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**A465 Blaenau'r Cymoedd  
Rhan 2 Gilwern i  
Fryn-mawr**

Adroddiad Asesu Cynllun  
Cam 3

**Hydref 2013**



**A465 Heads of the Valleys  
Section 2 Gilwern to  
Brynmawr**

Stage 3 Scheme Assessment  
Report

**October 2013**

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## Diben y Ddogfenhon

Mae Gweinidogion Cymru yn cynnig gwella rhan 8.1km o'r A465(T) rhwng Gilwern a Bryn-mawr. Gwneir hyn fel rhan o Gynllun Deuoli ehangach yr A465: Y Fenni (Rhan 1) i Hirwaun (Rhan 6). Enw'r cynllun arfaethedig yw A465 Rhan 2: Gilwern i Fryn-mawr (y cyfeirir ato o hyn ymlaen fel y "Cynllun").

Mae'r ddogfen hon, sef Adroddiad Asesu Cynllun Cam 3 (yr Adroddiad), yn disgrifio'r agweddau ar y cynigion nad ydynt yn ymwneud â'r amgylchedd. Mae'r Adroddiad yn ategu'r Gorchmynion drafft a gyhoeddwyd ar gyfer y cynllun, sef:

- Gorchymyn Gorchymyn Cefnffordd Castell-nedd i'r Fenni (A465) (Deuoli o'r Fenni i Hirwaun a'r Ffyrdd Ymuno ac Ymadael) a Chefnffordd Man i'r Dwyrain o Abercynon i Fan i'r Dwyrain o Ddowlais (A4060), Cefnffordd Caerdydd i Lanconwy (A470) (Ffyrdd Cysylltu) 1999, (Gilwern i Fryn-mawr) (Diwygio) 201-
- Gorchymyn Cefnffordd Castell-nedd i'r Fenni (yr A465) (Deuoli o'r Fenni i Hirwaun a Ffyrdd Ymuno ac Ymadael) a Chefnffordd Man i'r Dwyrain o Abercynon i Fan i'r Dwyrain o Ddowlais (yr A4060) a Chefnffordd Caerdydd i Lanconwy (yr A470) (Ffyrdd Cysylltu) (Gilwern i Fryn-mawr) (Ffyrdd Ymyl) 201\_
- Gorchymyn Prynu Gorfodol Gweinidogion Cymru (Cefnffordd Castell-nedd i'r Fenni (yr A465) (Deuoli o'r Fenni i Hirwaun a Ffyrdd Ymuno ac Ymadael) a Chefnffordd Man i'r Dwyrain o Abercynon i Fan i'r Dwyrain o Ddowlais (yr A4060), Cefnffordd Caerdydd i Lanconwy (yr A470) (Ffyrdd Cysylltu) (Gilwern i Fryn-mawr)) 201\_

Mae Datganiad Amgylcheddol (DA) wedi'i baratoi sy'n nodi'r effeithiau amgylcheddol a mesurau lliniaru i osgoi, lleihau ac, os yn bosibl, gywiro effeithiau andwyol. Mae'n cynnwys canfyddiadau astudiaethau

## Purpose of this Document

The Welsh Ministers propose to improve a 8.1km section of the A465(T) between Gilwern and Brynmawr. This forms part of the wider A465 Dualling Scheme: Abergavenny (Section 1) to Hirwaun (Section 6). The proposed scheme is entitled the A465 Section 2: Gilwern to Brynmawr (hereinafter referred to as the "Scheme").

This document, the Stage 3 Scheme Assessment Report (SAR), describes the non-environmental aspects of the proposals. The SAR supports the draft Orders published for the scheme, namely:

- The Neath to Abergavenny Trunk Road (A465) (Abergavenny to Hirwaun Dualling and Slip Roads) and East of Abercynon to East of Dowlais Trunk Road (A4060), Cardiff to Glan Conwy Trunk Road (A470) (Connecting Roads) Order 1999, (Gilwern to Brynmawr) (Amendment) Order 201-
- The Neath to Abergavenny Trunk Road (A465) (Abergavenny to Hirwaun Dualling and Slip Roads) and East of Abercynon to East of Dowlais Trunk Road (A4060) and Cardiff to Glan Conwy Trunk Road (A470) (Connecting Roads) (Gilwern to Brynmawr) (Side Roads) Order 201\_
- The Welsh Ministers (The Neath to Abergavenny Trunk Road (A465) (Abergavenny to Hirwaun Dualling and Slip Roads) and East of Abercynon to East of Dowlais Trunk Road (A4060) Cardiff to Glan Conwy Trunk Road (A470) (Connecting Roads) (Gilwern to Brynmawr) Compulsory Purchase Order 201\_

An Environmental Statement (ES) has been prepared which identifies the environmental effects and mitigation measures to avoid, reduce and, if possible, remedy adverse effects. It contains the findings of

cynhwysfawr o'r agweddau amgylcheddol ar y cynllun.

Mae Crynodeb Annhechnegol (CA) yn crynhoi'r Datganiad Amgylcheddol (DA) yn syml. Dylid darllen yr Adroddiad hwn ar y cyd â'r CA. Diben y dogfennau hyn yw sicrhau bod pawb sydd â diddordeb yn y cynllun yn deall y cynigion ac yn cael y cyfle i fynegi barn arnynt, gan alluogi Gweinidogion Cymru i benderfynu a ddylid bwrw ymlaen â'r cynllun.

comprehensive studies of the environmental aspects of the scheme.

A Non-Technical Summary (NTS) summarises in a non-technical language the Environmental Statement (ES). This SAR should be read with the NTS. The purpose of these documents is to ensure that all those with an interest in the scheme, understand the proposals and are given the opportunity to express an opinion, enabling the Welsh Ministers to decide whether to proceed with the scheme.

## Cyflwyniad

Gweinidogion Cymru sy'n gyfrifol am gefnffyrdd yng Nghymru ac maent yn cynnig gwella'r A465 rhwng Gilwern a Bryn-mawr fel rhan o'r cynllun ehangach i ddeuoli'r A465 rhwng y Fenni a Hirwaun.

Mae'r cynllun i ddeuoli'r A465 Ffordd Blaenau'r Cymoedd wedi'i rannu'n chwe Rhan fel y disgrifir yn Nhabl 1.

## Introduction

The Welsh Ministers are responsible for trunk roads in Wales and propose to improve the A465 between Gilwern and Brynmawr as part of the wider dualling of the A465 between Abergavenny and Hirwaun.

The dualling of the A465 Heads of the Valleys Road has been divided into six Sections as described in Table 1.

| Rhan | Lleoliad                       |
|------|--------------------------------|
| 1    | Y Fenni i Gilwern              |
| 2    | <b>Gilwern i Fryn-mawr</b>     |
| 3    | Bryn-mawr i Dredegar           |
| 4    | Tredegar i Ddowlais Top        |
| 5    | Dowlais Top i Gyffordd yr A470 |
| 6    | Cyffordd yr A470 i Hirwaun     |

**Tabl 1: Rhannau Deuoli'r A465**

Cafodd y Gorchymyn Llinell ar gyfer y cynllun cyfan ei wneud yn wreiddiol ym mis Mehefin 1999. Cwblhawyd Rhan 4 (Tredegar i Ddowlais Top) a Rhan 1 (Y Fenni i Gilwern) yn 2004 a 2008 yn y drefn honno. Dechreuodd gwaith adeiladu ar Ran 3 ym mis Ionawr 2013 ac mae disgwyl iddo gael ei gwblhau erbyn canol 2015.

| Section | Location                     |
|---------|------------------------------|
| 1       | Abergavenny to Gilwern       |
| 2       | <b>Gilwern to Brynmawr</b>   |
| 3       | Brynmawr to Tredegar         |
| 4       | Tredegar to Dowlais Top      |
| 5       | Dowlais Top to A470 Junction |
| 6       | A470 Junction to Hirwaun     |

**Table 1: A465 Dualling Sections**

The Line Order for the entire scheme was originally made in June 1999. Section 4 (Tredegar to Dowlais Top) and Section 1 (Abergavenny to Gilwern) were completed in 2004 and 2008 respectively. Section 3 commenced construction in January 2013 and is expected to be complete by mid 2015.

Mae'r Cynllun Trafnidiaeth Cenedlaethol yn nodi y caiff Rhannau 5 (Dowlais Top i'r A470) a 6 (A470 i Hirwaun) eu cwblhau erbyn 2020.

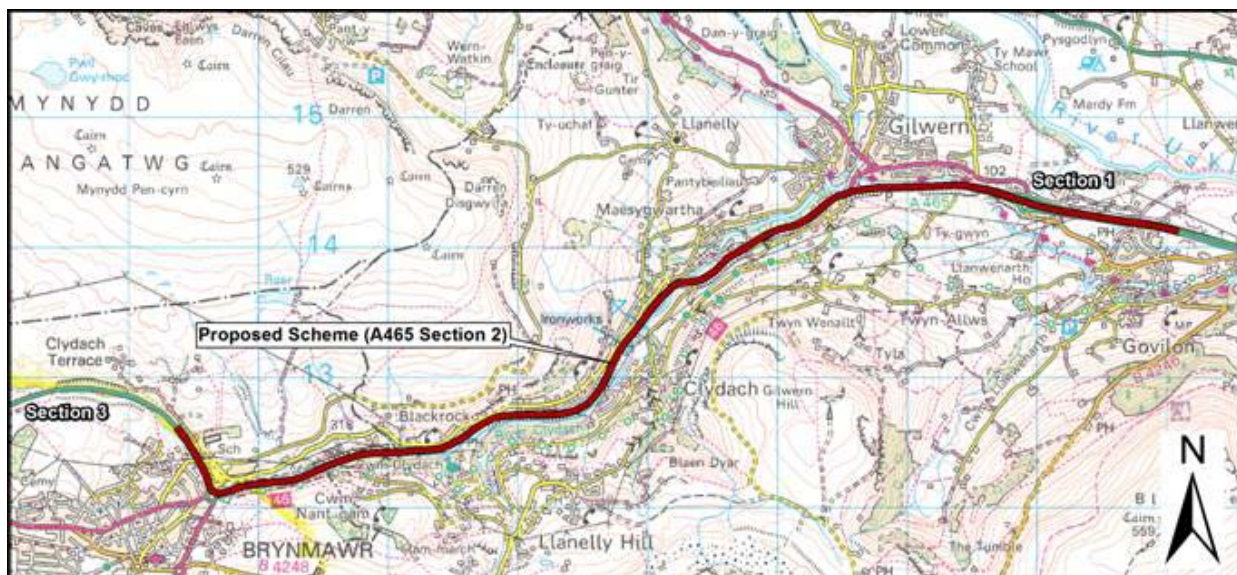
The National Transport Plan notes that Sections 5 (Dowlais Top to A470) and 6 (A470 to Hirwaun) will be completed by 2020.

Mae'r cynllun hwn, y cyfeirir ato fel Rhan 2, yn cynnig deuoli'r A465 rhwng Gilwern a Bryn-mawr. Mae'r cynllun tua 8.1km o hyd ac mae'n golygu gwaith i ledi'r ffordd bresennol yn bennaf.

This scheme, referred to as Section 2, proposes to dual the A465 between Gilwern and Brynmawr. The overall length of the scheme is approximately 8.1 km and is predominantly on-line widening of the existing road.

Os caiff y gweithdrefnau statudol eu cwblhau'n foddhaol ac os bydd arian ar gael, disgwylir i'r gwaith adeiladu ddechrau ar ddiwedd 2014 a byddai'n cymryd tua thair blynedd i'w gwblhau.

Subject to the satisfactory completion of the statutory procedures and the availability of finance, construction is scheduled to start in late 2014 and would take approximately three years to complete.



Maint y Cynllun/ Extent of Scheme

## Amodau Ar Hyn O Bryd

Adeiladwyd y ffordd unffrwd bresennol â thair lôn yn y 1960au gyda dwy lôn i'r cyfeiriad esgynnol drwy Geunant Clydach yn bennaf. Mae lled y ffordd, graddiant, y cyffyrdd un-lefel a'r prinder cyfleoedd i oddiweddyd yn ddiogel yn cyfyngu ar lif a chyflymder traffig. Mewn sawl ardal, mae aliniad y ffordd bresennol yn arwain at welededd gwael, sy'n peri mwy o risg i ddiogelwch.

## Existing Conditions

The existing single three lane carriageway was constructed in the 1960s with generally two lanes in the uphill direction through the Clydach Gorge. Traffic flow and speed are restricted by the road width, gradients, the at-grade nature of the junctions and the limited opportunities for safe overtaking. In many areas the alignment of the existing road results in poor visibility, presenting an increased safety risk.

Mae nifer fawr o ddamweiniau yn digwydd ar rai rhannau o'r ffordd bresennol, fel Blackrock ac yng nghyffiniau'r cyffyrdd ym Mryn-mawr, Gilwern a Glanbaiden.

Mae traffig yng nghylchfan Bryn-mawr eisoes yn uwch na'r capasiti ar adegau brig. Mae'r Llif Cyfeirio Tagfeydd (CRF) yn amcangyfrif y llif traffig sy'n debygol o achosi tagfeydd ar ffordd yn ystod oriau brig ar ddiwrnod arferol. Ar gyfer y rhannau hynny o'r ffordd bresennol sy'n unffrwd i bob pwrpas, mae'r rhagolygon o dwf traffig yn dangos y bydd y lefelau traffig yn uwch na'r CRF ar y rhannau hyn o'r ffordd erbyn y flwyddyn agor arfaethedig (2017). Oni wneir rhywbeth, bydd tagfeydd traffig a phroblemau traffig, gan gynnwys gwrthdrawiadau, yn cynyddu.

Accident concentrations occur on some sections of the existing road, such as at Blackrock and in the vicinity of the junctions at Brynmawr, Gilwern and Glanbaiden.

The traffic capacity of the roundabout at Brynmawr is already exceeded at peak times. The Congestion Reference Flow (CRF) is an estimate of the traffic flow at which a road is likely to be congested at peak hours on an average day. For the sections of the existing route that are effectively single carriageway, forecasts of traffic growth indicate that the CRF will be exceeded on these sections of the route by the proposed opening year (2017). If nothing is done then traffic congestion and traffic related problems, including collisions, will increase.



**Cyffordd Bryn-mawr a'r Ceunant/ Brynmawr Junction and the Gorge**



**Y Ceunant a Chyffordd Bresennol Saleyard/ The Gorge and Existing Saleyard Junction**



**Cyffyrdd Presennol Gilwern a Glanbaiden/ Existing Gilwern and Glanbaiden Junctions**

## Pam Mae Angen Y Cynllun

Mae'r Cynllun Trafnidiaeth Cenedlaethol (Mawrth 2010, blaenoriaethwyd yn 2011) yn cydnabod bod yr A465 Ffordd Blaenau'r Cymoedd yn ffordd strategol bwysig. Yn rhyngwladol, mae'n rhan o'r Rhwydwaith Trafnidiaeth Traws-Ewropeaidd (TEN-T). Yn genedlaethol, y ffordd hon yw'r cyswllt strategol rhwng canolfannau diwydiannol canolbarth Lloegr a de-orllewin Cymru ac mae hefyd yn ddewis amgen i'r M4. Yn lleol, mae'n cysylltu'r dwyrain a'r gorllewin ar draws pen gogleddol neu "flaenau" cymoedd glo De Cymru, rhwng y Fenni i'r dwyrain a Chastell-nedd i'r gorllewin lle mae'n ymuno â thraffordd yr M4.

Mae nifer fawr o gerbydau'n defnyddio ffordd bresennol yr A465 ac nid yw'r rhannau sydd heb eu gwella yn cyrraedd safonau dylunio cyfredol mewn mannau. Cred Llywodraeth Cymru fod gwella'r A465 yn rhan bwysig o'i rhaglen adfywio economaidd gan ddarparu swyddi, teithiau dibynadwy a mwy diogel a rhwydwaith cefnffyrdd mwy cydnerth yn neddwyrain Cymru.

## Why The Scheme is Needed

The A465 Heads of the Valleys Road is recognised in the National Transport Plan (March 2010, prioritised in 2011) as a strategically important route. On an international level, it forms part of the Trans European Transport Network (TEN-T). On a national level, it is the strategic link between the industrial centres of the midlands and south west Wales as well as providing an alternative to the M4. On a local level it provides an east-west link across the northern end or "heads" of the South Wales coalfield valleys between Abergavenny in the east and Neath in the west where it joins the M4 motorway.

The existing A465 carries a high number of vehicles and the unimproved sections do not meet current design standards in places. The improvement of the A465 is seen by the Welsh Government as an important part of its programme for economic regeneration providing access to jobs, safer reliable journeys and improved resilience for the trunk road network in south east Wales.

## Polisiau ac Amcanion

Mae'r cynigion hyn yn cefnogi amcanion Llywodraeth Cymru fel y'u nodir yn Strategaeth Drafnidiaeth Cymru Ebrill 2008, y Cynllun Trafnidiaeth Cenedlaethol Mawrth

## Policies and Objectives

These proposals support the objectives of the Welsh Government as set out in the Wales Transport Strategy April 2008, the National Transport Plan March 2010, the

2010, Blaenoriaethu'r Cynllun Trafnidiaeth Cenedlaethol 2011, Cynllun Buddsoddi yn Seilwaith Cymru a Rhaglen Lywodraethu 2011-2016.

Amcan cyffredinol Llywodraeth Cymru ar gyfer y Cynllun yw:

- Gwella'r A465 Ffordd Blaenau'r Cymoedd rhwng Gilwern a Bryn-mawr (Rhan 2 o'r prosiect cyfan) o ffordd unffrwd â thair lôn i ffordd ddeuol â dwy lôn yn unol â'r Gorchymyn Llinell a wnaed a'i Ddatganiad Amgylcheddol cysylltiedig a chyflawni'r cynllun yn unol â'r rhaglen a'r gyllideb.

Yn ogystal ag amcan polisi Llywodraeth Cymru, amcanion penodol y cynllun yw:

- Cynnal y lefel bresennol o wasanaeth a chyflawni gwelliannau.
- Lleihau amseroedd siwrnai ar gyfer defnyddwyr ffyrdd, preifat a masnachol.
- Hwyluso adfywio economaidd.
- Gwella diogelwch y ffordd a lleihau nifer yr anafusion.
- Gwneud hyn oll gan roi ystyriaeth ddyledus i'r amgylchedd.
- Cyflenwi cynllun sy'n gynaliadwy.
- Gwella'r ddarpariaeth i ddefnyddwyr nad ydynt yn fodurwyr, gan ddarparu cyfleoedd i fyw'n iach.
- Cyflawni cynllun a fydd yn lleihau gofynion cynnal a chadw yn y dyfodol a tharfu llai ar y rhwydwaith.
- Lleihau amrywioldeb amseroedd siwrneiau a gwella dyfalbarhad ar yr A465.
- Defnyddio'r A465 i reoli traffig yn effeithiol a gwella gwytnwch y rhwydwaith ffyrdd strategol yn Ne Ddwyrain Cymru.
- Cyflawni cynllun a fydd yn integreiddio â thrafnidiaeth gyhoeddus ac â'r rhwydwaith trafndiaeth lleol.
- Gwella mynediad at ofal iechyd, addysg a chyfleusterau hamdden.
- Lleihau'r nifer y cymunedau a holltir.

prioritised National Transport Plan 2011, the Wales Infrastructure Investment Plan (WIIP) and the Programme for Government 2011-2016.

The Welsh Government's over-arching Objective for the Scheme is;

- To improve the A465 Heads of the Valleys Road between Gilwern and Brynmawr (Section 2 of the overall project) from a single 3-lane carriageway to dual 2-lane carriageway in accordance with the made Line Order and its associated Environmental Statement and to deliver the scheme to programme and budget.

In addition to the Welsh Government's policy objective, the scheme specific objectives are:

- To maintain the current level of service and to carry out improvements.
- To reduce journey times for private and commercial road users.
- To facilitate economic regeneration.
- To enhance road safety and reduce casualties.
- To do all this with due consideration for the environment.
- To deliver a scheme that is sustainable.
- To improve Non-Motorised User provision, providing opportunities for healthy lifestyle.
- To deliver a scheme which minimises future maintenance requirements and disruption to the network.
- To reduce journey time variability and improve resilience on the A465.
- To use the A465 to manage traffic effectively and improve resilience on the strategic road network in South East Wales.
- To deliver a scheme that integrates with public transport and the local transport network.
- To improve access to healthcare, education and leisure facilities.
- To reduce community severance.

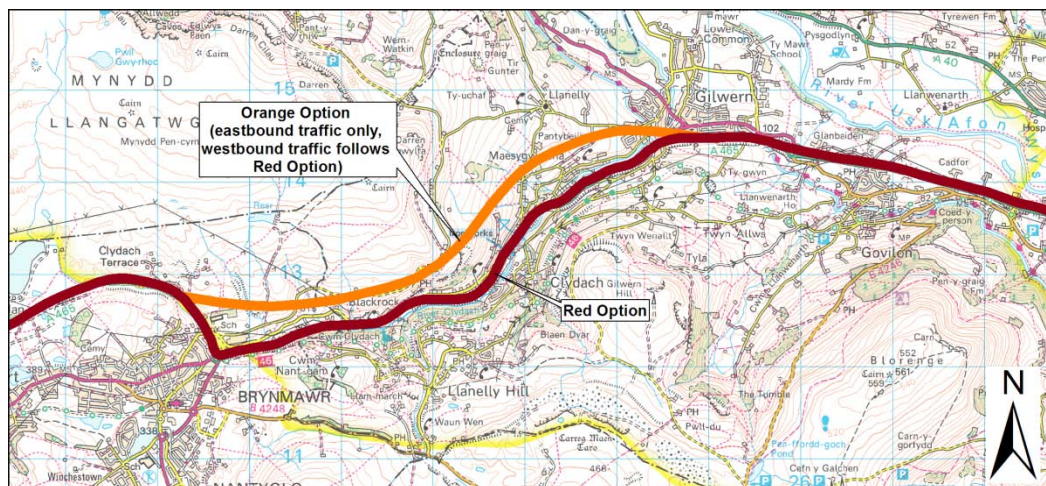
## Dewisiadau Amgen A Ystriwyd Alternatives Considered

Fel rhan o Ymgynghoriad Cyhoeddus a gynhaliwyd yn 1994 gwnaed cynigion i wella'r A465.

A Public Consultation in 1994 put forward proposals for improving the A465.

Ar gyfer hyd y ffordd yn Rhan 2, ystyriwyd dau ddewis amgen, sef uwchraddio'r ffordd bresennol (y Llwybr Coch) a gwyro oddi wrth y ffordd bresennol fel bod y ffordd tua'r dwyrain yn rhedeg ar lefel uwch drwy Geunant Clydach (y Llwybr Oren).

Over the length of Section 2, two alternatives were considered: an upgrade of the existing road (the Red Route) and a departure from the existing road where the eastbound carriageway ran at a higher level through the Clydach Gorge (the Orange Route).



### Dyfyniad o Ddatganiad Amgylcheddol 1997/ Extract from 1997 Environmental Statement

Ar sail holiaduron a llythyrau a gwblhawyd gan y cyhoedd, roeddent yn ffafrio'r Llwybr Coch dros y Llwybr Oren yn ôl ffactor o 2.5 i 1. Roedd yr Awdurdod Prifffyrdd Lleol yn ffafrio'r Llwybr Coch tra bod yr Awdurdod Cynllunio Lleol yn ffafrio'r Llwybr Oren. Cyhoeddodd Ysgrifennydd Gwladol Cymru ei Lwybr a Ffefrir ar gyfer y cynllun ym mis Gorffennaf 1995, a fu'n sail i Orchymyn Llinell 1999, ac roedd yn cynnwys y Llwybr Coch dros hyd y ffordd yn Rhan 2 gydag addasiad ym Mryn-mawr. Yn ei resymau dros ddewis y Llwybr a Ffefrir, dywedodd fod barn y cyhoedd, awdurdodau lleol a sefydliadau eraill wedi cael ei hystyried yn ofalus yn ystod y broses o ddethol.

Based on questionnaires and letters completed by the public, the Red Route was preferred to the Orange Route by a factor of 2.5 to 1. The Local Highway Authority preferred the Red Route although the Local Planning Authority preferred the Orange Route. The Secretary of State for Wales announced his Preferred Route for the scheme in July 1995 which formed the basis of the 1999 Line Order and included the Red Route over the length of Section 2 with a modification at Brynmawr. He stated in his reasons for the selection of the Preferred Route that the views of the public, local authorities and other organisations had been carefully considered and taken into account in the selection process.

Ar ôl i Adroddiad yr Arolygwyr gael ei gyhoeddi yn 1998, gwnaed rhagor o waith ar effaith Cyffordd newydd Glanbaiden. Cafodd

Following the publication of the Inspectors Report in 1998, further work took place in relation to the impact of the new Glanbaiden

aliniad prif ffordd yr A465 ei ostwng dros y gyffordd. Ers hynny mae'r newidiadau allweddol canlynol wedi'u gwneud i'r cynllun dylunio: -

- Symudwyd aliniad y brif ffordd drwy Gyffordd Bryn-mawr i'r gogledd ac ad-drefnwyd y gyffordd i leihau'r effaith ar Safle Daearegol o Ddiddordeb Gwyddonol Arbennig (SoDdGA) Brynmawr Sections ac osgoi 600m o gwlfertau ychwanegol ar gyfer afon Clydach.
- Cynlluniwyd y brif ffordd o Fryn-mawr i Blackrock (rhyw 2km) fel "ffordd ddwy lefel" er mwyn lleihau'r angen i gloddio i mewn i garreg anodd yn yr ardal hon.
- Cafwyd gwared ar y lôn ddringo drwy Geunant Clydach.
- Gosodwyd byndiau mawr o bridd ym Maesygartha a Gilwern i greu sgrin rhwng y ffordd a'r pentrefi.
- Cafodd lled cyfan croestoriad y ffordd ei leihau drwy ddefnyddio lleiniau ymylon ffordd a lleiniau caled cul.
- Cyflwynwyd cyffordd rannol yng Ngilwern sydd ond yn caniatáu symudiadau ymuno ac ymadael tua'r dwyrain. Roedd hyn yn mynd i'r afael â'r broblem a godwyd fwyaf yn ystod yr Arddangosfeydd Gwybodaeth Cyhoeddus a gynhaliwyd yn 2011.
- Newidiwyd aliniad y ffordd drwy Blackrock a Chlydach i leihau'r effaith ar y llystyfiant.
- Ad-drefnwyd cyffordd Saleyard i gynyddu'r defnydd o ffordd bresennol yr A465 i'r eithaf.
- Adolygwyd ffurf strwythurau a gwnaed newidiadau er mwyn gwella'r rhaglen adeiladu a'r gyllideb.
- Adolygwyd y gorffeniadau i'r waliau cynnal (drwy ymgynghori â'r prif randdeiliaid) er mwyn lliniaru eu heffaith ar yr amgylchedd cyfagos

Junction. The alignment of the main A465 was lowered over the junction. Since then the following key changes have been made to the scheme design: -

- The alignment of the main carriageway through the Brynmawr Junction has been moved to the north and the junction was reconfigured to reduce the impact on the Brynmawr Sections Geological Site of Special Scientific Interest (SSSI) and avoid 600m of additional culverting of the river Clydach.
- The main carriageway from Brynmawr to Blackrock (some 2km) has been designed as "split level carriageway" to reduce the excavation into difficult rock in this area.
- The climbing lane provided through Clydach Gorge has been removed.
- The introduction of large earth bunds at Maesygartha and Gilwern to create a screen between the road and the villages.
- The overall width of the carriageway cross section has been reduced through the use of narrow hard-strips and verges.
- A partial junction was introduced at Gilwern allowing eastbound exit and entry manoeuvres only, this addressed the issue that was raised the most at the Public Information Exhibitions held in 2011.
- Revisions were made to the road alignment through Blackrock and Clydach to reduce the effect on existing vegetation.
- The Saleyard junction was reconfigured to maximise use of the existing A465.
- The form of structures has been reviewed and changes made to improve the construction programme and budget.
- The finishes to retaining walls have been reviewed (through consultation with key stakeholders) in order to mitigate their impact on the surrounding environment

## Y Cynllun

## The Scheme

### Disgrifiad o'r Cynllun

Byddai'r cynllun yn ymestyn am 8.1km o fan i'r gorllewin o Bont Intermediate Road i fan sydd union i'r gorllewin o Gyffordd Glanbaiden. Byddai'r cynllun hwn hon yn cysylltu'r gwaith a gwblhawyd yn flaenorol yn Rhan 1 (dwyrain) a Rhan 3 (gorllewin).

Byddai'r ffordd newydd yn ffordd ddeuol (dwylôn i'r ddau gyfeiriad) gyda phedair cyffordd fel y nodir isod;

### Description of the Scheme

The scheme would extend for 8.1km from west of the Intermediate Road Bridge to immediately west of the Glanbaiden Junction. This would connect the previously completed sections of Section 1 (east) and Section 3 (west).

The new road would be a dual carriageway (two lanes in each direction) with four junctions as detailed below;

| Enw'r Gyffordd | Cynllun y Gyffordd                                                                                                                                                   |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bryn-mawr      | Cyfnewidfa Aml-lefel gyda symudiad llawn. Mynediad i mewn ac allan o Fryn-mawr, yr Ysgol, Main Road a Hafod Road.                                                    |
| Saleyard       | Cyffordd symudiad llawn gyfansawdd Mynediad i mewn ac allan o Station Road, Main Road a Maesygartha.                                                                 |
| Gilwern        | Cyffordd symudiad cyfyngedig gyfansawdd (mynediad tua'r dwyrain yn unig i Gilwern ac oddi yno). Mynediad i mewn ac allan o Station Road ar bont newydd dros yr A465. |
| Glanbaiden     | Cyfnewidfa Aml-lefel gyda symudiad llawn. Mynediad i'r A4077 i Gilwern ac o'r A4077 a mynediad i'r B4246 i Govilon ac o'r B4246.                                     |

**Tabl 2: Mathau o Gyffordd**

| Junction name | Junction Layout                                                                                                                                 |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Brynmawr      | Grade Separated Interchange with full movement. Access to and from Brynmawr, the School, Main Road and Hafod Road.                              |
| Saleyard      | Composite full movement junction. Access to and from Station Road, Main Road and Maesygartha.                                                   |
| Gilwern       | Composite restricted movement junction (eastbound access only to and from Gilwern). Access to and from Station Road via a new bridge over A465. |
| Glanbaiden    | Grade Separated Interchange with full movement. Access to and from A4077 to Gilwern and the B4246 to Govilon.                                   |

**Table 2: Junction Types**

Wrth bob cyffordd, byddai gyrwyr ar yr A465 yn pasio drwy'r cyffordd heb stopio. Oherwydd natur gyfyngedig y ceunant, mae'r lleiniau caled a'r lleiniau ymyl ffordd yn fwy cul nag y byddent fel arfer ar gyfer ffordd o'r math hwn ac mae troeon mwy tynn yn aliniad y ffordd. Mae'r cynllun hwn ynghyd â'r angen i leihau effaith y ffordd ar ansawdd aer y

At each junction, drivers on the A465 would pass through the junctions uninterrupted. Because of the constrained nature of the gorge the hardstrips and verges are narrower than would normally be expected for a road of this nature and the alignment includes tighter bends. This layout combined with the need to minimise the air quality

safleoedd ecolegol cyfagos yn golygu y byddai'r cynllun i gyd yn dod o dan derfyn cyflymder gorfodol o 50mya, a fyddai'n cael ei fonitro a'i orfodi.

Byddai'r ffordd newydd yn gadael Rhan 3 (a fydd yn ddeuol) rhyw 450m i'r gorllewin o Gylchfan bresennol Bryn-mawr a byddai'n gwyro tua'r chwith er mwyn pasio i'r gogledd o Gylchfan bresennol Bryn-mawr. Byddai'r lonydd ar ddwy lefel wahanol o'r pwynt hwn ymlaen am ryw 2.2km hyd at Blackrock gyda'r lôn tua'r dwyrain hyd at 11m yn uwch na'r lôn tua'r gorllewin.



**Cyffordd Bryn-mawr o'r gorllewin/  
Brynmaur Junction from west**

Câi cylchfan newydd ei hadeiladu i'r gogledd o'r ffordd bresennol ym Mryn-mawr a chât ffyrdd ymuno ac ymadael a ffyrdd cysylltu newydd eu hadeiladu i gysylltu'r gylchfan bresennol a'r gylchfan newydd â'r A465 a'r rhwydwaith ffyrdd lleol. Byddai pont newydd (Pont Gateway Bryn-mawr) yn cario'r ffordd gysylltu rhwng y ddwy gylchfan.

impacts of the road on the surrounding ecological sites requires that the whole length of the scheme would be subject to a mandatory 50mph speed limit which would be monitored and enforced.

The new road would leave Section 3 (which will be dualled) some 450m to the west of the existing Brynmawr Roundabout and would bear left to pass north of the existing Brynmawr Roundabout. The carriageways would be split level from this point for some 2.2km through to Blackrock with the eastbound carriageway up to 11m higher than the westbound.



**Pont Gateway o'r dwyrain/ Gateway Bridge  
from east**

A new roundabout would be built to the north of the existing road at Brynmawr and new slip roads and link roads would be constructed to link the existing and new roundabouts with the A465 and the local road network. A new bridge (Brynmaur Gateway Bridge) would carry the link road between the two roundabouts.



**Golygfa o'r De/ View from South**



**Golygfa o Gylchfan Main Road/  
View from Main Road Roundabout**

Câi Intermediate Road ei chau a byddai pont droed newydd yn cymryd lle'r bont bresennol. Byddai'r ffyrdd cysylltu newydd yn galluogi cerbydau i gyrraedd a gadael yr ysgol, a byddai cylchfan newydd gerllaw mynedfa'r ysgol yn galluogi ceir i droi o gwmpas a defnyddio cilfan bwrpasol y tu allan i'r ysgol.

Ar y cyfan, byddai'r ffordd yn dilyn llinell ffordd bresennol yr A465 heblaw yn ardal Saleyard lle byddai'r ffordd newydd yn rhedeg i'r de o ffordd bresennol yr A465 ar lefel uwch. Câi'r ffordd bresennol ei defnyddio wedyn i ddarparu'r ffyrdd ymuno ac ymadael tua'r dwyrain ar gyfer Cyffordd Saleyard. Byddai pontydd newydd yn cario'r A465 dros afon Clydach a Station Road a fydd wedi'i hailalinio.

Intermediate Road would be closed and the existing bridge replaced by a new footbridge. Vehicular access to and from the school would be via the new link roads, and a new roundabout near to the school entrance would allow vehicles to turn round and access a dedicated layby outside the school.

The road would generally follow the line of the existing A465 except in the Saleyard area where the new road would run to the south of the existing A465 at a higher level. The existing road would then be used to provide the eastbound entry and exit slip roads for the Saleyard Junction. New bridges would carry the A465 over the river Clydach and the realigned Station Road.



**Cyffordd Saleyard o'r gorllewin/  
Saleyard Junction from the west**



**Cyffordd Gilwern o'r gogledd/  
Gilwern Junction from north**

Yng Ngilwern, câi ffyrdd ymuno ac ymadael tua'r dwyrain eu darparu i gyfarfod â'r A4077 Main Road i'r de o'r bont gamlas bresennol. Byddai'r ffordd gysylltu â Station Road, Gilwern yn croesi dros yr A465 ar bont newydd ac yn cyfarfod â Main Road mewn cyffordd siap 'T' syml gerllaw Gwesty'r Navigation.

At Gilwern, eastbound exit and entry slip roads would be provided meeting the A4077 Main Road south of the existing canal bridge. The link to Station Road, Gilwern would cross over the A465 on a new bridge and meet Main Road at a simple 'T' junction adjacent to the Navigation Hotel.

Yng Nglanbaiden, byddai dwy bont newydd yn cario'r A465 dros y gylchfan bresennol i gyfarfod â Rhan 1.

At Glanbaiden, two new bridges would carry the A465 over the existing roundabout to meet Section 1.

Câi pontydd troed newydd eu darparu i gymryd lle'r tanlwybrau ym Mhont Harri Isaac, Blackrock a Phant Glas, yn ogystal â'r bont droed bresennol yng Nghlydach. Câi'r bont

The subways at Pont Harri Isaac, Blackrock and Pant Glas, as well as the existing footbridge at Clydach, would all be replaced with new footbridges. The footbridge at the

droed yn y Lion Hotel ei dymchwel ond câi llwybr cerdded amgen ei ddarparu ochr yn ochr â Station Road, a fydd wedi'i hailalinio, dros yr A465.

Câi'r holl danlwybrau presennol eu troi'n fannau croesi i ystlumod. Câi'r arosfannau bws ar brif ffordd yr A465 eu cadw yn Blackrock a Chlydach a darperir arosfannau bws newydd yn Saleyard, yn union oddi ar brif ffordd yr A465.



**Cyffordd Glanbaiden o'r gorllewin/  
Glanbaiden Junction from west**

Câi cilfannau argyfwng eu darparu ar Ffordd Ymuno/Ymadael Saleyard (tua'r dwyrain) ac i'r gorllewin o Blackrock (tua'r gorllewin).

Byddai golau ar hyd y rhan hon o'r cynllun.

## Strwythurau - Pontydd

Byddai angen 13 o bontydd newydd ar gyfer y cynllun fel a ganlyn:

- Byddai Pont Droed Hafod i gerddwyr a beicwyr yn unig a byddai'n cysylltu Intermediate Road ag Ysgol Sefydledig Bryn-mawr. Câi'r bont ffordd bresennol yn y lleoliad hwn (Pont Intermediate Road) ei dymchwel.
- Byddai Trosbont Cyffordd Bryn-mawr (Pont Gateway) yn bont fwa o ddur a byddai'n cario Ffordd Gysylltu Main Road rhwng Cylchfan Bryn-mawr a Chylchfan newydd Main Road dros yr A465 ac Afon Clydach.

Lion Hotel would be demolished but an alternative pedestrian route would be provided alongside the realigned Station Road over the A465.

All existing subways would be converted into crossing points for bats. Bus stops on the main A465 would be retained at Blackrock and Clydach with new bus stops being provided at Saleyard, immediately off the main A465.



**Pont Droed Harri Isaac/  
Pont Harri Isaac Footbridge**

Emergency laybys would be provided at Saleyard Slip Road (eastbound) and west of Blackrock (westbound).

The scheme would be lit for its entire length.

## Structures – Bridges

Thirteen new bridges would be required along the scheme length as follows:

- Hafod Footbridge would be for pedestrians and cyclists only and would link Intermediate Road with Brynmawr Foundation School. The existing road bridge at this location (Intermediate Road Bridge) would be demolished.
- Brynmawr Junction Overbridge (Gateway Bridge) would be a steel arch bridge carrying the Main Road Link between the Brynmawr Roundabout and the new Main Road Roundabout over the A465 and the River Clydach.

- Byddai Pont Ffordd Ymuno/Ymadael Brynmawr yn bont goncrïd/dur gyfansawdd a byddai'n cario'r ffordd ymadael newydd tua'r dwyrain dros y ffordd ymuno tua'r dwyrain.
- Byddai Tanlwybr Pont Harri Isaac yn mynd o dan yr A465 tua'r dwyrain ac yn arwain at Bont Droed Harri Isaac a fyddai'n rhychwantu'r A465 tua'r gorllewin a byddai'n cadw cyswllt y llwybr troed presennol.
- Byddai Pont Droed Blackrock yn drawst dirdro crwm o flychau dur a byddai'n cymryd lle'r tanlwybr presennol ac yn cysylltu Blackrock â'r llwybr troed i Devils Bridge a byddai hefyd yn cysylltu'r ddau arhosfan bws.
- Byddai Pont Droed Clydach yn cymryd lle'r bont droed bresennol ac yn cysylltu Gogledd a De Clydach. Byddai hefyd yn cysylltu'r ddau safle bws.
- Byddai Pont Droed Pant Glas yn drawst dirdro crwm o flychau dur a byddai'n cymryd lle'r tanlwybr presennol.
- Byddai Croesfan Afon Saleyard yn bont goncrïd/dur gyfansawdd a byddai'n cario'r A465 dros Afon Clydach.
- Byddai Tanbont Gyswllt Clydach yn strwythur bwaog o goncrïd wedi'i rag-gastio a byddai'n cario'r A465 dros y cyswllt newydd (gwyriad Station Road) rhwng Gogledd a De Clydach.
- Brynmawr Slip Road Bridge would be a steel/concrete composite bridge carrying the new eastbound exit slip road over the eastbound entry slip road.
- Pont Harri Isaac Subway would pass under the eastbound A465 and lead into the Pont Harri Isaac Footbridge which would span the westbound A465 and maintain the existing footway link.
- Blackrock Footbridge would be a curved torsion steel box beam replacing the existing subway and link Blackrock with the footway to Devils Bridge and would also link the two bus stops.
- Clydach Footbridge would replace the existing footbridge and link North and South Clydach and would also link the two bus stops.
- Pant Glas Footbridge would be a curved torsion steel box beam replacing the existing subway.
- Saleyard River Crossing would be a steel/concrete composite bridge carrying the A465 over the River Clydach.
- Clydach Link Underbridge would be a precast concrete arch structure carrying the A465 over the new link (Station Road diversion) between North and South Clydach.



**Pont droed Blackrock o'r gorllewin/  
Blackrock footbridge from west**



**Pont droed Pant Glas o'r dwyrain/  
Pant Glas footbridge from east**

- Byddai Trosbont Navigation Inn yn strwythur bwaog o goncrïd wedi'i rag-gastio a byddai'n cario gwyriad Station Road yng Ngilwern dros yr A465 newydd.
- Byddai Tanbontydd Glanbaiden (Dwyrain a Gorllewin) yn strwythurau bwaog o goncrïd wedi'i rag-gastio a byddent yn cario'r A465 dros ffordd gylchredol y Gylchfan bresennol.
- Navigation Inn Overbridge would be a precast concrete arch structure carrying the diverted Station Road at Gilwern over the new A465.
- Glanbaiden Underbridges (East and West) would be precast concrete arch structures carrying the A465 over the circulatory carriageway of the existing Roundabout.

## Strwythurau Cynnal

Oherwydd y topograffi a'r cyfyngiadau amgylcheddol, byddai angen defnyddio strwythurau cynnal yn helaeth er mwyn sicrhau y caiff cyn lleied o dir â phosibl ei gymryd a lleihau'r effaith ar ardaloedd sensitif. Byddai angen dros 11.5km o'r strwythurau hyn. Byddai'r waliau hyn yn cynnwys concrïd cyfnerthedig traddodiadol, pridd cyfnerthedig wedi'i orchuddio gan baneli gwaith maen neu goncrïd, llethrau naturiol wedi'u trin ac argloddiau pridd wedi'u cyfnerthu â geodecstilau. Bydd y rhan fwyaf o'r waliau sydd bron yn fertigol, gan gynnwys y wal rhwng y lonydd yn y rhan o'r ffordd sydd ar ddwy lefel, wedi'u gorchuddio gan gymysgedd o baneli gwaith maen a choncrïd gweadog er mwyn efelychu strata'r ddaearreg naturiol yn yr ardal.

## Defnyddwyr Heblaw Modurwyr

Byddai'r Cynllun yn effeithio ar nifer o hawliau tramwy cyhoeddus a llwybrau a ddefnyddir yn bennaf gan gerddwyr a beicwyr, y mae rhai ohonynt yn cysylltu â llwybrau cyfeiriedig megis Llwybr Dyffryn Gwy, na fyddai'r Cynllun yn effeithio arnynt. Yn ystod y gwaith adeiladu, byddai angen cau rhai o'r rhain dros dro neu'n barhaol, a byddai defnyddwyr yn cael defnyddio rhannau eraill o'r rhwydwaith yn ystod y cyfnod hwn. Ar ôl cwblhau'r gwaith adeiladu, câi cysylltiadau'r rhwydwaith hawliau tramwy cyhoeddus eu cadw gyda newidiadau i aliniad rhai llwybrau a rhai cysylltiadau newydd.

## Retaining Structures

The topography and the environmental constraints would require extensive use of retaining structures to reduce landtake and impact on sensitive areas. Over 11.5km of these structures would be required. The nature of these walls would include traditional reinforced concrete, reinforced earth with masonry or concrete facing panels, treated natural slopes and soil embankments strengthened with geotextiles. The majority of near vertical walls, including the wall between the carriageways in the split level section, will be faced with a mixture of textured concrete and masonry panels to replicate the strata of the natural geology in the area.

## Non Motorised Users

The Scheme would affect a number of public rights of way and routes used predominantly by pedestrians and cyclists, some of which link to promoted routes such as the Usk Valley Way, which would not be affected by the Scheme. During construction some would require stopping up on a temporary or permanent basis, and users would access other parts of the network during this time. Following completion of the construction works, the connectivity of the public rights of way network would be maintained with changes in the alignment of some routes and some new links provided.

Mae'r tanlwybrau a'r trosbontydd presennol sy'n croesi'r A465 yn gysylltiadau pwysig i gerddwyr yn yr aneddiadau ar bob ochr i'r ffordd a byddai'r rhain yn cael eu cadw ar agor (lle bo hynny'n bosibl) hyd nes y bydd y strwythurau newydd wedi'u cwblhau ac yn barod i'w defnyddio.

Yn ogystal, mae'r cynllun yn gobeithio y gellir agor rhai o'r llwybrau adeiladu a chynnal a chadw i gerddwyr ar ôl i'r cynllun gael ei gwblhau. Caiff addasrwydd y llwybrau hyn ei asesu ar ôl y gwaith adeiladu ar y cyd â'r Awdurdodau Lleol perthnasol.

The existing underpass and overbridge crossings of the A465 provide important pedestrian links for the settlements located on either side of the road and these would remain open (where possible) until the new structures are completed and operational.

In addition, it is an aspiration of the scheme to open up some of the construction and maintenance paths to walkers following the completion of the scheme. The suitability of the routes will be assessed post-construction in liaison with the relevant Local Authorities.

## Y Costau

### Amcangyfrif o'r costau

Mae'r amcangyfrif canlynol o gostau yn seiliedig ar brisiau yn Chwarter 4 2012.

## The Costs

### Cost Estimate

The following cost estimate is based upon Quarter 4 2012 prices.

| Elfen                                                             | Amcangyfrif    |
|-------------------------------------------------------------------|----------------|
| Paratoi                                                           | £10.6M         |
| Goruchwyllo                                                       | £16.9M         |
| Adeiladu                                                          | £151.2M        |
| Tir                                                               | £11.4M         |
| <b>Cyfanswm (heb gynnwys TAW a chwyddiant) i gwblhau'r gwaith</b> | <b>£190.1M</b> |

Tabl 3: Amcangyfrif o'r Costau

| Component                                                | Estimate       |
|----------------------------------------------------------|----------------|
| Preparation                                              | £10.6M         |
| Supervision                                              | £16.9M         |
| Construction                                             | £151.2M        |
| Land                                                     | £11.4M         |
| <b>Total (excluding VAT and inflation) to completion</b> | <b>£190.1M</b> |

Table 3: Cost Estimate

### Safonau Peirianeg

Dyluniwyd y cynllun gan ystyried yr holl bolisiâu, cynlluniau a safonau cynllunio cenedlaethol a lleol. Cyflymder Dylunio'r cynllun yw 85kmya (50 mya), fodd bynnag, byddai'n rhaid gwyro oddi wrth y Safonau o ran geometreg priffyrdd ar adegau er mwyn lleihau'r effaith ar yr amgylchedd.

### Defnydd Tir

Mae'r cynllun yn rhedeg drwy gymysgedd o dir amaethyddol, tir diwydiannol diffaith a choetir a byddai angen tua 122 hectar o dir i gyd (gan gynnwys tir dros dro ar gyfer adeiladu a mesurau lliniaru amgylcheddol). Bydd angen ardaloedd bach o dir comin yn ardal Bryn-mawr a darperir tir cyfnewid fel rhan o'r cynllun. Byddai angen dymchwel wyth adeilad o ganlyniad i'r cynllun yn ychwanegol at yr eiddo preswyl yn Lion Terrace a ddymchwelwyd eisoes.

### Amodau Tir

Cynhaliwyd arolwg ymchwiliol o'r tir i ddarparu gwybodaeth ar gyfer y cynllun a helpu i sicrhau y gellir ailddefnyddio cymaint â phosibl o'r pridd a'r cerrig a gaiff eu cloddio yn y cynllun.

Mae'r amodau tir yn amrywio'n sylweddol o leoliad i leoliad, yn enwedig wrth i'r ffordd symud tua'r dwyrain drwy Geunant Clydach. Mae'r haenau, gan ddechrau ar lefel y ddaear a gweithio tuag i lawr, fel a ganlyn:

- Uwchbridd
- Pridd Artiffisial (rwbel mwyngloddio yn bennaf)
- Llifwaddod (i raddau bach iawn)
- Rhewglai

### Engineering Standards

The scheme has been designed taking into account all relevant national and local planning policies, plans and standards. The Design Speed of the scheme is 85kph (50 mph), however, there would be some Departures from Standards in terms of highway geometry to reduce the impact on the environment.

### Land Use

The scheme runs through a mixture of agricultural land, derelict industrial land and woodland and would require approximately 122 hectares of land in total (including temporary land for construction and environmental mitigation). Small areas of common land will be required in the Brynmawr area and exchange land will be provided as part of the scheme. 8 buildings would require demolition as a result of the scheme in addition to the residential properties at Lion Terrace which were previously demolished.

### Ground Conditions

A ground investigation survey has been carried out to provide information for the design and to help optimise the amount of excavated soils and rock that can be reused in the scheme.

The ground conditions vary significantly from location to location, particularly as the road moves east through the Clydach Gorge. The layers, starting at ground level and working down, consist of:

- Topsoil
- Made Ground (mainly mine spoil)
- Alluvium (of very limited extent)
- Glacial Till

- Creigwely (Gwythiennau Glo, Grut Melinfaen, Calchfaen a Thywodfaen)

Mae sawl man o fewn y cynllun lle mae'r amodau tir yn debygol o beri risgiau geodechnegol/daearegol sylweddol. Ymhlith y rhain mae:

- Tir halogedig o bosibl yng nghyn-safle Anacomp a sawl safle tirlenwi arall ar hyd y cynllun.
- Hen weithfeydd mwyngloddio hanesyddol ar ochr Bryn-mawr o'r cynllun.
- Ogofau calchfaen o dan aliniad y ffordd yn Blackrock.

Mae tua 1.2 miliwn m<sup>3</sup> o uwchbridd, dyddodion arwynebol a cherrig i'w cloddio o'r safle, a chaiff y cyfan ei aildddefnyddio o fewn ffiniau'r cynllun. Er mwyn cloddio cerrig, efallai y bydd angen gwneud gwaith ffrwydro mewn mannau lle mae'r garreg yn galed iawn ond caiff hyn ei werthuso gan ddefnyddio canllawiau a dulliau cymeradwy er mwyn sicrhau y caiff y gwaith hwn gyn lleied o effaith â phosibl ar yr amgylchedd a'r ecoleg.

## Draenio

Byddai'r cynllun yn croesi Afon Clydach mewn tri man yn ogystal â sawl un o'i hisafonydd.

Byddai hefyd yn croesi Ardal Diogelu Tarddiad Dŵr (SPZ1) y ddyfrhaen galchfaen ger Bryn-mawr.

Câi'r ffordd newydd ei draenio drwy gyfuniad o sianeli, draeniau hidlo a systemau cwrw a gyl. Byddai'r rhain i gyd yn casglu dŵr glaw ac yn ei gario i ffordd mewn pibellau.

Nid yw system ddraenio ffordd bresennol yr A465 yn atal llygredd rhag mynd i mewn i gyrsgiau dŵr lleol, ond byddai cynllun y system ddraenio newydd yn cynnwys seiffonau petrol sy'n lleihau'r risg o lygredd yn dilyn gollyngiadau. Byddai tanciau tanddaearol a phantiau a llynnoedd yn cyfyngu ar faint o

- Bedrock (Coal Measures, Millstone Grit, Limestone and Sandstone)

There are a number of areas along the scheme where the ground conditions are likely to present significant geotechnical and geological risks. These areas are:

- Potentially contaminated ground at the former Anacomp site and several other landfill sites along the scheme.
- Presence of old historical mine workings at the Brynmawr end of the scheme.
- Limestone caves below the carriageway alignment at Blackrock.

There is approximately 1.2 million m<sup>3</sup> of topsoil, superficial deposits and rock to be excavated from the site, all of which will be reused within the scheme boundaries. The excavation of rock may necessitate the use of blasting in areas where the rock is very hard but this will be subject to evaluation using approved guidance and methods to ensure minimal impact on the environment and ecology.

## Drainage

The scheme would cross the Clydach River in three locations as well as several of its tributaries.

It would also cross the Source Protection Zone (SPZ1) of the limestone aquifer near Brynmawr.

Drainage of the new road would be through a combination of channels, filter drains and kerb and gully systems. These would all collect rainwater and carry it away in pipes.

The drainage system in the existing A465 does not prevent pollution entering local watercourses, whereas the design of the new drainage would include petrol interceptors which reduce the risk of pollution from spillages. Underground tanks and swales/ponds would restrict the amount of

ddŵr sy'n dod allan i gwrs dŵr fel bod cyfnodau byr o lif uchel yn cael eu hystemyn dros gyfnod hwy o amser.

Câi llifau cyrsiau dŵr presennol eu cynnal drwy ymestyn neu ddiweddarau'r cwlfertau presennol a fydd yn pasio o dan y ffordd newydd. Mae astudiaethau llifogydd ac asesiadau risg wedi dod i'r casgliad nad yw'r cynllun arfaethedig yn cynyddu'r risg o lygredd na llifogydd.

## Cyfleustodau Cyhoeddus

Ymgynghorwyd â holl berchenogion a gweithredwyr yr amrywiol gyflenwadau dŵr, carthffosydd, llinellau telathrebu, nwy a thrydan i ganfod sut y byddai'r Cynllun yn effeithio ar eu hoffer a rhoi cyfle iddynt gynllunio unrhyw wyriadau sydd eu hangen.

## Adeiladu

Os caiff y Gweithdrefnau Statudol perthnasol eu cwblhau'n foddhaol ac os bydd arian ar gael, bwriedir dechrau'r gwaith adeiladu ar ddiwedd 2014 a byddai'n cymryd tua thair blynedd i'w gwblhau.

Câi'r prif bwyntiau mynediad i'r safle eu lleoli ym mhob un o'r cyffyrdd. Byddai Cynllun Rheoli Traffig y safle yn cyfyngu ar y defnydd y gellir ei wneud o'r rhwydwaith ffyrdd lleol. Ac eithrio pan fydd angen gwneud gwaith ar y ffyrdd ymyl lleol (gan gynnwys Main Road) neu'n union gerllaw cyffyrdd, bydd traffig adeiladu yn defnyddio'r A465.

Mae rheoli traffig yn ystyriaeth hollbwysig er mwyn sicrhau diogelwch y gweithlu a'r cyhoedd. Y nod yw cynnal cymaint o'r llwybrau presennol â phosibl a dim ond defnyddio llwybrau amgen pan fo gwir angen gwneud hynny er mwyn gwneud y gwaith adeiladu. Fel arfer câi'r traffig ei gyfyngu i ddwy lôn, un i bob cyfeiriad, gyda therfyn cyflymder dros dro; ond weithiau bydd angen cyflwyno cyfyngiadau dros nos i un lôn gyda goleuadau traffig. Bydd angen cau'r ffordd dros nos weithiau hefyd.

water coming out into a watercourse to smooth out short periods of high flow over a longer period.

Existing watercourse flows would be maintained by extending or replacing the existing culverts passing beneath the new road. Flood studies and risk assessments have concluded that there is no increased risk of pollution or flooding from the proposed scheme.

## Public Utilities

All owners and operators of the various water mains, sewers, telecommunications, gas and electricity lines have been consulted to establish how their equipment would be affected by the Scheme and to allow them to plan any diversions required.

## Construction

Subject to the satisfactory completion of the relevant Statutory Procedures and the availability of finance, it is intended to start construction in late 2014 and would take approximately three years to complete.

Main site access points would be located at each of the junction locations. Use of the local road network would be restricted by the site Traffic Management Plan. Except where works are required on the local side roads (including Main Road) or immediately adjacent to junctions, construction traffic will use the A465.

Management of traffic is a key consideration to ensure the safety of the workforce and the public. The aim is to maintain existing routes as much as possible and to only implement alternatives when it is absolutely necessary to construct the works. Typically through traffic would be restricted to two lanes, one in each direction, with a temporary speed restriction; although some overnight restrictions to single lane working under signal control will be necessary. Occasional overnight closures will also be necessary.

Ein nod yw cadw traffig ar yr A465 er mwyn atal pobl rhag defnyddio ffyrdd lleol fel ffyrdd amgen a byddwn yn gweithio gyda'r Heddlu ac awdurdodau priffyrdd lleol i gyflawni hyn.

Byddai'r gweithgarwch adeiladu cynnar yn cynnwys clirio coed a llystyfiant, dargyfeirio gwasanaethau presennol a mesurau lliniaru amgylcheddol.

Disgwylir i'r gwaith sylfaen ddechrau yng ngwanwyn 2015.

Oherwydd natur linellol a chyfyng y safle, caiff gwaith ei wneud mewn sawl lleoliad ar hyd coridor y ffordd ar yr un pryd. Bydd y gwaith i adeiladu'r gyffordd newydd ym Mryn-mawr yn dechrau yn gynnar yn y rhaglen.

Câi materion amgylcheddol, gan gynnwys dŵr ffo arwyneb, sŵn, llwch a rheoli gwastraff safle, eu rheoli drwy Gynllun Rheoli Amgylcheddol ar gyfer Gwaith Adeiladu.

### **Beth sy'n digwydd i'r ffordd bresennol?**

Gwaith i ledw'r ffordd yw'r cynllun yn bennaf ac felly byddai'r cynllun newydd yn cymryd lle'r ffordd bresennol. Byddai'r Gylchfan bresennol ym Mryn-mawr yn cael ei chadw ond byddai'n dal i fod yn rhan o'r gefnffordd. Byddai rhan o ffordd bresennol yr A465 yn Saleyard yn ffurfio'r ffyrdd ymuno/ymadael newydd tua'r dwyrain yn y gyffordd newydd.

It is our aim to keep traffic on the A465 to avoid rat-running on local roads and we will work with the Police and local highway authorities to achieve this.

Early construction activities would consist of tree and vegetation clearance, diversion of existing services and environmental mitigation works.

Earthworks operations are programmed to commence in the spring of 2015.

Due to the linear and constricted nature of the site, works will be carried out at several locations along the route corridor at the same time. The works to construct the new junction at Brynmawr will commence early in the programme.

Environmental issues including surface water runoff, noise, dust and site waste management would all be controlled and managed through a Construction Environmental Management Plan.

### **What happens to the existing road?**

The majority of the scheme would be on-line widening and therefore the existing road would be replaced by the new scheme. The existing Brynmawr Roundabout would remain but would still form part of the trunk road. A section of the existing A465 at Saleyard would form the new eastbound slip roads at the new junction.

## **Asesiad Traffig ac Asesiad Economaidd**

### **Modelu**

Gwnaed gwaith cyfrif traffig, cyfrif symudiadau troi, arolygon o hyd ciwiau ac arolygon o amseroedd teithio ym mis Tachwedd 2011.

Cafodd y wybodaeth ei phrosesu a'i defnyddio i ddatblygu model traffig cyfrifiadurol o'r ardal.

## **Traffic and Economic Assessment**

### **Modelling**

Traffic counts, turning movement counts, queue length surveys and journey time surveys were undertaken in November 2011.

This information was processed and used to develop a computer traffic model of the area.

## Rhagamcanu

Defnyddiwyd y model i lunio rhagolygon traffig ar gyfer 2017 a 2032 (yn seiliedig ar Rannau 1, 2, 3 a 4 wedi'u cwblhau), fel y dangosir yn nhabl 4 isod:

## Forecasting

The model was used to produce traffic forecasts for 2017 and 2032 (as based on Sections 1, 2, 3 & 4 being completed), as shown in the table 4 below:

| Rhagamcan o Lifau Traffig Dyddiol Cyfartalog Blynnyddol |                      |                  |                        |                  |
|---------------------------------------------------------|----------------------|------------------|------------------------|------------------|
| Lleoliad                                                | Blwyddyn Agor 2017   |                  | Blwyddyn Ddylunio 2032 |                  |
|                                                         | Rhwydwaith Presennol | Gyda Gwelliannau | Rhwydwaith Presennol   | Gyda Gwelliannau |
| I'r Gorllewin o Gyffordd Bryn-mawr                      | 25100                | 29100            | 29500                  | 44300            |
| I'r Dwyrain o Gyffordd Bryn-mawr                        | 22800                | 28100            | 29100                  | 42900            |
| I'r Dwyrain o Gyffordd Saleyard                         | 22900                | 28200            | 29100                  | 43000            |
| I'r Gorllewin o Gyffordd Glanbaiden                     | 21200                | 26500            | 26800                  | 40800            |
| I'r Dwyrain o Gyffordd Glanbaiden                       | 24800                | 29900            | 32600                  | 46000            |

**Tabl 4: Rhagolwg o Lifau Traffig**

| Forecast Annual Average Daily Traffic Flows |                   |                  |                  |                  |
|---------------------------------------------|-------------------|------------------|------------------|------------------|
| Location                                    | Opening Year 2017 |                  | Design Year 2032 |                  |
|                                             | Existing Network  | With Improvement | Existing Network | With Improvement |
| West of Brynmawr Junction                   | 25100             | 29100            | 29500            | 44300            |
| East of Brynmawr Junction                   | 22800             | 28100            | 29100            | 42900            |
| East of Saleyard Junction                   | 22900             | 28200            | 29100            | 43000            |
| West of Glanbaiden Junction                 | 21200             | 26500            | 26800            | 40800            |
| East of Glanbaiden Junction                 | 24800             | 29900            | 32600            | 46000            |

**Table 4: Forecast Traffic Flows**

## Perfformiad economaidd y cynllun

Aseswyd perfformiad economaidd y cynllun drwy gymharu costau'r cynllun â'r buddiannau a gyflawnir. Mae'r costau yn cynnwys y costau adeiladu a'r costau cynnal a chadw yn y dyfodol. Ymhlith y buddiannau a ystyriwyd mae amser teithio a arbedir, costau rhedeg cerbydau a newidiadau o ran costau damweiniau.

## Economic performance of scheme

The economic performance of the scheme has been assessed by comparing the costs of the scheme with the benefits that would be achieved. The costs include both the construction costs and the future maintenance costs. The benefits considered include journey time savings, vehicle operating costs and changes in accident costs.

Caiff buddiannau economaidd y cynllun, a gyfrifwyd yn unol â dulliau Llywodraeth Cymru, eu crynhoi yn nhabl 5. Mae'r rhain yn ystyried effeithiau economaidd uniongyrchol y cynllun ar gostau trafnidiaeth h.y. gwelliannau o ran amser teithio a lleihad mewn damweiniau.

The economic benefits of the scheme, calculated in accordance with Welsh Government methods, are summarised in the table 5. These take into account the direct economic effects of the scheme on transport costs i.e. improvements in travelling time and reduction in accidents.

| Canlyniadau'r Asesiad (prisiau 2010, wedi'u disgowntio i 2010) |                |
|----------------------------------------------------------------|----------------|
| Gwerth Presennol Buddiannau (GPB)                              | <b>£248.4M</b> |
| Gwerth Presennol Costau (GPC)                                  | <b>£170.4M</b> |
| Gwerth Net Presennol (GPB - GPC)                               | <b>£78.0M</b>  |
| Cymhareb Cost a Budd                                           | <b>1.46</b>    |

**Tabl 5: Perfformiad Economaidd**

| Assessment Results (2010 prices, discounted to 2010) |                |
|------------------------------------------------------|----------------|
| Present Value of Benefits (PVB)                      | <b>£248.4M</b> |
| Present Value of Costs (PVC)                         | <b>£170.4M</b> |
| Net Present Value (PVB – PVC)                        | <b>£78.0M</b>  |
| Benefit Cost Ratio                                   | <b>1.46</b>    |

**Table 5: Economic Performance**

Mae i'r cynllun fuddiannau economaidd ehangach y tu hwnt i'r effeithiau ar gostau trafnidiaeth. Byddai'r Cynllun yn gwneud yr ardal yn fwy hygyrch i weithwyr a chwmnïau gan wella Cynnyrch Mewnwladol Crynswth (CMC) yr ardal. Gall yr effaith a gaiff costau trafnidiaeth is ar gostau cynhyrchu arwain at fuddiannau economaidd hefyd. Gan ystyried y buddiannau hyn, byddai'r perfformiad economaidd yn newid fel y dangosir yn nhabl 6.

The scheme has wider economic benefits over and above the effects on transport costs. The Scheme would make the area more accessible to both workers and companies thereby improving the Gross Domestic Product (GDP) of the area. The effect of reduced transport costs on production costs can also have economic benefits. When these benefits are taken into account, the economic performance would change as shown in table 6.

| Canlyniadau'r Asesiad (prisiau 2010, wedi'u disgowntio i 2010) |             |
|----------------------------------------------------------------|-------------|
| Gwerth Presennol Buddiannau a Addaswyd (GPB)                   | £280.9M     |
| Gwerth Presennol Costau (GPC)                                  | £170.4M     |
| Gwerth Net Presennol a Addaswyd (GPB - GPC)                    | £110.5M     |
| Cymhareb Cost a Budd a Addaswyd                                | <b>1.65</b> |

**Tabl 6: Perfformiad Economaidd gan ystyried Buddiannau Economaidd Ehangach**

| Assessment Results (2010 prices, discounted to 2010) |             |
|------------------------------------------------------|-------------|
| Adjusted Present Value of Benefits (PVB)             | £280.9M     |
| Present Value of Costs (PVC)                         | £170.4M     |
| Adjusted Net Present Value (PVB – PVC)               | £110.5M     |
| Adjusted Benefit Cost Ratio                          | <b>1.65</b> |

**Table 6: Economic Performance taking Wider Economic Benefits into account**

## Beth Sy'n Digwydd Nesaf?

Bydd Gweinidogion Cymru yn ystyried unrhyw sylwadau cyn penderfynu a ddylai'r Cynllun fynd rhagddo ai peidio, a hynny gyda neu heb addasiadau.

Gan ddibynnu ar natur a nifer unrhyw wrthwynebiadau a sylwadau a geir mewn perthynas â'r Gorchmynion drafft cyhoeddedig, efallai y caiff Ymchwiliad Cyhoeddus ei gynnal gerbron Arolygydd annibynnol.

Os bwriedir cynnal Ymchwiliad Cyhoeddus, fel arfer caiff pawb sydd wedi ymateb ei hysbysu o fewn pedair wythnos i ddiwedd y cyfnod gwrthwynebu a chaiff yr Ymchwiliad ei gynnal o fewn 22 wythnos i'r hysbysiad hwnnw. Caiff manylion llawn unrhyw Ymchwiliad Cyhoeddus eu cadarnhau a chaiff hysbysiadau eu rhoi yn y wasg leol.

Caiff copïau o'r holl ohebiaeth eu hanfon at yr Arolygydd ac fe'u cedwir yn Llyfrgell yr Ymchwiliad sydd ar agor i'r cyhoedd. Rhoddir cyhoeddusrwydd i unrhyw gynnig amgen ymarferol a geir o fewn terfyn amser i'w bennu yn yr Hysbysiad o'r Ymchwiliad Cyhoeddus. Os bydd Gweinidogion Cymru yn penderfynu bwrw ymlaen â'r Cynllun y mae'r DA wedi'i gyhoeddi ar ei gyfer, yna mae'n rhaid iddynt gyhoeddi gwybodaeth am yr ymgynghoriad a gynhaliwyd, yn unol â Rheoliad Prifffyrdd (Asesu Effaith Amgylcheddol) 2007, y sylwadau a gafwyd ac unrhyw newidiadau a wnaed o ganlyniad i'r sylwadau hynny.

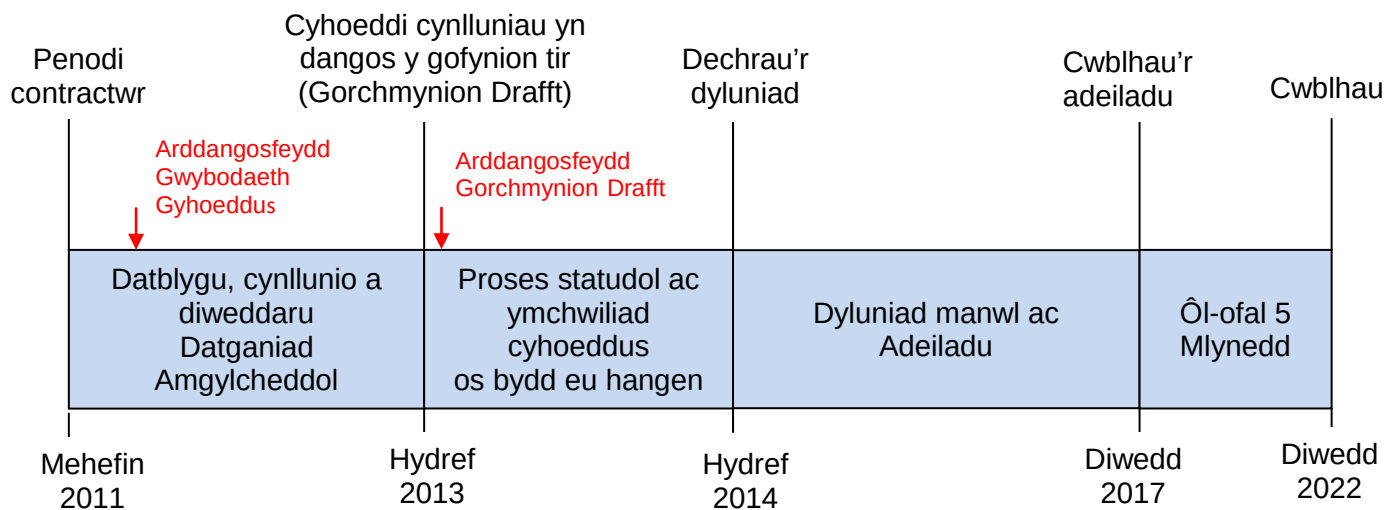
## What Happens Next?

The Welsh Ministers will take into consideration any representations before deciding whether or not to proceed with the Scheme, with or without modifications.

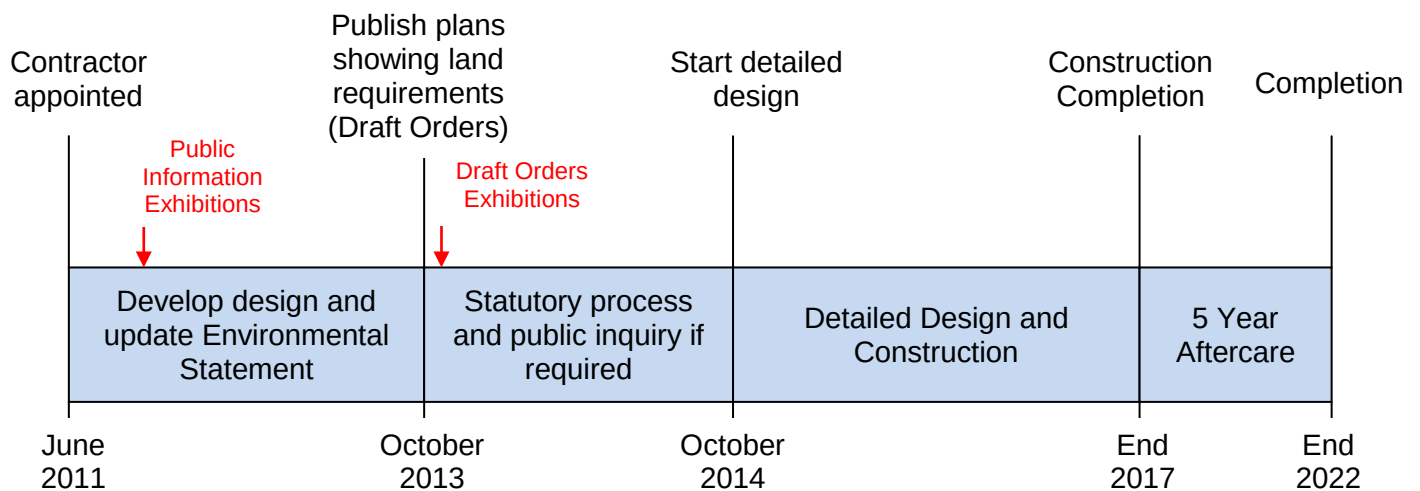
Depending on the nature and number of any objections and comments received to the published draft Orders, a Public Inquiry may be held before an independent Inspector.

If a Public Inquiry is to be held, all those who have responded would normally be notified within 4 weeks of the end of the objection period and the Inquiry held within 22 weeks of that notification. Full details of the Public Inquiry will be confirmed and notices will appear in the local press.

All correspondence will be copied to the Inspector and kept in the Inquiry Library which is available to the public. Publicity would be given to any feasible alternative proposal received within a time limit to be specified in the Public Inquiry Notice. If the Welsh Ministers decide to proceed with the Scheme for which the ES has been published, they then must publish information about the consultation carried out, in compliance with The Highways (Environmental Impact Assessment) Regulation 2007, the representations received and any changes made as a result.



### Llinell amser y cynllun



### Scheme Time Line

## Rhagor o Wybodaeth

Gellir edrych ar gopiau o'r DA a'r Gorchmynion drafft am ddim yn ystod oriau swyddfa arferol yn ystod y cyfnod gwrthwynebu yn y manau canlynol.

**Cangen Gorchmynion, Trafnidiaeth, Yr Adran Economi, Gwyddoniaeth a Thrafnidiaeth, Llywodraeth Cymru, Parc Cathays, Caerdydd, CF10 3NQ**

## Further Information

Copies of the ES and draft Orders may be inspected free of charge, during normal office hours during the objection period at the following premises.

**Orders Branch, Transport, Department for Economy, Science and Transport Welsh Government, Cathays Park, Cardiff, CF10 3NQ**

**Awdurdod Parc Cenedlaethol Bannau Brycheiniog, Plas y Ffynnon, Ffordd Cambrian, Aberhonddu, Powys, LD3 7HP**

**Cyngor Bwrdeistref Sirol Blaenau Gwent, Swyddfeydd y Cyngor, Canolfan Ddinesig, Glynebwy, NP23 6XB**

**Llyfrgell Bryn-mawr, Market Square, Bryn-mawr, NP23 4AJ**

**Cyngor Sir Fynwy, Siop Un Stop, Neuadd y Farchnad, Cross Street, Y Fenni, Sir Fynwy, NP7 5HD**

Hefyd, bydd y safleoedd canlynol ar agor ar y diwrnodau a'r amseroedd a nodir yn ystod y cyfnod gwrthwynebu:

**Canolfan Gymunedol Hen Ysgol Gilwern, Gilwern NP7 0AT** (Dydd Llun, Dydd Mawrth a Dydd Mercher rhwng 9.30 a 12.30)

Gellir prynu copïau o'r DA gan Lywodraeth Cymru yng Nghaerdydd yn y cyfeiriad canlynol:-

**Cangen Gorchmynion, Trafnidiaeth, Yr Adran Economi, Gwyddoniaeth a Thrafnidiaeth  
Llywodraeth Cymru, Parc Cathays, Caerdydd, CF10 3NQ**

Y gost yw:-

- Cyfrol 1 (Adroddiad ar yr Asesiad Technegol) - £50
- Cyfrol 2 (Ffigurau) - £50
- Cyfrol 3 Rhannau 1 i 6 (Atodiadau Technegol) - £50 (fesul rhan)
- Datganiad i Lywio Asesiad Priodol (DLAP) - £15

Gellir prynu copïau electronig o'r DA a'r DLAP am £5. Gellir cael rhagor o gopïau o Adroddiad Asesu Cynllun Cam 3 am ddim gan Lywodraeth Cymru yn y cyfeiriad a nodir uchod neu drwy'r wefan ganlynol:

[www.cymru.gov.uk/trafnidiaeth](http://www.cymru.gov.uk/trafnidiaeth)

**Brecon Beacons National Park Authority, Plas y Ffynnon, Cambrian Way, Brecon, Powys, LD3 7HP**

**Blaenau Gwent County Borough Council, Municipal Offices, Civic Centre, Ebbw Vale, NP23 6XB**

**Bryn-mawr Library, Market Square, Bryn-mawr, NP23 4AJ**

**Monmouthshire County Council, One Stop Shop, Market Hall, Cross Street, Abergavenny, Monmouthshire, NP7 5HD**

Additionally, the following premises will be open on the days and times indicated during the objection period:

**Gilwern Old School Community Centre, Gilwern NP7 0AT** (Mondays, Tuesdays and Wednesdays 9.30 to 12.30)

Copies of the ES can be purchased from the Welsh Government in Cardiff at the following address:-

**Orders Branch, Transport, Department for Economy, Science and Transport  
Welsh Government, Cathays Park, Cardiff, CF10 3NQ**

At a cost of:-

- Volume 1 (Technical Assessment Report) - £50
- Volume 2 (Figures) - £50
- Volume 3 Parts 1 to 6 (Technical Appendices) - £50 (each part)
- Statement to Inform an Appropriate Assessment (SIAA) – £15

Electronic copies of the ES and the SIAA can be purchased at a cost of £5. Further copies of this Stage 3 Scheme Assessment Report may be obtained free of charge from the Welsh Government at the address shown above or via the following website:

[www.wales.gov.uk/transport](http://www.wales.gov.uk/transport)

## Eich Barn

Os hoffech gefnogi'r Gorchmynion drafft neu'r Gorchymyn Prynu Gorfodol, cynnig sylwadau arnynt, neu eu gwrthwynebu, cyflwyno cynigion amgen, neu gynnig sylwadau ar y Datganiad Amgylcheddol a/neu'r Datganiad i Lywio Asesiad Priodol, dylech ysgrifennu at Lywodraeth Cymru yn y cyfeiriad isod.

**Y Gangen Gorchmynion  
Trafnidiaeth  
Adran yr Economi, Gwyddoniaeth a  
Thrafnidiaeth  
Llywodraeth Cymru,  
Parc Cathays,  
Caerdydd CF10 3NQ**

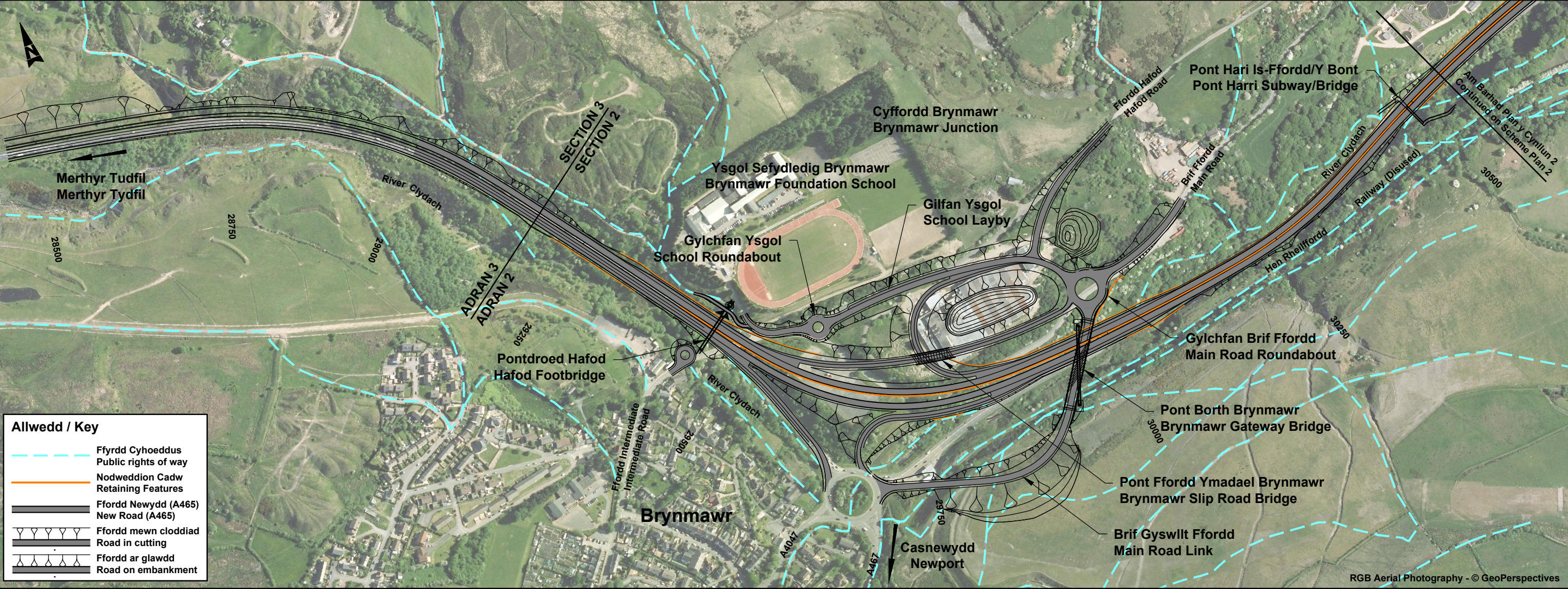
Dylid anfon pob gohebiaeth o'r fath fel ei bod yn cyrraedd Llywodraeth Cymru cyn diwedd y cyfnod a nodir yn yr Hysbysiad Cyhoeddus.

## Your Views

If you wish to support, comment or object to the draft Orders or Compulsory Purchase Order (CPO), put forward alternative proposals, or comment on the Environmental Statement and/or the Statement to Inform an Appropriate Assessment, you should write to the Welsh Government at the address below.

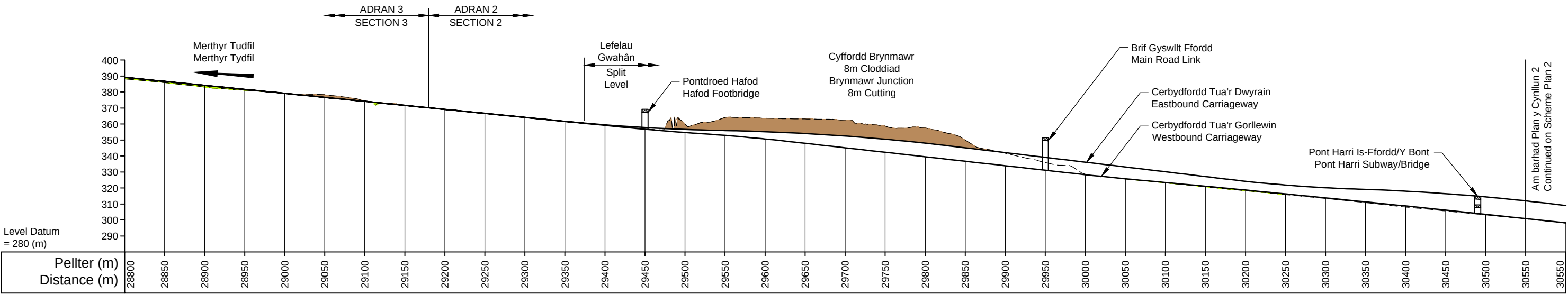
**Orders Branch  
Transport  
Department for Economy, Science and  
Transport  
Welsh Government,  
Cathays Park,  
Cardiff CF10 3NQ**

All such correspondence should be sent to arrive at the Welsh Government no later than the end of the period as set out in the Public Notice.



Plan y Cynllun / Scheme Plan 1

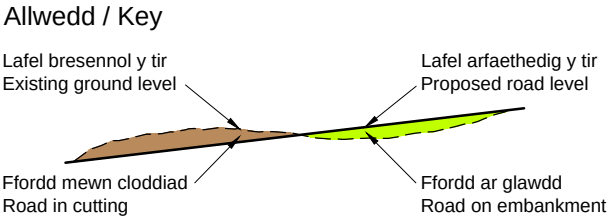
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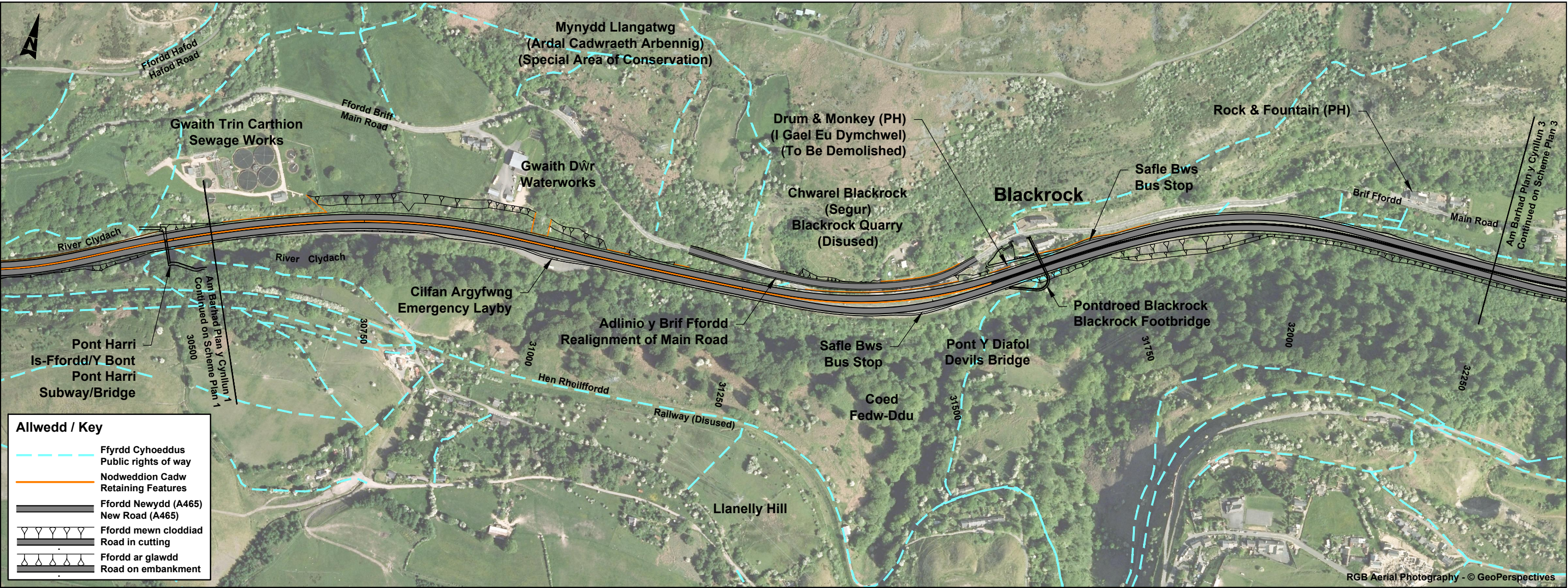


Toriad hydredol yn dilyn llinell ganol y cynllun arfaethedig  
Longitudinal section following the centreline of the proposed scheme

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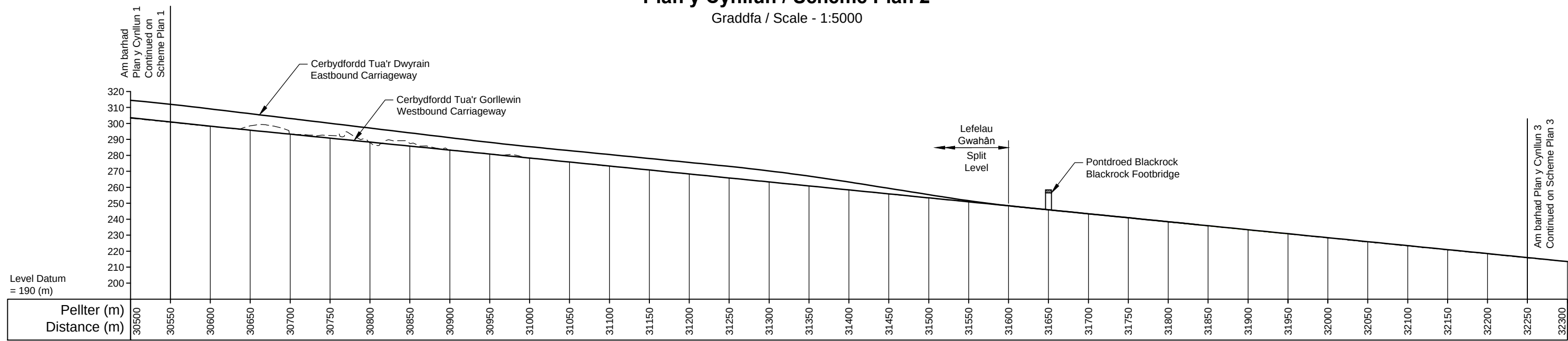
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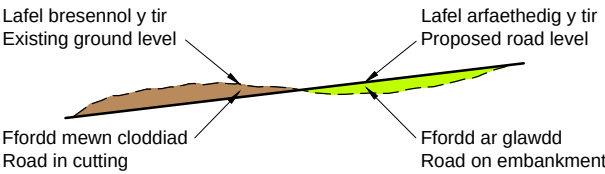


## Plan y Cynllun / Scheme Plan 2

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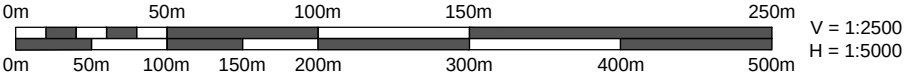
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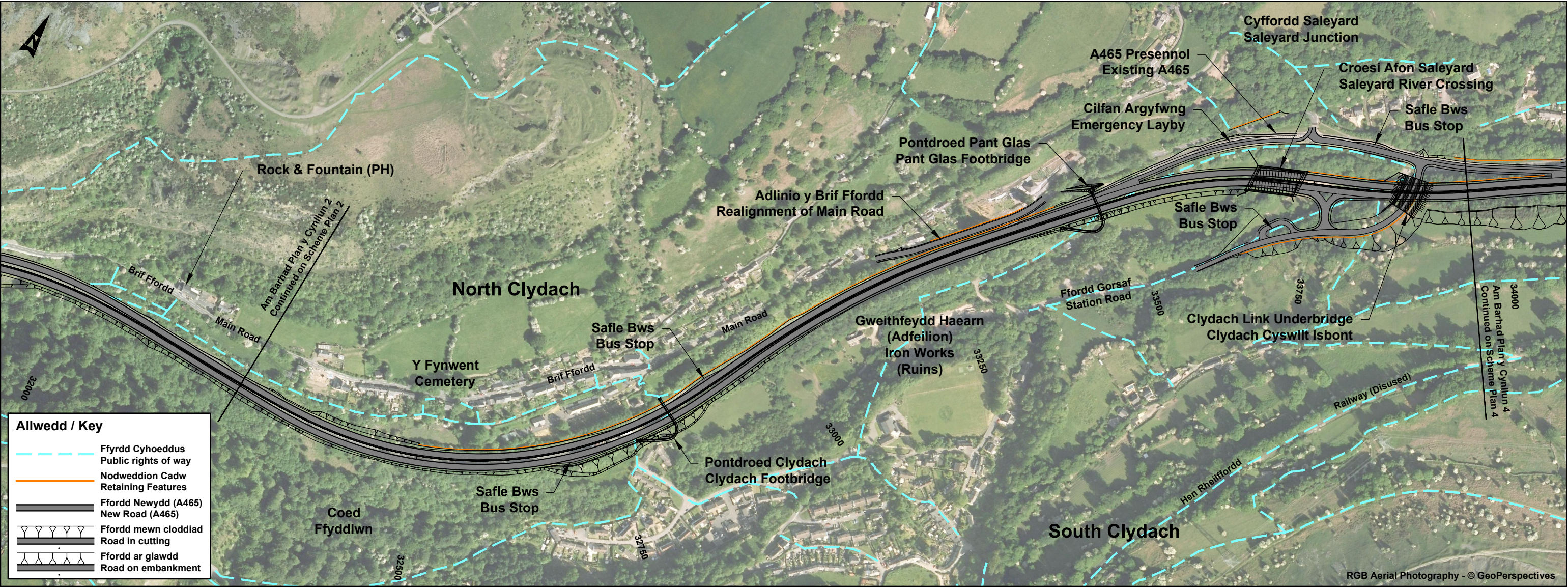


## Toriad hydredol yn dilyn llinell ganol y cynllun arfaethedig Longitudinal section following the centreline of the proposed scheme

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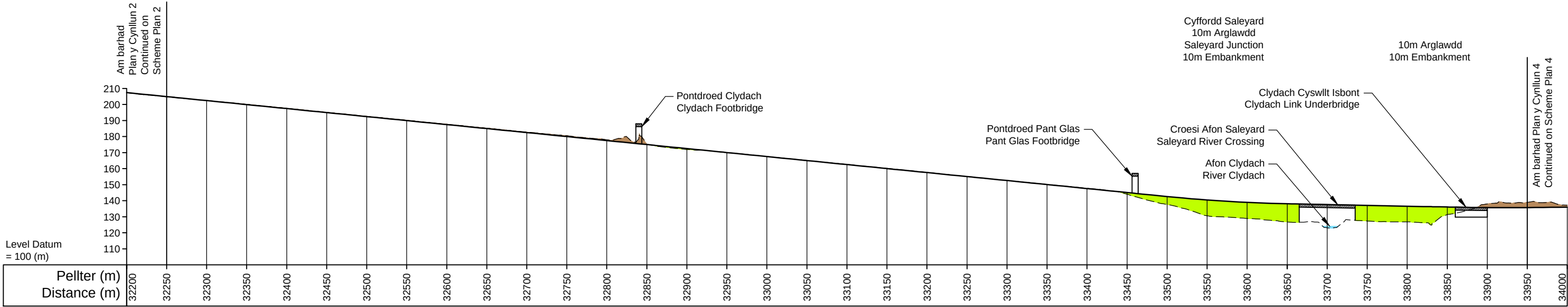
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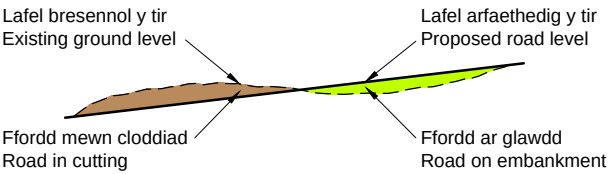


**Plan y Cynllun / Scheme Plan 3**

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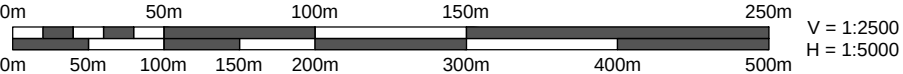
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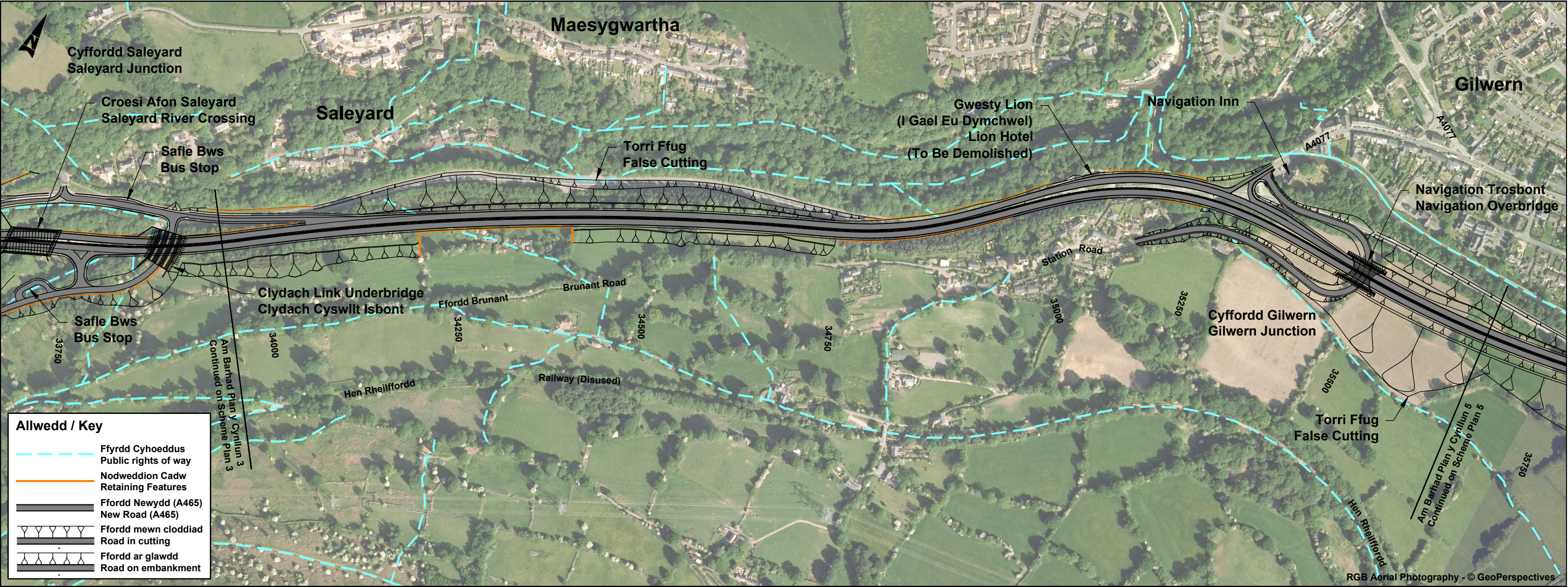


**Toriad hydredol yn dilyn llinell ganol y cynllun arfaethedig**  
**Longitudinal section following the centreline of the proposed scheme**

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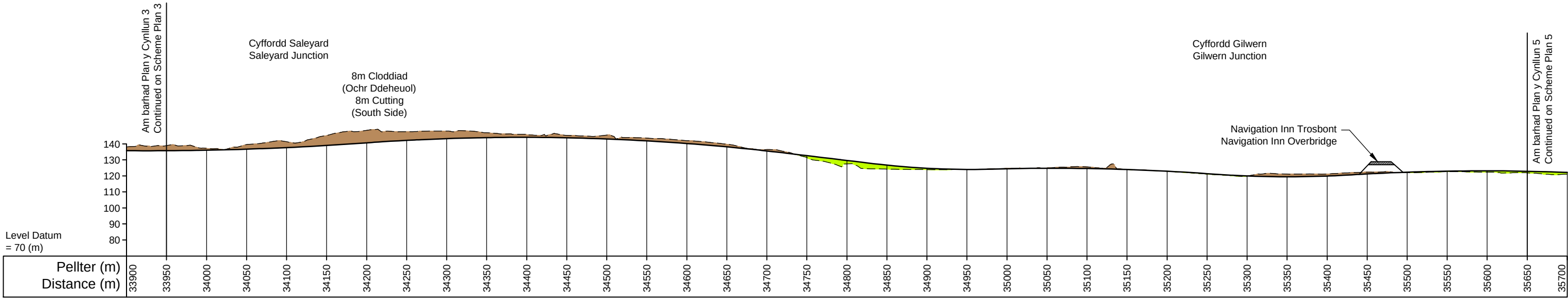
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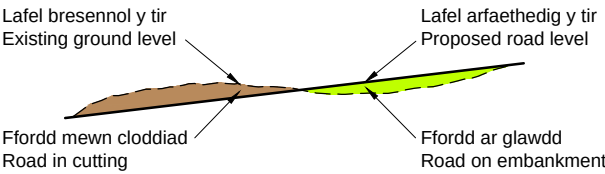


**Plan y Cynllun / Scheme Plan 4**

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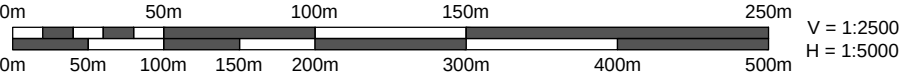
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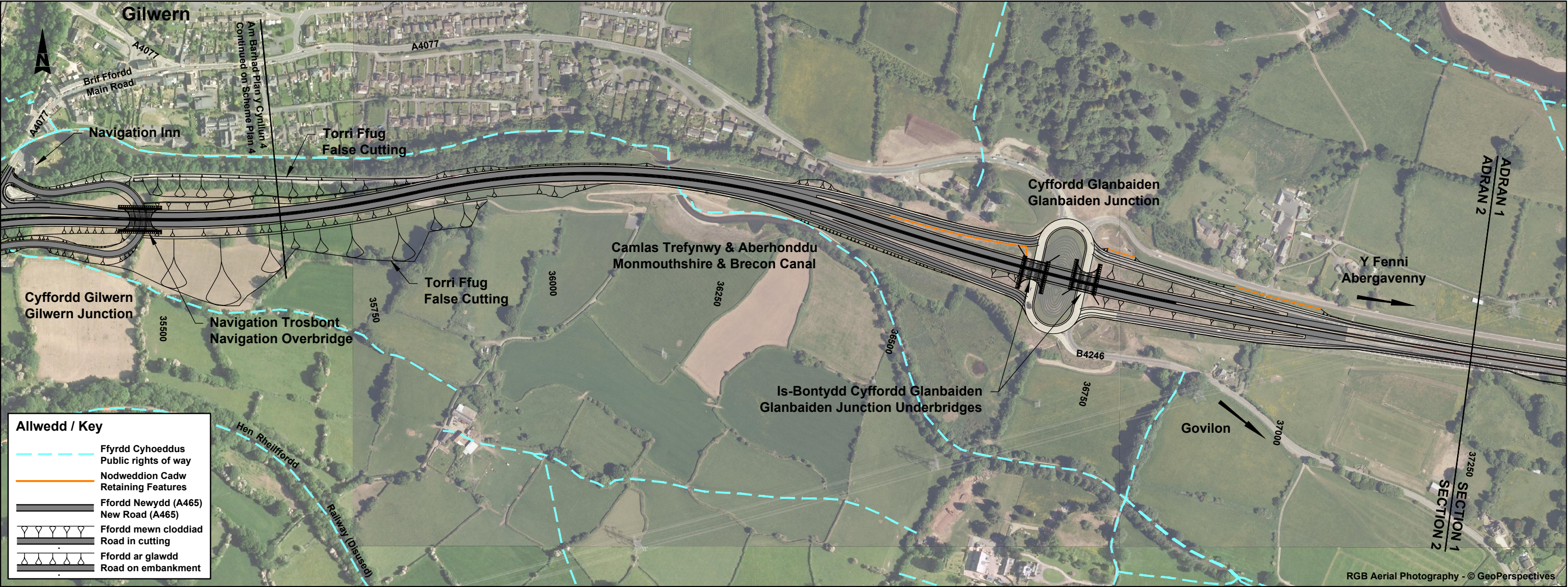


**Toriad hydredol yn dilyn llinell ganol y cynllun arfaethedig**  
**Longitudinal section following the centreline of the proposed scheme**

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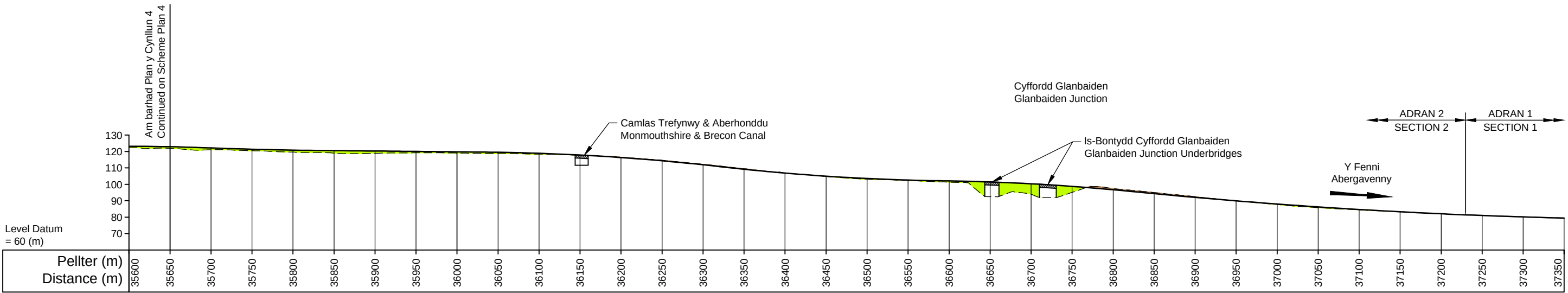
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**Plan y Cynllun / Scheme Plan 5**

Graddfa / Scale - 1:5000



**Toriad hydredol yn dilyn llinell ganol y cynllun arfaethedig**  
**Longitudinal section following the centreline of the proposed scheme**

Graddfa llorweddol / Horizontal scale - 1:5000

Graddfa unionsyth / Vertical scale - 1:2500

