CONTENTS

TABLES

FIGURES

APPENDIX

INTRODUCTION

14.1 This Chapter considers the likely, significant effects on the environment including the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the Proposed Development. This Chapter sets out the assessment methodology, existing conditions in the study area, proposed best practice methods and predicted adverse effects prior to, and following, the application of mitigation measures, where applicable, to reduce potentially adverse effects on the road infrastructure, road users and local communities.

14.2 The assessment detailed within this Chapter is based on worst case assumptions for traffic generation made for the purpose of forming a robust assessment of the Proposed Development within the parameters identified within **Chapter 2: Description of the Proposed Development**.

Background

14.3 The Medite Europe DAC facility, herein referred to as the 'Site', is located in Redmondstown, Clonmel, Co. Tipperary, located approximately 4 kilometres (km) to the east of the centre of the nearby town of Clonmel. The Site is accessed from an unnamed local road (the L2506) that connects to the N24 approximately 0.9km south of the Site location, which provides access to the M8 to the west and the N27, N25, and M9 to the east.

14.4 Medite intends to apply for planning permission to replace the existing energy systems at the Medite factory with two new wood biomass-fired energy plants, one for each of Medite's production lines.

Scope of Work/ EIA Scoping

14.5 The assessment identifies whether the Proposed Development is likely to have significant effects on the environment. In the context of this assessment, a 10km development study area has been considered and the main receptors relating to increased traffic levels arising from the development are anticipated to be Redmondstown Cottages located south of the Site and existing residential dwellings and developments situated along the N24.

14.6 Consideration has also been given to the proposed access/ egress route to/ from the Site and the assessment process comprised the following principal stages:

- baseline survey and characterisation of the existing traffic network through desk study, site visit and traffic surveys.
- identification of sensitive receptors and the impact to these from the proposed development in terms of HGV generated trips.
- derivation of mitigation measures, where appropriate, to address any identified effects; and
- description of any residual effects.

Effects Assessed in Full

14.7 A detailed assessment of the current conditions with focus on the likely significant effects on the environment during the proposed site operations is set out. This includes consideration of the construction phase, outlining that the Construction Traffic Management Plan (TMP) will avoid peak hours and include a routing agreement.

14.8 During the operational phase, the additional level of traffic anticipated to access and egress the site has been assessed to identify whether there are likely significant effects on the environment.

14.9 During the construction stage, abnormal loads will not be required and therefore no Abnormal Loads Route Assessment (ALRA) is required.

Effects Scoped Out

14.10 A Road Safety Audit (RSA) has been scoped out as there are no proposed changes or improvements required to the existing road network.

Consultations/ Consultees

14.11 SLR prepared scoping material (dated 27 June 2022) in terms of the traffic and transport chapter for Transport Infrastructure Ireland (TII).

14.12 Account has been taken of the scoping response from TII and a full summary of the consultee comments along with SLR comments/ actions is provided at **Chapter 1: Introduction**.

Table 14-1. Key Transport Issues

Consultee, form of consultation and date	Summary of Key Issues	Where addressed in Chapter
Transport Infrastructure Ireland (TII), Scoping Response (01/07/2022)	Further consultation should be had with the relevant Local Authority/ National Roads Design Office with regard to locations of existing and future road schemes.	Addressed in below in this Table
	Transport assessment should consider potential significant impacts from proposals to the national road network and associated junctions, in particular, the nearby junction with the N24.	Addressed in Impact Assessment within this chapter.
	Visual impacts from the existing national roads should be assessed.	Addressed in Chapter 13.
	Regard should be given to any road schemes in the area and any potential cumulative impacts.	Addressed in Cumulative Assessment within this chapter.
	Regard should be given to TII publications (formerly DMRB and the Manual of Contract Documents or Road Works), as well as TII's Traffic and Transport Assessment Guidelines (2014).	Addressed in Impact Assessment
	A Traffic and Transport Assessment (TTA) should be carried out in accordance with relevant guidelines, noting traffic volumes attending the site and traffic routes to/ from the site with reference to impacts on the national road network and junctions of lower category roads with national roads.	Addressed in Impact Assessment
	Any improvements to national roads to facilitate the proposed development should be identified.	N/A
	Identify whether a Road Safety Audit is required.	This has been scoped out as per EIA Scoping section.

	All haul routes should be identified.	Identified in Impact Assessment
Tipperary County Council (TCC) (19/10/2020)	Principal haul routes should be identified. Routes to be examined in terms of safety and capacity.	Identified in Impact Assessment
	Increase in traffic to be assessed.	Addressed in Impact Assessment
Department of Transport (DoT), Scoping Response (19/07/2022)	At this point in time the department had no observations to make.	N/A
Local Residents of Redmondstown Cottages, Community Consultation Response (July 2022)	Air pollution concerns due to small particles of wood/ dust fibres becoming airborne.	Addressed in Chapter 8
	Noise pollution, particularly overnight.	Addressed in Chapter 10
	Speeding.	Addressed in mitigation measures
	Road safety concern with increase in HGV levels and use of Redmondstown Cottages layby area adjacent to the cottages.	Addressed in mitigation measures
Tramore House Regional Design Office	See no direct conflict with the N24 Waterford to Cahir project and so no issue with the proposed development in terms of potential conflicts with local roads and junction upgrades.	N/A

Statement of Authority

14.13 As stated in Chapter 1, this Chapter has been prepared by Lauren Furnival, a Senior Transport Planner at SLR, who has five years of industry experience. Lauren has a Bachelor of Science degree in Geography and Environmental Management and is a member of both the Transport Planning Society (TPS) and the Chartered Institution of Highways and Transportation (CIHT).

14.14 A subsequent update to the chapter has been undertaken by Rachel Willock, a Senior Transport Planner at SLR, who has 20 years of industry experience. Rachel has a Bachelor of Science degree in Geography and is a Member of the Chartered Institution of Highways and Transportation (CIHT).

14.15 The chapter was reviewed by Patrick Lanaway, a Technical Director within the Highways & Transportation Planning team at SLR. Patrick has more than 30 years' experience in the transport planning industry, both in the private and public sectors. Patrick is a Technical Director within the Transportation & Highways Discipline for SLR and is involved in an extensive range of activities relating to the preparation of Transport Assessments and associated development related transport planning. Patrick provides extensive advice to the regarding all aspects of Traffic and Transport Assessments. In addition, Patrick is involved in and coordinates SLR's role in a number of housing, public sector, and commercial developments for external clients.

Limitations/ Difficulties Encountered

14.16 The assessment of the potential impacts to the baseline traffic relies on the accuracy of the traffic flow data. The subconsultants, Tracsis Traffic Data Ltd (Tracsis), are traffic survey specialists that collected the data and are, therefore, considered to be reliable. There were no issues reported by Tracsis during the survey period.

14.17 The development trip generation has been based on existing 2019 traffic figures, as recorded and provided by the applicant, and a first principles approach based on the proposed increase in fuel import tonnages from the replacement thermal energy systems which serve the two production lines. 2019 figures have been used as these are considered the most robust pre-Covid.

14.18 The following statement is made on the Road Safety Authority (RSA) website:

The RSA is in the process of reviewing its road traffic collision (RTC) data sharing policies and procedures. Record-level RTC data cannot be shared until this review is complete but we expect this to be finalised in the coming months. At that point, we will have new policies and procedures in place for access to RTC information and data.

14.19 Personal Injury Collision (PIC) data is usually obtained from the RSA). PIC data typically provides detailing on the specific causes of the recorded collisions, vehicle classification, number of vehicles involved, number of casualties, resulting injury severity and weather/ road conditions.

14.20 The data is used to determine the existing road safety situation, within vicinity of the Site, and to establish a base against which the effects of the proposed development are assessed. The study area for PIC data has been determined in association with the operational vehicular trip distribution and includes the L2506 from the north Site access junction, south to the junction with the N24.

14.21 Due to the unavailability of the data by way of the usual source, at this stage, a Road Safety Review cannot be undertaken.

REGULATORY BACKGROUND

14.22 The Site lies within the administrative boundary of Tipperary County Council (TCC).

14.23 A desk study of the relevant national, regional, and local planning policy has been carried out, with the findings summarised below. This determines the extent to which the proposed development would fulfil the aims and objectives within these documents.

14.24 This traffic and transport impact assessment has been prepared in accordance with the relevant policy, guidance, and technical standards.

Planning Policy

National

14.25 The National Planning Framework, A Government of Ireland Policy – National Policy Objective 55:

Promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050.

Regional

14.26 Regional Spatial & Economic Strategy (RSES) for the Southern Region identifies Clonmel as a key town due to its *strategic location on the Waterford-Limerick N24 corridor with onward inter-regional linkages to Mid-West and South-West; major employment [sites]*. The RSES identifies a need for upgrades to the N24 Waterford-Limerick link which will subsequently benefit Clonmel, and this upgrade is identified with within **Policies RPO 17 and Waterford MASP Policy Objectives 2 & 7**. Another objective relative to transportation is **RPO 155** which is that the capacity and safety of transport networks must be managed and enhanced through the management of traffic and travel

demand, with appropriate route selection and environmental assessments taking place prior to any changes to the networks.

Local

14.27 The Development Plan consists of the County Tipperary Development Plan 2022 – 2028 and the Clonmel and Environs Development Plan 2013. Relevant Strategic Objectives of the Tipperary County Development Plan 2022- 2028 include.

> SO - 1: To support the just transition to a climate resilient, biodiversity-rich, environmentally-sustainable and climate-neutral economy.
>
> SO – 2: To facilitate and promote the development of Clonmel, Nenagh and Thurles as Key Towns, economic drivers and significant population and service centres for the Southern Region.
>
> SO - 5 To promote, support and enable sustainable and diverse economic development, and foster new and innovative opportunities, harnessing the talent of our workforce and communities.
>
> The N24 is identified as a key link between Limerick and Waterford and Planning Objective 12 – B is to: *Work in partnership with TII, and regional stakeholders to achieve enhanced regional accessibility, sustainable mobility, and quality international connectivity. In particular, to actively seek…(b) The upgrade of the N24 National Route linking Limerick and Waterford (Major Roads Project).*

14.28 Clonmel and Environs Development Plan Volume 1, adopted 2013 published by Tipperary County Council – Policy INF 1: *Carrying Capacity of the N24* specifies TCC will ensure the capacity for the N24 will not be exceeded. All development proposals which will potentially impact this will need to be supported by a Traffic and Transport Assessment (TTA) to assess whether the additional traffic can be accommodated. In compliance with this provision, a full assessment of the impact on the capacity of the N24 is contained within this Chapter.

14.29 The Southern Region RSES and the Tipperary County Development Plan 2022-2028 both designate Clonmel as a 'Key Town' and 'Self-Sustaining Regional Driver', with strong capacity for enterprise and employment growth building on its strengths and specialties.

14.30 It is an objective of the draft Clonmel Local Area Plan 2024-2030 (Objective 4A) to support this role and the function of Clonmel as a strategic employment location.

14.31 With respect to the Medite site, the site is zoned for 'general industry' in the extant Clonmel and Environs Development Plan 2013 and the objective with this zoning is to 'provide for heavy industry and related uses'. The draft Clonmel Local Area Plan 2024-2030 continues to recognise the economic and employment role of the Medite facility and continues to zone the site for 'General Industry'.

14.32 The Draft Clonmel LAP states the purpose of this 'General Industry' Zoning is to provide for heavy/specialised industrial development. It is intended that this zoning will facilitate industry that may be associated with environmental emissions, including noise and odour (e.g., waste processing, aggregate processing, etc) and with intensive processing. This continued and consistent planning policy support in the Draft Clonmel LAP is welcomed by Medite Europe DAC.

14.33 More generally, the Draft Clonmel LAP outlines that various factors are taken into account during the planning application stage for new development. These factors include density, height, massing, traffic generation, public health, design, and visual amenity. Additionally, potential nuisances such as noise, odour, and pollution are also considered by the planning authority.

Local Transport Plan and N24 at the Redmondstown Junction

14.34 The LTP contains a series of segregated cycle infrastructure in Section 6.2 to improve safety and comfort for cyclists across the network, including the current N24 as it routes eastwards out of the town centre. However, it is noted that whilst the proposed segregated cycle network will connect the large residential areas within the town centre, this provision does not extend out as far as the Redmondstown Junction (figure 6.30 of the LTP).

14.35 The strategy recommends (section 6.2.2) that segregated cycle facilities be extended further east to connect with large employers such as Bulmers and Medite but that in some locations, delivery of segregated infrastructure will be challenging and other means of delivering a high-quality cycling environment will be considered, including, potentially, Rapid Build/quick win schemes.

N24 and Clonmel Road Link 4

14.36 The draft Clonmel Local Area Plan 2024-2030 notes and recognises that the N24 Waterford to Cahir Public Consultation is currently progressing through Phases 1 to 4 of the TII's Project Management Guidelines (PMG) and is presently at Phase 2, the Options Selection stage. It is also noted that determination of a preferred transport solution for the scheme is anticipated in late 2023.

14.37 These policy implications have been taken into account in the preparation of this chapter.

Guidelines

14.38 Spatial Planning and National Roads Guidelines for Local Authorities sets out the basis from which development plans must use to determine policies and objectives which include to seek to maintain and protect the safety, capacity and efficiency of national roads and associated junctions and the approach to development management with reference to TTA.

14.39 Institute of Environmental Management and Assessment (IEMA) *Guidelines for the Environmental Assessment of Road Traffic* (1993) have been used to inform the Impact Assessment within this Chapter which provides more detail around these Guidelines and criteria for assessment.

14.40 National Roads Authority, Environmental Impact Assessment of National Road Schemes – A Practical Guide which sets out the best practice and policy requirements when assessing national road schemes and recommends the use of the National Roads Authority (NRA) Traffic and Transport Assessment Guidelines for use within assessments.

14.41 Transport Infrastructure Ireland (TII), Traffic and Transport Assessment Guidelines (2014) have been used concurrently alongside the IEMA Guidelines for this assessment, as this document is recommended by the NRA within the Environmental Impact Assessment of National Road Schemes – A Practical Guide, and as recommended by Transport Infrastructure Ireland (TII) during consultation and scoping.

14.42 Environmental Protection Agency (EPA) *Guidelines on the information to be contained in Environmental Impact Assessment Reports* (2022) and the European Commission Environmental

Impact Assessment of Projects: Guidance on the preparation of the Environmental Impact Assessment Report (2017). This document has been informed the Impact Assessment coincidingly with the IEMA Guidelines in terms of determining and defining likely significant effects and in the overall structure and information within the Chapter.

Technical Standards

14.43 Building Regulations 2010, Technical Guidance Document M – Access and Use provides relevant guidance at Section 2 *Access and Use of existing buildings other than dwellings*. As the site is in-situ and operational for HGVs, all existing approaches, accesses from the national road network and circulatory internal routes are compliant with standards set out within this document; and

14.44 Design Manual for Urban Roads and Streets (2019) has been reviewed when assessing the proposed development. Due to the existing nature of the site, there are no proposals to alter the existing road network; however, it is noted at Section 3.2.1 of this Design Manual that designers need to ensure that higher volumes of traffic are catered for.

RECEIVING ENVIRONMENT

Study Area

14.45 A 10km study area has been defined for this assessment and includes the site access junction, the local road marked as L2506, and the N24 Redmondstown junction.

14.46 Within the 10km study area, any likely significant have been captured by identifying the sections of road network along which the traffic generated by the proposed development will travel, and hence impact. The assessment considers the section of L2506 local road between the site access junction up to and including the N24 junction, working away from the site access, to include those links upon which importation traffic will impact.

Baseline Study Methodology

14.47 An understanding of the existing situation and baseline conditions within the study area has been established through the following:

- an Automatic Traffic Counter (ATC) which was undertaken continuously across a duration of seven days from 04 April 2022 until 10 April 2022 (a neutral week outside of any school/ public holidays and roadworks). This was installed approximately 220m south of the southern site access junction. The detailed report of this data is included within **Appendix 14.1**; and

- a Junction Turning Count (JTC) which was undertaken at the L2506/ N24 priority junction on a neutral weekday of Tuesday 05 April 2022 which recorded data between the hours of 0730-0930 and 1645-1915. The detailed report of this data is included within **Appendix 14.2**.

Sources of Information

14.48 The following data collection and analysis has been undertaken:

- analysis of commissioned traffic count data.
- analysis of available personal injury collision data.
- assessment of traffic impacts from proposals; and
- assessment of traffic impacts from proposals and identified cumulative development.

Field Survey

14.49 An understanding of the existing situation and baseline conditions within the study area have been established through a visual inspection of the local road network during a site visit (dated Monday 05 September 2022) and via a desktop study using appropriate software and tools available on the internet.

Baseline Conditions – Existing Situation

14.50 This section details the baseline conditions that exist in the study area in relation to the existing road network, existing traffic flows and the current safety of the study area.

Existing Road Network

14.51 The study area for this assessment has been identified as the following junctions and links, these being those along which traffic generated by the development will travel:

- the existing site access junctions
- a section of the L2506 local road between the site access junction and N24 junction; and
- the N24 junction itself.

14.52 Due to the nature of the proposed use and the importation proposed, no other links or junctions are forecast to be impacted other than as part of the identified route network that is included within the above study area.

14.53 The existing site access junction is a priority junction that directly adjoins the L2506 local road.

14.54 The L2506 local road is a two-way single carriageway that spans between the N24 link road to the south, to series of unnamed local roads which lead to the R706 located approximately 3.7km to the north. The speed limit of the L2506 is 60kph between the N24 junction and site access junction, changing to 80kph immediately to the north of the site access junction which is maintained for the remainder of the road's length.

14.55 The site access junction is a wide priority junction that requires exiting vehicles to stop before joining onto the L2506. The access itself does not have a southern corner radius, instead the access

has been widened as much as possible in order to allow more space for vehicles turning into the site.

14.56 There is an uncontrolled priority junction 80m south of the site access junction that links the L2506 to an unnamed local road which leads into the Powerstown. The L2506 is the priority road for this junction.

14.57 The N24 will be undergoing development works from Waterford to Cahir, the Clonmel Road Link 4, which is a 150m wide corridor. The works are not in vicinity of the Proposed Development and so is not anticipated to impact nor conflict with one another. This was confirmed through consultation with the Regional Design Office. Further detail on this consultation is set out in **Chapter 1**.

Existing Traffic Flows

14.58 Baseline traffic flows were undertaken by Tracsis who installed an ATC within the study area approximately 220m south of the southern site access junction along the L2506. The southern site access is the main entrance to the site. There is a secondary entrance which is an emergency exit and is therefore not in use for day-to-day operations.

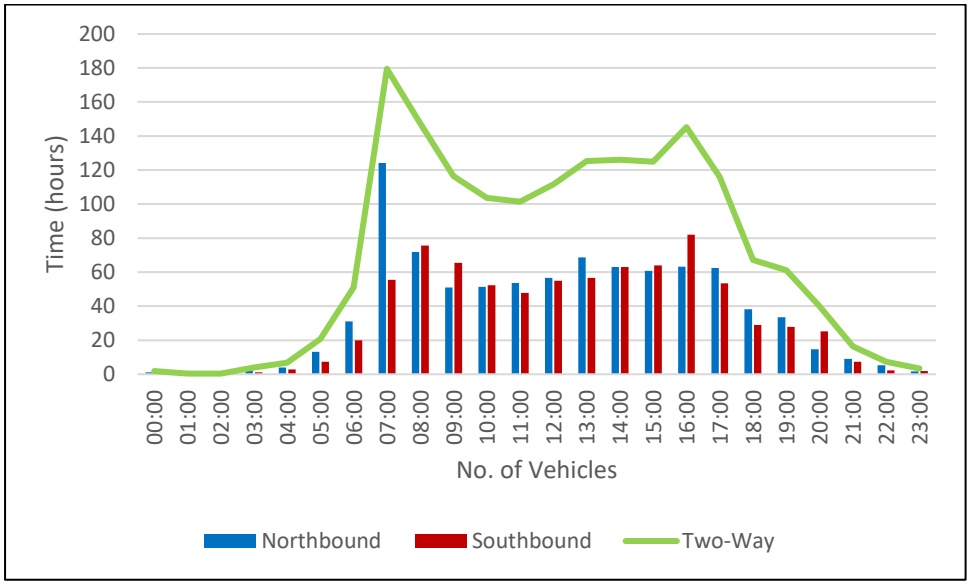
14.59 The ATC location is shown on Figure 14.1. The ATC collected data continuously over a seven-day period between Monday 04 April 2022 to Sunday 10 April 2022, a period which lies outside of any school, public or bank holidays.

Figure 14-1. Location of ATC
(©Google Earth Image)

Traffic Flow Profile

14.60 The raw data has been used to prepare a traffic flow profile for directional and two-way traffic flows across a full 24-hour period for an average weekday (Monday-Friday). The data has been plotted on Graph 14-1 and has been obtained from an average of weekday vehicle numbers recorded at the traffic count location. The road network is not currently experiencing congestion at peak times.

Graph 14-1. 24 Hour Average Weekday Traffic Flow Profile (All Vehicles)



14.61 The traffic flow profile along the L2506 shows a fluctuation of between approximately 0 and 180 total two-way vehicles, with distinct daily peaks shown as 07:00-08:00 and 16:00-17:00. During the morning, particularly within the AM peak hour, there are more vehicles recorded to be travelling northbound, while during the afternoon/ evening (from approximately 14:00) there are more vehicles recorded travelling southbound.

Weekly Traffic Flows

14.62 The raw data has been analysed and a summary of the average weekday recorded vehicles is provided in Table 14-2. The data includes directional and two-way flows for total vehicles and HGVs during the peak hours and across a full day.

Table 14-2. Average Weekday Traffic Flows

Period	Northbound			Southbound			Two-Way		
	Total	HGV	*%HGV*	Total	HGV	*%HGV*	Total	HGV	*%HGV*
AM Peak 07:00-08:00	124	15	*12%*	55	4	*7%*	181	19	*10%*
PM Peak 16:00-17:00	63	6	*10%*	82	10	*12%*	145	16	*11%*
24 Hour	881	152	*17%*	769	149	*19%*	1,650	301	*18%*

14.63 The average weekday traffic flows show that the L2506, also the site access road, to the south of the Site supports approximately 1,650 vehicles (two-way flow) during an average weekday. The

northbound flow of vehicles is slightly higher, making up 53% of the total two-way numbers. There is a relatively high presence of HGVs recorded within the survey of the L2506 making up between approximately 7-19% of traffic. This is anticipated due to the existing Site and low level of other development accessible via the L2506.

Network Capacity Performance

Road Safety Review

14.64 The following statement is made on the Road Safety Authority (RSA) website:

> *The RSA is in the process of reviewing its road traffic collision (RTC) data sharing policies and procedures. Record-level RTC data cannot be shared until this review is complete but we expect this to be finalised in the coming months. At that point, we will have new policies and procedures in place for access to RTC information and data*.

14.65 Therefore, at this stage, a Road Safety Review cannot be undertaken.

14.66 Personal Injury Collision (PIC) data is usually obtained from the RSA). PIC data typically provides detailing on the specific causes of the recorded collisions, vehicle classification, number of vehicles involved, number of casualties, resulting injury severity and weather/ road conditions.

14.67 The data is used to determine the existing road safety situation, within vicinity of the Site, and to establish a base against which the effects of the proposed development are assessed. The study area for PIC data has been determined in association with the operational vehicular trip distribution and includes the L2506 from the north Site access junction, south to the junction with the N24.

14.68 For clarification, those accidents recorded which result in slight injury indicate that the victim was likely to suffer from slight shock with occurrences of sprains or bruises from the accident, whereas a serious accident accounts for breakages, lacerations, concussion, or hospital admittance. A fatal accident means there was a resultant death from the injuries sustained.

Existing Road Network Performance

14.69 The sections above provide an assessment of the existing baseline situation. The following may be concluded:

- the existing road network is laid out to allow substantial reserve capacity against existing traffic demand; and
- there are no further improvement works that have been proposed to the roads within the study area associated with the proposed development.

Existing Site Operations

14.70 Manufacturing at the Medite site runs continuously 24 hours a day, 7 days a week. The Debarker runs from 07:00 to 23:00 Monday to Friday and the weighbridge operates from 06:00 to 22:00 Monday to Thursday and 06:00 to 20:00 on Fridays.

14.71 All biomass fuel for the energy systems is delivered to site during the operating hours of the weighbridge. The majority of all other HGV movements to and from the site also take place during the operating hours of the weighbridge.

14.72 Some deliveries of production wood chip take place outside of the weighbridge hours. The same is true of resin deliveries and shipped goods departing site.

14.73 Data of existing trips to and from the Site is collected regularly and this, along with tonnage capacity throughputs for production, have been used to determine the existing and proposed trip generation. The existing and proposed tonnages per year have been set out in Table 14-3.

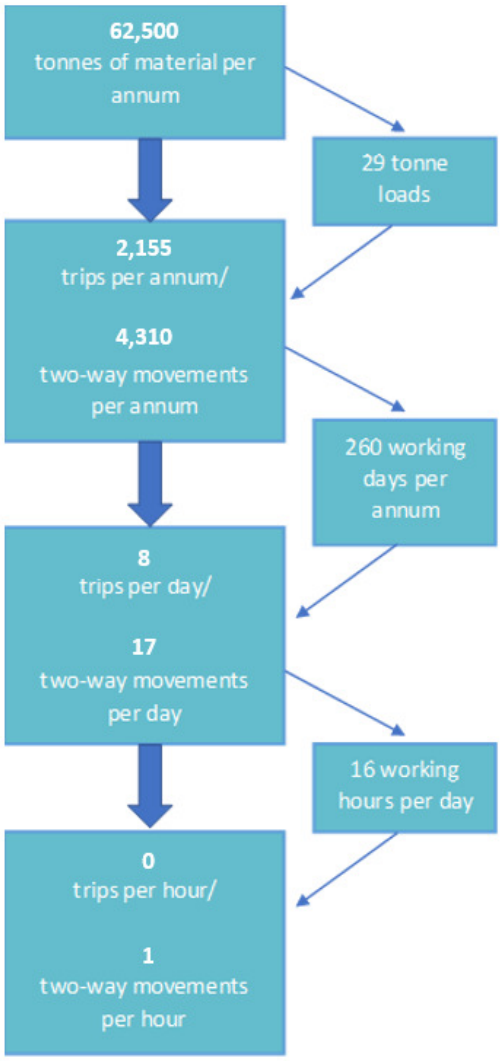
Table 14-3. Existing and Proposed Material Throughputs (tonnes per annum)

Fuel Type	Existing Biomass Boilers Line 1 + Line 2 t/y	Proposed Biomass Energy Plant Line 1 t/y	Proposed Biomass Energy Plant Line 2 t/y	Total Proposed Line 1 + 2 t/y	+10% headroom (to account for variation in fuel mix and moisture content)
Medite residues	52,000	48,000	23,000	71,000	71,000
Forestry & Sawmill Residues	33,700	67,000	31,000	98,000	115,000
Recovered wood	25,300	,	,	,	
Total	**111,000**	**115,000**	**54,000**	**169,000**	**186,000**

14.74 In addition, the current systems generate a combined bottom and fly ash total of approximately 3,500 tonnes per annum. The ash is stored in dedicated covered facilities and transported by truck for disposal offsite at a licensed facility.

14.75 From the calculated material throughputs, the baseline trips for the existing situation have been determined and are set out in **Figure 14-2**.

Figure 14-2. Existing External Trip Generation



14.76 Medite Europe Limited require regular deliveries throughout the working week to ensure that the facility has the material it requires to operate. In addition, the ATC data gathered and analysed at in the Baseline Conditions – Existing Situation section of this chapter show that HVGs arrive throughout the weekdays and throughout the day. Based on this understanding of the business operation and the actual deliveries at Medite, and on the basis of 29 tonne loads of material carried per HGV across a total of 260 days of deliveries per year, 15 HGV trips per day presently deliver to the existing energy system, which then leave site with empty loads, resulting in 30 two-way HGV movements per working day.

14.77 As deliveries take place across a 16-hour working day (06:00 to 22:00), an average had been calculated which equates to one trip per hour or two two-way movements per hour. It is noted that all figures have been rounded up to account for a worst-case scenario.

14.78 The existing distribution sees all vehicles associated with the delivery of biomass fuel for the energy systems all access/ egress south of the site along the L2506 to the junction with the N24. From here, there is a split in vehicles travelling east and west along the N24 to access the wider road network which averages 60% of vehicles accessing/ egressing west and the remaining 40% east, as shown in the Junction Turning Count survey data (attached at Appendix 14.2).

Baseline Conditions – Future Situation

14.79 The proposed development is explained in full in **Chapter 2: Description of the Proposed Development**.

14.80 The proposals are for the replacement of all four existing aging thermal energy systems serving both Medite's two production lines. These systems will be replaced with 2 new renewable energy plants which will have rated thermal input capacity of up to 60 Mega Watts (MW) for the system serving Production Line 1 and 30MW for the system serving Production Line 2. The plants will take the form of wood biomass fired Thermal Fluid Heaters.

14.81 The phased construction of the project will take place over a ten-year period which will include four distinct phases of development. The anticipated start date for each development phase will depend on the date of grant of permission.

14.82 The phasing arrangements will include:

- **Phase 1** – which will include the development of the Line 1 Energy Plant and fuel reception, storage, and conveying/screening equipment (Proposed development identified for Areas 1 and 2). The anticipated timescale for this phase is 2024-2026.
- **Phase 2** – which will include decommissioning of the existing Line 1 energy plant. The anticipated timescale for this phase is 2026-2029.
- **Phase 3** – which will include the development of the Line 2 Energy Plant and associated storage area. The anticipated timescale for this phase is 2030-2033; and
- **Phase 4** – which will include the dismantling and removal of the existing Line 2 Boilers. The anticipated timescale for this phase is 2034-2035.

14.83 The Applicant is seeking a ten-year permission for the development to facilitate a phased development process which will allow existing manufacturing operations at the site for the duration of the construction phase. For this reason, the future baseline must be calculated for the scenario when all development will be completed (2035).

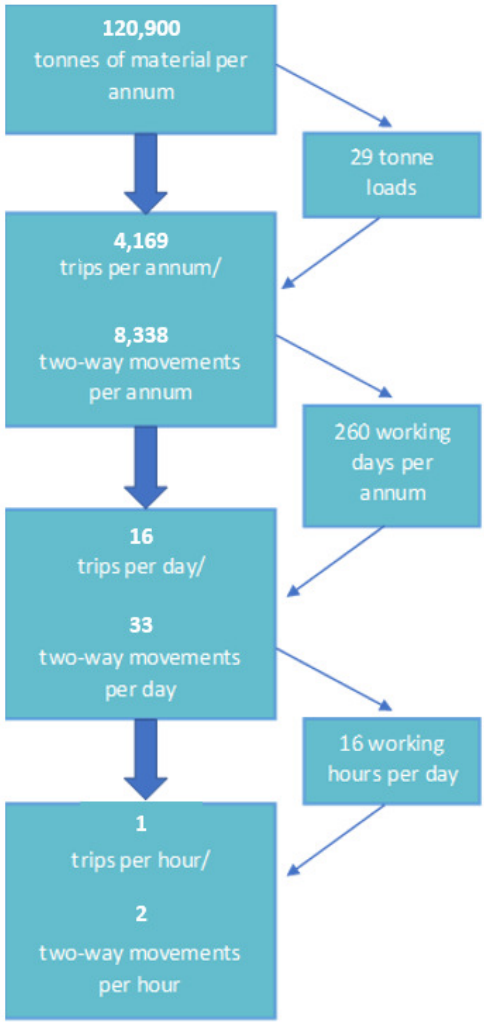
14.84 Within Great Britain, there is an industry recognised software, the Trip End Modelling Programme (TEMPro) v.7.2c, which is used to derive a growth factor to apply to existing baselines to determine future baseline traffic flows. Ireland appears not to have similar software, and so, in order to ensure a worst-case scenario, the proposed trip generation will be applied to the existing baseline situation. This will reflect a greater increase to baseflows and so ensure a robust assessment into the potential impacts arising from the development.

14.85 In addition, there will be an estimated additional output of 5,900 tonnes of bottom and fly ash per annum. When compared to the existing situation of 3,500 tonnes per annum, this is an additional

2,400 tonnes of ash and will require an additional 83 HGV loads per year, about 1.5 per week. This is included in the calculated trip generation at Figure 14-3.

14.86 The proposed trip generation, based on the proposed tonnages set out in Table 14-3. has been calculated and presented within Figure 14-3.

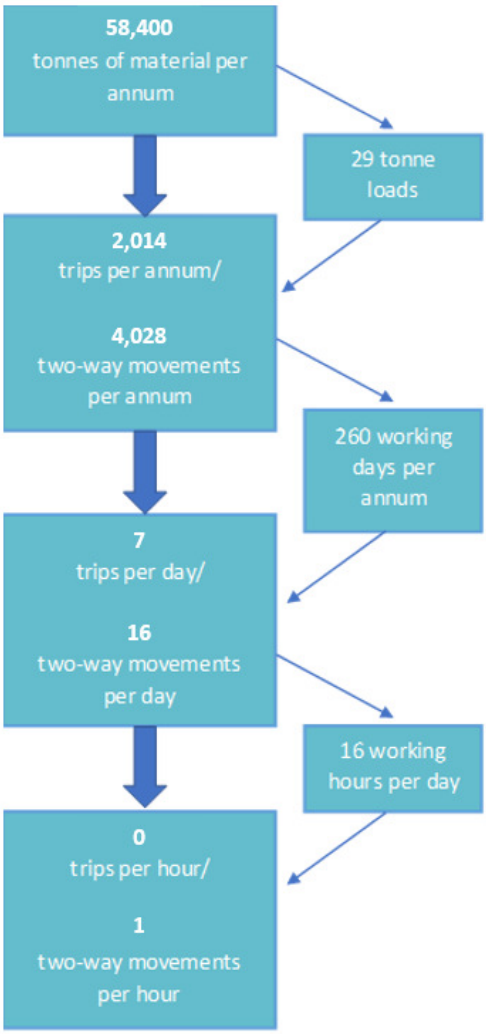
Figure 14 3. Proposed External Trip Generation



14.87 Based on the same load sizes as used within existing operations for deliveries, and across the same working days and hours, the proposed development, once fully completed, will generate up to 25 HGV trips per day/ 50 two-way movements. This equates to up to two trips per hour/ four two-way movements. All figures have been rounded up to account for a worst-case scenario.

14.88 The proposed net additional external trip generation, when compared with the existing situation, is shown at Figure 14-4.

Figure 14 4. Net Additional External Trip Generation



14.89 Overall, the completed proposed development will generate up to 10 additional trips per day/ 20 two-way movements, thus up to an additional one trip per hour/ two two-way movements.

14.90 It is also noted there will be no additional light vehicular trips associated with staff as no additional staff members will be employed from the proposed development, once the new development is operational.

14.91 The delivery vehicle trips in HGVs will continue to utilise the same distribution as existing, with all vehicles utilising the L2506 south of the site and an approximate 60% travelling west along the N24 and approximately 40% travelling east along the N24.

Sensitive Receptors

14.92 In vicinity of the Site, the main sensitive receptors have been identified as the Redmondstown Cottages which are located approximately 135 m south of the southern Site access junction.

14.93 During scoping for the EIAR to accompany the planning application for the proposed development, responses were received by some residents of these dwellings raising concerns as follows:

- air pollution arising from wood dust/ fibre particles.
- noise from passing vehicles.
- road safety, in particular concerns with conflict between HGVs and pedestrians.
- passing vehicular speeds; and
- HGVs utilising the cottage's layby.

14.94 Due to the small number of dwellings situated in proximity to the Site (approximately 15 no.) the Site is not considered to be located within a sensitive area, and so the NRAs Traffic and Transport Assessment (TTA) Guidelines threshold for assessment where there is an increase in traffic by 10% has been applied. Any additional development over and above the current building footprint comprises external space occupied by the proposed new systems. Therefore the additional floorspace does not exceed the stated 5,000sqm threshold contained within the TII Guidance, and therefore the development does not require assessment from the criteria of additional floorspace.

14.95 The concerns raised by the residents have been accounted for and, where necessary, mitigation measures have been suggested from paragraph 14.143.

IMPACT ASSESSMENT

Evaluation Methodology

Approach to Assessment of Effects

14.96 The likely significant effects on the environment from the proposed development that relate to site traffic and transport have been determined by considering the magnitude of change in traffic movements and the sensitivity of the receptors which would be affected by these changes. This has been undertaken in accordance with the IEMA Guidelines and standard good practice, based on the experience of the assessor.

14.97 The IEMA Guidelines suggest that a day-to-day traffic flow variation of + or -10% is to be expected in the baseline situation, and that projected traffic flow increases of less than 10% would be imperceptible to the general public and would create no discernible environmental impact. Therefore, increases in traffic levels below 10% are considered insignificant. This is also in keeping with the NRA transport threshold guidance as set out within the TTA.

14.98 Based on the IEMA Guidelines, the following factors have been identified as being the most discernible potential environmental effects likely to arise from changes in traffic movements. These are therefore considered in the assessment as potential effects which may arise from changes in traffic flows resulting from the proposed development construction and operational phases:

- severance– the perceived division that can occur within a community when it becomes separated by major transport infrastructure.
- driver delay – traffic delays to non-development traffic.
- Pedestrian delay (incorporating delay to all non-motorised users) – pedestrian delay and severance are closely related and can be grouped together. Changes in the volume, composition or speed for traffic may affect the ability of people to crossroads.
- non-motorised user amenity – pedestrian amenity is broadly defined as the pleasantness of a journey, and is considered to be affected by traffic flow, traffic composition and pavement width/separation from traffic.
- Fear and intimidation – created by all moving objects.
- road safety – ‘collision cluster’ assessment to identify potential impacts at a more detailed level.
- road safety audits
- hazardous loads/large loads – some developments may involve the transportation of dangerous or hazardous loads by road.

Likely Significant Effects

14.99 Criteria for the determination of sensitivity (e.g., 'high', 'medium', or 'low') or of importance (e.g., 'international', 'national', 'regional' or 'authority area') have been established based on prescribed guidance, legislation, statutory designation and/ or professional judgement.

14.100 For this assessment the likely significant effects on the environment have been determined by consideration of the sensitivity of receptors to change, taking account of the specific issues relating to the study area, the magnitude of that change and identifying whether a significant effect will arise or not.

Sensitivity of Receptor

14.101 The potential sensitivity of receptors to change in traffic levels has been determined by considering the study area and the presence of receptors in relation to each potential impact.

14.102 The IEMA Guidelines provide two thresholds when considering predicted increases in traffic, whereby a full assessment of the impact is required where:

- the total traffic would increase by 30% or more (10% in sensitive areas); and/or
- the HGV traffic would increase by 30% or more (10% in sensitive areas).

14.103 Moreover, the NRA TTA Guidelines acknowledges similar thresholds but whereby the total traffic would increase by 10% or more (5% in sensitive areas).

14.104 In this context, both the IEMA Guidelines and the NRA TTA Guidelines do not define a sensitive area, and therefore the assessor has made a judgement based on experience and the nature of the study area including the presence of the existing lawful operation, the low population, rural location and with few routes into and out of the site. Each receptor has been assessed individually to determine its sensitivity, and the assessment criteria chosen are shown in Table 14-4.

Table 14-4. Receptor Sensitivity

Impact	Low Sensitivity	Medium Sensitivity	High Sensitivity
Driver severance and delay	Road network not affected	Road network not experiencing congestion at peak times	Road network experiencing congestion at peak times
Road safety	High sensitivity receptor		
Community severance and delay	No presence of existing communities severed by road	Presence of existing communities with a moderate level of existing severance (subjective assessment)	Presence of existing communities with existing severance (subjective assessment)
Noise	No sensitive receptors	Presence of sensitive receptors near to the road	Presence of sensitive receptors adjacent to the road
Vulnerable road users	High sensitivity receptor		
Wider disruption due to dangerous loads	No hazardous or dangerous loads on the road network	Some hazardous or dangerous loads on the road network. Loads are legally permitted on	Abnormal and oversized loads to use road network

Impact	Low Sensitivity	Medium Sensitivity	High Sensitivity
		UK roads	
Dust and dirt	Limited presence of sensitive receptors (subjective assessment)	Low to medium presence of sensitive receptors (subjective assessment)	High presence of sensitive receptors (subjective assessment)

Likely Significant Effects (Potential Effects)

14.105 Sensitivity and magnitude of change, as assessed under the detailed criteria, have been considered collectively to determine the likely significant effects. The collective assessment is a considered assessment by the assessor, based on the likely sensitivity of the receptor to change (e.g., is a receptor present which would be affected by the change), and then the magnitude of that change. Effects of 'major' and 'moderate' significance are considered and whether the effect is significant or not in terms of the EIA Directive 2011/92/EU as amended by Directive 2014/52/EU.

Potential Cumulative Effects

14.106 An assessment of the cumulative effect on the study area of all relevant developments (either in the planning system or under construction) which may utilise the same access routes as the proposed development has been undertaken and set out from paragraph 14.138.

Mitigation

14.107 Mitigation measures would be considered as part of construction good practice and would seek to offset any effects which have been assessed as significant.

Residual Effects

14.108 Following consideration of mitigation measures, an assessment of the residual effects has been made. Residual impacts are those likely to occur after mitigation measures have been incorporated into the scheme. Potential residual impacts include general wear and tear to roads and verges as a result of increased traffic.

Statement of Significance

14.109 A statement of significance is provided below, which provides a summary of the complete assessment for each receptor, taking into consideration any proposed mitigation measures, and it reports the significance of the residual effects in compliance with the EIA Regulations.

Construction Stage Impacts

Traffic Management Plan (TMP)

14.110 A Construction TMP will be submitted to and agreed with the Planning Authority in consultation with the TII, prior to the commencement of development. The TMP will avoid peak hours and include a routing agreement and address the following main areas of concern:

- Contractor parking whereby all such parking shall be within the curtilage of the site and not on the surrounding road network (see **Figure 2-10** for proposed location).
- Movements and control of all deliveries (where all loading and unloading shall be undertaken on site); and
- The control of dust, mud, and debris to ensure none is deposited onto the public road.

14.111 The purpose of the TMP will be to control the operation and use of construction traffic accessing the construction site in relationship to the operation of the adopted public road. The TMP will therefore outline the areas for consideration when preparing the programme of works and undertaking the site operation, with updating as necessary.

14.112 Vehicle routing will be set out within the TMP to ensure a suitable means of access to the site is secured and a site layout plan will be prepared which will show the provision of a compound within the site boundary to accommodate all traffic movements, parking and storage associated with the works. Along with full details of vehicle routing to/ from the site, the hours of operation for construction works and deliveries will be confirmed for the purposes of controlling and managing the impact of construction traffic associated with the development works.

14.113 The principal areas which the TMP will cover are summarised as follows:

- Physical measures at the site entrance, as appropriate.
- Internal layout of compound, allocation of space within the site to enable turning and loading, material storage and workforce rest facilities (if not as per existing).
- Management and control of hours of traffic activity and movements.
- Fencing and security (if additional required).
- Parking arrangements for workforce employed throughout the construction stage; and
- Publicity and information, as appropriate and required.

14.114 It is expected that there will be average of 50 construction workers on site at any one time during the construction phase, rising to a peak of 240 construction workers over a period of 14 months of Phase 1. A Construction Traffic Management Plan (TMP) will be prepared prior to commencement of the proposed development.

Operational Stage Impacts

Direct Impacts

14.115 The predicted increases in traffic levels against the baseline levels have been calculated, and then an assessment of the likely significant effects has been made against the criteria described in Tables 14-4.

14.116 When fully operational, there will be no change from the current situation in terms of the total number of employees on site each day between 8am to 6pm Monday to Friday, the numbers of which are detailed within the description of the development. However, as a result of additional

fuel requirements, it is predicted there will be a total of 25 HGVs per day (50 two-way movements)) which is an increase of 10 HGVs per day (20 two-way movements) based on the existing situation being 15 HGVs per day (30 two-way movements).

14.117 The IEMA Guidelines provide two thresholds when considering predicted increases in traffic, whereby a full assessment of the impact is required where:

- the total traffic would increase by 30% or more (10% in sensitive areas); and/or
- the HGV traffic would increase by 30% or more (10% in sensitive areas).

14.118 The NRA TTA Guidelines acknowledges similar thresholds but whereby the total traffic would increase by 10% or more (5% in sensitive areas).

14.119 In measuring against both the IEMA Guidelines and TTA, the assessment acknowledges that an increase in traffic levels of below 10% is deemed to be imperceptible and cause negligible impact to the local road network.

14.120 The increase in traffic flow along the L2506 has been calculated and presented in Table 14-5, whereby the calculated traffic increases from the proposed development have been added to the future baseline scenario to determine the percentage increases within the peak hours, as well as across the average weekday.

Table 14-5. Traffic Increase Assessment

Period	Base			Development			Base + Development			
	Total	Of which HGVs	% HGV	Total	Of which HGVs	% HGV	Total	% increase	HGVs	% HGV increase
AM Peak Hour (07:00-08:00)	181	19	10%	2	2	100%	183	1.1%	21	10.5%
PM Peak Hour (16:00-17:00)	145	16	11%	2	2	100%	147	1.4%	18	12.5%
24 Hours	1,650	301	18%	20	20	100%	1,670	1.2%	321	6.6%

14.121 The results are indicative of a low total vehicular increase to the local road network (L2506) of up to 1.4% during a peak hour and a daily increase of up to 1.2%. This is significantly below the TTA criteria of 10% (and 5% in sensitive areas) and therefore will cause negligible impact. This is not considered to be a significant effect.

14.122 The percentage increase of HGVs is seen to be higher, with up to 12.5% within a peak hour and 6.6% across a working day. This is due to the relatively low baseline level of HGV movements. Despite the peaks receiving an increase higher than the TTA 10% threshold, this remains within the

IEMA Guidelines threshold of 30% and so is not considered to be significant or require additional assessment. Mitigation measures have been set out to reduce the effects from the additional hourly HGV movements, with particular attention to Redmondstown cottages. Overall, this is not considered to be a significant effect.

14.123 The level of peak hour and daily traffic impacts both fall below the thresholds stated in both the IEMA Guidelines and TTA and as such they are not considered to be significant or to require additional assessment. A full assessment of the traffic impact is therefore not required, however, a review of the potential impacts to potential effects has been undertaken based on Table 14-4.

14.124 It is noted here that no assessment into the capacity of the N24 has been undertaken. This is because the proposals will generate such an imperceptible increase in traffic along the L2506, as set out in Table 14-8, whilst the increase in traffic flows on the N24 national route will be of an even smaller magnitude due to a greater baseline flow.

14.125 The IEMA Guidelines suggest that a day-to-day traffic flow variation of + or -10% is to be expected in the baseline situation, and that projected traffic flow increases of less than 10% would be imperceptible to the general public and would create no discernible environmental impact. This means additional traffic will be absorbed as part of general daily fluctuations (+/ - 10%) meaning if there are any existing capacity issues the site will not further exacerbate this nor will it generate enough traffic to cause any capacity issues should none be existing.

Potential Effects

Effects on Driver Severance and Delay

14.126 The IEMA guidance states that there are a number of factors which determine driver severance and delay; these include delay caused by additional turning vehicles and additional parked cars at the site, delays at junctions due to increased traffic, as well as delays at side roads due to reduced gaps in the oncoming traffic.

14.127 Using the criteria outlined in Table 14-5, driver severance and delay is considered to be of medium sensitivity as the road network will be affected but is not currently experiencing congestion at peak times, and the potential effect is considered to be of minor significance (a less than 10% increase in total vehicular flows on the local road).

14.128 As such, the overall effects are assessed as minor and not significant.

Effect on Road Safety

14.129 There are no general thresholds used when determining the significance of increased traffic on road safety, therefore professional judgement is required to identify the potential road safety effects associated with the proposed development. The IEMA guidance confirms that existing road accident rates and professional judgement are needed to assess the implications of the cumulative operational movements. It should be noted that this assessment does not constitute a road safety audit.

14.130 Table 14-5 defines road safety as a high sensitivity receptor with an increase in traffic levels of greater than 10% requiring a quantitative assessment of existing accident records.

14.131 At the time of assessment, there were no appropriate data available to use to inform the road safety review. Road Safety Ireland (RSA) is undergoing a review of its road traffic collision (RTC) data sharing policies and procedures. Ireland's National Police and Security Service (An Garda Síochána) also provides road collision statistics per year but this data is not site specific, nor is it available to determine local collisions. Transport Infrastructure Ireland (TII) were also contacted (26 August 2022) who responded with the advice that TII do not hold any PIC data and RSA are the contact for this.

14.132 The predicted number of HGV movements would be slightly greater than the 10% threshold during the peak periods and within the 10% threshold across an average weekday, as set out in Table 14-5; however, this would be easily accommodated within the available capacity of the road network and road safety would not, therefore, be compromised. The impact to road safety is assessed to have a low magnitude.

14.133 In summary, the proposed development would create a marginal increase to HGV traffic levels within the study area, and these levels would remain well within the design capacity of the local road network.

14.134 Therefore, the level of effect is considered to be **minor and not significant**.

Effect on Community Severance

14.135 The IEMA guidance identifies severance as *"the perceived division that can occur within a community when it becomes separated by a major traffic artery"*. As an example, a road that passes through a community such as a town or village, where perhaps amenities are located on one side of the road and residential properties are located on the other side, causes severance to the movements between those places. The degree of severance depends on the traffic levels on the road and the presence of adequate crossing opportunities.

14.136 The L2506 and N24 do not sever any of the local communities in vicinity of the site. The residential dwellings at Redmondstown cottages, for example, are located on the western side of the L2506 only. Therefore, the potential for community severance for this section of the study area is considered to be low and the community receptor is considered to have negligible sensitivity.

14.137 As the increase in total traffic would be below the IEMA threshold of 30%, and the TTA threshold of 10%, the additional traffic within the study area will have a negligible magnitude of impact.

14.138 The potential for community severance effects for the study area is negligible and not significant.

Effects on Noise and Vibration

14.139 Noise has been classified as a moderate to high sensitivity receptor as the Redmondstown cottages are present adjacent to the west of the L2506 within the study area. The IEMA Guidelines state that an increase in noise due to an increase in traffic of less than 25% is deemed a negligible magnitude of impact to receptors with anything greater than 25% requiring a quantitative assessment.

14.140 The maximum traffic increase predicted for the proposed development is 20 vehicular movements per day. This is less than 25% of the current number of daily vehicle movements along the L2506

and hence, the traffic noise effects are considered to be negligible and not significant in terms of the EIA Directive.

14.141 The full environmental effects of noise and vibration are covered in **Chapter 10: Noise**.

Effects on Vulnerable Road Users

14.142 Vulnerable road users are considered to be a high sensitivity receptor according to the assessment criteria detailed in Table 14-4.

14.143 The impact of traffic on vulnerable road users would be most significant within settlements along the proposed access routes where the presence of vulnerable road users, such as pedestrians and cyclists, is greatest. The Redmondstown cottages are the only nearby settlement and are not expected to generate many vulnerable road users along the L2506 access road, as the dwellings are located on the western side of the road only and the road does not lead to any local amenities. Vulnerable road users from this settlement are more likely to remain within the immediate layby where there are observed to be parked vehicles.

14.144 The percentage increase in traffic would be less than 10% and so the effect on vulnerable road users is therefore considered to be minor and not significant in terms of the EIA Directive.

Wider Disruption Caused by Movement of Dangerous Loads

14.145 The proposed development will not generate any trips during operations which are classified as dangerous or abnormal loads. For this reason, and following the EIA Regulations, this is a low sensitivity receptor of negligible magnitude criteria and so is not significant.

Effects Due to Dust and Dirt

14.146 The movement of vehicles to and from the site would have the potential to bring dust, dirt, and other detritus onto the road. Sensitive receptors within the study area include the Redmondstown cottages along the L2506. These residential receptors may experience dust and dirt and have been classified as medium sensitivity receptors.

14.147 HGVs are likely to create the greatest impact in terms of dust and dirt. HGV traffic is calculated to minimally increase, with a less than 10% increase on the L2506 during an average day. The magnitude of impact is considered to be negligible as per the IEMA Guidelines.

14.148 Given that the above impacts due to dust and dirt have been classified as negligible due to the increase in HGVs, and would affect low to medium sensitivity receptors, the potential effect would be minor and not significant in terms of the EIA Directive.

Cumulative Impacts

14.149 Following a search of the Planning Register on the TCC website, Table 14-10 lists some cumulative development which are within a 10km radius of the site, and which will generate a significant amount of traffic whether during construction or operations, and during a similar timescale to the proposed development.

Table 14-3. Summary of Cumulative Development

Development Name and Location	Planning Register Reference	Date of Permission	Development Description
MSD Ireland – Ballydine, Kilsheelan, Clonmel, Co. Tipperary	21407 (EIA 2021056)	05/09/2021	Construction of proposed three-storey pilot plant manufacturing facility approx. 3,266m2 and approx. 20.75m heigh plus ancillary buildings and additional parking
MSD Ireland – Ballydine, Kilsheelan, Clonmel, Co. Tipperary	211365	08/02/2022	Development of c.7.48ha for solar PV energy development plus ancillary works
ABO Wind Ireland Limited – Knockroe, Kilnagrtanagh, Newtowndrangan, Tullowcussaun, Ballyvadlea, Ballyhomuck, Kilburry West, Milestown, Bannixtown, Quartercross, Clare More, Killusty North, Killusty South, Kiltinan, Loughcapple, Grange Beg, Miltown Britton, Mullenranky, Kilmore, Ballinyoher, Redmondstown and Ballyvaughan, Co. Tipperary	211502	27/10/2022	10-year permission of a wind farm project. Construction of up to 7no. wind turbines with max. overall tip height of 150m; associated hard standing areas at each turbine; 38kV electrical substation and all associated infrastructure works; c.19km underground cabling and all associated works along public roads; new site access; upgrading of existing agricultural tracks and construction of new tracks on site and all associated works; and demolition of 2 existing buildings
Michael O'Neill – Ballinamore, Clonmel, Co. Tipperary	211535	22/01/2022	Fill of existing gravel pit to reinstate to levels including all associated site development works
Grian PV Ballyboe Ltd. – Ballyboe, Clonmel, Co. Tipperary	21403	24/06/2021	Amend design of the approved development (19/600239) which comprises consent for the development of a temp (30 years) solar farm with an export capacity of 12 MW of PV panels with associated infrastructure including internal access tracks

14.150 A review of these committed developments has concluded the following in terms of the potential to have a significant cumulative effect on traffic flows within the study area:

14.151 The solar farms at Ballydine and Ballyboe, and the wind farm at Knockroe, will have negligible traffic movements associated with the operational phases of each of these developments. Any construction phase impact is anticipated to be controlled by suitable Construction Management Plans and to be short term.

14.152 The pilot plant at Ballydine is noted as being a proposed three-storey pilot plant manufacturing facility sized approximately 3,266 square metres and approximately 20.75 metres high and located and linked to the existing factory and located south of the O.S.D. manufacturing facility, currently under construction. It is noted that the overall site is located some 8.75km to the east of the Medite facility, to the east of the N24/N76 roundabout junction.

14.153 The gravel pit at Ballinamore is also located 2.8km to the north-east of the Medite facility and accessed by a minor road that joins the N76 to the east of the N24/N76 roundabout junction.

14.154 None of these planning applications for upcoming developments are within the immediate proximity to the site such that the traffic generated from these would utilise any of the road links and junctions within the study area assessed.

14.155 A figure showing all cumulative development, at the time of this assessment, within a 10km radius is attached at **Appendix 1.5**.

MITIGATION MEASURES

14.156 The assessment has been undertaken under the assumption that general good construction practice would be deployed during both the construction and operational phases.

14.157 It has also been assumed that:

- all HGVs delivering materials to the site would be roadworthy, adequately maintained and sheeted as required.
- adequate traffic management, such as scheduling of deliveries, and banksmen would be deployed for the movement of HGVs.
- HGV loads would be maximised to ensure that part load deliveries would be minimised; and
- wheel washing of HGVs, where appropriate, prior to leaving the site.

14.158 Concerns were raised by local residents of Redmondstown cottages during scoping stage of the proposed development and so the main points along with proposed solutions have been set out in Table 14-11.

Table 14-4. Local Concerns and Mitigation

Transport Issue	Proposed Solution
Air pollution concerns due to small particles of wood/ dust fibres becoming airborne	All loads will be covered, where applicable, and all wheels washed upon egress of the site to minimise as far as possible.
Noise pollution, particularly overnight	Most deliveries of material will take place between the hours of 06:00 and 22:00. Any deliveries/ HGV movements outside of these hours will be as quiet as possible with drivers briefed to keep music down and not to accelerate hard.
Speeding	Ensure all drivers are made aware of the 60km/h speed restriction along the L2506.
Road safety concern with increase in HGV levels and use of Redmondstown Cottages layby area adjacent to the cottages	Provide driver training to ensure all drivers are aware they are not to access the layby area adjacent the Redmondstown Cottages. Provide training in other languages as needed and information on location of nearby laybys or rest stops.

14.159 The proposed mitigation measures are considered to be appropriate and sufficient, considering there is assessed to be no significant impact arising from the proposals to any of the IEMA identified criteria, nor to the identified sensitive receptors.

MONITORING

14.160 The number of HGVs accessing and exiting the site will continue to be monitored with quantities recorded. This will be made available to the Local Authority upon request.

14.161 Regular checks along the L2506 will be undertaken to ensure, firstly, no HGVs are speeding, and secondly, no HGVs are utilising the Redmondstown Cottages layby.

REFERENCES

Southern Regional Assembly (31 January 2020) Regional Spatial & Economic Strategy for the Southern Region, Edition 1, Project Ireland 2040

Tipperary County Council (August 2022) Tipperary County Development Plan 2022- 2028, Edition/ Volume 1, Tipperary County Council

Clonmel Borough Council & South Tipperary County Council (01 October 2013) Clonmel & Environs Development Plan 2013, Edition/ Volume 1, Clonmel Borough Council & South Tipperary County Council

Department of Housing, Local Government and Heritage (January 2012) Spatial Planning and National Roads Guidelines for Local Authorities, Edition 1, Environment, Community and Local Government

Institute of Environmental Management and Assessment (IEMA) (July 2023) Guidelines: Environmental Assessment of Traffic and Movement, Institute of Environmental Management and Assessment

National Roads Authority (20 November 2008) Environmental Impact Assessment of National Road Schemes – A Practical Guide, Edition/ Revision 1, National Roads Authority

Transport infrastructure Ireland (TII) (May 2014) Traffic and Transport Assessment Guidelines, Transport Infrastructure Ireland

Environmental Protection Agency (May 2022) Guidelines on the information to be contained in Environmental Impact Assessment Reports, Edition unknown, Environmental Protection Agency

Department of Housing, Local Government and Heritage (2010) Technical Guidance Document M – Access and Use, Edition 1, The Stationary Office Dublin

Department of Transport (May 2019) Design Manual for Urban Roads and Streets, Version 1.1, Government of Ireland

Appendix

Appendix 14. 1 Automatic Traffic Counter Data Summary

Appendix 14. 2 Junction Turning Count

(Refer to EIAR Volume 3 for Appendices)