



Chapter 6: Highways and Transportation

Glyn Taff Solar Farm

05/03/2025



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6. INTRODUCTION

- 6.1. This chapter of the ES has been undertaken by Asbri Transport Limited to assess the potential effects of the Proposed Development in highways and transportation terms. The chapter assesses potential effects on the local transport systems serving the Site, focussing upon the highway network. Given the location and nature of the Proposed Development there is no active travel or public transport infrastructure and facilities are not an issue.
- 6.2. The Proposed Development will consist of an intense but relatively short-lived approximately 12-month construction period with staff travelling to and from The Site in private vehicles with construction materials and equipment being delivered on-site by various sized goods vehicles. During the operational phase there will be a minimal need to visit the site for maintenance purposes, which is estimated to involve 1 LGV vehicle movement per month.
- 6.3. This Chapter of the ES examines the transport impact of the Proposed Development on the existing transport system from the solar aspect of the Proposed Development only. Impacts arising from the grid route will be covered post consent as part of a condition within the final Construction Traffic Management Plan (CTMP).
- 6.4. This chapter of the ES is supported by the following Figures and Technical Appendices:
- Figure 6.1 – Proposed Development Site
 - Figure 6.2 – Construction Vehicle Delivery Route
 - Figure 6.3 – Public Transport Infrastructure
 - Figure 6.4 – Traffic Survey Locations
 - Figure 6.5 – Average Weekday 2 Way Traffic Flow Profiles
 - Figure 6.6 – Saturday 2 Way Traffic Flow Profiles
 - Figure 6.7 – Personal Injury Collisions
 - Figure 6.8 - Site 1 Bryn Tail Lane - Base + Development Traffic Flow Profiles – Weekday
 - Figure 6.9 - Site 1 Bryn Tail Lane - Base + Development Traffic Flow Profiles – Saturday
 - Figure 6.10 - Site 2 Dyffryn Road - Base + Development Traffic Flow Profiles – Weekday
 - Figure 6.11 - Site 2 Dyffryn Road - Base + Development Traffic Flow Profiles – Saturday
 - Figure 6.12 - Site 3 A4054 Cardiff Road - Base + Development Traffic Flow Profiles – Weekday

- Figure 6.13 - Site 3 A4054 Cardiff Road - Base + Development Traffic Flow Profiles – Saturday
- Appendix A – Cumulative Development Schemes

Site Description

- 6.5. The area of the Proposed Development (the “Application Site”) lies at an elevation of approximately 140m – 330m AOD and covers a total area of c. 70.9 hectares. It is centred around Bryntail Farm at approximate National Grid Reference (NGR) E 309333, N 189800. It is south of Eglwysilan Road. The site extends west of Bryntail Farm and east of the Bryn Tail Lane. The site is within the administrative area of Rhondda Cynon Taf Council.
- 6.6. The site comprises 38 agricultural fields that are currently in use for livestock farming. It is on the east side of the Taff Valley c. 1.6 km east of Ynysangharad War Memorial Park. Access will be gained from the Bryn Tail Lane.
- 6.7. The site is adjacent to the Twyn Hywel Energy Park a consented wind farm including 14 turbines (DNS/3272053).

Development Description

- 6.8. Installation, operation and subsequent decommissioning of a renewable energy scheme comprising ground mounted photovoltaic solar arrays together with substation compound, transformer stations, internal access track, landscaping, biodiversity measures, boundary fencing, security measures, CCTV posts, monitoring house, storage containers access improvement and ancillary infrastructure. The solar arrays will have a combined capacity of up to 39.9MWp.

LEGISLATION, POLICY & GUIDANCE

- 6.9. The Proposed Development has been assessed against existing national, regional and local policies and guidance. The assessment has been collated and considered based upon the following legislation, planning policy and guidance:

National Policies & Guidance

- 6.10. The national (UK and Wales) policy and guidance that has been consulted is as follows:
- Wales Spatial Plan¹;

¹ Welsh Government. Wales Spatial Plan. Available at:...

- National Development Framework 2020-2040²;
- Active Travel Act 2013³;
- Planning Policy Wales, Edition 11, Welsh Government (February 2021)⁴;
- One Wales: Connecting the Nation⁵;
- Technical Advice Note 18: Transport, Welsh Government (2007)⁶; and,
- Well-being of Future Generations (Wales) Act 2015⁷.

Regional & Local Policies & Guidance

- Rhondda Cynon Taf Council Local Development Plan 2006 – 2021⁸; and
- Rhondda Cynon Taf Council Supplementary Planning Guidance: Delivering Design and Placemaking: Access, Circulation & Parking Requirements⁹

Assessment of Relevant Policies, Guidance & Legislation

- 6.11. The assessment of traffic impact of the proposed development has been undertaken in accordance with the latest guidelines as detailed in the 'Institute of Environmental management and Assessment (IEMA) Guidelines: Environmental Assessment of Traffic and Movement'.
- 6.12. In general terms (paragraph 1.2.2) the IEMA Guidelines requirement states that Transport Assessments should:
- assess the traffic impact of the proposals based on an assessment of conditions on the highway network in peak periods

² National Development Framework 2020-2040

³ Active Travel Act 2013

⁴ Planning Policy Wales, Edition 11, Welsh Government (February 2021)

⁵ One Wales: Connecting the Nation

⁶ Technical Advice Note 18: Transport, Welsh Government (2007)

⁷ Well-being of Future Generations (Wales) Act 2015

⁸ Rhondda Cynon Taf Council Local Development Plan 2006 – 2021

⁹ Rhondda Cynon Taf Council Supplementary Planning Guidance: Delivering Design and Placemaking: Access, Circulation & Parking Requirements

- undertaken with reference to daily traffic flows prior to assessing the time period with the highest potential impact (i.e. degree of change from baseline conditions), which may not be the same as the time period with the highest baseline traffic flows.
- 6.13. The impact of traffic and movement is dependent on a wide range of factors (paragraph 2.6), including:
- Current state traffic and movement environment
 - Volume of development traffic
 - Traffic speeds and network operational characteristics
 - Traffic composition (e.g. percentage of Heavy Goods Vehicles (HGVs))
 - Future cumulative development traffic
- 6.14. Paragraph 2.8 of the guidelines also state that “Different types of development will attract different levels and types of traffic and, hence, different impacts”, with the type and level of assessment of impact being appropriate to the Proposed Development and proportionate to the size and scope of the likely impact.
- 6.15. With regards to the significance of an impact, the guidelines state (paragraph 3.12) that “There is no definition of a ‘significant effect’ in the EIA Regulations” and that there is a “need for interpretation and judgement....backed up by data or quantified information wherever possible.”

METHODOLOGY

- 6.16. The forecast traffic impact is based upon observed traffic flows, speeds and the layout of the local highway network. The baseline traffic conditions and the impact of construction traffic are discussed in more detail below. Traffic surveys were undertaken during a neutral month and during school term time in October 2024.
- 6.17. The nature of the development is such that the vast majority of associated traffic movements will occur during the construction period, particularly with regards to large construction vehicles. During the operational phase of the Proposed Development only intermittent maintenance and servicing visits will be required, with the vehicles used being no larger than a Light Goods Vehicle (LGV).
- 6.18. The decommissioning period, involving the removal of solar panels and other equipment as well as restoring the Site to its previous agricultural use, will necessarily entail a number of vehicle trips by staff and larger vehicles.

- 6.19. Therefore, the assessment methodology will concentrate upon the construction period, while also dealing briefly with the operational and decommissioning periods.

Study Area

- 6.20. It is proposed to construct a solar farm on 70.9 hectares of land to the east of Pontypridd and to the north of the Hawthorn settlement, Rhondda Cynon Taf. The site location is shown in **Figure 6.1**.
- 6.21. The proposed solar farm is located on land surrounding the existing Bryntail Farm, located at the northern extent of Bryn Tail Lane. The Site is bounded to the northeast by Eglwysilian Mountain and southeast by agricultural land.
- 6.22. Southwest of the Site is bounded initially by a strip of agricultural land located on the eastern edge of the settlements of Hawthorn and Rhydyfelin, which form the eastern extent of the Pontypridd urban area. The northwest the Site is bounded by Pontypridd Golf Course.
- 6.23. It is proposed to access the Site during the construction phase utilising Bryn Tail Lane, Masefield Way, Dyffryn Road and the A40454 Cardiff Road from the Upper Boat Junction of the A470.
- 6.24. The construction traffic route connecting with the A470 at the Upper Boat junction is shown in **Figure 6.2**.

Evaluation Methods

- 6.25. The main impact of the Proposed Development will be during the construction phase where a wide range of vehicles, including HGV movements, will be required to access the Site.
- 6.26. The traffic impact of the operational phase will be minimal, with only vehicles requiring access to the solar farm for regular but infrequent visits for maintenance purposes. Such traffic movements will not involve large vehicles and be restricted to LGVs.

Significance of Effects - Criteria

- 6.27. The assessment has been based upon the Institute of Environmental Management and Assessment's Guidelines for the Environmental Assessment of Road Traffic (the IEMA Guidelines). The IEMA Guidelines suggest in paragraph 2.16 that two broad rules-of-thumb could be used as a screening process to delimit the scale and extent of the assessment. These are:

“Rule 1 include highway links where traffic flows will increase by more than 30% (or the number of heavy goods vehicles will increase by more than 30%)

Rule 2 include any other specifically sensitive areas where traffic flows have increased by 10% or more.”

- 6.28. These rules-of-thumb form the starting point for the assessment of effects. Specifically for this assessment, the sensitive areas under Rule 2 will include the narrow country lanes that will be used to access the Site.
- 6.29. The significance of the effects of the Proposed Development have been considered in respect of the following receptors based on the IEMA Guidelines:
- Severance;
 - Driver delay;
 - Pedestrian delay;
 - Pedestrian amenity;
 - Fear and intimidation; and
 - Accidents and safety.
- 6.30. For many receptors, the IEMA Guidelines do not contain simple rules or formulae which define the thresholds of significance. Therefore, there is a need to exercise professional judgement in determining the degree of the effect and whether or not an improvement is required and, if required, what the improvement should comprise. **Table 6–1 to 6-3**, have been developed in this manner.

Severance, Pedestrian Delay, Pedestrian Amenity, Fear and Intimidation

- 6.31. Receptors relating to severance, pedestrian delay, pedestrian amenity, and fear and intimidation are associated primarily with the pedestrian experience. The criteria for the sensitivity of these receptors and magnitude of change have been developed based on changes in the volume of traffic. An increase in traffic volumes can result in difficulties for pedestrians when crossing roads and affect the pleasantness of journeys. The criteria for assessment are set out in **Table 6-1**.
- 6.32. The significance of effects for these receptors have also been assessed in qualitative terms in the context of existing pedestrian infrastructure, including the quality of footways, presence of street lighting and availability and type of crossing facilities.

Table 6-1: Receptor Sensitivity and Magnitude of Change Criteria – Severance, Pedestrian Delay, Pedestrian Amenity, Fear and Intimidation

Sensitivity	Criteria (PCUs – Passenger Car Units)
Very Low	Traffic flows of less than 100 PCUs (passenger car units) per hour.
Low	Traffic flows of between 100 and less than 1,000 PCUs per hour.
Medium	Traffic flows of between 1,000 PCUs and less than 2,000 PCUs per hour.
High	Traffic flows of 2,000 PCUs and greater per hour.

Sensitivity	Criteria
Very Low	Change in traffic flows of between 1% and less than 30%.
Low	Change in traffic flows of between 30% and less than 60%.
Medium	Change in traffic flows of between 60% and less than 90%.
High	Change in traffic flows of 90% and greater.

Driver Delay

- 6.33. Changes in levels of delay at junctions have been used in the assessment of driver delay. This has focused on the total level of delay at existing junction locations (i.e. the total across all approach arms).
- 6.34. Different criteria for sensitivity of receptor have been developed to account for the varying number of approach arms on the junctions in the study area network. The criteria for sensitivity of receptor and magnitude of change are set out in **Table 6-2**

Table 6-2: Receptor Sensitivity and Magnitude of Change Criteria –Driver Delay

No. of Approach Arms	Sensitivity	Criteria (PCUs – Passenger Car Units)
3	Very Low	Total junction delay of less than 30 seconds per PCU
	Low	Total junction delay of between 30 seconds and less than 90 seconds per PCU.
	Medium	Total junction delay of between 90 seconds and less than 180 seconds per PCU
	High	Total junction delay of 180 seconds and greater per PCU
4	Very Low	Total junction delay of less than 40 seconds per PCU.
	Low	Total junction delay of between 40 seconds and less than 120 seconds per PCU.
	Medium	Total junction delay of between 120 seconds and less than 240 seconds per PCU
	High	Total junction delay of 240 seconds and greater per PCU.
6	Very Low	Total junction delay of less than 60 seconds per PCU
	Low	Total junction delay of between 60 seconds and less than 180 seconds per PCU
	Medium	Total junction delay of between 180 seconds and less than 360 seconds per PCU
	High	Total junction delay of 360 seconds and greater per PCU.
No. of Approach Arms	Sensitivity	Criteria
3/4/6	Very Low	Change in junction delay per PCU of less than 30%.
	Low	Change in junction delay per PCU of between 30% and less than 60%.
	Medium	Change in junction delay per PCU of between 60% and less than 90%.
	High	Change in junction delay per PCU of 90% and greater

Accidents and Safety

- 6.35. The number of collisions on a road is an indicator of the current road safety conditions. An analysis of Personal Injury Collision (PIC) data has been undertaken over a 5-year period to identify whether there are any locations within the study area where there is an existing safety issue. Where an issue has been identified, a qualitative assessment has been undertaken to ascertain the likelihood that the Proposed Development will lead to further deterioration in safety.

Interaction of Magnitude of Change and Sensitivity of Receptor

- 6.36. Effects on receptors can be beneficial, adverse or negligible, and of minor, moderate or major significance. The significance criteria are derived from the interaction of receptor sensitivity and magnitude of change of effect. A matrix of magnitude of change and sensitivity of receptor is set out in **Table 6-3**. Major and moderate effects are considered significant, and minor and negligible effects are considered not significant.

Table 6-3: Assessment Matrix

Magnitude of Change	Sensitivity of Receptor			
	Very Low	Low	Medium	High
Very low	Negligible	Negligible	Minor	Minor
Low	Negligible	Minor	Minor	Moderate
Medium	Minor	Minor	Moderate	Major
High	Minor	Moderate	Major	Major

Assessment Limitations

- 6.37. Two of the Automatic Traffic Counters (ATC's) that were installed to collect the relevant baseline traffic flow data were deliberately damaged and both cut on the late evening of Saturday 5th October. Given the risk of repeated damage, it was decided not to reinstall the counters.
- 6.38. Nevertheless, sufficient data was collected at the other three count sites for the purposes of this analysis.

BASELINE CONDITIONS

Highway Network

- 6.39. Within the immediate vicinity of the Site, there are a number of named and unnamed single-track roads which provide access to a number of farms, including Bryntail Farm and Hendre Prosser Farm.
- 6.40. Bryntail Farm and Hendre Prosser Farm, are accessed via Bryn Tail Lane, which is a single-track road with occasional small passing places that terminates at Bryntail Farm. Bryn Tail Lane joins with the local road network at its southern extent at a priority T-Junction with Masefield Way located adjacent to the Llan Centre and the Hapi Hub.
- 6.41. Masefield Way is single carriageway residential road that runs from south to north from the direction of the A4054 Cardiff Road before turning through a right angle at its northern extent adjacent to the Llan Centre and running from west to east before becoming Dynea Road.
- 6.42. Masefield Way is a local distributor road providing access to several surrounding residential streets within Rhydyfelin. The priority T-junction with Oak Street forms just to the south of a bridge crossing over the former railway line, which is now a shared pedestrian and cycle track at its southern extent where the road becomes Dyffryn Road.
- 6.43. The road is approximately 6.5m wide and is subject to a 20mph speed limit, is equipped with street lighting and has continuous footways on the southern and northern northwestern side of carriageway. This is absent or of restricted width for much of the southern and eastern side of the carriageway.
- 6.44. Dyffryn Road is a single carriageway residential distributor road running south to north from the A4054 Cardiff Road and becoming Masefield Way at its northern extent. It is a local distributor road providing access to several surrounding residential streets within Rhydyfelin.
- 6.45. The road is approximately 6.5m wide and is subject to a 20mph speed limit is equipped with street lighting and has continuous footways on both sides of the carriageway and runs through Rhydyfelin neighbourhood centre where local amenities including a convenience store, GP surgery and pharmacy are located.
- 6.46. At its southern extent Dyffryn Road forms a priority junction with the A4054 Cardiff Road.
- 6.47. The A4054 is a single carriageway road which generally runs parallel to the A470, crossing under the A470 just to the east of the Dyffryn Road junction.
- 6.48. The carriageway runs in a northwest – south-easterly alignment, providing access to Pontypridd and the A470 to the north west and to the Treforest Industrial Estate, Taffs Well and the A470 to the south east. The A470 provides a direct route to the M4 and into Central Cardiff to the south and the A465 Heads of the Valleys Road to the North.
- 6.49. The A4054 is subject to an 20mph speed limit between its roundabouts with the A470 at Broadway to the northwest and Upper Boat to the southeast.

- 6.50. The carriageway is equipped with street lighting and has footways provided along both sides of the carriageway.

Pedestrians & Cyclists

- 6.51. The access road to the proposed solar farm offers no footway or cycleway provision as the site is served by narrow country lanes with hedges on either side for much of their extent.
- 6.52. Dyffryn Road and Masefield Way offer continuous footways on at least one side of the carriageway and footways often benefit from dropped kerbs with tactile paving.
- 6.53. With regards to the construction phase of the Proposed Development construction and site management staff will most likely all access the Site via vehicular traffic, with little or no demand for pedestrian and cyclist movements to the construction site.
- 6.54. During the operational phase the small number of maintenance related trips to the site will also be wholly undertaken via vehicular traffic.

Public Transport

- 6.55. While the majority of staff trips to/from the Site will be using private vehicles, there are a number of bus services that could be used to access the Llan Centre at least. The bus stops in the vicinity of the Site are shown in **Figure 6.3**.
- 6.56. There are bus stops located on Masefield Way just to the south of the Llan Centre, which is served by the 104 Service, which runs between Pontypridd Bus Station and the Upper Boat Tesco.
- 6.57. The nearest bus stops to the Site on the A4054 Cardiff Road are located 800m walking distance from the Llan Centre just to the west of Dyffryn Road. These stops are used by four Bus Services, the 104 (Glyncoch – Nantgarw) (112 (Ynysybwl - Nantgarw), 120 (Caerphilly - Blaencwm) and 132 (Cardiff – Maerdy).
- 6.58. A summary of the bus services available from the stops identified in is shown in **Table 6-4**.

Table 6-4: Summary of Bus Routes

Route No.	Destination	First/Last Service	Frequency
102	Glyncoch	06:30/20:47	Mon-Sat, hourly
	Nantgarw	06:51/21:32	Mon-Sat, hourly
104	Pontypridd	08:00/17:00	Mon-Sat, hourly
	Tesco	08:35/17:35	Mon-Sat, hourly
112	Ynysybwl	10:00/20:00	Sunday, Hourly

	Nantgarw	10:00/21:00	Sunday, Hourly
120	Caerphilly	07:45/21:35	Mon-Sat, half hourly Sun, every 2hrs
	Blaencwm	06:50/21:25	Mon-Sat, half hourly Sun, every 2hrs
132	Cardiff	06:13/22:05	Mon-Sat, every 15mins Sun, hourly
	Maerdy	05:03/20:38	Mon-Sat, every 15mins Sun, hourly

- 6.59. This data shows that there are a number of frequent bus services operating during the week within in the vicinity of the site offering transport to a number of destinations locally, including local rail services and further afield to Cardiff.
- 6.60. While the Merthyr Line of the South Wales metro runs relatively close to the Site on the other side of the River Taff, there is no rail provision within close proximity of the site. Nevertheless, the nearest train station at Treforest (1.7km) to the west can be accessed via local bus services.

Baseline Traffic Flows

- 6.61. In order to obtain the most recent traffic flows on the unnamed road in the vicinity of the Site, Automatic Traffic Counts (ATC's) were undertaken at 3 locations surrounding the Site, which are listed below and shown in **Figure 6.4**:
1. Bryn Tail Lane
 2. Dyffryn Road
 3. A4054 Cardiff Road, east of Dyffryn Road
- 6.62. Surveys covered a 7-day period from Friday 4 to Thursday 10th October 2024.
- 6.63. Given the different levels of flows observed on these roads, for the purposes of this analysis the surveyed roads can be split into two different groups:
- Farm Access Lanes (Sites 1, 3 & 4) – narrow farm/country lanes, serving as accesses to a small number of properties, characterised by low flows and restricted with regards to the size of vehicles that are able to use them

- Local Distributor Roads (Sites 2 & 5) – busy local distributor roads, with active frontages, linking residential areas with the wider highway network, characterised by relatively high flows and no restrictions in terms of vehicle size and type. Subject to 20mph speed limits.

Total Vehicles

6.64. **Table 6-5** and **Table 6-6** show the surveyed traffic flows for the average weekday and Saturday respectively for the survey sites. **Figure 6.5** and **Figure 6.6** show the Average weekday and Saturday traffic flow profiles for the survey sites. The Proposed hours of operation and the associated 2-way traffic flows covering the periods before and after the working day, when the majority of staff will arrive at and depart the site are:

- Weekday: 07:00-18:00
 - Site 1: 67 vehicles (average of 6 per hour)
 - Site 2: 4,658 vehicles (average of 423 per hour)
 - Site 3: 5,162 vehicles (average of 469 per hour)
- Saturday: 07:00-13:00
 - Site 1: 29 vehicles (average of 5 per hour)
 - Site 2: 1,949 vehicles (average of 324 per hour)
 - Site 3: 2,537 vehicles (average of 423 per hour)

6.65. These observed traffic flows show low levels of traffic along Bryn Tail Lane, with a maximum hourly 2-way flow of 8 vehicles during an average weekday and 6 on a Saturday.

6.66. The daily flow profiles for the average weekday show the normal AM and PM tidal peak hours with further minor peak lunchtime traffic and in the evening. For the Saturday there is the normal Saturday afternoon peak with very little off peak traffic

Table 6-5: Average Weekday Traffic Flows

Hour Start	Weekday Average traffic flows (vehicles)								
	Site 1: Bryn Tail Lane			Site 2 Dyffryn Rd			Site 3 A4054 Cardiff Road		
	NB	SB	2-way	NB	SB	2-way	EB	WB	2-way
0	0	0	0	17	12	29	9	12	21
1	0	0	0	6	7	13	5	9	14
2	0	0	0	4	4	8	4	5	9
3	0	0	0	4	2	6	6	3	9
4	0	0	0	8	9	16	9	5	14
5	0	1	2	22	30	52	59	10	69
6	0	1	1	44	50	94	114	30	145
7	0	3	3	115	115	230	291	80	371
8	1	6	6	268	251	519	391	218	609
9	2	3	5	175	188	363	194	182	376
10	2	3	5	132	144	276	171	157	329
11	3	1	4	150	161	311	180	171	351
12	3	2	5	157	158	315	183	207	391
13	3	3	6	152	169	321	167	188	355
14	4	4	8	192	214	406	234	252	486
15	5	2	7	272	288	561	186	305	492
16	4	3	7	214	238	451	198	280	478
17	4	4	7	231	239	471	198	289	487
18	2	2	4	208	226	434	188	251	439
19	1	1	2	169	167	336	122	187	310
20	2	1	3	121	114	234	73	111	184
21	1	1	2	93	82	175	54	79	133
22	1	1	2	68	59	127	27	52	79
23	0	0	0	37	34	71	21	26	47
Working Day (0700-1800)	33	35	67	2266	2393	4658	2582	2580	5162
Daily	39	40	79	2858	2962	5820	3087	3110	6197

Table 6-6: Average Saturday Traffic Flows

Hour Start	Saturday traffic flows (vehicles)								
	Site 1: Bryn Tail Lane			Site 2 Dyffryn Rd			Site 3 A4054 Cardiff Road		
	NB	SB	2-way	NB	SB	2-way	EB	WB	2-way
0	0	0	0	23	25	48	20	29	49
1	0	0	0	19	12	31	12	17	29
2	0	0	0	9	12	21	6	7	13
3	0	0	0	6	7	13	5	6	11
4	0	0	0	7	8	15	12	5	17
5	0	0	0	8	12	20	15	8	23
6	0	0	0	24	20	44	53	15	68
7	1	4	5	42	50	92	77	41	118
8	2	3	5	75	92	167	152	92	244
9	2	4	6	117	134	251	198	135	333
10	2	0	2	147	163	310	235	207	442
11	3	3	6	152	197	349	259	213	472
12	0	3	3	180	241	421	247	240	487
13	2	0	2	161	198	359	212	229	441
14	2	3	5	168	176	344	184	214	398
15	2	0	2	165	164	329	148	218	366
16	1	2	3	147	173	320	146	208	354
17	3	1	4	183	200	383	171	183	354
18	3	2	5	207	206	413	146	180	326
19	1	1	2	140	156	296	109	140	249
20	1	1	2	113	104	217	72	106	178
21	0	0	0	86	73	159	59	86	145
22	0	0	0	52	43	95	38	56	94
23	0	0	0	35	36	71	32	48	80
Working Day (0700-1300)	12	17	29	874	1075	1949	1380	1157	2537
Daily	25	27	52	2266	2502	4768	2608	2683	5291

Bryn Tail Lane Vehicle Types

- 6.67. The main traffic impact will be due to the forecast increase in heavy vehicles during the construction period. For the purposes of this analysis the vehicles have been split into Lights (Car, Motorcycle, Light Goods Vehicle) and Heavies (OGV1, OGV2 & PSV).
- 6.68. On Bryn Tail Lane at most there is 1 heavy vehicle movement per day, while for Dyffryn Road and Cardiff Road, the heavy vehicle percentage across the working day is 4-5% for the average weekday and the Saturday.

Road Safety

- 6.69. Personal Injury Collision (PIC) data has been obtained for the most recent five-year period from Welsh Government Open Data (2019-2023)¹⁰.
- 6.70. A summary of the collisions that occurred within the assessed study area are shown in **Table 6-7** and the location and severity of the collisions assessed are shown in **Figure 6.7**. This shows that there has been a total of 4 collisions.
- 6.71. This data demonstrates that there were no recorded personal injury collisions in close proximity of the Site, with the closest occurring on Dyffryn Road at the junction with Oak Street.
- 6.72. No collisions have been recorded along Bryn Tail Lane leading to the Site. This indicates that despite intermittent vehicular movements associated with agricultural vehicles utilising the lane that there is no existing safety pattern/problem which would likely need to be addresses as part of the construction phase of the solar farm.
- 6.73. It should also be noted that background movements along the lane are relatively low and therefore that the propensity for conflict outside of peak times would be low.

Table 6-7: Summary of Personal Injury Collision Data

Year	Severity				Pedestrians	Cyclists	Casualties	Vehicles
	Fatal	Serious	Slight	Total				
2019	0	0	1	1	0	0	1	2
2020	0	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	0	0
2022	0	1	2	3	2	0	3	4
2023	0	0	0	0	0	0	0	0
Total	0	1	3	4	2	0	4	6

POTENTIAL EFFECTS

Scheme Lifespan

- 6.74. An operational lifespan of 35 years is proposed, which would be linked to the first export date from the Proposed Development. Construction of the solar farm is expected to be carried out in a single phase of development over a period of circa 12 months.
- 6.75. Following a 35year generation period, and unless receiving an extension from planning authorities, the Proposed Development would then enter a decommissioning stage. No less than 12 months before the 35th anniversary of the first export date, a decommissioning and

¹⁰ Welsh Government Open Data

site restoration scheme would be submitted to the Local Planning Authority for approval, unless the project receives an extension from planning authorities.

Operational Traffic

- 6.76. The traffic impact of the operational phase will be negligible with the only vehicles requiring access to the solar farm will be regular but infrequent visits for maintenance purposes. Such traffic movements will not involve large vehicles and solely be LGVs, with only 1 vehicular trip per month estimated. ~~required~~

Construction Programme & Associated Traffic

- 6.77. While the detailed construction programme is yet to be confirmed, an indicative construction period schedule has been provided below. This is likely to be progressed in stages which would include the site preparation, delivery of materials and construction of the panels themselves.
- 6.78. The delivery of materials will therefore likely be spread throughout these phases of construction dependent on both their availability, the availability of storage and the requirement for materials to support construction on site.
- 6.79. It is envisaged that larger vehicles delivering to the Site will arrive and depart from the Site at times when background movements will be minimal to reduce the potential for any vehicle conflict along Bryn Tail Lane to the Site.
- 6.80. As stated above in paragraphs 10.23, it is proposed to access the Site during the construction phase by utilising Bryn Tail Lane, Masefield Way, Dyffryn Road and the A40454 Cardiff Road from the Upper Boat Junction of the A470.
- 6.81. All vehicles will access the Site itself via the designated route, as shown in **Figure 6.2**, due to the width and nature of Bryn Tail Lane use smaller HGVs (up to 13m in length) to transport the material up and down Dyffryn Road and Bryn Tail Lane.
- 6.82. With regards to Bryn Tail Lane, swept path analysis has been undertaken as part of the CTMP (**Annex 3: Volume 3**) using the smaller 13m HGV, which demonstrates the feasibility of the route requiring some minor temporary surfacing and hedgerow trimming. All Heavy movements would be carefully managed, with an escort vehicle and banksman as required.

Staff Numbers

- 6.83. It is anticipated that there will be up to around 60 construction staff on site at any one time, with the exact number depending on each phase of construction. Access arrangements will look to be arranged for staff wherever possible however some staff will require equipment on site which will need to be available as and when required.
- 6.84. Once construction is complete and the site is operational, there will be no full-time staff employed at the facility.

- 6.85. Staff trips will be made primarily by car or van. Temporary parking areas will be provided for construction staff within the construction compound in the Site. No specific routing will be imposed on staff travel to site unless driving a goods vehicle in which case the designated route must be followed. It is anticipated that staff will arrive at site during the morning peak period and depart in the evening peak period.
- 6.86. It is anticipated that construction operations will be undertaken between 07:00 and 18:00 Monday to Friday and 07:00 to 13:00 on Saturday.

Trip Generation – Construction Phase

- 6.87. With the number of large articulated HGV's being low, for the purposes of this analysis it is assumed that all construction vehicles as listed in **Table 6-8** will access the Site via Bryn Tail Lane, Dyffryn Road and the A4054 Cardiff Road.

Table 6-8: Estimated Total Construction Vehicle Movements

Transport	Number of Vehicles	Movements
Delivery of Mounting Frames	80	160
Delivery of Modules	160	320
Delivery of Inverters/Transformers/Grid	19	38
Delivery of Cables	40	80
Delivery of Plant Equipment	80	160
Delivery of Gravel Hard Core Material	285	570
Delivery of Fencing	20	40
Total	684	1368

- 6.88. It is intended that all deliveries will be carried out by vehicles that fall within the current UK limits for weight (maximum 44 tonnes), length (maximum 10m for a rigid and 13m for an articulated vehicle) and width (maximum 2.55m excluding wing mirrors). It is worth noting that the maximum length vehicle will be a 13m HGV. No deliveries of abnormal loads are expected for the construction of the Proposed Development.
- 6.89. Further information regarding the planning of the construction period, with an indicative traffic movement profile spread over the 12-month construction period shown in **Table 6-9**, with the resultant forecast traffic movement profile shown in **Table 6-10**.
- 6.90. With regards to the timing of the arrivals and departures of construction vehicles, the movements of such vehicles would be carefully managed and controlled to avoid the observed network peak periods.

- 6.91. With regards to staff trip generation during the construction period, it is proposed to have a maximum of 60 staff on-site any given time. The vast majority of staff will arrive on site between 7:00 and 8:00 prior to the network peak period for the weekday and certainly for the Saturday.
- 6.92. With the working day finishing at 18:00 during the weekday the majority of staff are likely to depart the site after 17:30, which would coincide with at least part of the weekday PM peak period.
- 6.93. While the majority of staff will visit the site using private transport the Applicant will encourage a degree of car sharing for construction staff, while the contractor may provide mini-bus transport for some of the construction staff, which would reduce further single car occupancy trip generation.

Table 6-9: Indicative 12-month Construction Traffic Movement Plan – Indicative Movement Profile

Construction Activity (indicative delivery vehicle)	Month												Total
	1	2	3	4	5	6	7	8	9	10	11	12	
Fencing	3%												3%
Gravel Hard Core	14%	14%	14%										42%
Mounting Frames		4%	4%	4%									12%
Modules			5.75%	5.75%	5.75%	5.75%							23%
Cabinets			3%										3%
Cables			1.3%	1.3%	1.3%	0.6%	0.6%						5%
Plant	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	12%
Total	18%	19%	29%	12%	8%	7%	2%	1%	1%	1%	1%	1%	100%

Table 6-10: Indicative 12-month Construction Traffic Movement Plan – Forecast Traffic Movements

Construction Activity (indicative delivery vehicle)	Month												Total
	1	2	3	4	5	6	7	8	9	10	11	12	
Fencing	20	0	0	0	0	0	0	0	0	0	0	0	20
Gravel Hard Core	95	95	95	0	0	0	0	0	0	0	0	0	285
Mounting Frames	0	26	27	27	0	0	0	0	0	0	0	0	80
Modules	0	0	40	40	40	40	0	0	0	0	0	0	160
Cabinets	0	0	19	0	0	0	0	0	0	0	0	0	19
Cables	0	0	10	10	10	5	5	0	0	0	0	0	40
Plant	7	7	7	7	7	7	7	7	6	6	6	6	80
Total (HGV)	122	128	198	84	57	52	12	7	6	6	6	6	684
Total (HGV) per week	31	32	50	21	14	13	3	2	2	2	2	2	15
Average HGV two-way trips per day*	6	6	10	4	3	3	1	1	1	1	1	1	3

Average HGV two-way trips per hour*	0.8	0.8	1.2	0.5	0.4	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0
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* 8 hour days and 20 working days in a month

- 6.94. Nevertheless, to provide a robust assessment of construction staff trip generation, for the purposes of this analysis, it is assumed that there will be a 20% reduction in trip generation with regards to car sharing. Therefore, it is assumed there will be a daily maximum of 48 daily staff vehicle arrivals and departures.
- 6.95. For the purposes of this analysis the assumed construction vehicle and staff arrival and departure profiles are shown in **Table 6-11**, with the resultant vehicular arrival and departures shown in **Table 6-12** for the average weekday and **Table 6-13** for the Saturday.
- 6.96. This information shows that on average the maximum number of construction vehicle 2-way movements accessing the site on any given working day is 10 on an average Weekday and 5 on a Saturday, during the early phases of construction. Due to operational requirements, during the peak construction period on a small number of days, the maximum number of 15.
- 6.97. It is anticipated that while this volume of traffic will contribute to noise and air quality pollution locally during the construction period, that the impact is considered to have a minor adverse significance rating.

Table 6-11: Vehicular Arrival & Departure Profile

Hour Start	Vehicular Arrival & Departure Profiles											
	Weekday						Saturday					
	Construction			Staff			Construction			Staff		
	In	Out	2way	In	Out	2way	In	Out	2way	In	Out	2way
7	20%	20%	40%	90%		90%				90%		90%
8				10%		10%				10%		10%
9												
10	20%	20%	40%				50%	50%	100%			
11	20%	20%	40%				50%	50%	100%			
12				25%	25%	50%					25%	25%
13				25%	25%	50%					75%	75%
14	20%	20%	40%									
15	20%	20%	40%									
16												
17					25%	25%						
18					75%	75%						

Table 6-12: Weekday Maximum Construction and Staff Trip Generation

Hour Start	Construction and Staff Trip Generation - Maximum								
	Weekday								
	Construction			Staff			Total		
	In	Out	2way	In	Out	2way	In	Out	2way
7	1	1	2	43		43	44	1	45
8				5		5	5		5
9									
10	1	1	2				1	1	2
11	1	1	2				1	1	2
12				12	12	24	12	12	24
13				12	12	24	12	12	24
14	1	1	2				1	1	2
15	1	1	2				1	1	2
16									
17					12	12		12	12
18					36	36		36	36
Total	5	5	10	72	72	144	77	77	154

Table 6-13: Saturday Maximum Construction and Staff Trip Generation

Hour Start	Construction and Staff Trip Generation - Maximum								
	Saturday								
	Construction			Staff			Total		
	In	Out	2way	In	Out	2way	In	Out	2way
7				43		43	43		43
8				5		5	5		5
9									
10	1	1	2				1	1	2
11	1	1	2				1	1	2
12					12	12		12	12
13					36	36		36	36
Total	2	2	4	48	48	96	50	50	100

Traffic Impact

6.98. Adding the construction phase trip generation to the observed base traffic flows across the working day produces the traffic flow totals shown in **Table 6-14** and **Table 6-15** for the average weekday and Saturday respectively. The resultant percentage increase in flows is shown in **Table 6-16** and **Table 6-17** for the average weekday and Saturday respectively.

Table 6-14: Weekday Average Base + Development Flows

Hour Start	Weekday Average traffic flows (vehicles)		
	Site 1: Bryn Tail Lane	Site 2 Dyffryn Rd	Site 3 A4054 Cardiff Road

	NB	SB	2-way	NB	SB	2-way	EB	WB	2-way
7	44	4	48	159	116	275	292	124	416
8	6	6	12	273	251	524	396	218	614
9	2	3	5	175	188	363	194	182	376
10	3	4	7	133	145	278	172	158	330
11	4	2	6	151	162	313	181	172	353
12	15	14	29	169	170	339	195	219	414
13	15	15	30	164	181	345	179	200	379
14	5	5	10	193	215	408	235	253	488
15	6	3	9	273	289	562	187	306	493
16	4	3	7	214	238	452	198	280	478
17	4	16	20	231	251	482	210	289	499
18	2	38	40	208	262	470	224	251	475
Working Day (0700-1800)	110	113	223	2343	2468	4811	2658	2657	5315

Table 6-15: Saturday Base + Development Flows

Hour Start	Saturday traffic flows (vehicles)								
	Site 1: Bryn Tail Lane			Site 2 Dyffryn Rd			Site 3 A4054 Cardiff Road		
	NB	SB	2-way	NB	SB	2-way	EB	WB	2-way
7	44	4	48	85	50	135	77	84	161
8	7	3	10	80	92	172	152	97	249
9	2	4	6	117	134	251	198	135	333
10	3	1	4	148	164	312	236	208	444
11	4	4	8	153	198	351	260	214	474
12	0	15	15	180	253	433	259	240	499
13	2	36	38	161	234	395	248	229	477
Working Day (0700-1300)	62	67	129	924	1125	2049	1430	1207	2637

Table 6-16: Weekday Average Development Traffic Increase

Hour Start	Weekday Average								
	Site 1: Bryn Tail Lane			Site 2 Dyffryn Rd			Site 3 A4054 Cardiff Road		
	NB	SB	2-way	NB	SB	2-way	EB	WB	2-way
7	22095%	33%	1412%	38%	1%	20%	0%	1%	12%
8	600%			2%					
9									
10	50%	35%	41%	1%	1%	1%	1%	1%	1%
11	35%	71%	47%	1%	1%	1%	1%	1%	1%
12	400%	750%	522%	8%	8%	8%	7%	6%	6%
13	429%	375%	400%	8%	7%	7%	7%	6%	7%
14	28%	25%	26%	1%	0%	0%	0%	0%	0%
15	19%	55%	28%	0%	0%	0%	1%	0%	0%
16									
17		333%	162%		5%	3%		4%	2%

18		2000%	857%		16%	8%		14%	8%
Working Day (0700-1800)	237%	222%	229%	3%	3%	3%	3%	3%	3%

Table 6-17: Saturday Average Development Traffic Increase

Hour Start	Saturday traffic flows (vehicles)								
	Site 1: Bryn Tail Lane			Site 2 Dyffryn Rd			Site 3 A4054 Cardiff Road		
	NB	SB	2-way	NB	SB	2-way	EB	WB	2-way
7	4320%		864%	68%		44%		105%	37%
8	240%			6%		3%		5%	2%
9									
10	31%	0%	100%	0%	0%	1%	0%	0%	0%
11	21%	21%	33%	0%	0%	1%	0%	0%	0%
12		400%	400%		5%	3%	5%		2%
13		0%	1800%		18%	10%	17%		8%
Working Day (0700-1300)	217%	200%	208%	3%	3%	3%	2%	2%	2%

- 6.99. The hourly working day Base plus Development traffic flow profiles (with the traffic flows split into Light (Cars & Motorcycles, LGV) and Heavy (OGV1, OGV2, PSV) vehicles) are shown in **Figure 6.8** and **Figure 6.9** for Site 1 Bryn Tail Lane for the average weekday and a Saturday respectively. The average weekday and Saturday 2 Way flow profiles for Site 2 between Dyffryn Road are shown in **Figure 6.10** and **Figure 6.11**. The average weekday and Saturday 2 Way flow profiles for Site 3 A4054 Cardiff Road are shown in **Figure 6.12** and **Figure 6.13** respectively.
- 6.100. This comparison of baseline and forecast construction phase traffic has demonstrated that, while the forecast percentage increase in traffic flows is large for some periods on Bryn Tail Lane, that this is as a result of the very low baseline traffic flows.
- 6.101. The forecast construction trip generation will also be on the local road network outside of the observed peak periods.
- 6.102. Therefore, the traffic impact of the Proposed Development is deemed to be minor adverse with a negligible residual impact.

Severance, Pedestrian Delay, Pedestrian Amenity, Fear and Intimidation –Traffic Flows

- 6.103. The assessment of severance, pedestrian delay, pedestrian amenity, and fear and intimidation is normally based on changes in traffic flows on the junctions in the study area network. While there are a number of junctions along Dyffryn Road and the A4054 that will have additional traffic the impact is low. Along the Farm Access Lanes there are no relevant junctions in the study network, while traffic flows are low. The impact upon severance and pedestrians being negligible.

Driver Delay

- 6.104. The assessment of driver delay is normally based upon any capacity assessment undertaken at the relevant junctions. Again, given the minor impact on Dyffryn Road and the A4054 Cardiff Road along with the very low level of traffic flows on Farm Access Lanes and the small and minimal levels of additional traffic during the construction and operational phases respectively, the impact upon driver delay will be negligible.

Accidents and Safety

- 6.105. As previously discussed, the PIC data has not identified any existing highway safety issues that require more detailed examination or that could be exacerbated by the Proposed Development.

Pedestrian and Cyclist Accessibility

- 6.106. As stated above the pedestrian and cyclist demand in relation to the Proposed Development will be negligible and likely to be non-existent.
- 6.107. During the operational phase there will be a negligible impact upon active travel users in the vicinity of the Site.

De-commissioning Phase

- 6.108. The proposed solar farm has a planned lifespan of ~~40~~ 35 years, unless receiving an extension by planning authorities. The decommissioning period will necessarily entail a number of vehicle trips by staff and by larger vehicles to remove the installed equipment and restore the Site to the previous agricultural use.
- ~~6.109.~~ The decommissioning period, involving the removal of solar panels and other equipment as well as restoring the Site to its previous agricultural use, will necessarily entail a number of vehicle trips by staff and larger vehicles.
- 6.110. The impact of the decommissioning phase will be minimal.

MITIGATION MEASURES

Construction Traffic

6.111. A CTMP (**Annex 3: Volume 3**) has been produced as an accompanying document, in order to help minimise construction traffic impacts, which includes the mitigation measures listed below:

- A dedicated Site Manager will be appointed for the management of the delivery booking system during the construction stage. It will also be this person's duty to make sure haulage companies use the chosen haul route (See **Figure 3.1: Appendix 3A of Annex 3: Volume 3**), without fail.
- Temporary construction gates will be in place to stop vehicles passing over the PRoWs freely and a banksman will be required to make sure there are no members of the public in the vicinity when vehicles are passing through.
- Due to the narrow nature of Bryn Tail Lane, additional traffic management measures will be in place all along Bryn Tail Lane leading up to the site access points. This is likely to be in the form of a banksmen-controlled entry and exit from the site, or temporary traffic lights. Additional banksmen will be placed at the bottom of Bryn Tail Lane to help alleviate any potential issues of HGVs meeting head on during the construction period. This will be agreed prior to the construction stage of the Proposed Development with the local Council.
- The Applicant will conduct a pre- and post-construction condition survey of Bryn Tail Lane from the access points to its junction with Masefield Way, with the Applicant liable to repair any damage to the road attributed to the construction of the Proposed Development.
- Traffic movements will be limited to 07:00 - 18:00 on Monday to Friday and 07:00 – 13:00 on Saturdays, unless otherwise agreed in writing with the Council. Deliveries will be scheduled to avoid morning and evening peak hours. This will avoid HGV traffic arriving during the morning peak hours, creating conflict with local residents' commute or school run. Construction personnel will be encouraged to car-pool, or to travel to site in minibuses.
- During the construction phase, clear construction warning signs will be placed on the local access road leading to the Proposed Development access, as well as on the B4598

in accordance with Chapter 8 of the Traffic Signs Manual. The Site Entrance will also be appropriately signed. Access to the construction site will be controlled by onsite personnel and all visitors will be asked to sign in and out of the site by security/site personnel. Site visitors will receive a suitable Health and Safety site induction and Personal Protective Equipment (PPE) will be worn.

- To control, prevent and minimise dirt on the access route and emissions of dust and other airborne contaminants during the construction works, the following mitigation measures will also be implemented:
 - Wheel washing equipment will be available and used onsite within the construction compound, as required, to prevent the transfer of dirt and stones onto the public highway. All drivers will be required to check that their vehicle is free of dirt, stones and dust prior to departing from the site;
 - Wheel washing facilities will consist of a water bowser with pressure washer.
 - The bowser will contain water only and no other additives.
 - Run-off from this activity will be directed to the drainage situated on the lower boundary of the construction compound.
 - Dampening of site roads to minimise dust emissions;
 - Any soil stockpiles will be covered and / or lightly tracked when left for extended periods of time;
 - Drivers will adopt driving practices that minimise dust generation including a 5m/h internal access road speed limit; and,
 - Any dust generating activities will be avoided or minimised, wherever practical, during windy conditions.
- Once construction of the Proposed Development is completed, all portacabins, machinery and equipment will be removed and hard standing excavated. The area will be regraded with the stockpiled topsoil to a natural profile.

Operation

6.112. In operation mitigation measures are not required due to the small.

RESIDUAL EFFECTS

6.113. During the construction phase, the proposed mitigation measures will minimise disruption on the local highway network, there will only be a **negligible** residual impact upon the local highway network.

6.114. During the operational phase the site is largely unattended with periodic inspection and maintenance visits from the relevant staff. Therefore, residual impacts are **negligible**.

CUMULATIVE EFFECTS

6.115. The relevant cumulative developments are listed in **Appendix 6A**. This shows renewable energy schemes, including solar and wind as well as non-solar schemes within employment allocations, which have been added to the list. These sites are likely to be more of relevance in relation to transport/highways cumulative effects.

6.116. This data shows a number of development sites (both developments of national significance and developments of non-national significance) within 10km of the Proposed Development. The low levels of construction traffic and the negligible levels of operational traffic generation will not have a detrimental impact upon the operation and safety of the surrounding road network.

SUMMARY & CONCLUSION

6.117. This Chapter of the ES identifies the impact of the Proposed Development on the surrounding transport network; and identifies any measures required to mitigate the impact of the proposed development.

6.118. The Proposed Development comprises of an up to 39.9 MWp solar farm on 70.9 hectares of land to the east of Pontypridd and to the north of the Hawthorn settlement, Rhondda Cynon Taf. Given the location and nature of the Proposed Development there will be a negligible impact upon the local area with regards to transport.

6.119. The only impact will be evident during the construction phase, with a range of mitigation measures to minimise the impact during the relatively short construction period.

6.120. Overall, it is considered that with the introduction of the proposed mitigation measures, the environmental impact of the Proposed Development will be negligible from a traffic, transport and movement standpoint.

FIGURES

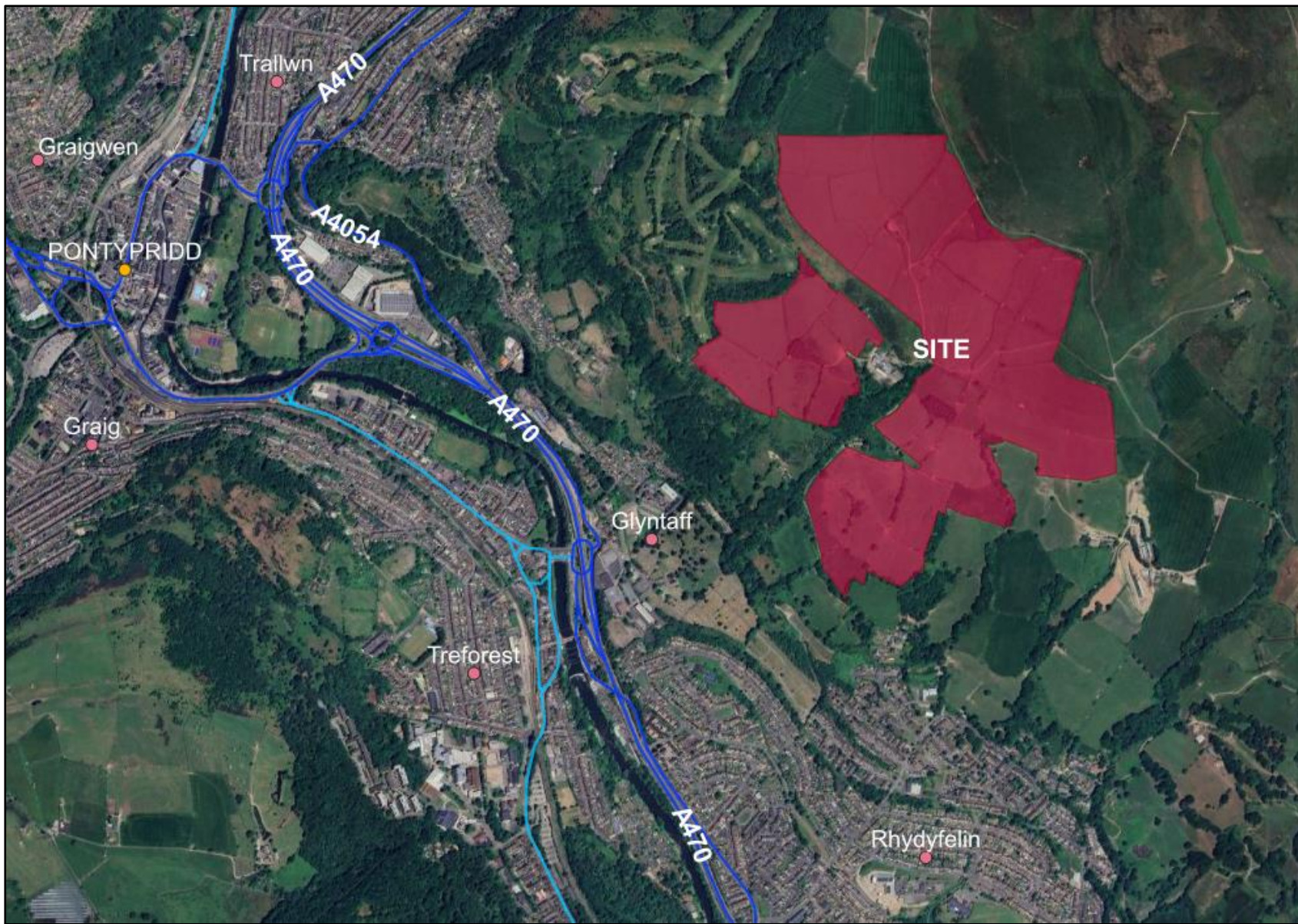


Figure 6.1: Proposed Development Site

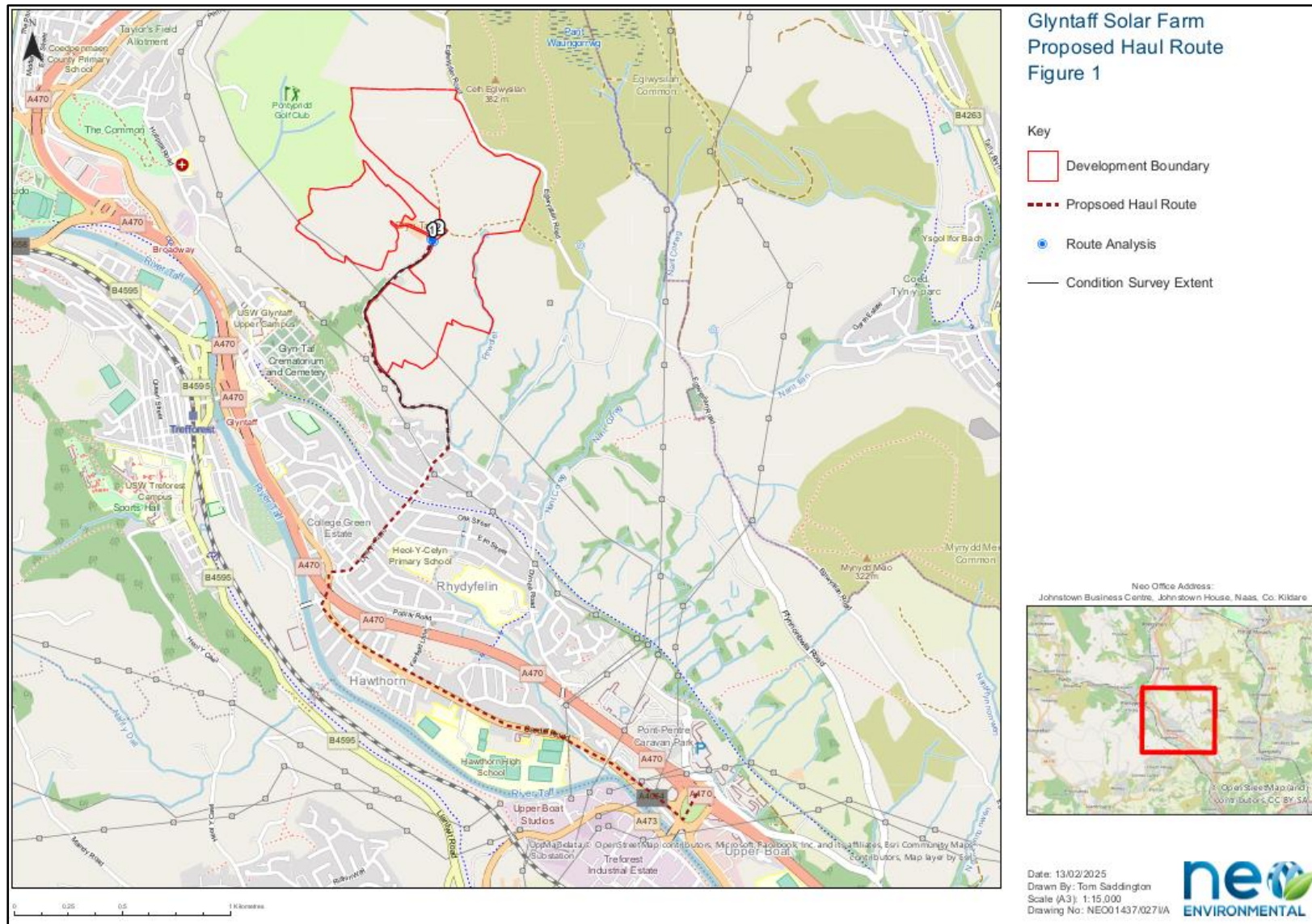


Figure 6.2: Construction Vehicle Delivery Route



Figure 6.3: Public Transport Infrastructure

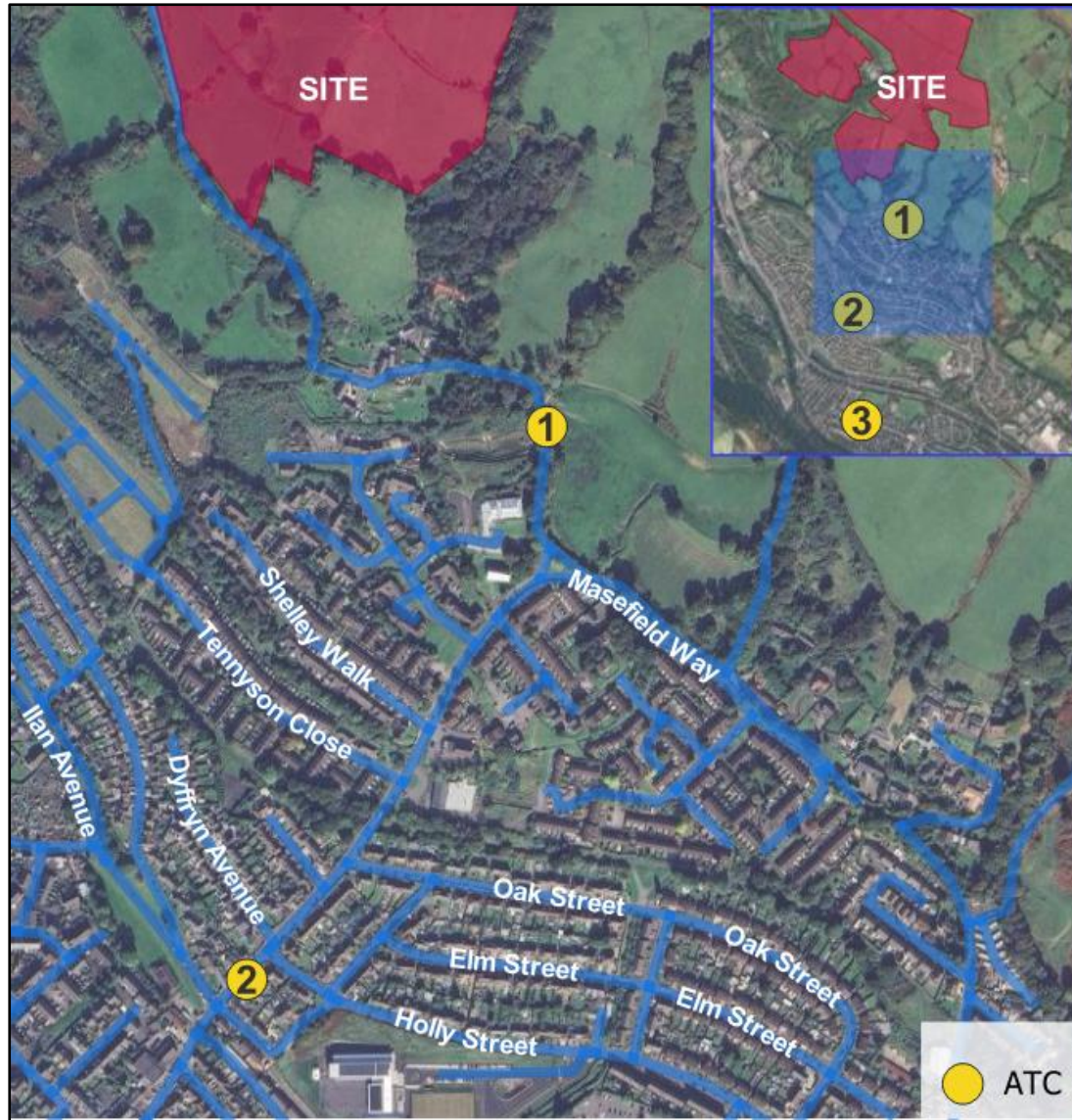


Figure 6.4 Traffic Survey Locations

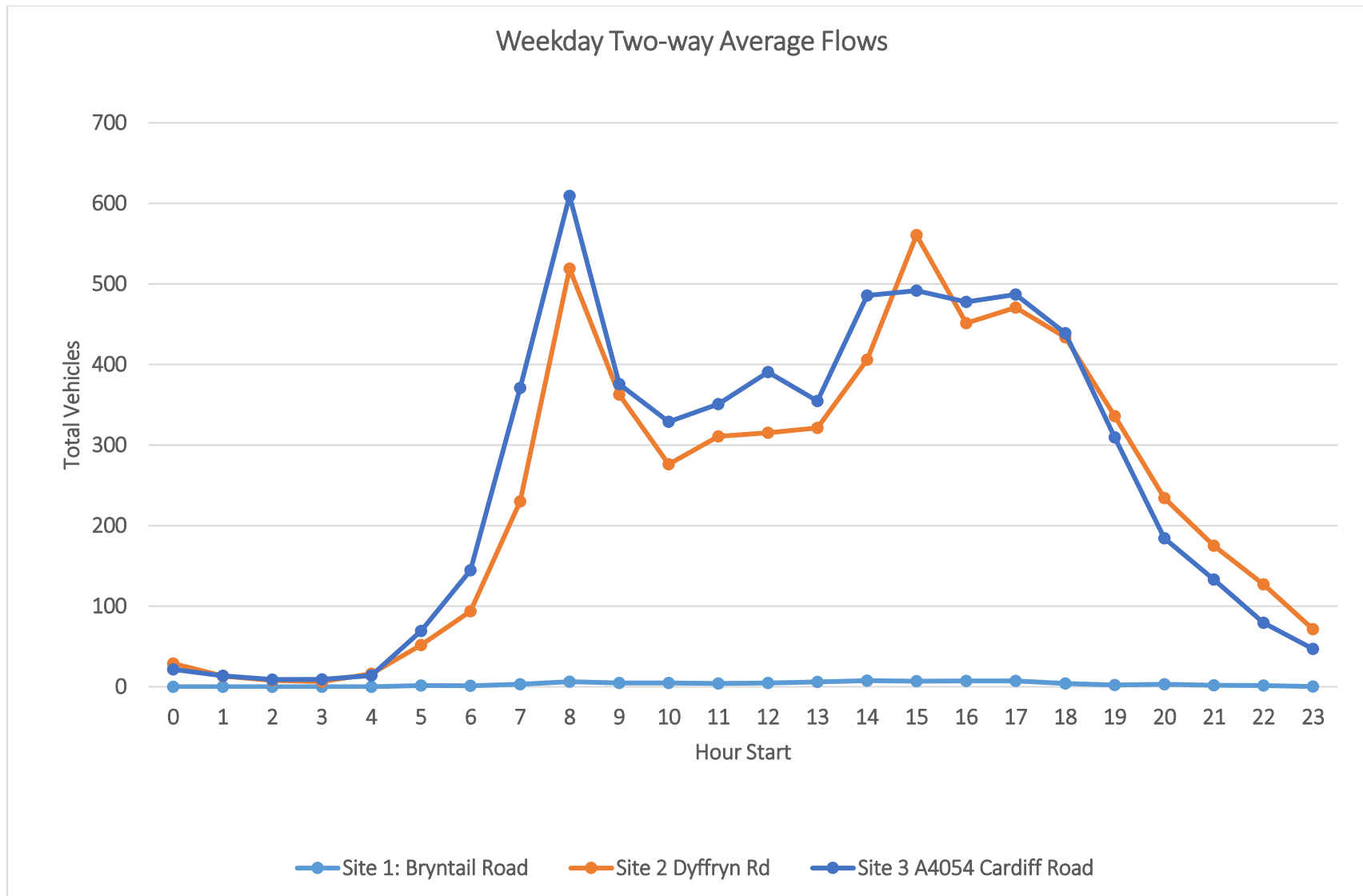


Figure 6.5: Average Weekday Traffic Flow Profiles

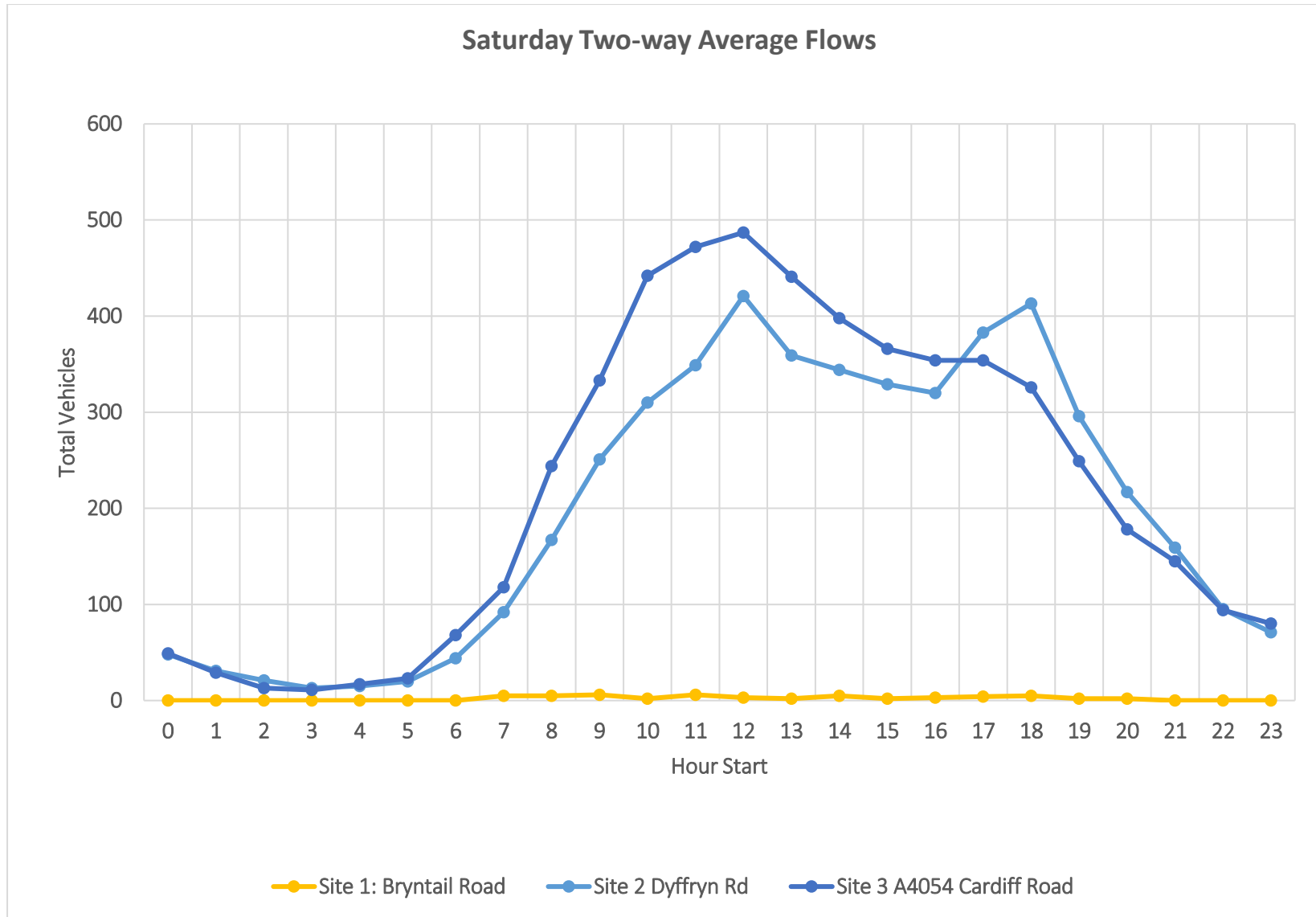


Figure 6.6: Saturday Traffic Flow Profiles

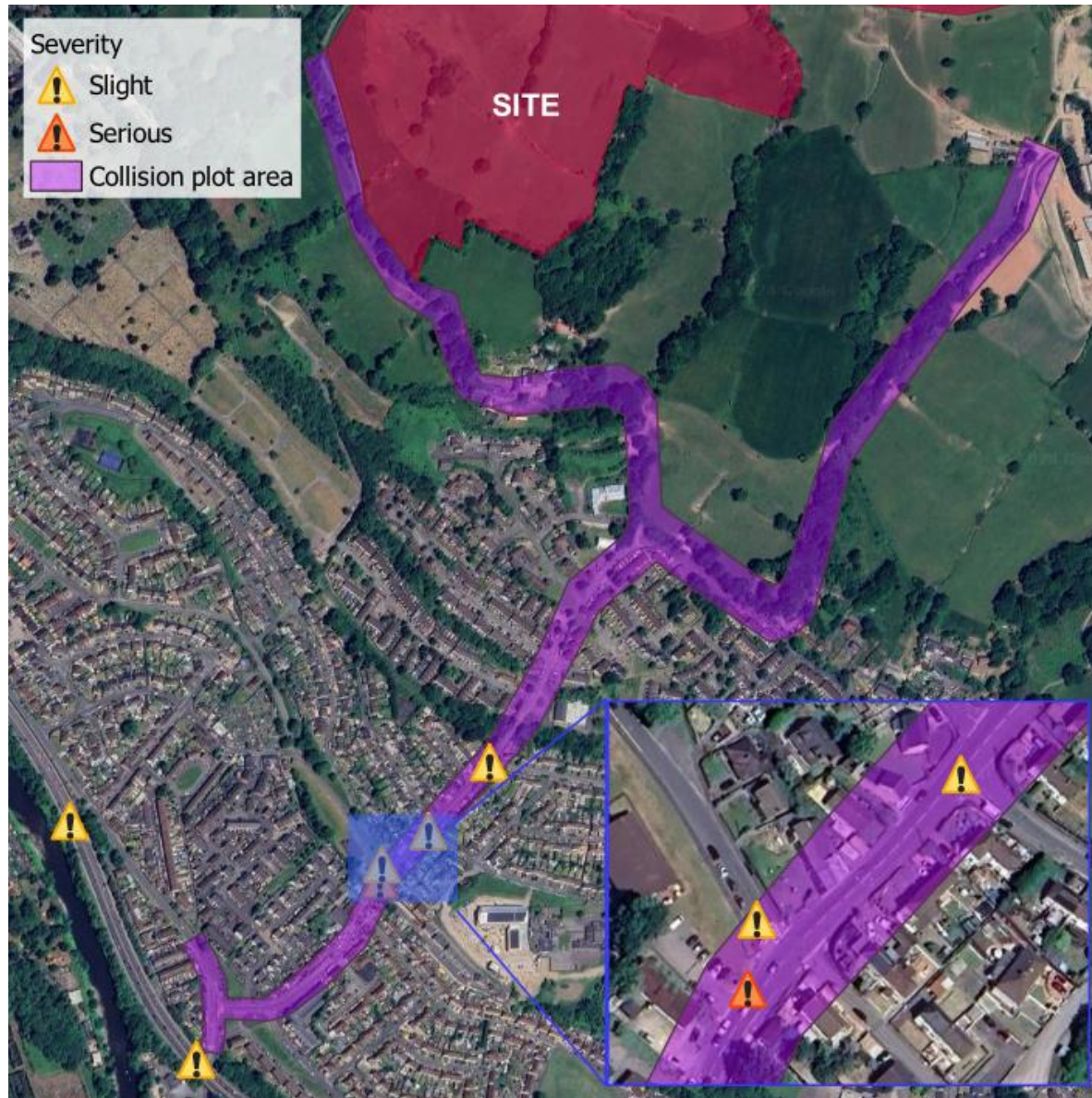


Figure 6.7: Personal Injury Collisions

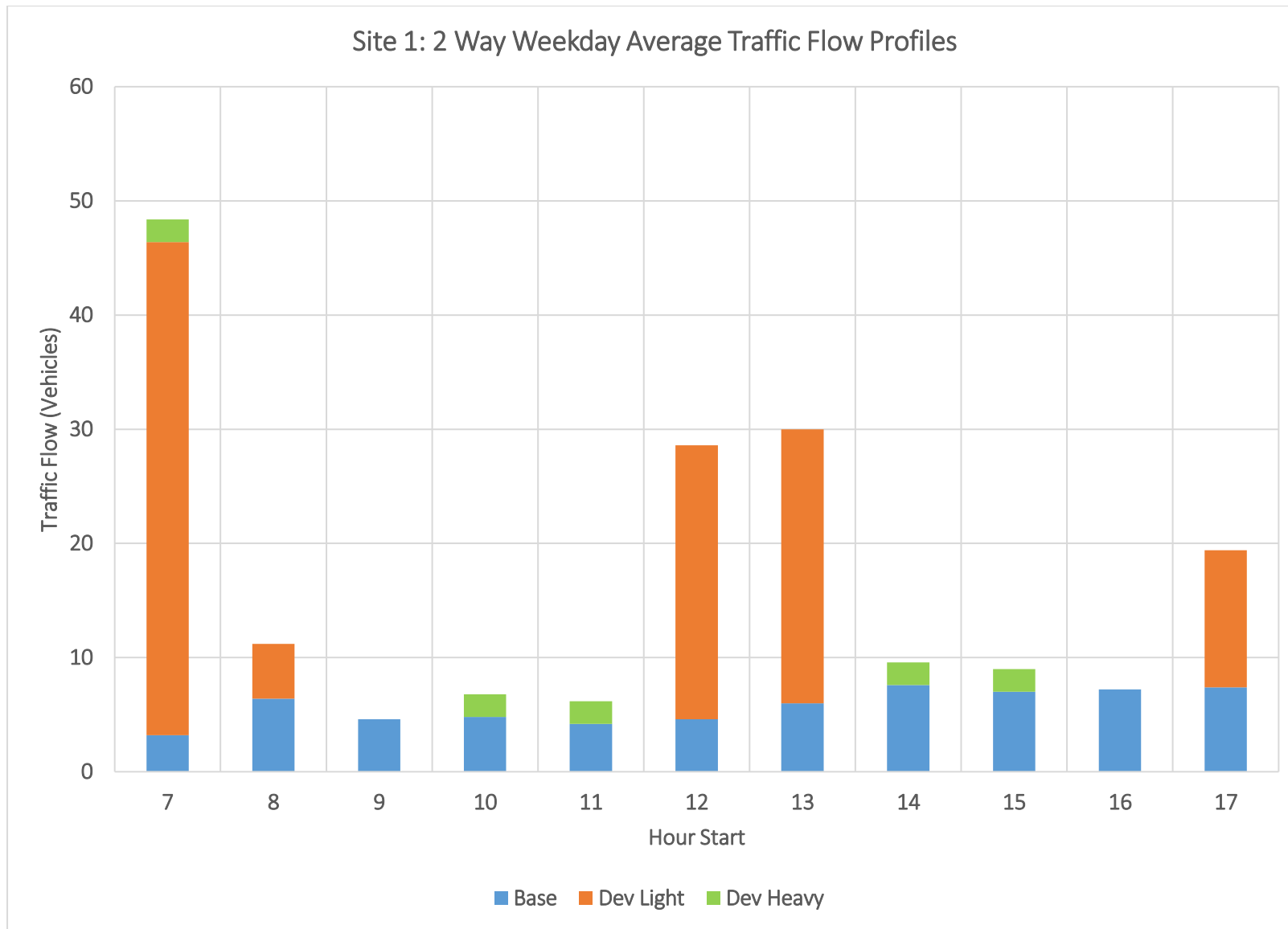


Figure 6.8: Site 1 Bryn Tail Lane - Base + Development Traffic Flow Profiles – Weekday

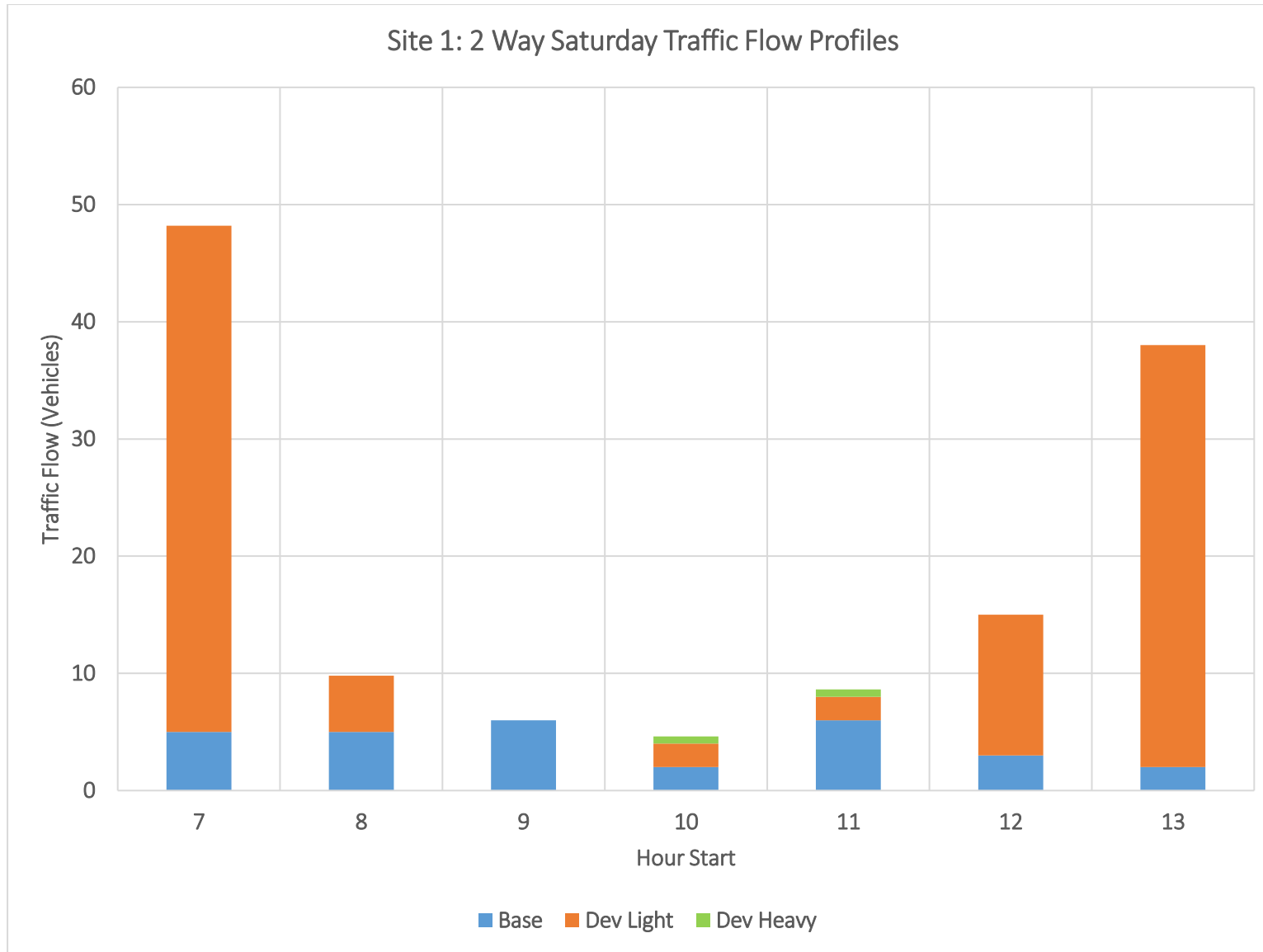


Figure 6.9: Site 1 Bryn Tail Lane - Base + Development Traffic Flow Profiles – Saturday

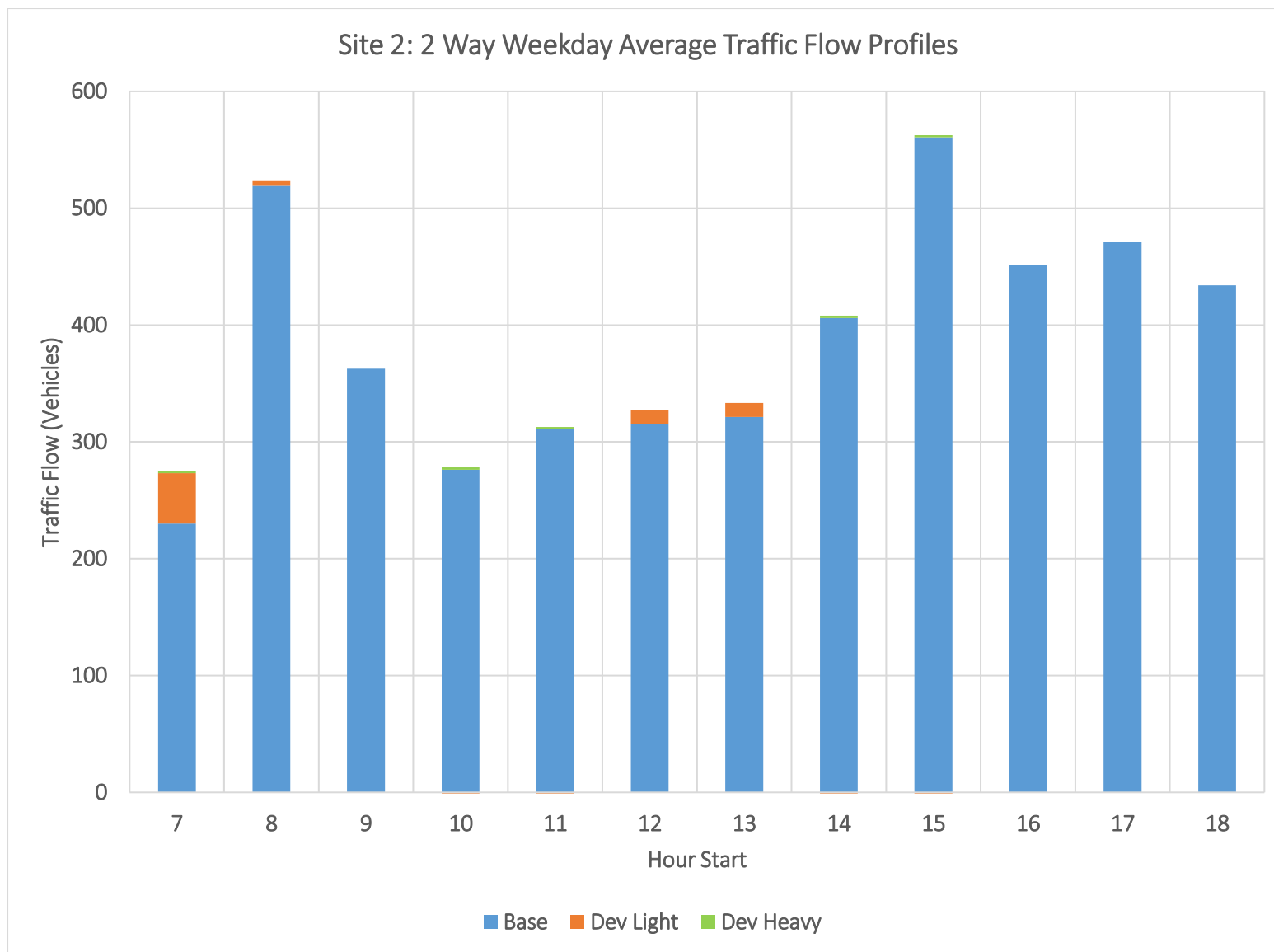


Figure 6.10: Site 2 Dyffryn Road - Base + Development Traffic Flow Profiles – Weekday

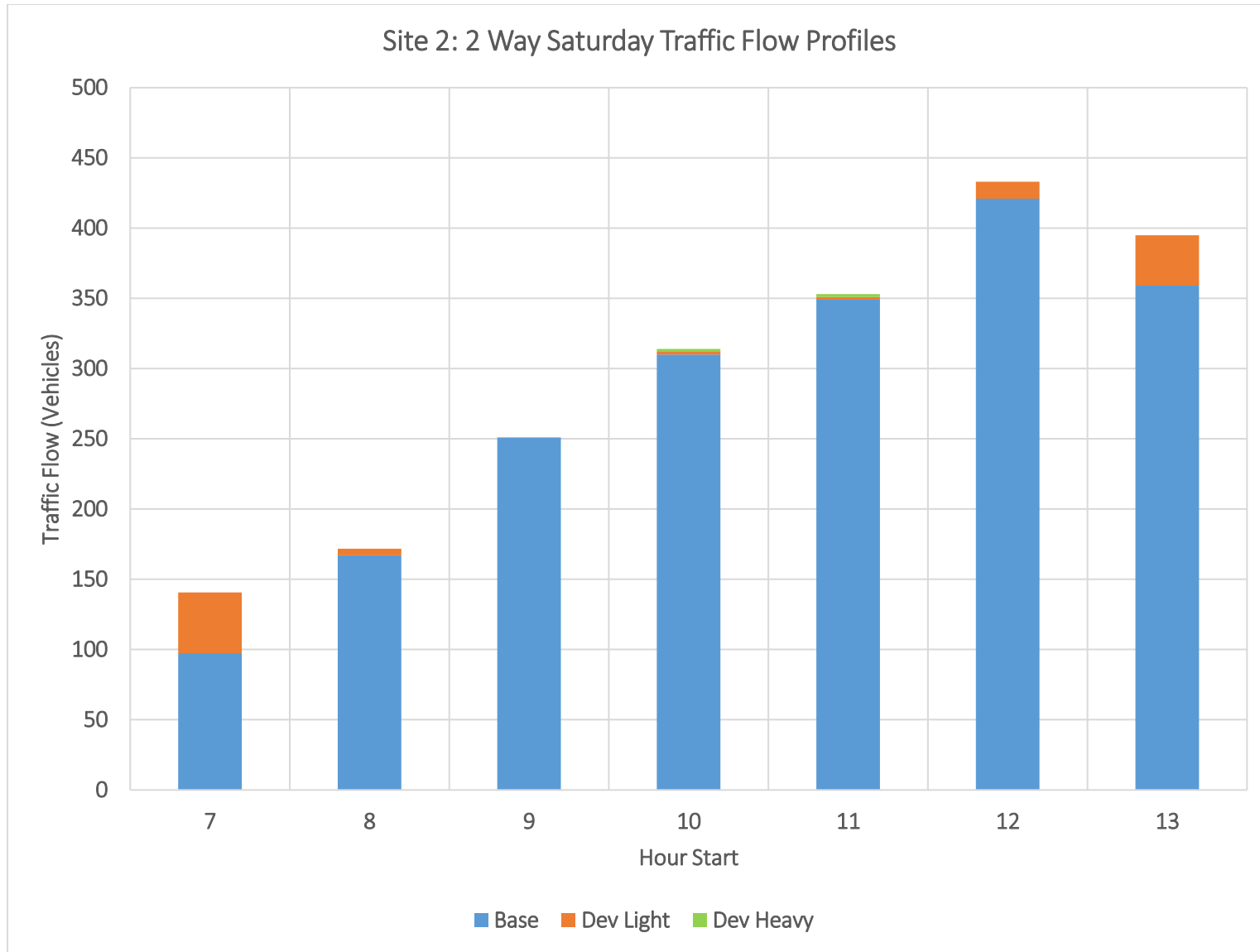


Figure 6.11: Site 2 Dyffryn Road - Base + Development Traffic Flow Profiles – Saturday

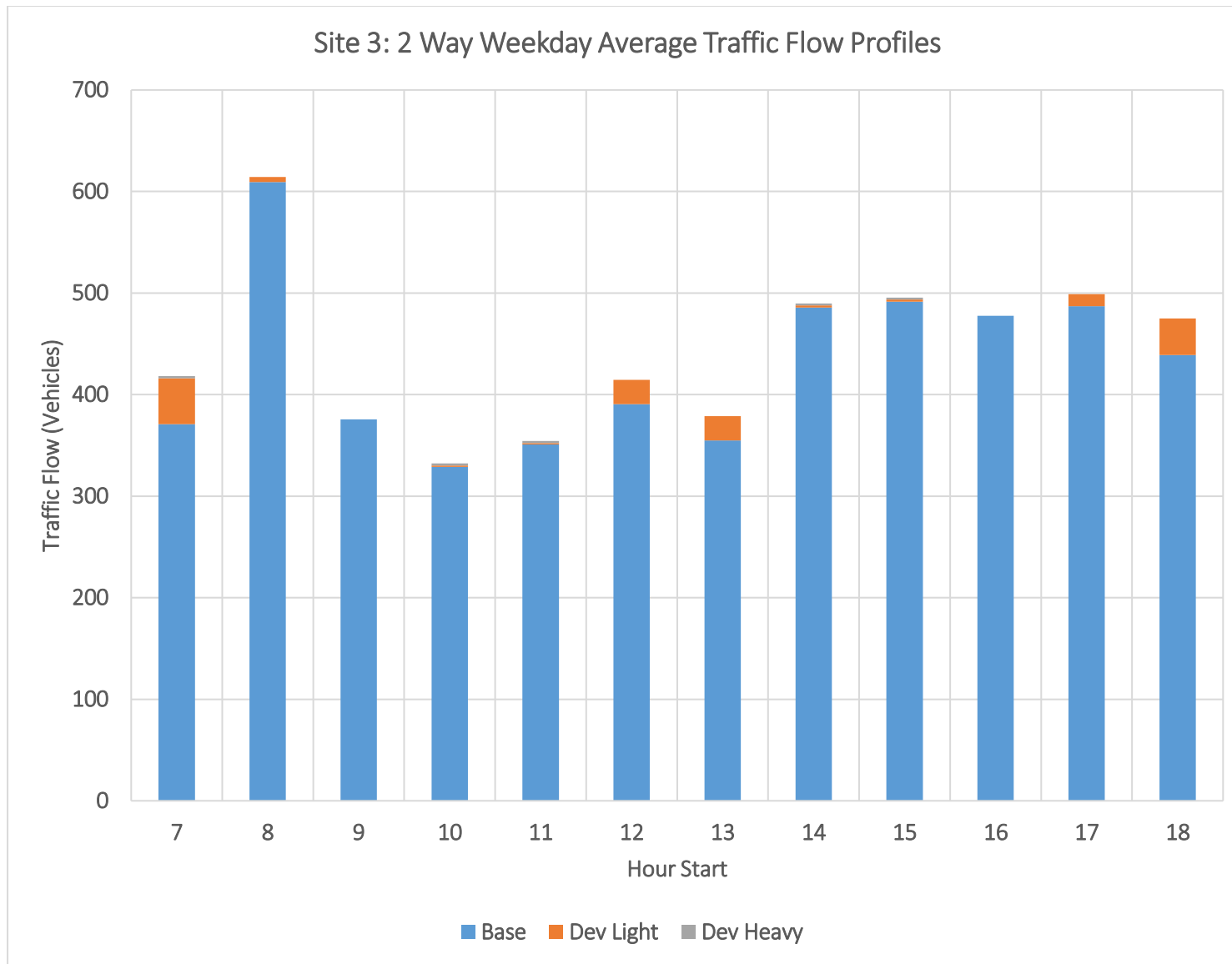


Figure 6.12: Site 3 A4054 Cardiff Road - Base + Development Traffic Flow Profiles – Weekday

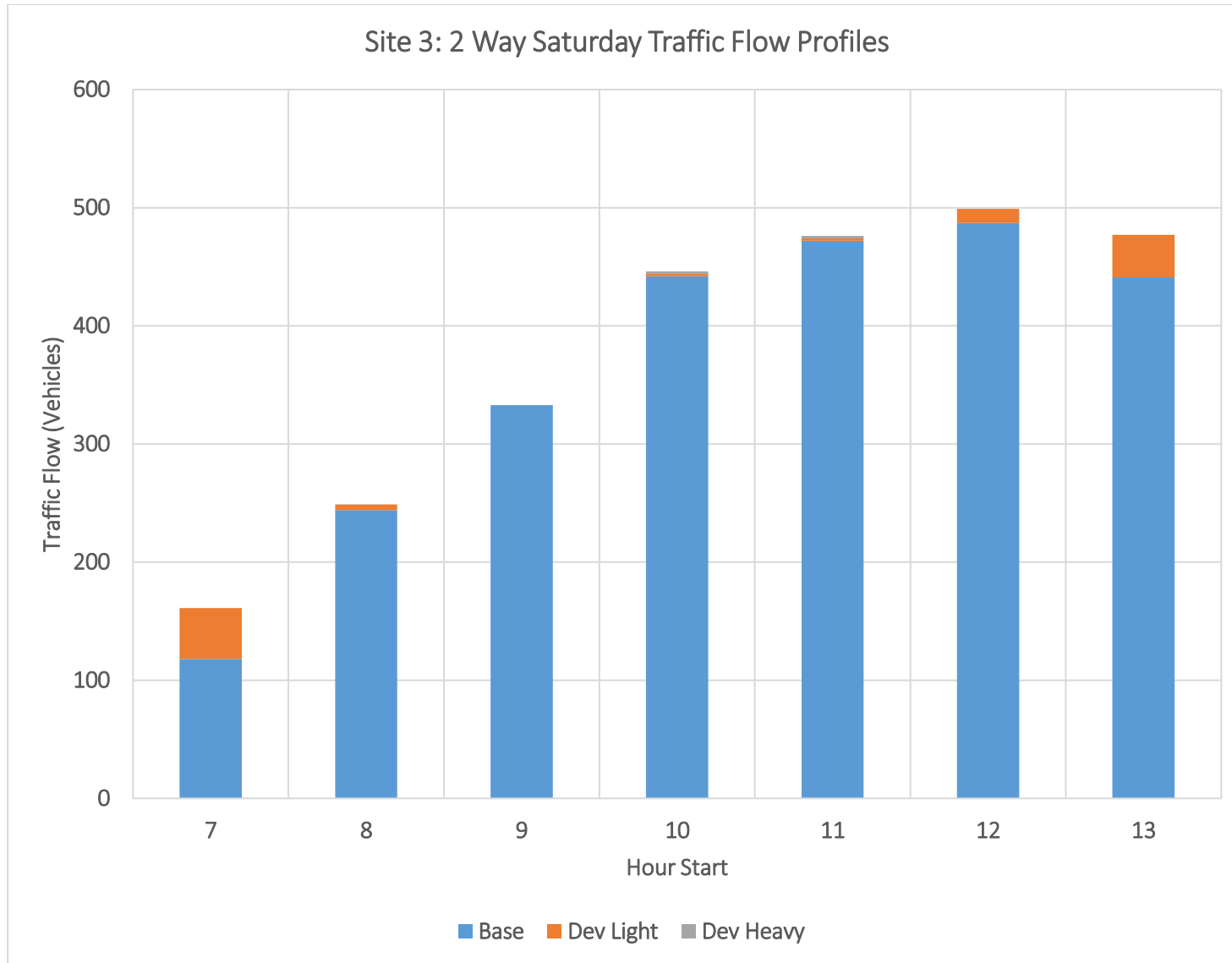


Figure 6.13: Site 3 A4054 Cardiff Road - Base + Development Traffic Flow Profiles – Saturday

APPENDICES

Appendix 6A – Cumulative Developments

App. No.	Type of Development	Development Description	App. Stage	Decision Type	Decision	Distance	Direction
<u>Caerphilly County Borough Council</u>							
DNS 8357463 23/0427/DNS/ 22/1272/DNS	Wind Farm	Construct and operate up to 14 wind turbines and associated infrastructure	Finalised	Permission	Granted	0.010km	E
23/0508/FULL	Residential	Erect residential development of 169 residential units and associated works	Finalised	Permission	Granted	4.532km	NE
22/0072/FULL	Residential	Erect residential development of 153 No. units with new access, landscaping, drainage arrangements and associated works	Finalised	Permission	Granted	1.870km	E
23/0470/FULL	Infrastructure	Erect a synchronous condenser with ancillary infrastructure and associated works including access and landscaping, and a cable connection to the adjacent existing substation for the purpose of supplying grid stability to the National Grid as part of their pathfinder 3 initiative	Finalised	Permission	Granted	3.410km	NE
23/0116/DNS	Solar Farm	Construct and operate a Solar	Finalised	Permission	Granted	2.754km	E

		Photovoltaic (PV) Farm - Development of National Significance					
21/085 5/FULL	Infrastructure	Install anemometer mast of up to 81.3 m high (including instruments) for 3 years, with associated security fencing	Finalised	Permission	Granted	3.940km	NE
16/038 5/FULL	Wind Farm	Erect a single wind turbine of up to 77m tip height and associated infrastructure	Finalised	Permission	Granted	1.733k m	NE
<u>Rhondda Cynon Taf County Borough Council</u>							
24/101 7/SSO	Wind Farm	8 turbines	Scoping report	n/a	n/a	5.5km	N (Twyn Y Glog)
23/095 8/FUL	Residential	Proposed residential development of 20 no. dwellings,	Pending decision	n/a	n/a	3.5km	N (CF37 3DJ)
DNS 328037 8 22/112 9/DNS	Wind Farm	To construct and operate a wind farm consisting of up to 7 wind turbines and associated infrastructure (Development of National Significance)	Finalised	Permission	Granted	4.600km	W
15/163 5/FUL	Wind Farm	Erection of two wind turbines with a tip maximum height of 125m, associated infrastructure, transformer cabin and access track, including access via the public highway and across Cribin Ddu Farm and Llwynceilyn Farm	Finalised	Permission	Granted	4.463km	NW

20/093 4/SSO	Residential	Screening Opinion for proposed to develop the site for a new, residential community comprising up to 110 dwellings in a mix of housing types and tenures.	Finalised	Permission	Resolved	4.36km	NW
08/138 0/FUL	Quarry	Application for determination of conditions for mineral site. The Environmental Act 1995 (Section 96 and paragraph 9 of schedule 13).	Finalised	Permission	Granted	1.71km	NW
21/151 7/GREG	Education	New Welsh medium primary school, MUGA, sports field, car park, landscaping, and associated infrastructure works.	Finalised	Permission	Granted	0.855k m	S
22/042 5/GREG	Education	Provision of a new 3-16 'all through' school, demolition of some buildings and replacement, refurbishment of others, new staff car park, coach car park and pupil drop off, associated works.	Finalised	Permission	Granted	1.530k m	S
22/112 8/DNS	Solar Farm	Solar park, access and associated development (Development of National Significance)	Finalised	Permission	Raise No Objection	2.705km	S
18/140 2/OUT	Residential	Outline application for residential development (All matters reserved save for access) with associated public open space,	Finalised	Permission	Granted	3.860km	SW

		landscaping and other associated works					
15/077 7/FUL	Solar	Solar photovoltaic park, ancillary development and ecological enhancements	Construct ed	Permission	Granted	2.8km	SW on opposing side of the valley. Berthllwyd Farm CF37 1PS
14/101 4/FUL	Solar	Installation of a solar farm and associated infrastructure, including photovoltaic panels, mounting frames, inverters, transformers, substations,	Construct ed	Permission	Granted	4.44km	South (Willowford Road Tonteg Pontypridd CF38 1SL)