

TRANSPORT STATEMENT



IDENTIFICATION TABLE

Client	Hochtief (UK) Construction Ltd
Project	Snowdonia VIP
Study	Minffordd Quarry
Date	01/08/2023
Reference number	SYS_MINFFORDD_01082023
Document number	C0233-ATM-GES-OX-RP-X-0003

Introduction and Background

This Transport Statement has been prepared on behalf of HOCHTIEF (UK) Construction Ltd (HTUK). HTUK are a Principal Contractor for the Snowdonia Visual Impact Provision (SVIP) Project (“the Project”) being promoted by the Client, National Grid Electricity Transmission (plc) (NG). HTUK are responsible for the Tunnel & Cable contract element of the Project.

Planning permission has been granted to National Grid to reduce the visual impact of a section of electricity transmission line near the towns and villages surrounding the Dwyryd Estuary. The Project involves the removal of an approximately 3.5km section of overhead lines and replacing it within underground infrastructure.

The tunnel will extend from a location close to National Grid’s existing Garth Sealing End Compound on the western side of the Dwyryd Estuary, to Cilfor on the eastern side of the Dwyryd Estuary.

A separate Transport Assessment and Environmental Impact Assessment was produced to support the planning application and a Construction Traffic Management Plan has subsequently been produced to discharge planning condition requirements. These documents assess the traffic implications of the Project and have identified a range of mitigation measures to reduce the residual impact.

Now that the Project is progressing, Minffordd Quarry, located just 500m to the north of the Garth site off the Porthmadog Bypass (3.5km by road), has been identified as a suitable location for the deposit of extracted material from the tunnelling operations.

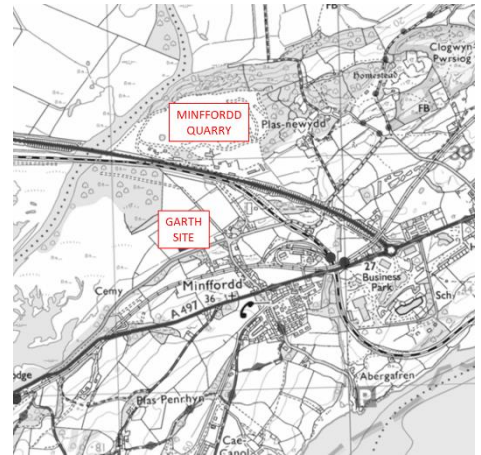
Whilst material will be deposited within the Minffordd Quarry site, a separate designated area is to be allocated, for which a new permit and planning application is required.

SYSTRA has been appointed by HTUK to prepare this Transport Statement to provide a review of the current operations and proposals.

Site Location

The site is located to the north of Minffordd and accessed off the A487 Prthmadog Bypass. The site is bounded by forestry areas to the north and east, the Afon Glaslyn River the west and Porthmadog Bypass to the south.

In the context of the Garth site, Minffordd Quarry is located approximately 500m to the immediate north. Vehicle routing to the quarry from Garth, described in the next section, is approximately 3.5km by road.



Existing Quarry Operations & Forecast

Existing Quarry Operations

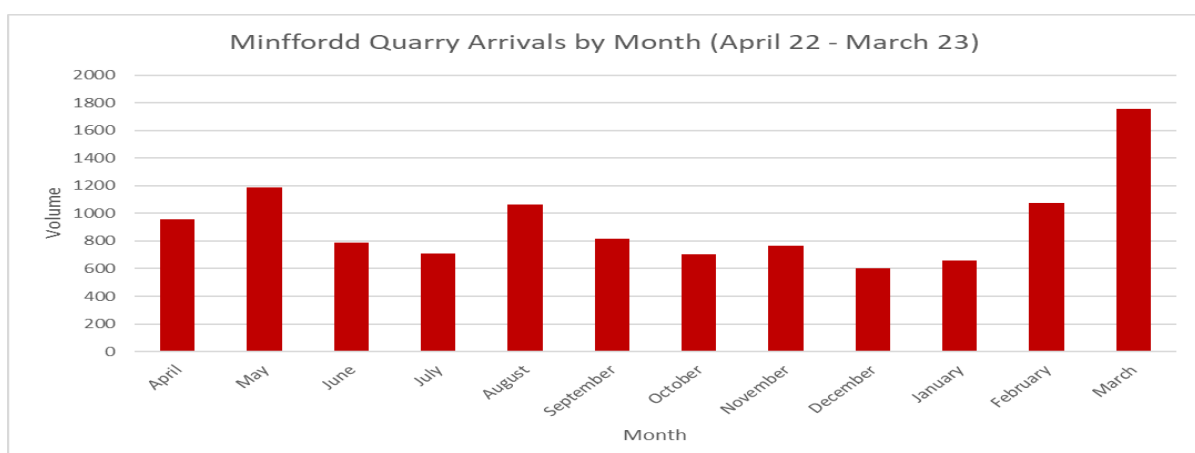
The Minffordd Quarry and Asphalt Plant has been operating successfully for a number of years and is operated by Breedon Group, having been acquired from Tarmac in 2018.

To gain an understanding of the existing operations at the quarry, recorded data has been provided by Breedon Group for the period from April 2022 to March 2023. The data provided includes the detailed breakdown of the number of arrivals, along with associated date and time of day. This data is important when seeking to establish the movement profile of vehicle trips over the day.

The hours of operation vary for the quarry operation and the asphalt plant. The asphalt plant has the following operating hours:

- Monday to Saturday – 05:30hrs to 20:00hrs
- Sunday (max 15 per annum) – 07:30hrs to 16:30hrs

The following graphs provide a summary of the operating data for the 12-month period of April 2022 to March 2023, inclusive.



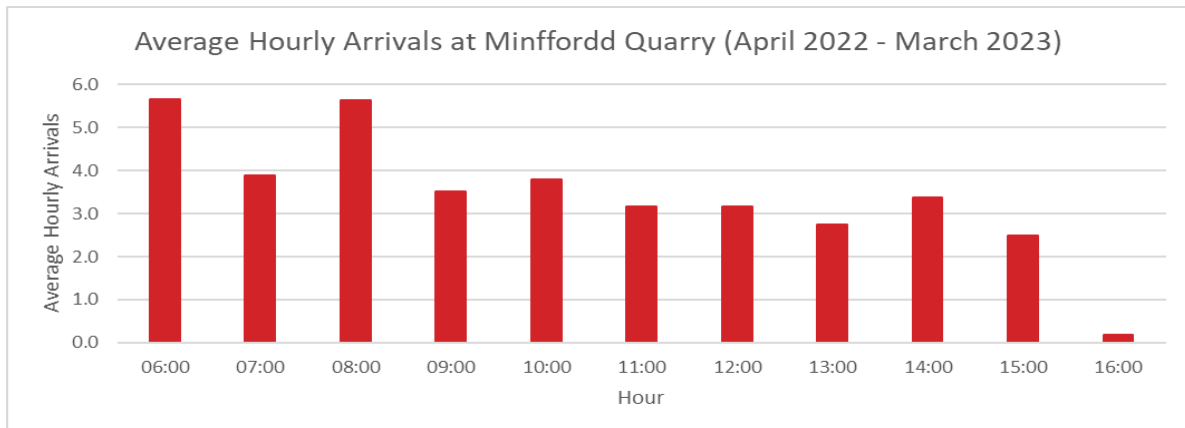
The graph above shows whilst the total volumes of vehicles to the site fluctuate through-out the year, the volumes are relatively consistent, although it is clear that March experienced a much higher volume than the other months.

The graph below provides an overview of the weekday operations and indicates that the quarry typically experiences a higher volumes of arrivals on Tuesday, Wednesday and Thursday, with Monday and Friday being comparably lower.

The graph shows that for the period covered by the data, the highest number of average daily arrivals is 48, occurring on Thursday.

From the data, it is also possible to present a summary of the average hourly arrivals, to understand the profile throughout the typical weekday. This is important to establish the peak periods of activity and turning movements of HGVs likely to currently be experienced at the site access.

It can be seen that the site experiences busier hours in the morning, especially in the hours of 06:00hrs to 09:00hrs. The data shows that in the periods 06:00hrs to 07:00hrs and from 08:00hrs to 09:00hrs there is an average arrival



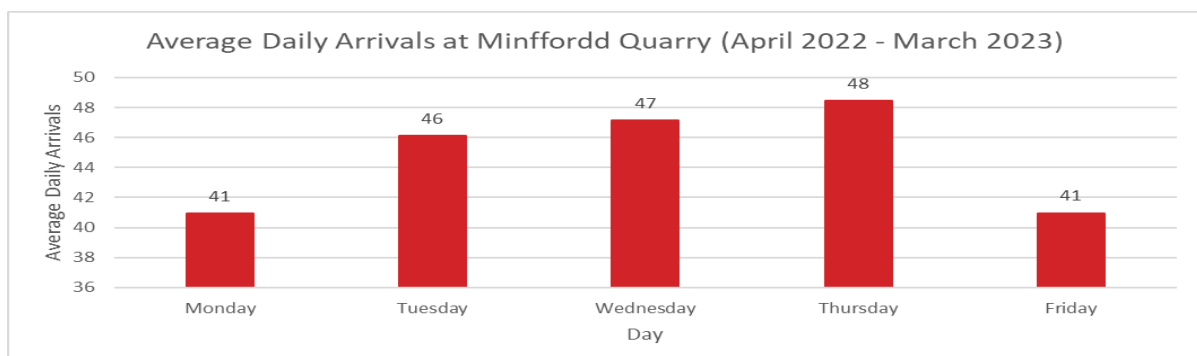
of over 5 HGVs. From 11:00hrs onwards there is an average arrival of approximately 3 HGVs per hour over the course of a typical weekday. There are minimal movements after 16:00hrs.

HGV Forecasts from Garth

The tunnelling operations at Garth are forecast to generate approximately 30 loads of waste material per day, suitable for transfer to the quarry by HGV. The quarry is open for deliveries for approximately 10 hours every day and as such, this equates to an average of an extra three HGV arrivals per hour every day.

Breedon Group have confirmed that they do not have any Conditions restricting the number of HGVs at the site and similarly, do not have a limit on the annual tonnages that can be received. As such the additional three HGV arrivals at the site per hour (average) can be accommodated and permitted.

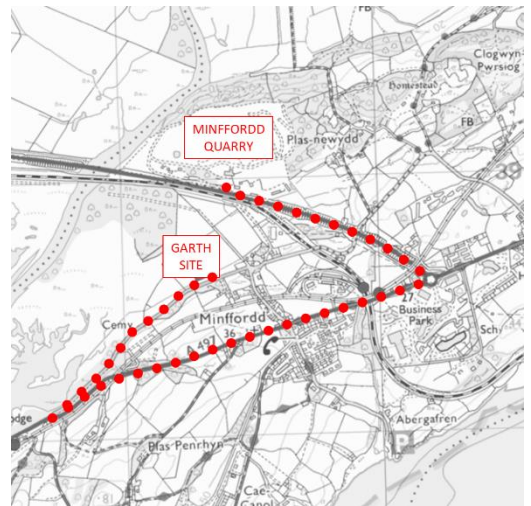
Routing to the site from Garth, the suitability of this route and the site access are briefly discussed in the following sections, however, in relation to the operations of the surrounding road network it is considered that the additional number of HGVs per hour is low will not have a material impact on the safety or operations of the surrounding road network.



In terms of highway links and the appropriate routing of HGVs, material will be transported from Garth to Minffordd Quarry using the A497 and A487 Porthmadog Bypass, as shown on the adjacent plan.

HGVs will initially turn right out of the site at Garth and head west. HGVs will then turn left after approximately 850m onto the A497 and will follow the A497 until the A497 / A487 Minffordd Roundabout.

From the A497 / A487 Minffordd Roundabout, HGVs will turn onto the A487 Porthmadog Bypass in a north-westerly direction for approximately 700m before turning right into the quarry site access.



Site Access

The road network in the immediate vicinity of the quarry operates in a generally satisfactory manner with no significant queueing or delay to journey times.

The site access in the quarry takes the form of a priority controlled junction off the A487.

From the east, a ghost island right turn lane is provided allowing vehicles to wait to turn without blocking through movements. From the west, a left turn slip land is provided into the site, allowing vehicles to decelerate before turning without impeding any following traffic.

For vehicles existing the site, good visibility is available in both directions.



Road Safety Review

A review of road safety in the immediate vicinity of the quarry has identified one reported collision – located on the left turn slip lane approach to the site access junction. The collision occurred in in January 2020.

It should be noted that there have been no other collisions reported in the vicinity of the site in the last 20 years.

The review of collision data does not identify any incidents or clusters which raise concern with regard to the additional HGV traffic proposed.



Summary and Conclusion

The following items present a summary of this Transport Statement:

- Extracted material from tunnelling operations at Garth are proposed to be transported to Minffordd Quarry. Tunnelling operations will generate 30 loads of material per day – 3 HGVs per hour on average.
- Quarry operations are busier in the mid-week, with the highest average of 48 arrivals on a typical Thursday.
- There are no Conditions restricting the number of HGV arrivals or annual tonnages at Minffordd Quarry.

- The additional HGV movements to the quarry from Garth are low and will not result in a material impact on the operations of the surrounding road network.
- HGVs will route to the quarry via the A497 and A487 Porthmadog Bypass.
- The quarry site access is already established for HGV movements is to a suitable standard and currently operates in a satisfactory manner.
- There has only been one collision in the vicinity of the quarry in the last 20 years at the site access. The proposed operations will not result in road safety concerns.

Conclusion

With consideration of all of the above, it is concluded that the extracted material from tunnelling operations at Garth can be transported to Minffordd Quarry in a satisfactory manner, without road safety or operational concerns. The proposals are considered to be acceptable from a transport perspective and as such, should be supported.