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MINING AND MINERAL PROCESSING
MINERAL ESTATES
WASTE RESOURCE MANAGEMENT

CONVATEC LTD

CONVATEC GREEN MANUFACTURING HUB, RHYMNEY

TRANSPORT STATEMENT

FEBRUARY 2024

wardell armstrong

Wardell Armstrong LLP
Temple Studios, Temple Gate, Redcliffe, Bristol, BS1 6QA, United Kingdom
www.wardell-armstrong.com

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PREPARED BY:

Joanna French Principal Transport Planner .....

REVIEWED BY:

Steven Ward Technical Director .....

APPROVED BY:

Ian Cronshaw Technical Director .....

CONTENTS

APPENDICES

TABLES

DRAWINGS/FIGURES

1 INTRODUCTION

1.1 Overview

1.1.1 Convatec Ltd is proposing to construct three wind turbines, a solar generating facility and associated infrastructure, on land adjacent to its industrial units at the Heads Of The Valley Industrial Estate, Rhymney, Tredegar NP22 5RL. The Proposed Development will be known as the 'Convatec Green Manufacturing Hub'. The site is within the administrative boundary of Caerphilly County Borough Council which is also the local highway authority.

1.1.2 Due to the size and nature of the project, it is considered a Development of National Significance (DNS) by the Welsh Government.

1.1.3 The existing site consists of several fields of improved grassland, bound by a mix of scrub, hedgerows and open/featureless boundaries. It is used for grazing animals. The town of Rhymney lies c. 230m to the east on the opposite side of the A469 and the A465 'Heads of the Valleys' trunk road is located c. 200m to the north of the Site.

1.1.4 The construction phase of the project is likely to generate most traffic to the site, so although both construction and operation phases are considered, construction traffic is the main focus of this report.

1.1.5 Construction and primary operational access to the proposed development would be via existing roads improved to safely accommodate 16.5m HGVs. These existing roads are the A465, the A469, the roundabout interchange with the B4257 Carno St/Heads of the Valley Industrial Estate access road, the Industrial Estate access road, the private unnamed access road and the private access to Cwm Carno Farm (in the applicant's ownership). The unnamed access road and the access to Cwm Carno Farm would require improvement to ensure safe access for HGVs to the site as part of the construction process.

1.1.6 Construction access for Abnormal Indivisible Loads (AILs) is planned via the A465 and the A469 directly to the site. This would entail temporary removal of street lighting and changes to other highways infrastructure. Movement would be by agreement with the relevant highway authorities and emergency services, proposed to be undertaken overnight to minimise disruption to local communities.

1.1.7 Within the site existing tracks will be used, reinforced as required for construction HGV access. During the operation phase, traffic to the site is limited to occasional light vehicles.

1.1.8 This report supports the traffic chapter of the Environmental Statement, which includes a review of relevant Welsh and local transport policies and an assessment of traffic and transport impacts on potential sensitive receptors. This report assesses the transport implications of the proposed development both during its construction and operational phases.

1.1.9 The report structure is as follows:

- Section 2 briefly reviews relevant national and local policies and guidance for the TS;
- Section 3 reviews baseline conditions at the site and within the study area;
- Section 4 reviews the development in more detail, including site access proposals and traffic generated by the development during construction and operation phases;
- Section 5 sets out outline proposed measures for a Construction Traffic Management Plan and a Delivery Management Plan; and
- Brief conclusions are set out at Section 6.

2 POLICIES AND GUIDANCE

2.1 Policy Context

2.1.1 The policies which set the framework for the assessment of Access and Traffic are detailed below.

Future Wales – the National Plan 2040[1]

2.1.2 Future Wales sets out South-East Wales as a national priority for regeneration, recognising the vital role of decarbonisation and renewable energy generation and also connectivity, transport infrastructure and services including the Heads of the Valleys in regeneration and sustainable economic growth.

2.1.3 Policy 18 states that renewable and low carbon energy projects qualifying as Developments of National Significance will be permitted subject to criteria including "no unacceptable adverse impacts on the transport network".

Llwybr Newydd The Wales Transport Strategy 2021[2]

2.1.4 The Wales Transport Strategy sets out:

- the vision for an accessible, sustainable and efficient transport system
- priorities including "Priority 2: Allow … goods to move easily … by … efficient transport… infrastructure"
- well-being ambitions including "Good for the economy and places in Wales – A transport system that contributes to our wider economic ambitions"

Technical Advice Note 18: Transport (TAN 18)[3]

2.1.5 TAN 18 was published by the Planning Policy Wales on behalf of the Welsh Assembly Government in 2007. The document provides guidance and may be material to decisions on planning applications. It recognises that "An efficient and sustainable transport system is a requirement for a modern, prosperous and inclusive society. However, transport, in particular road traffic, can also have negative impacts on human health and the environment" (para 2.1).

2.1.6 Concerning development in rural areas, the Note states: "Development in rural locations should embody sustainability principles, balancing the need to support the rural economy, whilst maintaining and enhancing the environmental, social and

[1] https://www.gov.wales/sites/default/files/publications/2021-02/future-wales-the-national-plan-2040.pdf
[2] https://www.gov.wales/sites/default/files/publications/2021-03/llwybr-newydd-wales-transport-strategy-2021-full-strategy_0.pdf
[3] https://www.gov.wales/sites/default/files/publications/2018-09/tan18-transport.pdf

cultural quality of rural areas. Most development should be located in places accessible by a range of travel modes." (para 3.13)

2.1.7 Concerning farm diversification, the Note states "Local authorities should adopt a positive approach to development associated with farm diversification in rural areas, irrespective of whether farms are served by public transport" (para 3.14).

2.1.8 Considering the needs of walkers and cyclists in development planning is clearly stated (section 6) and similarly public transport provision (section 7). Chapter 8 encourages freight transport by water or other alternatives to roads where feasible for part or all of the journey. Transport assessment aims to provide information necessary to assess the suitability of an application in terms of travel demand and impact and processes are set out at section 9. Visibility standards which help determine suitability of development access are set out in Appendix B.

Turning Heads … A Strategy for the Heads of the Valleys 2020[4]

2.1.9 The regeneration strategy was published in 2006, within the context of the Wales Spatial Plan, and provided for the upgrading of the A465 Heads of the Valleys road (located approximately 200m to the north of the Proposed Development) as an important regeneration opportunity.

Heads of the Valleys Regeneration Area Masterplan[5]

2.1.10 The Masterplan was published in June 2020 by Caerphilly County Borough Council. It sets out strengths of the Heads of the Valleys area (which includes Rhymney) notably "Excellent connectivity by road via the A465 Heads of the Valleys Road to the West Midlands, West Wales and Ireland". Moreover, the "good strategic location on the A469 and very close to the A465" is acknowledged for future development of the Heads of the Valley Industrial Estate. Improved Rhymney Valley rail services post 2023, the South Wales Metro and an A465/A469 Transport Hub are identified for better local public transport connectivity. Active travel routes are also proposed to encourage walking and cycling in Rhymney.

South East Wales Valleys Local Transport Plan[6]

2.1.11 The South East Wales Valleys Local Transport Plan was jointly produced by Blaenau Gwent, Caerphilly, Merthyr Tydfil, Rhondda Cynon Taf and Torfaen County Borough

[4] https://www.blaenau-gwent.gov.uk/media/imahhdtt/sd119.pdf
[5] https://democracy.caerphilly.gov.uk/documents/s38796/Uwchgynllun%20Blaenaur%20Cymoedd.pdf?LLL=1
[6] https://www.torfaen.gov.uk/en/Related-Documents/Roads-Highways-and-Pavements/Local-Transport-Plan/South-East-Wales-Valleys-Local-Transport-Plan.pdf

Councils in 2015. It sets out the local authorities' priorities for transport schemes up to 2030. The Plan includes proposals for improvements to the A469 New Tredegar to Pointlottyn (at feasibility stage) located south of the Proposed Development to benefit regeneration.

Caerphilly County Borough Council Adopted Local Development Plan (LDP)[7]

2.1.12 The current Local Development Plan (LDP) was adopted on the 23 November 2010. Relevant transport policies include:

- SP1 Development Strategy in the Heads of the Valleys Regeneration Area which seeks to build on past transport investment to attract private sector investment for a wide variety of land uses.
- SP11 Countryside Recreation promotes enjoyment of local rural environments
- CW3 Design Considerations: Highways sets out highways requirements:

  A The proposal has regard for the safe, effective and efficient use of the transportation network

  B The proposal ensures that new access roads within development proposals are designed to a standard that:

  i Promotes the interests of pedestrians, cyclists and public transport before that of the private car, and

  ii Safely and effectively accommodates the scale and nature of traffic, which those roads are intended to serve

  C Parking, appropriate servicing and operational space have been provided in accordance with the CSS Wales Parking Standards 2008

  D Where access onto a highway is required the proposal takes account of the restrictions relevant to the class of road as designated in the road hierarchy ensuring movements and speeds are controlled through appropriate design, in order to ensure highway safety and amenity.

Caerphilly County Borough Council Rights of Way Improvement Plan[8]

2.1.13 The plan was published in 2007. It sets out the rights of way strategy and aims to provide local communities and visitors with sustainable opportunities to enjoy the countryside in their close locality.

[7] https://www.caerphilly.gov.uk/caerphillydocs/ldp/written-statement.aspx
[8] https://www.caerphilly.gov.uk/caerphillydocs/roads-and-pavements/rights-of-way-improvement-plan.aspx

2.2 Transport Guidance

2.2.1 Transport guidance relevant to the Proposed Development is 'Manual for streets 2' as referenced by the Welsh government[9] and published by the Chartered Institute of Highways and Transportation[10] to guide how to plan and improve urban and rural streets, balancing movement and other functions of our street network. It is a helpful resource here for access design.

[9] https://www.gov.wales/manual-streets-2-urban-and-rural-streets#description-block
[10] https://tsrgd.co.uk/pdf/mfs/mfs2.pdf

3 BASELINE CONDITIONS

3.1.1 This section looks at traffic and transport conditions on site and then across the wider study area.

3.2 On site traffic and transport

3.2.1 Within the site are minor access roads and tracks, including Public Rights of Way (PROW) described below, and generally the site is open to the public for recreational use. The site is accessed via Cwm Carno Farm access road for purposes of animal grazing.

3.3 Traffic Study Area

3.3.1 The traffic study network is bounded by the following study junctions and shown at Figure 1:

Interchange 1: Site Access/Cwm Carno Farm private access/unnamed access road/Heads of Valley Industrial Estate access road;

Interchange 2: A469/Heads of Valley Industrial Estate road/B4257 Carno St; and

Interchange 3. A469/Heads of Valleys A465.

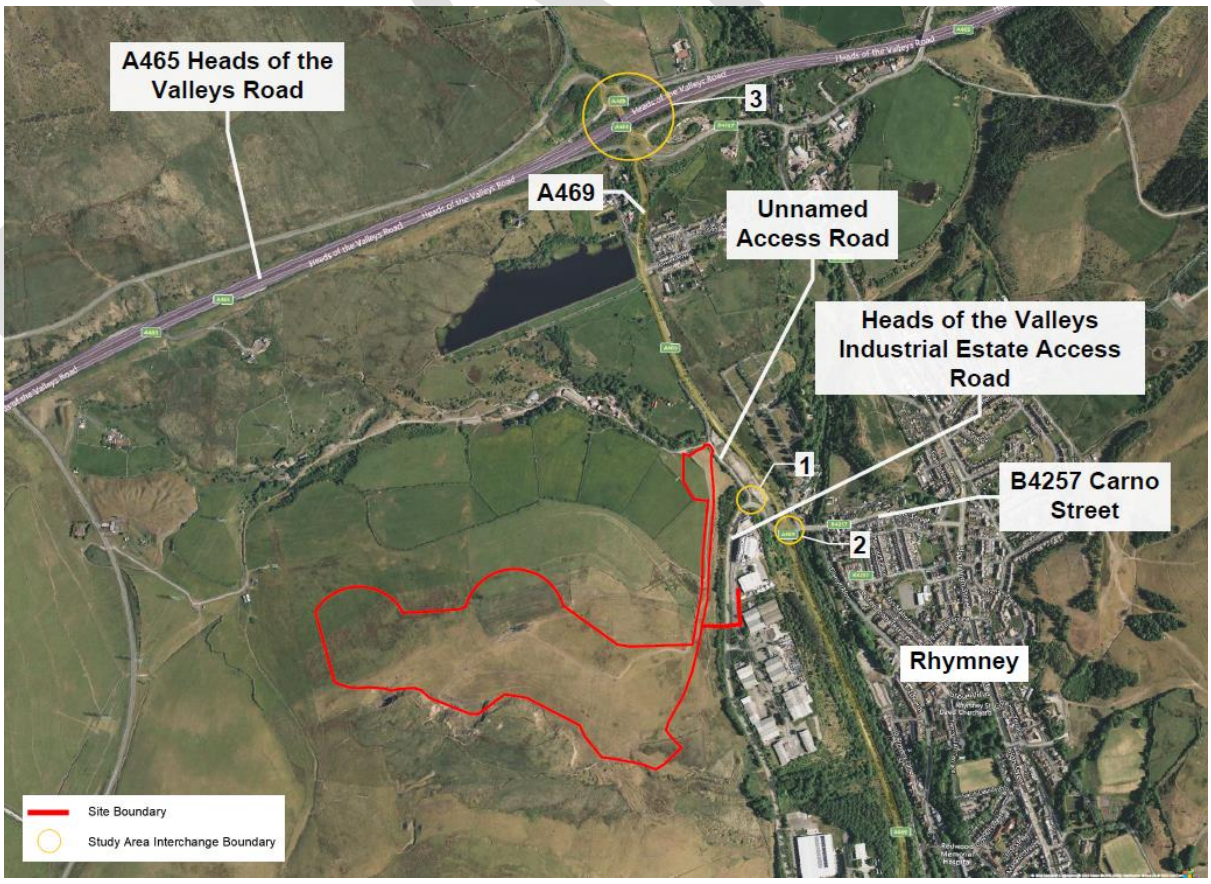


Figure 1: Traffic Study Area

3.3.2 Study area public roads are described briefly as follows:

- The A465 is a dual carriageway trunk road running east-west between the border with Herefordshire and Swansea. It is managed by the South Wales Trunk Road Agent.
- The A469 is a single carriageway road running north-south between the A465 and Cardiff. It is managed by Caerphilly County Borough Council. The road width is 6.7m and the national speed limit applies within the study area.
- The Heads of the Valley Industrial Estate Access Road is 7.6m wide, serving the Heads of the Valley Industrial Estate (including the Convatec manufacturing plant) with connections to the A469 to the north (at the roundabout with B12427 signed Rhymney town centre within this study area) and to the south (at a priority wide mouthed T junction). There are no apparent speed restrictions on the Access Road.

3.3.3 Traffic data on the A465 relevant to the study area is available from UK Department of Transport and from traffic counts commissioned from professional traffic count company (Streetwise Ltd) for this Proposed Development. The data is described in more detail below and then summarised at the following Table 1.

3.3.4 Traffic data for the Heads of the Valley Industrial Estate access road is available from an automatic count (ATC) undertaken by professional traffic survey company Streetwise for this Proposed Development over the seven days from 16 to 22 January 2024, shown at Figure 2 below.

3.3.5 Traffic data for the A469 is available from another ATC located between the A465 and the Heads of the Valley Industrial Estate, also shown at Figure 2. The count was again undertaken by Streetwise for this Proposed Development again over the seven days from 16 to 22 January 2024.

3.3.6 Two relevant UK DfT count sites are available for the Heads of the Valleys Road, the A465. South-west of the A465 junction with the A469 (count reference 99664[11]) the most recent count was undertaken on 29 April 2021. At this time COVID related lockdowns were being eased, so that traffic flows could have been suppressed. This data therefore could show some suppression of traffic, and in this context represents a worst-case situation (because the greater the background traffic flows the lower the proportional development related traffic impact). The April 2021 data shows an

[11] https://roadtraffic.dft.gov.uk/manualcountpoints/99664

estimated AADT of 27,408 of which 4.8% were HGVs. This compares well with a previous traffic count undertaken in 2017 which estimated an AADT of 28,865 of which 4.6% were HGVs.

3.3.7 The second relevant DfT count site is located on the A465 north-east of the A465/A469 junction (count reference 99666[12]) and depends on a neighbouring counted link. The most recent count was undertaken in 2019 and shows an estimated AADT of 26884 with 4.7% HGVs. Again, this data compares well with the 2017 and 2021 counts south of the A465/A469 junction. Information such as the actual date counted concerning the "neighbouring counted link" is not apparent, so this data is considered less reliable than that for the site to the south-west (site reference 99664[13]).

Table 1: Background Traffic Data

Location	Date of Count	AADT (veh)	HGV (%)
A465 Heads of Valleys Road to SW of A469 junction	29 April 2021	27,408	4.8%
A465 Heads of Valleys Road to SW of A469 junction	19 October 2017	28,865	4.6%
A465 Heads of Valleys Road to NE of A469 junction	2020	26,884	4.7%
A469 south of A465	16-22 January 2024	7,360	12.2%
Heads of the Valley Industrial Estate Access Road	16-22 January 2024	587	21%

3.3.8 For the traffic analysis, our estimate of the baseline AADT on the A465 is taken as 27,408 vehicles with 4.8% HGV. This is a worst-case assumption because the proportional impact of the Proposed Development is greatest where the background traffic is low. AADT estimates elsewhere on the road network are taken directly from count data.

[12] https://roadtraffic.dft.gov.uk/manualcountpoints/99666
[13] https://roadtraffic.dft.gov.uk/manualcountpoints/99664

Figure 2: Traffic Counts

Road Safety

3.3.9 Analysis of the Crashmap dataset[14] shows that over the five years 2018 to 2022 inclusive a total of four slight personal injury accidents took place within the study area. The locations are shown at Figure 3 below and reveal that there were no persistent locations or common patterns.

[14] https://www.crashmap.co.uk/

Figure 3 Personal Injury Accident Locations

On Street Infrastructure for Pedestrians and Cyclists

3.3.10 National Cycle Network Route (NCN) 468 runs the length of the Rhymney Valley (bar a gap to the south), through Rhymney town centre and up to the A465 via the A469. Within the study area NCN 468 comprises a segregated and lit cycle track of approximately 2m width alongside the eastern side of the A469.

3.3.11 There is also an informal pedestrian crossing of the A469 north of the interchange with the B4257 signed Rhymney and the Heads of the Valley Industrial Estate access road.

3.3.12 Proximity to Rhymney town centre (approximately 230m to the east of the site access), railway station and bus services means there is reasonable accessibility to the site by means other than the car. This would facilitate the operational stage of the proposed development.

Public Rights of Way (PROW)

3.3.13 Within and beyond the site there is a network of PROW, both footpaths and a bridleway. The local network is shown at Figure 4 below.

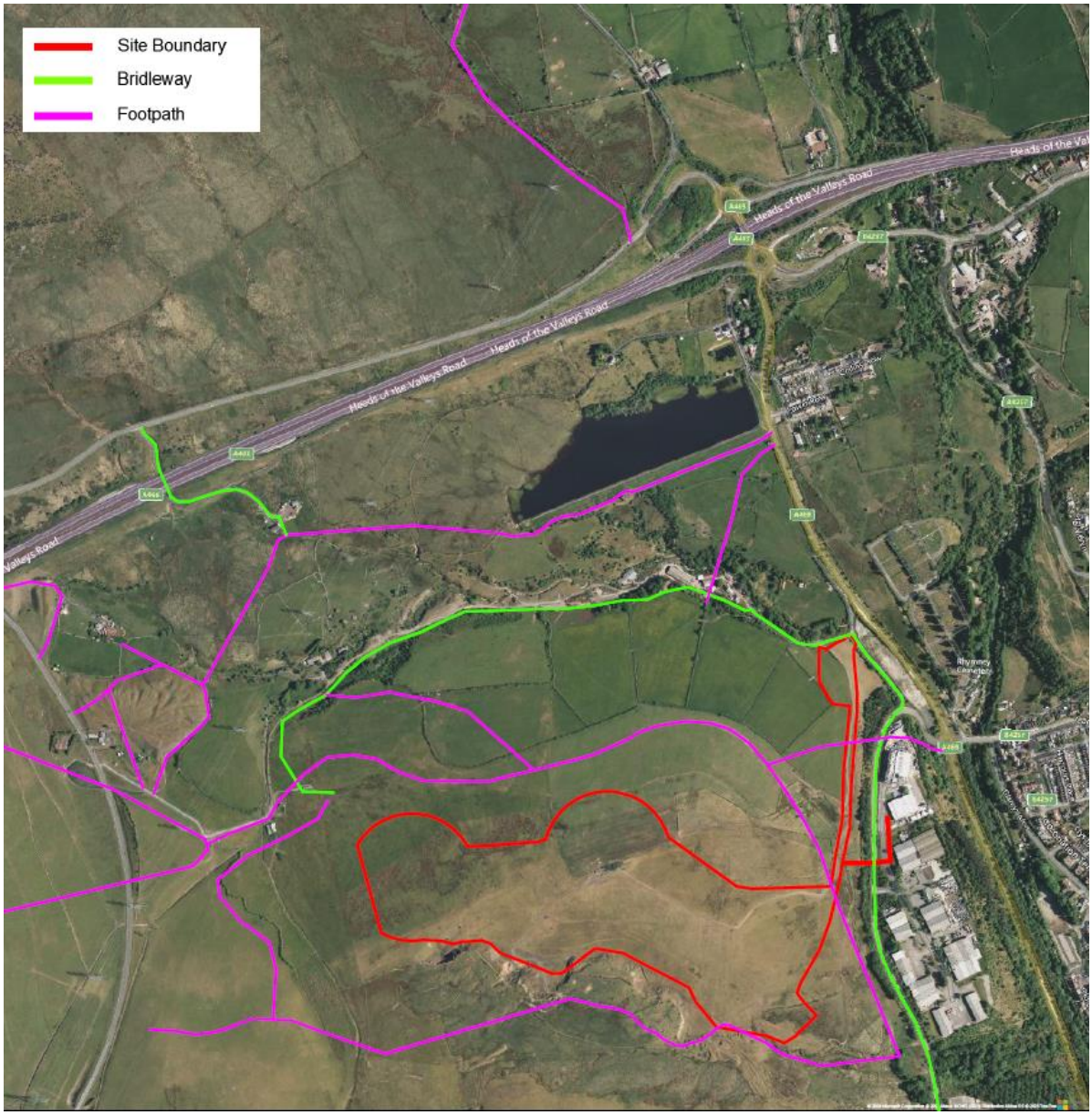


Figure 4: Local PROW network

3.3.14 PROW in the vicinity of the proposed site access are also shown in more detail at Figure 5 below.

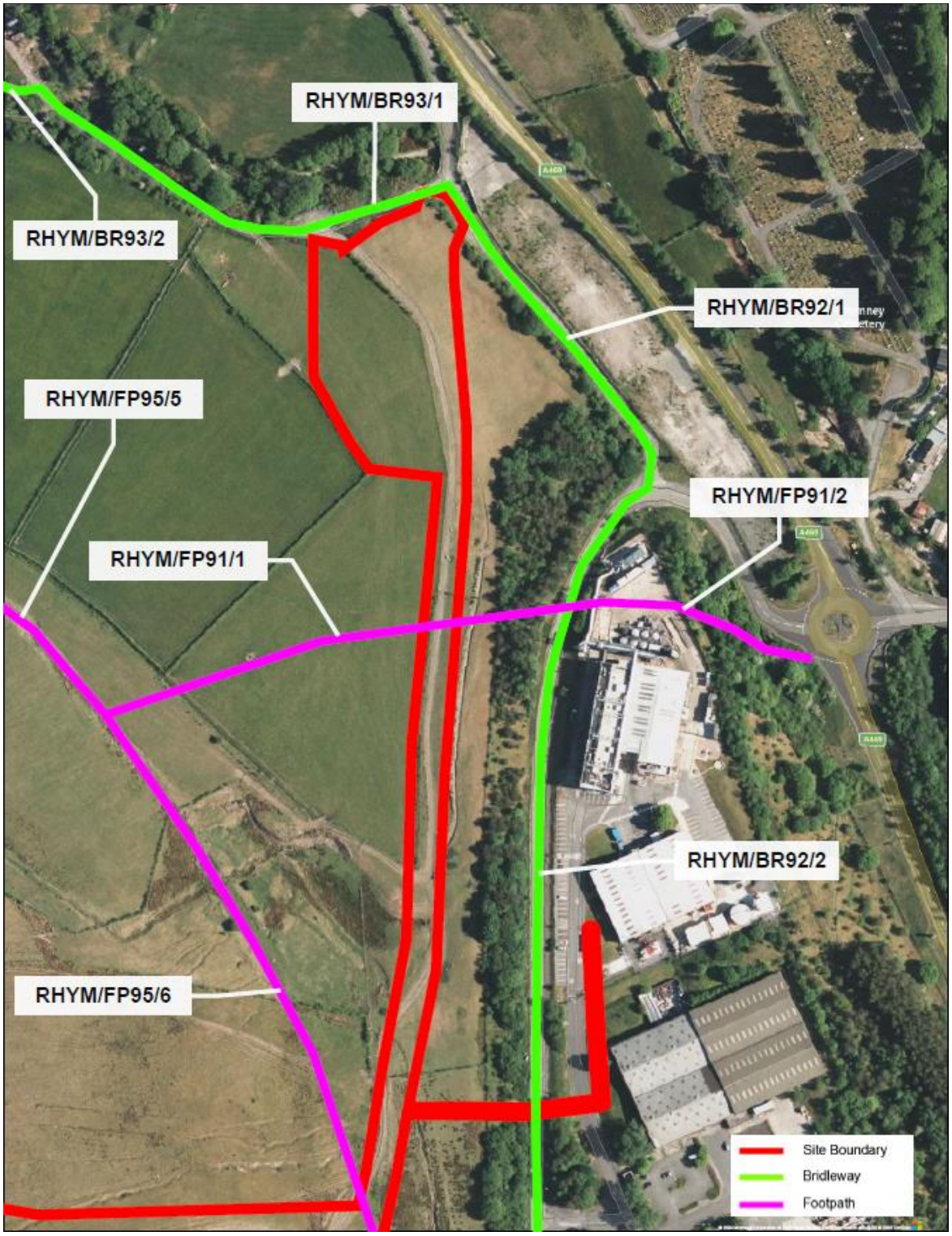


Figure 5: PROW in the vicinity of the proposed site access

4 DEVELOPMENT PROPOSAL

4.1 Description of proposed development

4.1.1 As outlined above, the Proposed Development would comprise of three wind turbines, expected to be approximately 150m to tip, with an installed capacity of approximately 15MW, along with a solar farm of approximately 5MW installed capacity. Access tracks, temporary construction compounds and foundations for the turbines are also planned. On site electrical installations would be connected via underground cable to Convatec Rhymney's manufacturing facility at the Heads of the Valley Industrial Estate, with any excess to be exported to the National Grid. Figure 6 below refers.

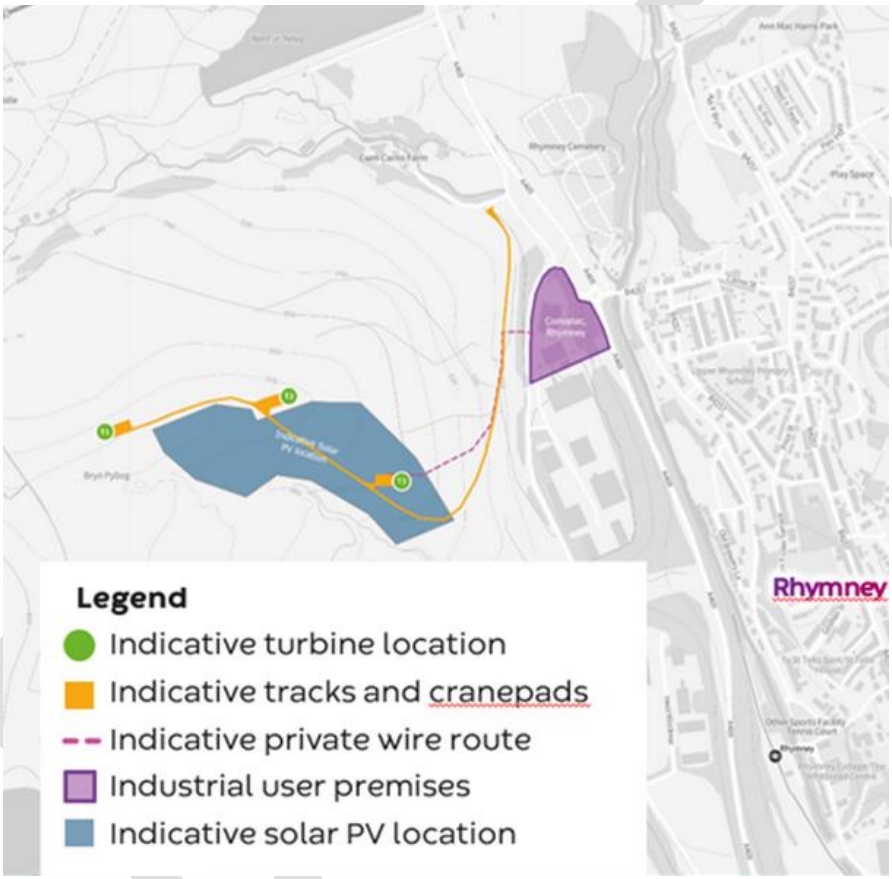


Figure 6: Indicative Site Layout

4.1.2 The new land uses would complement existing grazing on site.

4.2 Site Access

4.2.1 Construction and primary maintenance and operational access to the proposed development will be provided from the A465 Heads of the Valleys trunk road via the A469, the A469/B4257 (Carno Street) roundabout, the Heads of the Valley Industrial Estate access road, an unnamed private access road and the private access to Cwm

Carno Farm. The private access roads are in the ownership of the applicant. Figure 7 below shows the outline strategy.

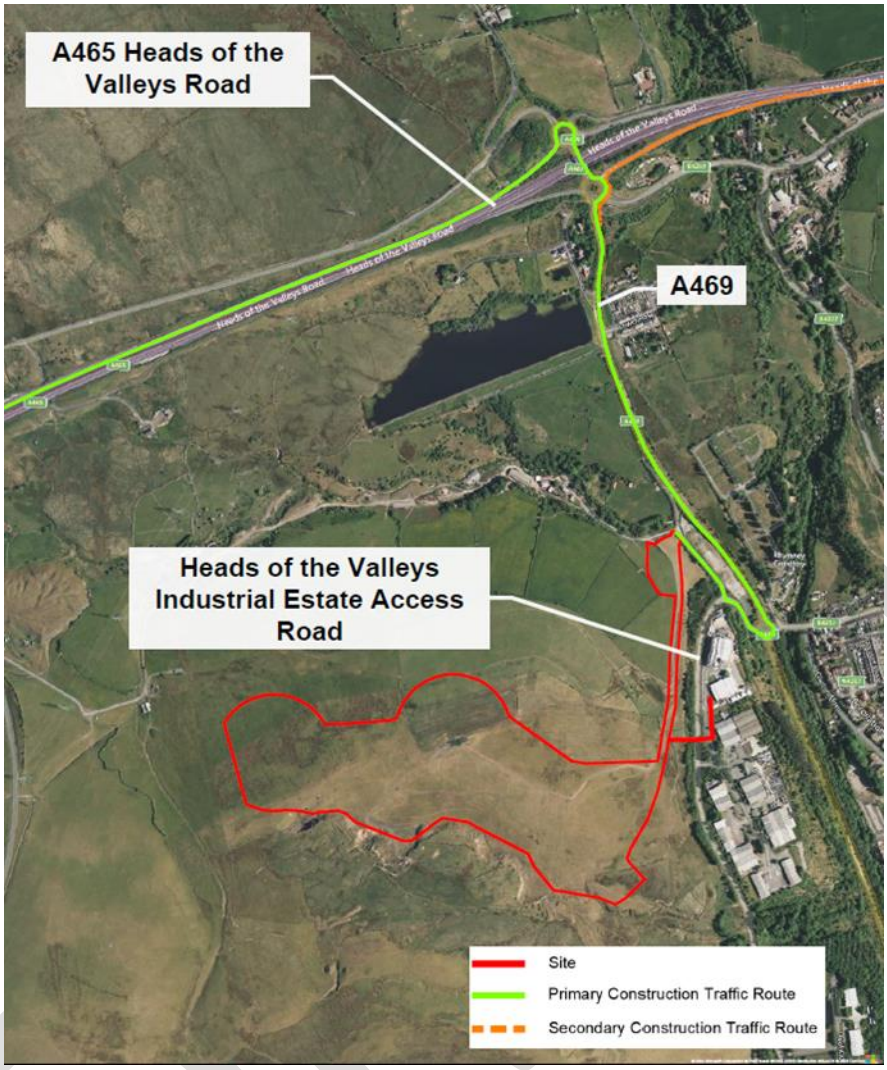


Figure 7: Outline Site Access

4.2.2 The site access at a more detailed scale and swept path analysis for 16.5m HGVs accessing the site to and from the public highway (the Heads of the Valley Industrial Estate access road) is shown at the Appendix. This shows that subject to some vegetation clearance (within the applicant's land ownership) satisfactory HGV access is achievable. The Heads of the Valley Industrial Estate access road currently achieves satisfactory access for HGVs to the industrial estate; no changes to current arrangements or design are proposed.

4.3 AIL Access

4.3.1 As quantified at section 5 below, AIL access will be required to achieve aspects of the development, particularly wind turbine components.

4.3.2 The likely solution is for direct access from the A469 north of the roundabout interchange with the B4257/Heads of the Valley Industrial Estate Access Road. The access would require temporary removal of street lighting and other highway equipment and temporary restrictions to road users. The swept path for the direct route from the A469 into the site is set out at the Appendix.

4.3.3 Preliminary management and communication measures are set out at the outline Delivery Management Plan (DMP) proposals at section 5 below.

4.3.4 It is assumed that the Port of Entry is Swansea, which benefits from a direct highway connection via the A465 to approximately 200m as the crow flies from the site. Detailed analysis is required to assess and manage the door to door journey, although neighbouring wind turbine schemes have been successfully delivered. Similarly, the access strategy remains subject to assessment of on-site topography because there are level differences within the site.

4.4 Construction Traffic Programme and Generation

Construction programme and deliveries

4.4.1 On site construction is estimated to have a duration of approximately five months. Preliminary details of construction activities and traffic movements by month are set out in the ES and are summarised at Table 2 below. Traffic loads and movements are estimated from recent experience of renewable energy schemes in the UK.

Table 2: Construction Works Phases, Programme & Traffic Generation

Works Phase	Traffic Impact (loads)	Traffic Impact (2-way Traffic Movements)	Indicative Programme
Site Establishment	13 HGVs	26 HGVs	Weeks 1-2
Track Construction	240 HGVs	480 HGVs	Weeks 2-8
PV Modules & Mounting Structures	35 HGVs	70 HGVs	Weeks 3-16
Transformer Centres/Switchgear Cabins	9 HGVs	18 HGVs	Weeks 11-15
Turbine Foundations	127 HGVs	254 HGVs	Weeks 10-13
Turbine Erection	13 AILs	26 AIL vehicles	Weeks 12 & 15

Cable Laying	18 HGVs	36 HGVs	Weeks 6-10
Substation	206 HGVs	412 HGVs	Weeks 2-19
Reinstatement	6 HGVs	12 HGVs	Weeks 19-20
Total	654 HGVs and 13 AILs	1308 HGVs and 26 AILs	
Peak Week	93 HGVs	186 HGVs	Week 6

4.4.2 The peak week of construction is estimated to require 186 two-way heavy goods vehicle movements. During this specific week the weekday impact would amount to 37 HGV movements. The average week of construction meanwhile would require a total of 65 HGV movements, resulting in a much lower weekday impact of 13 HGV movements (around one third of the peak construction week). Analysis of the peak week therefore represents the worst case scenario.

Construction worker travel

4.4.3 Around 25 people are expected to work on site generally during construction, five days per week. In addition, specialist input is anticipated comprising:

- 10 staff during civils operations;
- five staff during substation works; and
- 15 staff during turbine erection.

4.4.4 Therefore, at most some 40 people are anticipated to be working on site. Assuming construction workers use four minibuses from local points of departure with some supervisory/inspection access by light vehicle, this element of traffic generated by the development amounts to 10 two-way light vehicle movements per day.

Total construction traffic in relation to the baseline

4.4.5 Total AADT traffic impact comprises construction deliveries and construction worker travel to the site, both discussed above. Baseline traffic flows on the A469 and the Heads of the Valley Industrial Estate access road were shown at Table 1 in section 3 above. The comparison of baseline and worst-case development traffic flows is set out below at Table 3. Traffic on the A465 Heads of the Valleys road and interchange are not considered, because Table 1 shows that baseline flows on the A469 are lower – the analysis focuses on the worst case scenario.

Table 3: Baseline and Development Related Traffic Comparison		
	A496	**Heads of the Valley Industrial Estate access road**
Baseline HGV AADT	898	124
Baseline AADT	7360	587
Construction Deliveries (HGV)	37	37
Construction Traffic (vehicles)	47	47
Peak week construction traffic impact (HGV)	4%	29.8%
Peak week construction traffic impact (vehicles)	>1%	17%

4.4.6 Table 3 shows that the peak week traffic impacts of the development are estimated below the 30% significance threshold. The HGV impact on the Heads of the Valley Industrial Estate access road is just under 30% - this reflects that average flows are relatively low, with the maximum hourly flow at 55 vehicles. The Industrial Estate Access Road is designed for HGV use and is currently operating well below capacity. Moreover, the construction overall is of limited duration, estimated at around five months, and the peak week of construction is of very short term duration.

4.5 AIL traffic generation

4.5.1 Our best estimate at this stage of AIL traffic is quantified in Table 2 above, with a total of 13 loads anticipated over two weeks.

4.6 Operational traffic generation

4.6.1 General maintenance of panels will be undertaken annually to clean and check the solar panels. Maintenance crews visiting the site will use small vehicles (e.g. 4x4 or small van) to access the site. Teams of two people with a 4x4/van would undertake the servicing. It takes two people (on average) up to 2 days to service each turbine. Routine maintenance or servicing of turbines is carried out twice a year, with a main service generally taking place in the summer and a minor service in the 6 months following. In year 1, there is commonly an initial 3-month service after commissioning. The turbine being serviced will be switched off for the duration of its service.

4.6.2 Travel to the site for agricultural, ground and ecological management is also anticipated on an occasional basis, at a similar level of activity to the baseline.

5 TRAFFIC MANAGEMENT MEASURES RECOMMENDED FOR FINAL CTMP

5.1 Introduction

5.1.1 The primary means of controlling construction vehicular traffic would be through an approved Construction Traffic Management Plan (CTMP). This CTMP would form part of the contractor agreements, offering a means of enforcement by the Site Manager. Typical components of measures that would be included within the CTMP are set out below in the preliminary CTMP.

5.1.2 The CTMP aims are:

- to ensure safe management and monitoring of construction traffic, particularly for delivery of goods and equipment and for efficient travel to site for construction workers;
- to minimise disruption to people using PROW; and
- to maintain highway safety and the free flow of traffic on the public highway.

5.1.3 Preparation for the CTMP should begin with supervisory staff suitably briefed in advance of the construction.

5.2 Temporary construction measures (Preliminary CTMP)

5.2.1 Within the site itself, one or more construction compound areas would provide an area for loading and unloading of vehicles and a turning area to allow vehicles to exit the site in forward gear. All delivery drivers and construction workers would be advised of the construction route prior to making their delivery or commencing work.

5.2.2 The site manager would have responsibility for supervising, controlling and monitoring vehicle movements to and from the site. If required, marshals/banksmen would be provided to give drivers guidance when reversing within the site noting that all vehicles would enter and leave the site in a forward gear. There would be no reversing manoeuvres on the public highway.

5.2.3 All PROW and their users within the site boundary would be protected. Temporary closures may be required. Those and other measures, such as warning signage, local communications, weekend traffic bans and the use of banksmen to supervise traffic movements would be discussed with the local highway authority, Caerphilly County Borough Council.

5.2.4 Suitable equipment to facilitate the washing of vehicle wheels would be provided on site to ensure that mud/detritus materials originating from the site is not deposited on the public road.

5.2.5 The origin of plant, machinery and materials is not known at this stage, however, deliveries of materials to site would be required to arrive by way of the proposed construction access route. A driver information pack would be provided to all suppliers identifying the required access route.

5.2.6 Given the nature of the road network, there may be a need for a specific restriction in vehicle arrival/departure times to be implemented to avoid disruption at peak times. Analysis of hourly traffic count data on the Industrial Estate Access Road and the A469 suggests that the roads are less busy during the mornings rather than the afternoons.

5.2.7 Signs to direct construction vehicles associated with the development would be installed along the routes to the site.

5.2.8 It is also proposed that temporary signage be located in the vicinity of the site access during the construction period to warn drivers of the site entrance and HGV movements.

5.2.9 The CTMP will provide for minibus travel to the Site for contractors. Car trips will be minimised to reduce traffic and environmental effects of the Proposed Development

5.2.10 The initial measures outlined here are based on experience of similar projects and current knowledge of the site. It is recognised that the contents of the CTMP and final measures would be formed through engagement with the relevant highway authorities in advance of the development.

5.3 Outline DMP

5.3.1 The CTMP will also include a Delivery Management Plan (DMP), setting out all traffic management and mitigation measures required to ensure safe and efficient transport of HGVs and AILs. All abnormal load movements are regulated by the South Wales Trunk Road Agent and will be subject to separate agreement with the relevant highway authorities and police through the ESDAL system. It is assumed that the DMP process will ensure any effects on local communities and road users are minimal.

5.3.2 The DMP will specify approved HGV routes and mechanisms for monitoring and enforcement of these.

5.3.3 The majority of HGV traffic generated by the Proposed Development during the construction phase are normal HGV loads carrying non-hazardous substances. There will be some abnormal loads associated with the delivery of turbine components. It is also possible that other components such as cable drums, cranes, and drilling equipment may be brought in by abnormal load. The proposed route of these abnormal loads is yet to be confirmed but is likely to comprise the A469/A465. All

abnormal load movements are regulated by the Welsh Government and will be subject to separate agreement with the relevant highway authorities and police through the Electronic Service Delivery for Abnormal Loads (ESDAL) system.

5.3.4 A suitably qualified and experienced specialist abnormal load contractor will determine suitable abnormal load routes and appropriate standard safety mitigation measures, such as:

- Night-time or off-peak movement of abnormal loads to minimise impact on other road users;
- Rolling road closures (where necessary) to ensure safety; and
- Escort vehicles and signage.

5.3.5 Additional management of the existing PROW will also be considered during AIL deliveries, again through liaison with the Caerphilly County Borough Council.

6 CONCLUSIONS

6.1.1 This report assesses the transport implications of the proposed development during its construction and any subsequent operational traffic impact.

6.1.2 Construction and primary maintenance and operational access to the proposed development will be provided from the A465 Heads of the Valleys trunk road via the A469, the A469/B4257 (Carno Street) roundabout, the Heads of the Valley Industrial Estate access road, an unnamed private access road and the private access to Cwm Carno Farm. Access for essential Abnormal Indivisible Loads (AILs) is likely to be direct from the A469.

6.1.3 During construction up to 40 people are anticipated to be working on site. Assuming construction workers use four minibuses from local points of departure with some supervisory/inspection access by light vehicle, this element of traffic generated by the development amounts to 10 light vehicle movements per day.

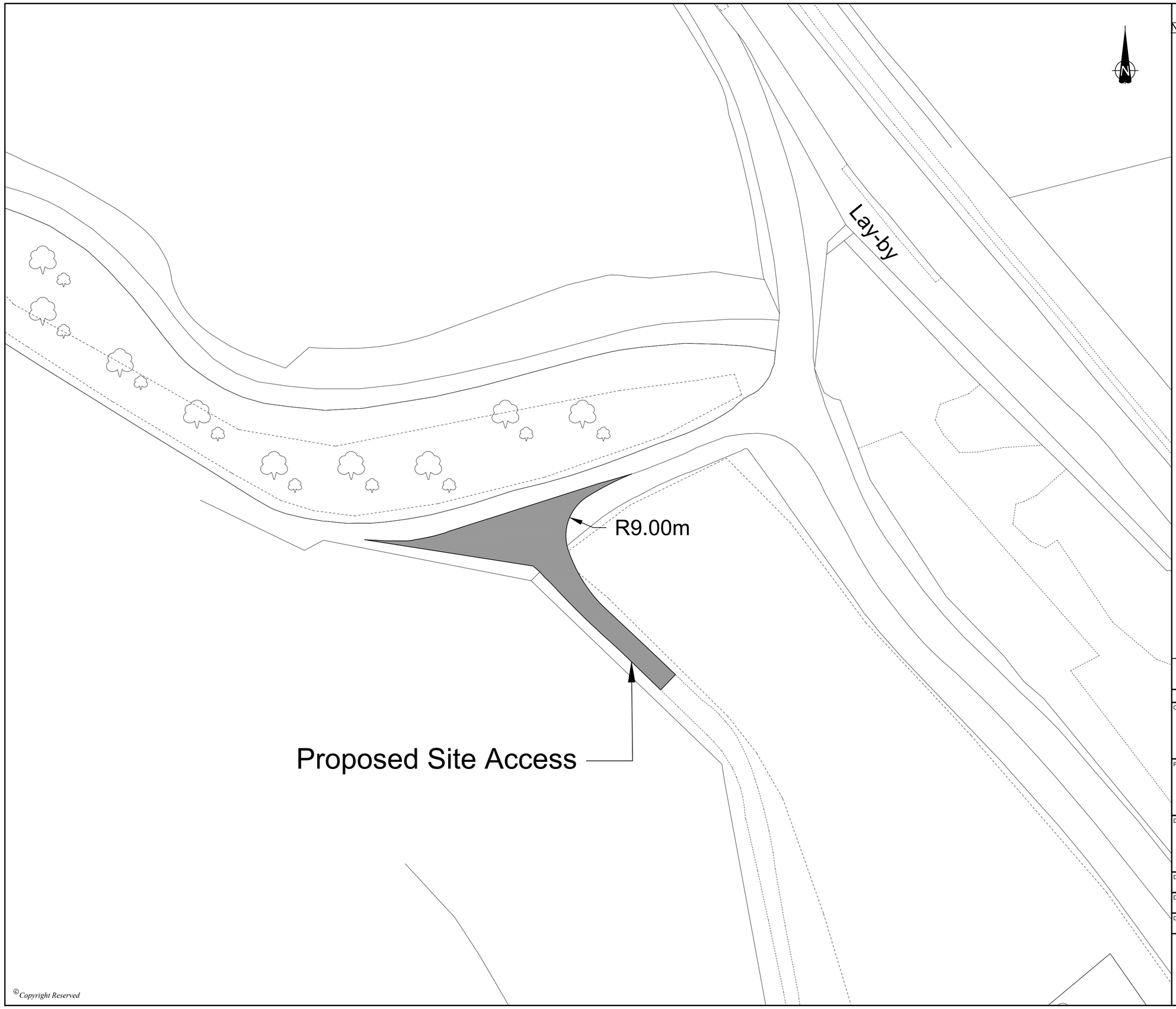
6.1.4 Construction deliveries are estimated to amount to 1308 HGVs and 26 AILs (two-way movements) over five months. Together with construction staff travel to the site, traffic during construction is estimated to be below the 30% significance threshold. As such, construction traffic (with the exception of AIL deliveries) is likely to be imperceptible to local communities and road users.

6.1.5 The primary means of controlling construction vehicular traffic will be through a Construction Traffic Management Plan (CTMP) incorporating a Delivery Management Plan (DMP) and arrangements to minimise disruption for local public rights of way (PROW) users to be agreed with the highway authorities.

6.1.6 The only requirement for staff to visit the site during the operational phase will be for maintenance purposes. No staff will be based at the site and there will be no daily staff-related trip generation. Such traffic movements will have no material impact on the local road network.

6.1.7 The initial measures outlined within this report are based on experience of similar projects and current knowledge of the site. It is recognised that the contents of the CTMP and final measures will be formed through engagement with the local highway authorities in advance of construction.

APPENDIX A: Construction and Operation Site Access and Swept Path Analysis



DO NOT SCALE FROM THIS DRAWING

NOTES:

1. ALL LEVELS IN METRES ABOVE ORDNANCE DATUM AND ALL DIMENSIONS IN METRES UNLESS STATED OTHERWISE.
2. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER ENGINEERING DRAWINGS AND DETAILS AND CONTRACT DOCUMENTATION
3. SWEPT PATH ANALYSIS AT SITE ACCESS BASED ON OS MAPPING AND IS SUBJECT TO DETAILED DESIGN

REVISION	DETAILS	DATE	DRAWN	CHK'D	APP'D

CLIENT

CONVETEC

PROJECT

CONVATEC GREEN MANUFACTURING HUB
RHYMNEY

DRAWING TITLE

PROPOSED SITE ACCESS ARRANGEMENTS

PRELIMINARY

DRG No.	REV	SUIT. CODE
BR10167-053	P0	

DRG SIZE	SCALE	DATE
A2	1:500	01/02/2024

DRAWN BY	CHECKED BY	APPROVED BY
RB		

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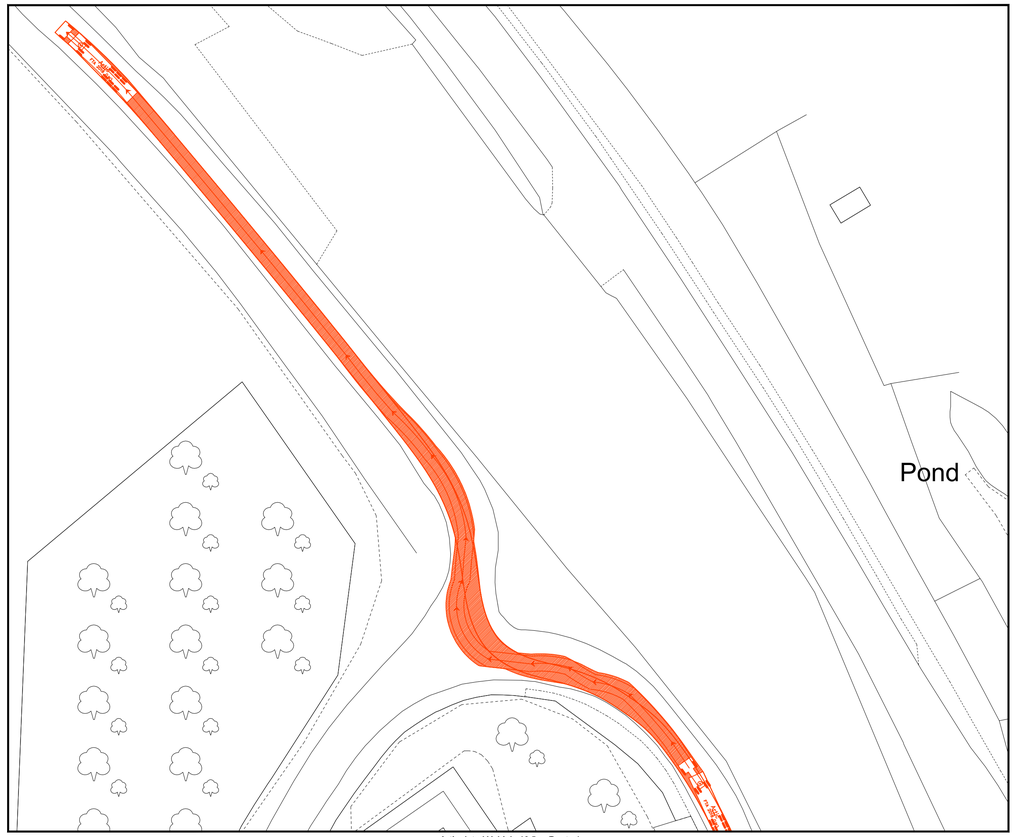
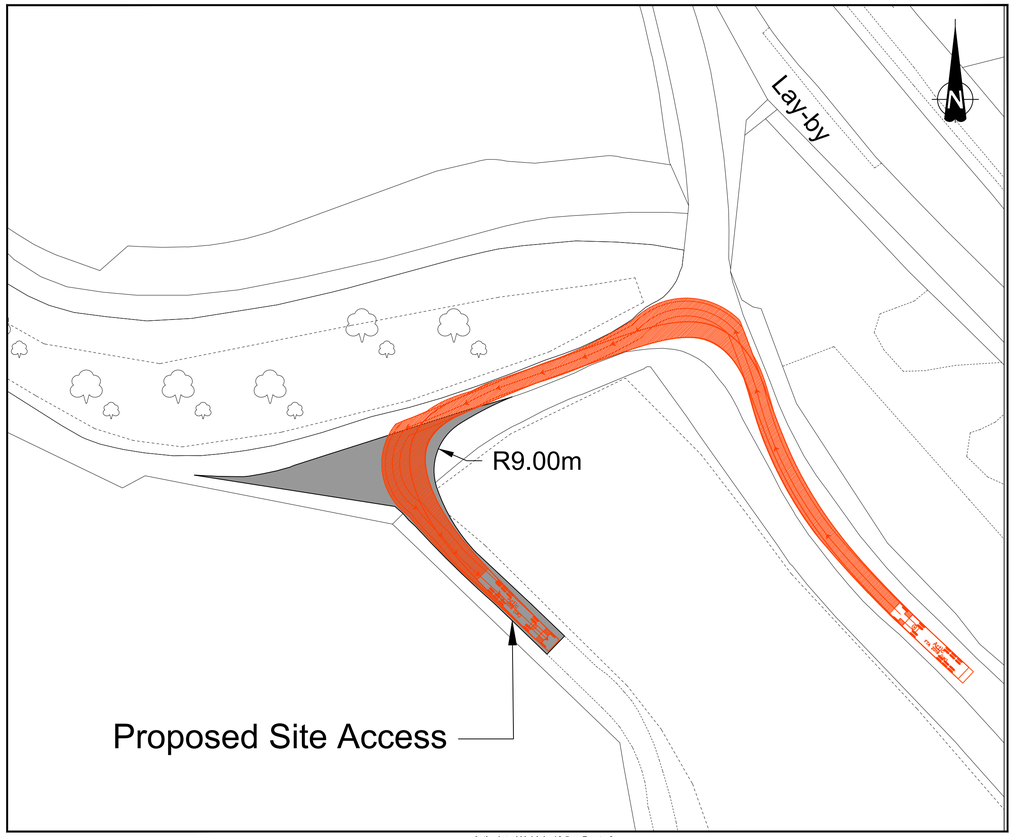
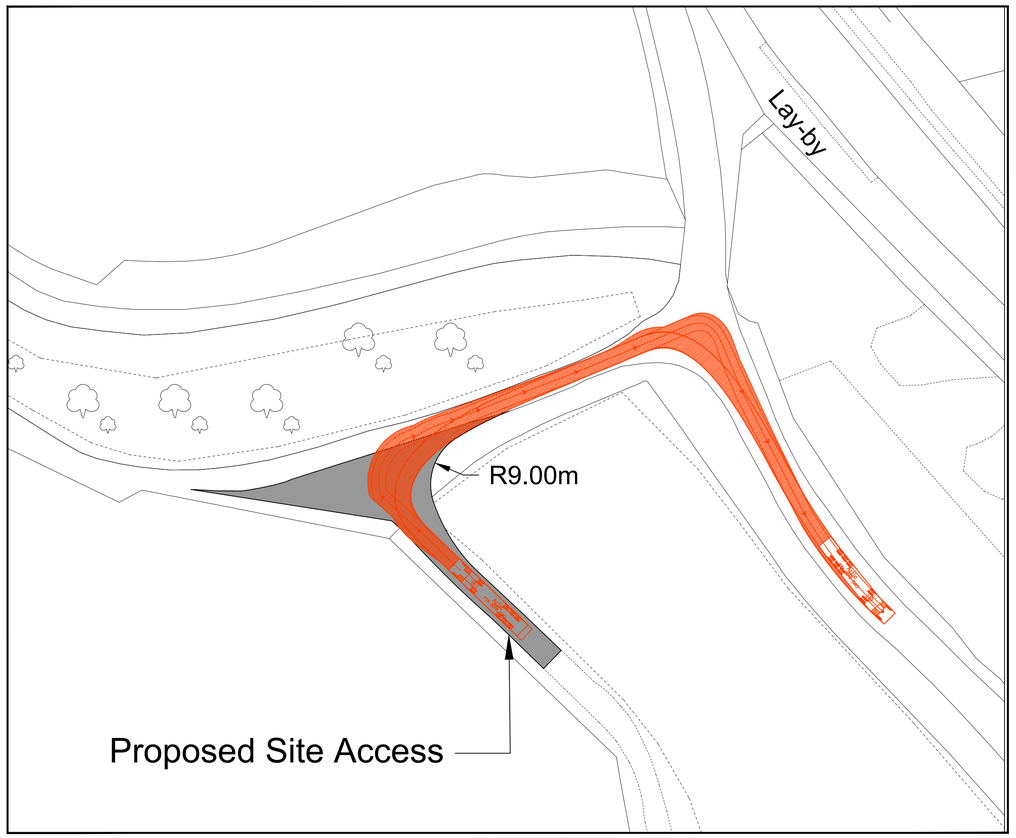


Articulated Vehicle 16.5m: Route 1
Scale: 1:500



Articulated Vehicle 16.5m: Route 2
Scale: 1:500

Articulated Vehicle 16.5m: Route 3
Scale: 1:500



Articulated Vehicle 16.5m: Route 4
Scale: 1:500

DO NOT SCALE FROM THIS DRAWING

NOTES:

1. ALL LEVELS IN METRES ABOVE ORDNANCE DATUM AND ALL DIMENSIONS IN METRES UNLESS STATED OTHERWISE.
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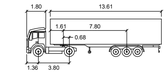
3. SWEPT PATH ANALYSIS AT SITE ACCESS BASED ON OS MAPPING AND IS SUBJECT TO DETAILED DESIGN



Articulated Vehicle 16.5m

	metres		
Tractor Width	2.55	Lock to Lock Time	6.0
Trailer Width	2.55	Steering Angle	42.7
Tractor Track	2.55	Articulating Angle	70.0
Trailer Track	2.55		

REVISION	DETAILS	DATE	DRAWN	CHK'D	APP'D

CLIENT
CONVETEC

PROJECT
COVETEC GREEN MANUFACTURING HUB, RHYMNEY

DRAWING TITLE
SWEPT PATH ANALYSIS

PRELIMINARY

DRG No.		REV	SUIT. CODE
BR10167-054		P0	
DRG SIZE	SCALE	DATE	
A1	1:500	01/02/2024	
DRAWN BY	CHECKED BY	APPROVED BY	
RB			

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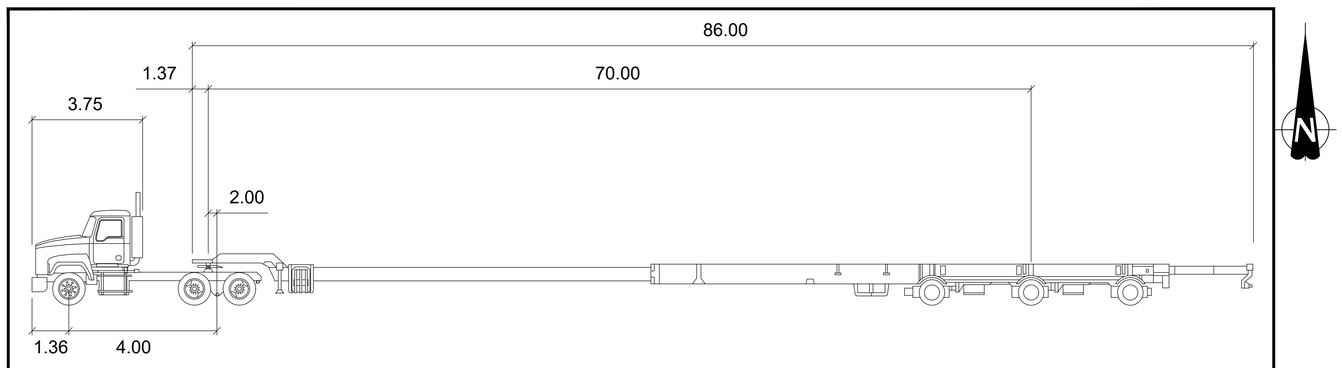

Rotor Blade

	metres		
First Unit Width	: 4.30	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 34.7
First Unit Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

DO NOT SCALE FROM THIS DRAWING

NOTES:

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2. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER ENGINEERING DRAWINGS AND DETAILS AND CONTRACT DOCUMENTATION
3. SWEPT PATH ANALYSIS AT SITE ACCESS BASED ON OS MAPPING AND IS SUBJECT TO DETAILED DESIGN

Lay-by
Drain
Lay-by
Pond
Chy
WB
Tanks
B4257
1

REVISION	DETAILS	DATE	DRAWN	CHK'D	APP'D

CLIENT: CONVETEC

PROJECT: CONVETEC GREEN MANUFACTURING HUB, RHYMNEY

DRAWING TITLE: INDICATIVE SWEPT PATH ANALYSIS (ABNORMAL LOAD)

PRELIMINARY

DRG No. BR10167-061		REV P0	SUIT. CODE
DRG SIZE A0	SCALE 1:500	DATE 07/02/2024	
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STOKE-ON-TRENT
Sir Henry Doulton House
Forge Lane
Etruria
Stoke-on-Trent
ST1 5BD
Tel: +44 (0)1782 276 700

BIRMINGHAM
Two Devon Way
Longbridge Technology Park
Longbridge
Birmingham
B31 2TS
Tel: +44 (0)121 580 0909

BOLTON
41-50 Futura Park
Aspinall Way
Middlebrook
Bolton
BL6 6SU
Tel: +44 (0)1204 227 227

BRISTOL
Temple Studios
Temple Gate
Redcliffe
Bristol
BS1 6QA
Tel: +44 (0)117 203 4477

BURY ST EDMUNDS
Armstrong House
Lamdin Road
Bury St Edmunds
Suffolk
IP32 6NU
Tel: +44 (0)1284 765 210

CARDIFF
Tudor House
16 Cathedral Road
Cardiff
CF11 9LJ
Tel: +44 (0)292 072 9191

CARLISLE
Marconi Road
Burgh Road Industrial Estate
Carlisle
Cumbria
CA2 7NA
Tel: +44 (0)1228 550 575

EDINBURGH
Great Michael House
14 Links Place
Edinburgh
EH6 7EZ
Tel: +44 (0)131 555 3311

GLASGOW
24 St Vincent Place
Glasgow
G1 2EU
Tel: +44 (0)141 428 4499

LEEDS
36 Park Row
Leeds
LS1 5JL
Tel: +44 (0)113 831 5533

LONDON
Third Floor
46 Chancery Lane
London
WC2A 1JE
Tel: +44 (0)207 242 3243

NEWCASTLE UPON TYNE
City Quadrant
11 Waterloo Square
Newcastle upon Tyne
NE1 4DP
Tel: +44 (0)191 232 0943

TRURO
Baldhu House
Wheal Jane Earth Science Park
Baldhu
Truro
TR3 6EH
Tel: +44 (0)187 256 0738

International office:

ALMATY
29/6 Satpaev Avenue
Hyatt Regency Hotel
Office Tower
Almaty
Kazakhstan
050040
Tel: +7(727) 334 1310

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