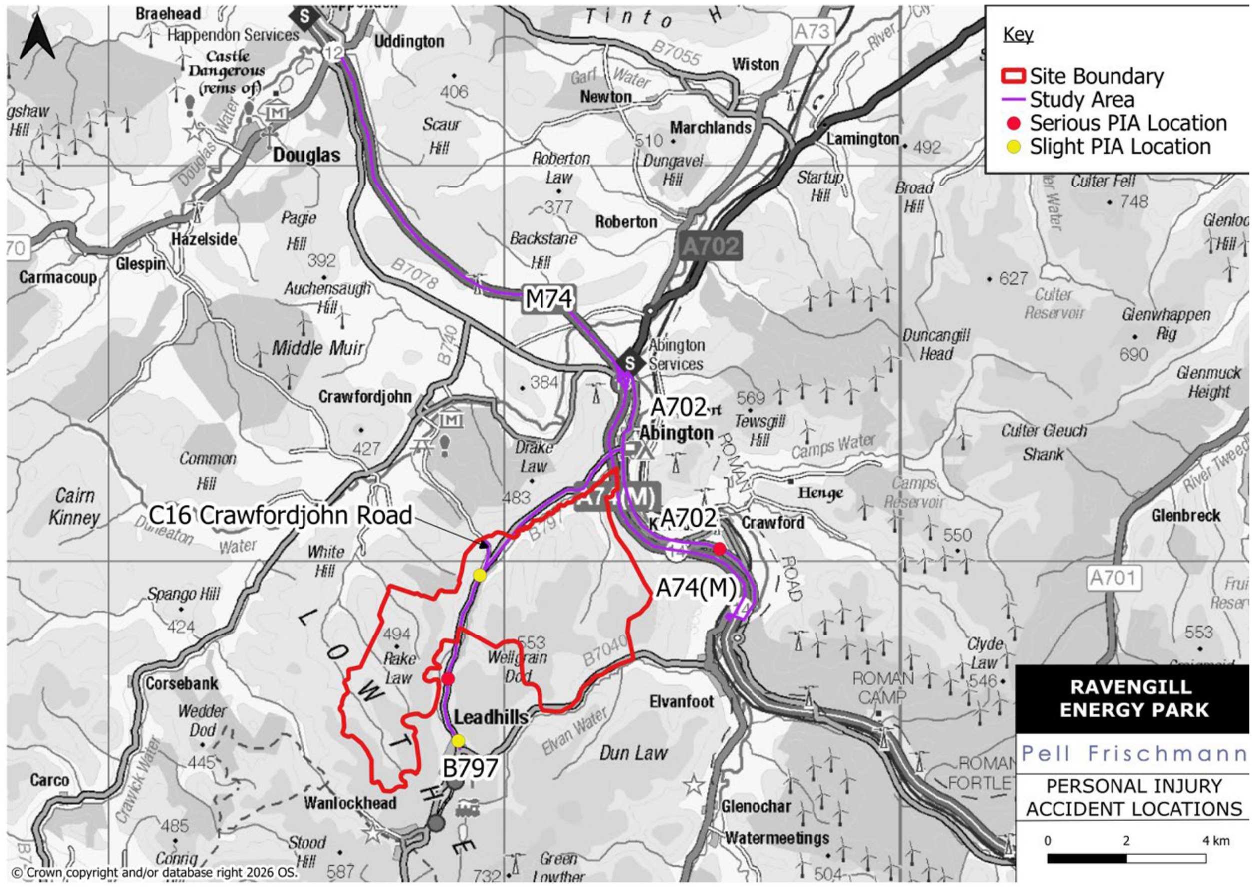
Figure 8 Accident Locations



A summary analysis of the incidents indicates that:

- A total of four accidents were recorded on the B797 and A702, within the Study Area, within the five-year period, which includes three accidents recorded on the B797 and one accident recorded on the A702;
- Of those three accidents recorded on the B797, two were classed as "slight", and one as "serious". There were no fatalities recorded;
- All three accidents recorded on the B797 involved cars. The two "slight" accidents were single vehicle accidents while the "serious" accident involved a collision between two cars;
- The closest accident recorded to the B797 Site access is approximately 1 km to the southwest of the western section's access;
- One accident was record on the A702, which involved a car and a motorcycle and resulted in a "serious" casualty;
- None of the recorded accidents involved HGVs; and
- None of the recorded accidents involved cyclists or pedestrians.

In general, there are no clusters of PIAs at any location in the assessed area or high numbers of accidents involving HGVs for example.

Based on the information available, it has been established that there are no specific road safety issues within the vicinity of the Site that currently require to be addressed or would be exacerbated by the construction of the Proposed Development.

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5.6 Future Baseline Traffic Conditions

5.6.1 2035 Traffic Flows

Construction of the Proposed Development is estimated to commence during 2035 if planning permission is granted and is anticipated to last approximately 18 months depending on weather conditions and ecological considerations.

To assess the likely effects during the construction, base year traffic flows were determined by applying a Tempro low growth factor to the surveyed traffic flows. The Tempro low growth factor for 2026 to 2035 is 1.016. These factors were applied to the survey data to estimate the 2035 base traffic flows, as shown in **Table 6**. This forecast forms the baseline for the assessment of traffic and transport related effects in **Chapter 9: Traffic and Transport (EIAR Volume 2)**.

Table 6 24-hour Two-way Average Traffic Data (2035)

No.	Survey Location	Cars & Lights	HGV	Total
1	B797, at Site Accesses	377	76	452
2	B797, north of Leadhills	515	18	533
3	A702, north of Abington Village	1,849	115	1,965
4	A702, north of A702/Carlisle Rd/A74(M) Rbt	867	127	994
5	M74, south of Junction 12	23,703	12,330	36,032
6	A74(M), north of Junction 14	25,986	13,326	39,312

Please note minor variances due to rounding may occur.

5.7 Committed Developments

5.7.1 Onshore Wind Farm and Energy Related Planning Applications

A review of SLC's online planning portal[16], Scottish Borders Council's (SBC's) planning portal[17] in addition to the Scottish Government's Energy Consents Unit portal[18] was undertaken to identify any consented developments within the vicinity of the Site which would generate substantial traffic.

TA Guidance[19] advises that only those projects with extant planning permission or local development plan allocations within an adopted or approved plan require to be included in any assessment. Those projects in scoping or at the application stage should not be included in cumulative assessments as they have yet to be determined. When considering traffic impacts specifically in relation to the construction phase of a project, the potential traffic impact is highly speculative and as such, cannot be included in the assessment.

The review did not identify any other significant traffic generating developments on the B797 or A702 within the Study Area that may occur during the construction period associated with the Proposed Development.

It should be noted that any crossover of traffic with the Proposed Development flows would be addressed via an overarching Traffic Management and Monitoring Plan, secured by planning condition on the Proposed Development's consent.

[16] South Lanarkshire Council (2026) Planning – Simple Search. Available at: https://publicaccess.southlanarkshire.gov.uk/online-applications/
[17] Scottish Borders Council (2026). Planning – Simple Search. Available at: https://eplanning.scotborders.gov.uk/online-applications/
[18] Energy Consents Unit (2026). Available at: https://www.energyconsents.scot/ApplicationSearch.aspx?T=1
[19] UK Government (2014) Travel Plans, Transport Assessments and Statements Available at: https://www.gov.uk/guidance/travel-plans-transport-assessments-and-statements

5.7.2 Other Planning Applications

A review of the SLC's online planning portal was also undertaken for other any other developments with planning consent, which should be considered within this assessment. The review examined consented developments whose trips are considered significant in scale (i.e., has associated traffic impact of over 10%).

The review did not identify any other significant traffic generating developments in the Study Area that may occur during the construction period associated with the Proposed Development.

It should be noted that the use of low Tempro growth assumptions has provided a basis for general local development growth within the Study Area.

6 Trip Generation and Distribution

6.1 Construction Phase

6.1.1 Trip Derivation

During the 18-month construction period, the following traffic would require access to the Site:

- Staff transport, in either cars or staff minibuses;
- Construction equipment and materials, deliveries of machinery and supplies such as concrete materials and crushed rock;
- Components relating to the BESS element, substation components and associated infrastructure;
- AILs consisting of the wind turbine sections and heavy lift cranes; and
- Escort vehicles for AIL deliveries.

Average monthly traffic flow data was used to establish the construction trips associated with the Proposed Development, based on the assumptions detailed in the following sections. It should be noted that there may be variations in the following calculations due to rounding, which are not considered sufficiently significant to affect the outcomes.

6.1.2 Construction Staff

Staff would arrive in non-HGV vehicles and where possible would be encouraged to car share. The workforce on-site would depend on the activities undertaken but, based on previous wind farm construction site experience for a project of this scale, which suggests three staff per wind turbine during the short peak period of construction is likely, the maximum number of staff expected on-site could be around 63 per day.

For the purposes of estimating traffic movements, it was assumed that 40% of staff would be transported by minibus and 60% would arrive by car (single car occupancy was assumed as the worst case at this stage with potentially fewer movements through car sharing).

Based on these assumptions, staff transport cars and light vehicles would account for a maximum of 84 vehicle movements (42 inbound trips and 42 outbound trips) per day during the peak period of construction.

6.1.3 Abnormal Indivisible Load Deliveries

The wind turbines are broken down into components for transport to the Site. The nacelle, blade and tower sections are classified as AILs due to their weight, length, width and height when loaded. For the purposes of the assessment, the 'worst case' numbers of components requiring transport are illustrated in **Table 7**.

Table 7 Turbine Components

Component	Number of Components per Turbine
Rotor Blades	3
Tower Sections	5
Nacelle	1
Hub	1
Drive Train	1
Nose Cone	1
Transformer	1
Ancillary	1
Site Parts	0.25 (parts shared between 4 wind turbines on one delivery)

In addition to the wind turbine deliveries, up to two high-capacity erection cranes would be needed to offload a number of components and erect the turbines. The cranes are likely to be mobile cranes with a capacity of up to 1,000 tonnes that are escorted by boom and ballast trucks to allow full mobilisation on Site. Smaller erector cranes would also be present to allow the assembly of the main cranes and to ease the overall erection of the wind turbines. Two transformers will also be delivered to Site.

Escort vehicles would accompany the AIL convoys to support the traffic management measures. Up to three vehicles would be deployed and it is assumed that three AIL turbine component loads would be delivered per convoy. This would result in 78 convoys on the network, with a total of approximately 470 escort vehicle movements (235 inbound trips and 235 outbound trips).

Wind turbine components that do not classify as AILs, would be delivered in addition to these, resulting in a further approximate 134 movements (67 inbound trips and 67 outbound trips). All of these deliveries are expected to occur over a period of approximately six months.

The escort vehicles have been assumed to be police cars and light goods vehicles. Motorcycles may be deployed, depending upon Police Scotland resources.

6.1.4 General Deliveries

Throughout the construction phase, general deliveries would be made to the Site by means of HGV. These would include fuel, Site office and staff welfare. At the height of construction, it is assumed that up to 40 journeys to Site are made (20 inbound trips and 20 outbound trips) per month.

6.1.5 Material Deliveries

Various materials would need to be delivered to Site to construct the site-based infrastructure. At the outset of the construction works, HGV deliveries would deliver plant and initial materials to the Site to enable the formation of the Site compound and to deliver construction machinery.

The Site is large enough to warrant on-site batching of concrete. The assessment assumes that all wind turbine and substation foundation concrete would be mixed on-site, with deliveries of cement powder, water and sand and aggregates being delivered by HGV. For the purpose of this assessment, it is assumed that the cement powder and water would be delivered from local concrete suppliers via the A74(M) / (M74). It is assumed that sand and aggregate would be delivered by tipper HGV and is expected to come from local quarries via the A74(M) / (M74).

The estimated total volume of concrete required on site is 28,754 m³, based upon expected wind turbine foundations, substation foundation and miscellaneous uses across the Proposed Development. The individual deliveries associated with the raw materials have been estimated and result in inbound trips of 63 cement tankers, 911 sand and aggregate tippers, and 365 water tankers. It may be possible to extract some aggregate for use in concrete production from borrow pits within the Site, however 100% of the concrete aggregate has been assumed to be delivered to Site to present a worst-case scenario.

Steel reinforcement required in the foundations across the Site for wind turbine foundations, substation etc. are estimated to total 2,871 tonnes, resulting in a total of 194 vehicle movements (97 inbound trips and 97 outbound trips).

The proposed access tracks are generally 6 m in width and would be designed to accommodate 13 tonne axle loads. In addition to the access tracks, crane hardstands would be constructed to enable the wind turbine erection process. While it is anticipated that up to 100% of these aggregate requirements would be sourced from extraction of materials related to construction of Site infrastructure (e.g. BESS and substation compounds) from the four on-site borrow pits, as a worst-case assessment, it is assumed that 100% of the aggregate material requirements would be imported to the Site. It is assumed that the aggregate material would arrive to Site from quarries via the A74(M) / (M74).

The estimate of imported material is detailed in **Table 8**.

Table 8 Aggregate Material Deliveries

Element	Volume / Installation (m³)	Total Weight (t)	Lorry Capacity (t)	Inbound Trips	Total Movements
Aggregate Material	191,121	420,467	20	21,024	42,048

Geotextile would be delivered to Site in rolls. A total of 170 large rolls may be required at Site and would be delivered by HGV which would result in 18 vehicle movements (9 inbound trips in and 9 outbound trips).

Cables would connect each wind turbine to the substation compound. Trip estimates for the cable materials are provided below in **Tables 9** and **10**. Three cables are to be provided within each cable trench and these would be backfilled with cable sand. Ducting deliveries would comprise 10 vehicle movements (5 inbound trips and 5 outbound trips).

Table 9 Cable Trip Estimate

Element	Total Cable Length (m)	Length per Drum (m)	Number of Drums	Inbound Trips	Total Movements
Cables	9,000	500	18	2	4

Table 10 Cable Sand Trip Estimate

Element	Volume (m³)	Total Weight (t)	Lorry Capacity (t)	Inbound Trips	Total Movements
Cable Sand	1,013	1,620	20	81	162

One substation building would be constructed on the Site. This would require deliveries of building materials, structural elements and components and would result in 240 vehicle movements (120 inbound trips in and 120 outbound trips). BESS deliveries would result in a further 148 HGV vehicle movements for battery, invertor and cabin / building deliveries etc (38 inbound trips in and 38 outbound trips).

The resulting traffic generation estimates have been plotted onto the indicative 18-month construction programme to illustrate the peak journeys on the network. **Table 11** illustrates the trip generation throughout the construction programme for each month, showing two-way construction vehicle movements, i.e. an inbound and outbound trip.