

## 8. Transport

### Introduction

8.1 The traffic and transport related impacts associated with the development proposals were originally assessed within Chapter 12 of the original EIA submission (March 2014). This was followed by subsequent Further Environmental Information (FEI) submissions in 2016 and 2019.

8.2 The key findings of the assessments are summarised as follows:

- The future traffic movements for the new facility and potential locations on the highway network that may experience some impact. Operational assessments of the relevant junctions demonstrated that there would be no tangible reduction in highway performance as a result of development traffic. The environmental impact of the proposed development on transport issues was therefore assessed as neutral.
- A draft Construction Environmental Management Plan was developed to ensure that the construction phase of the development would have minimal impact on the site or its general vicinity. The environmental impact during the construction phase of the proposed development with respect to transport was assessed as moderate due to the relatively significant traffic volumes and diversionary routing in place during the construction period. However, it should be noted that this impact was confirmed as temporary/ short-term.
- The development proposals involve upgrading and widening of Boghill Road including the provision of a footpath with improvements to the visibility splays at the Boghill Road/ Hydepark Road junction and forward visibility on Hydepark Road. These improvements will improve road safety and the general convenience of road users.
- In terms of indirect impacts, it is considered that transport could have potential indirect impacts on ecology, landscape, the water environment, noise and air quality. These impacts relate to both the construction and operational phases which will have implications for the transport network. These indirect impacts are considered in detail in the various relevant chapters of this Environmental Statement and related chapters should be referenced accordingly.
- Cumulative Impacts are impacts that result from incremental changes caused by other past, present or reasonably foreseeable actions together with the project under consideration. In summary, it is considered that there will be a slight cumulative effect due to the anticipated increases in traffic on the localised road network.

8.3 The updated Transport Chapter submitted as part of the 2019 FEI further concluded:

*“From the review set out within this chapter and the 2019 TA Review, it is concluded that the findings and recommendations/ mitigations set out within the original approved assessment and the 2016 Transport FEI accepted by the PAC at Public Inquiry remain valid and current.”*

- 8.4 Department for Infrastructure Roads (DfI Roads) were consulted in relation to the updated transport/ traffic information within the 2019 FEI and provided a response dated 19<sup>th</sup> April 2018 which stated that they were ***“...satisfied with the methodology used and agrees with the conclusion that the finding/ recommendations / mitigation set out in the original assessment and the 2016 transport FEI remain valid.”***

#### **2023 TA Review**

- 8.5 The principal aim of this chapter is to ensure that in 2023, the findings remain valid and consistent with the previous assessments undertaken. In particular, this review focused on the age of the traffic data which informed the assessments and the committed developments which are approved in the vicinity of the development site as well as any other material change in circumstances which may affect the findings. The review concluded that:

- The latest traffic data which was collected in November 2018 to support the 2019 Transport FEI is reaching the end of the recommended lifespan.
- It should also be noted that in the passage of time since the 2018 traffic surveys, Junction 2 – Hydepark Road/ Hightown Road has been upgraded from a priority-controlled junction to a signalised junction that includes controlled pedestrian crossing facilities on the Hightown Road at the junction.
- Although it was noted that a number of committed developments previously identified within the 2019 FEI had progressed to construction, the level of build complete is difficult to fully define and therefore these committed developments should still be included within the assessment. In addition, a review of planning approvals since the 2019 FEI update highlighted that a number of new committed developments should also be included within the assessment.
- The accident data for the local road network should be re-visited.

- 8.6 To inform the preparation of a 2023 TA Review the following actions were taken:

- New traffic data was collected on 24<sup>th</sup> May 2023 from 07:30 to 09:30 and 16:30 to 18:30.
- A review of the approved planning applications within 2km of the site was undertaken to identify if any new committed developments should be included in the update.
- The PSNI were contacted to obtain new road traffic accident data for the period 2018 -2022.

- 8.7 The 2023 TA Review technical note is included as Appendix 8.1. The 2023 TA review demonstrated that although there have been some changes in background traffic, accident data and public transport services since the 2019 FEI was prepared, these changes do not affect the previously reported traffic impact of development or the operational capacity assessments originally undertaken.

## **Methodology**

- 8.8 As noted, the developments impacts have been assessed on multiple occasions (original submission in 2014 and FEI in 2016 and 2019) and the findings of which have been accepted by DfI Roads. Therefore, this assessment provides an update to the 2019 FEI to confirm whether or not the previous findings and proposed mitigation measures remain valid/ robust.
- 8.9 This updated Transport Chapter will therefore focus on key information presented within the 2019 FEI which is time limited or sensitive to changes in traffic volumes. The key areas to be considered within this assessment are:
- Base Conditions, including Committed Developments and Road Safety
  - Proposed Operational Movements.
  - Predicted Environmental Effects and their significance (Construction and Operation)
  - Proposed Mitigation Measures (Construction and Operation)
  - Residual Effects and their Significance taking Mitigation into Account (Construction and Operational)
- 8.10 Table 8.1 therefore sets out an initial overview of the key information that is time limited or sensitive to changes in traffic volume which require further consideration as part of this chapter.

**Table 8.1 Summary of Transportation Elements to be Considered**

Key Area	Sub area	Change Since 2019
Baseline Conditions	Traffic Volumes	Traffic Volumes have changed slightly since the 2019 FEI.
	Committed Developments	New committed developments identified
	Existing quarry use	Recently approved (14/03/2023) planning application (LA03/2022/0649/F) at the site for the "Erection of a replacement Coated Roadstone Plant and associated ancillary development to include bitumen storage tanks; aggregate and recycled asphalt pavement storage bays; hoppers; storage silos and conveyors
	Council Waste Contracts	Core assessment no longer assumes that a level of existing/ observed traffic movements within the study area are associated with Councils sending existing waste to Cottonmount.
	Road Safety Statistics	Road Safety statistics have changed slightly but conclusions remain appropriate.
	PT/ Walk/ Cycle Environment	Upper Hightown Road/ Hydepark Road Junction is now a signalised junction
Proposed Operational Movements	Vehicle Movements	No Change
	Routing	No Change
	Hours of operation	No Change
Predicted Environmental Effects and their Significance (Construction)	Type of movements, Risks, mitigation	No Change
Predicted Environmental Effects and their Significance (Operational)	Council Waste Contracts	See above. Note, this scenario was previously considered as a sensitivity test.
	Future Assessment Years	Future assessment years have changed due to passage of time and likely year of opening.
	PT/ Walk/ Cycle Environment	Upper Hightown Road/ Hydepark Road Junction is now a signalised junction (previously priority-controlled junction)
Description of Proposed Mitigation Measures (Construction)	-	No Change
Description of Proposed Mitigation Measures (Operation)	-	No Change
Description of Residual Effects and their Significance taking Mitigation into Account (Construction and Operational)	-	No Change

8.11 In accordance with EIA guidelines, the following potential net impacts generated by development proposals have been considered to help understand the requirement for mitigation measures:

- Change in traffic conditions e.g. increased queuing and delays.
- Change in public transport conditions e.g. increased waiting for public transport.
- Change in highway infrastructure – e.g. for local residents.
- Effects on car users; e.g. impacts local road users and development traffic.
- Effect on pedestrians.
- Effects on local residents.

8.12 In keeping with the Significance Criteria set out within previous submission/ assessment and based on the type of potential consequences occurring and the magnitude of consequence, the proposed site's construction and operational assessment (after mitigation) has been undertaken as presented In Table 8.2.

**Table 8.2 Magnitude of Impact Criteria**

<b>2014 Terminology</b>
<b>Neutral:</b> where there will be no overall impact.
<b>Slight:</b> where impacts will be observable but where the scale of the impact is unlikely to be of material significance in the locality.
<b>Moderate:</b> where impacts could occur which will have effects on factors recognised as being of local importance or implication.
<b>Substantial:</b> where impacts could occur which have implications for factors which are of recognised regional importance.
<b>Severe:</b> where the potential impact is likely to affect a matter of recognised national or international importance or affect a recognised national or international guideline or standard, or to be of major implication to the character or context of the area in which the feature or factor is located.

8.13 Indirect impacts, cumulative impacts and impact interactions will also be considered. This approach is still considered valid.

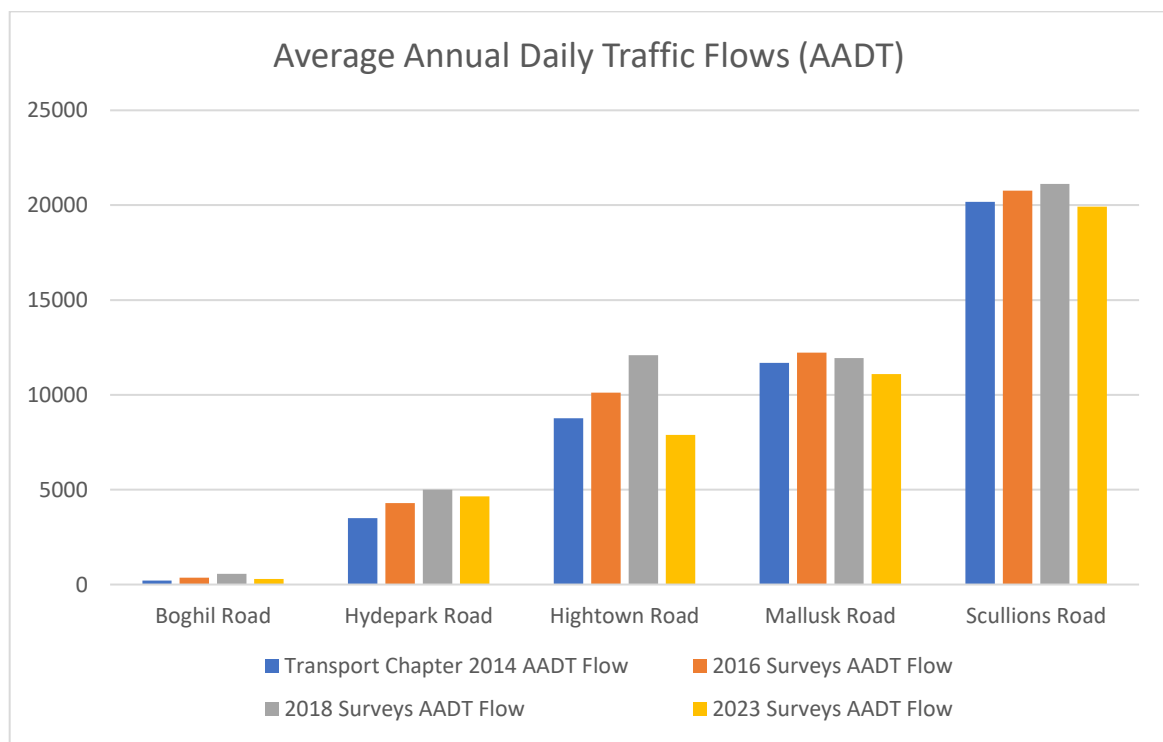
## Assessment

### Explanation of Base Conditions

8.14 The most recent assessment submitted to and accepted by DfI Roads was the 2019 FEI which included Annual Average Daily Traffic (AADT) flows for the following links within the study area:

- Boghill Road;
- Hydepark Road.
- Highway Road.
- Mallusk Road.
- Scullions Road.

8.15 As part of the 2023 TA Review, new traffic data was collected at all junctions previously surveyed and the AADT Figures previously reported have been updated. Figure 12.1 provides a comparison between the latest 2023 AADT figures and those set out in the previous assessments.



**Fig 8.1 Daily Traffic Flows**

8.16 Figure 8.1 demonstrates that the observed daily traffic flow levels were high in 2018 when compared to all other survey years.

8.17 It should also be noted that in the passage of time since the 2018 traffic surveys, Junction 2 – Hydepark Road/ Hightown Road has been upgraded from a priority-controlled junction to a

signalised junction that includes controlled pedestrian crossing facilities on the Hightown Road at the junction.

#### Committed Development

- 8.18 Atkins have reviewed the recently approved planning applications since the 2019 FEI and identified a number of committed developments to be included within the assessment.
- 8.19 For robustness however, the original assumptions/volumes for committed developments have been retained as well as the additional 2023 committed developments (to reflect the difficulty in confirming accurately the degree of build out of originally committed developments).
- 8.20 It should be noted that we have undertaken a review of the recently approved (14/03/2023) planning application (LA03/2022/0649/F) at the site for the “Erection of a replacement Coated Roadstone Plant and associated ancillary development to include bitumen storage tanks; aggregate and recycled asphalt pavement storage bays; hoppers; storage silos and conveyors” to determine awareness of potential future baseline at the site. However, the approved development (LA03/2022/0649/F) will not operate in tandem with the proposed Residual Waste Treatment application therefore has not been included as a committed development.
- 8.21 Furthermore, in relation to the potential trip generation associated with the existing quarry use, the assumptions within planning application (LA03/2022/0649/F) are consistent with those assumed as part of this assessment and previous assessments.

#### Road Safety

- 8.22 Atkins has consulted PSNI Statistics team to obtain the latest road safety data for the last 3 years (1<sup>st</sup> January 2020 and 30<sup>th</sup> December 2022) for the road network in the vicinity of the proposed development. This enabled a comparison of recent accident levels with those reported previously in the ES and FEI submissions.
- 8.23 The latest information received from PSNI Statistics team shows that there were 10 slight collisions and a total of 19 injuries recorded within the study area over a 3-year period between January 2020 and December 2022.
- 8.24 When this latest data is compared with the accident data presented within the 2019 update, it is noted that the total number of collisions in the vicinity of the site between 1<sup>st</sup> January 2020 and 30<sup>th</sup> December 2022 is less than the number recorded between 1<sup>st</sup> October 2015 and 30<sup>th</sup> September 2018. A review of the accidents showed an increase at the Mallusk / Hightown Road junction, however, the data did not provide information on the causation of the accidents and therefore further analysis cannot be undertaken.
- 8.25 The type, number and location of accidents within the study area is generally consistent between the latest data and the 2019 FEI and it is therefore considered reasonable to conclude that the previous findings in relation to the Road Safety remain valid.

- 8.26 Previous commitments to enhance road safety in the vicinity of the site will be retained and road improvements will be provided in the form of enhanced visibility at the Boghill Road/ Hydepark Road junction and widening of the Boghill Road to deliver betterment to the existing alignment and forward visibility at this location.

#### Explanation of Proposed Operational Movements

- 8.27 Key Information presented within previous EIA submission are summarised below and are considered to be unchanged and remain current:

- Proposed site will have the capacity to accept up to a maximum of 300,000 tonnes of waste annually.
- The proposed operational waste vehicles that will be transferred to the site is 143 vehicles arriving and 143 departing the site in a typical daily weekday (equates to 286 two-way vehicles).
- During peak periods there will be 32 two-way operational vehicles during the AM peak (07:45-08:45) and 2 two-way operational vehicles during the PM peak (16:45-17:45).
- The waste operation hours for the site will be between 07:00 and 18:00 during the weekdays and therefore waste operational vehicles will only enter and depart the site during this time. Waste deliveries will also occur on Saturday morning although there will be no Sunday deliveries.
- There are four primary routes which operational vehicles associated with the Waste Treatment Facility can utilise from the M2 Motorway when arriving/ departing to/ from the site (B95 Mallusk Road, Hightown Road, Upper Hightown Road, Hydepark Road).

#### Predicted Environmental Effects and their significance (Construction)

- 8.28 Key information presented with previous submission are summarised below and are considered to be unchanged and remain current:

- Traffic movements associated with the construction phase will include cars and light goods vehicles (LGVs) for construction workers as well as heavy goods vehicles (HGVs) delivering construction materials and plan to the site.
- Potential risks include:
  - The spillage of materials and carrying of soil from the site onto carriageways; and
  - The disturbance of adjacent landowners and people using the road network in the area.
- A separate Construction Management Plan (CMP) has been prepared to address the detailed procedures, sequencing and construction methodology anticipated by the project team engaged in the planning, liaison, and construction of the project. The CMP outlines



detailed proposals for temporary traffic and environmental measures to be adopted during construction. Also includes supplementary information on detailed construction practice that will be adhered to during the development of the site.

#### Predicted Environmental Effects and their significance (Operation)

- 8.29 Previous analysis had made various assumptions about the volumes of waste that would be destined for the Cottonmount site. For robustness and to better reflect the existing scenario, this assessment makes no allowance for Councils sending waste to Cottonmount and therefore all traffic to the proposed site are considered new trips. The trips have been distributed and assigned to the study network based upon previous assumptions set out within the approved TA – this has not changed.
- 8.30 Given that new traffic surveys were collected as part of the 2023 TA Review, the assessment years have been updated as follows:
- Opening Year = 2028.
  - Design Years = 2038 and 2043.
- 8.31 The 2023 TA review re-endorses the conclusion of the original TA and subsequent updates in that only two junctions (Hydepark Road/ Boghill Road and Hydepark Road/ Hightown Road) exceed the 5% threshold required to undertake detailed analysis to determine their operational performance without and with development traffic.
- 8.32 Based on the 2023 review, it is considered that the conclusions within the 2019 FEI submission that potential operational impacts associated with the development are not significant and are localised in their area of influence is unchanged and remains valid.
- 8.33 The 2019 FEI also noted that although there will be an increase of operational traffic to the site, the junction operational assessment indicated that the junctions perform within sufficient capacity threshold limits. The 2023 TA Review revisited the traffic modelling and this conclusion remains valid.
- 8.34 The Hydepark Road / Hightown Road junction has been upgraded since the 2019 review from a priority junction to a signalised junction. Atkins has undertaken a modelling assessment of the signalised junction which showed that the junction currently operates within capacity and will operate within capacity threshold limits in the future assessment scenarios.
- 8.35 Furthermore, the 2019 FEI concluded that the operation of the waste facility will not raise potential issues of (pedestrian) severance of Hightown Road as a result of increased traffic volumes given the level/ quality of good pedestrian infrastructure along Hightown Road and in the vicinity of Edmund Rice College. The upgraded Hydepark Road / Hightown junction incorporates a signalised pedestrian crossing for the Hightown Road. Based on the latest review undertaken, this conclusion is considered to remain valid.

#### Description of Proposed Mitigation Measures (Construction)

8.36 The proposed mitigation measures during the development's construction remain unchanged and valid from those set out within the 2019 FEI submission; these are:

- Suitable traffic management arrangement will be put in place to control traffic in all of the working areas during the construction phase. All proposed measures will be agreed in advance between appointed contractor and DfI Roads. Appointed contractor will also liaise closely with DfI Roads during the construction phase to ensure any unexpected issues arising can be addressed quickly and appropriately.
- A CMP has been prepared to address the detailed procedures, sequencing and construction methodology anticipated and outlines proposals for traffic and environmental management measures to be adopted during construction. This also includes proposals for diversionary routes required for the upgrade of Boghill Road.

#### Description of Proposed Mitigation Measures (Operation)

8.37 The proposed mitigation measures when the proposals are in operation remain unchanged and valid from those set out within the 2019 FEI submission; these are:

- Upgrade and widening of the Boghill Road to enhance forward visibility and improvements to provide adequate visibility splays at the Boghill Road/ Hydepark Road junction and forward visibility and forward visibility on Hydepark Road.
- Provision of a new footway along Boghill Road and cycle parking facilities will be provided within the site to encourage travel to the site via walking and cycling. Within the site, footways will be provided to facilitate ease of access for all, and routes will be clearly identified and supported by appropriate signage. Pedestrian, wheelchair and cycle access will be segregated from the vehicle access and will be designed to include minimal crossing points.
- Two coach spaces will be provided on-site within close vicinity of the visitor car park and sufficient car parking spaces for staff and visitors will be provided.

#### Description of Residual Effects and their Significance taking Mitigation into Account (Construction and Operational)

8.38 Based on the latest information collected and the analysis undertaken to date as discussed within this chapter and set out within the 2023 TA Review, the conclusions of the 2019 FEI remain valid and these are summarised below:

- Operational assessment of the relevant junctions has demonstrated that there will be no tangible reduction in highway performance as a result of development traffic. The impact of the proposed development on transport issues is therefore assessed as neutral.
- The impact during the construction phase of the proposed development on transport is assessed as moderate due to relative significant traffic volumes and diversionary routing

during the construction period. However, it should be noted that this will be a short-term impact.

- The proposed mitigation to Boghill Road and the Boghill Road/ Hydepark Road junction will improve road safety and the general convenience of road users.
- Transport issues (both construction and operational) could have a potential indirect impact on ecology, landscape, the water environment noise and air quality, and these are considered in detail within the various relevant Chapters of the EIA.
- In terms of cumulative impacts, it is considered that there will be a slight cumulative effect due to the anticipated increases in traffic on the localised road network.

### **Conclusion**

8.39 From the review set out within this chapter and the 2023 TA Review, it is concluded that the findings and recommendations/ mitigation set out within the original EIA and subsequent FEI submissions remain valid and current.