

**Tremeirchion Waste Water Treatment Works.
Proposed Integrated Constructed Treatment Wetland (ICTW) scheme,**

Landscape and Visual Impact Statement

August 2024

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JB	PW	v1	02.09.24

This report has been prepared by Tirlunbarr Associates on behalf of Caulmert Ltd. in connection with the provision of an Integrated Constructed Wetland Scheme at the existing Tremeirchion Waste Water Treatment Works Plant, near Tremeirchion, Denbighshire and takes into account their particular instructions and requirements. It is not intended for and should not be relied on by any third party and no responsibility is undertaken to any third party. © Tirlunbarr Associates.

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1.0 Introduction

- 1.1 Tirlun Barr Associates were appointed in summer 2024 to provide Landscape and Visual input in connection with the change of use of land and construction of an Integrated Constructed Treatment Wetland (ICTW) scheme at Tremeirchion Waste Water Treatment Works, comprising the installation of 2 no. underground septic tanks, creation of 3 no. wetland areas with associated natural habitat planting, a small welfare facility, new internal access roads, specimen tree planting and fencing.
- 1.2 Details of the proposed development have been provided by the client and their representatives Caulmert Ltd. and these are contained at the rear of this document. Refer to Figure 2 of the Appendices - Site Proposals.
- 1.3 An initial site inspection was made in July 2024 to ascertain the site context, and the scale and content of the proposed development with the aim of identifying any avoidance mitigation measures or post operation landscape mitigation that may be necessary as part of the development proposals.
- 1.4 The initial site visit concluded that the scale and content of the proposal, together with the existing site use and landscape context did not merit any avoidance mitigation measures as the proposal content and appearance reflected the existing landscape character and the site extent was identified as very limited and visually well contained.
- 1.5 It was considered that a lengthy Landscape and Visual Appraisal would be disproportionate given the minor magnitude and content of the proposal, and that a Landscape and Visual Statement would be helpful to identify any likely effects upon the existing landscape character and visual receptors, and this approach was discussed and agreed with Denbighshire Officers. (Barr/Crawley 23.08.24)
- 1.6 The site assessment and subsequent landscape review was undertaken by Mrs. Julie Barr BA, Dip LA CMLI, a Chartered Landscape Architect with over 30 years' experience of Landscape related matters and Development Proposals and Principal of Tirlun Barr Associates.
- 1.7 The assessment for the Landscape Statement has involved a review of the existing site context and the proposed development characteristics, together with a study of the baseline landscape character, its context and features, and although located outside of the protected landscapes of the Clwydian Range and Dee Valley AONB and Vale of Clwyd Registered Historic Landscape - taking their proximity into account when carrying out the assessment.
- 1.8 Details of the proposed development have been provided by the client and their representatives and these are contained within the report appendices to the rear of this document. Refer to Figure 2 of the Appendices - Site Development Proposals.
- 1.9 Report figures are contained within the Appendices at the rear of this document.

2.0 Site Context and Baseline

- 2.1 The proposed site is located in open farmland immediately adjacent to the existing Tremeirchion Waste Water Treatment Plant approximately 1.2km south west of the small village of Tremeirchion and circa 2.5km north east of Trefnant in the Vale of Clwyd Denbighshire, north Wales on land near Waen Road, near Tremeirchion. LL17 0AY. **(NGR SJ06954 72725)**
- 2.2 The existing Waste Water Treatment Plant (established on the site in circa 1960, comprises a small discrete pumping facility underground tanks and metal security fencing located behind established woodland and small stream bordering Waen Road to the north (known as Nant Pen Isa'r Waen).
- 2.3 The site is approximately 40m AOD within the broad and low-lying landscape of the Vale of Clwyd - a rural location in Waen located some 1.2km distant and outside the Clwydian Range and Dee Valley Area of Outstanding Natural Beauty (AONB) which is located to the east of the existing (and proposed site) on rising land forming part of the Clwydian Range of Hills, and Tremeirchion - the nearest village to the site located approximately 1.2m distant.



Plate 1. Aerial Photograph of the Wider Site Context

© - Bing Maps

- 2.4 The site and surrounding area are located within the Vale of Clwyd Registered Landscape of Historic Interest in Wales (ref HLW(C) 1 described:

A broad, lowland river valley edged by the Clwydian Hills in central Denbighshire, representing the best surviving and most complete, typical historic part of the Vale of Clwyd. The area contains significant evidence of the late prehistoric and medieval land use and includes a spectacular, defensive chain of Iron Age Hill forts overlooking the valley floor, which is characterised by medieval estate enclosure, settlements and Denbigh and Ruthin defended town and castles

- 2.5 The surrounding area also includes 2 Parks included within the CADW/ICOMOS Register of Parks and Gardens in Wales:
- Bryn Bella (1.2km distant from the existing and proposed site) – a Late eighteenth century small park and informal gardens with later overlays and CADW Listed Brynbella House (Grade II*)
 - Llannerch Hall (circa 2km distant from the existing and proposed site) – Site of one of the most famous Welsh historic Gardens created by Mutton Davies c 1660 overlain by 1920s garden designed by Percy Cane.

- 2.6 The existing treatment Plant (and proposed site) is located south of the woodland strip along its northern edge and access to the site is via an existing track from Waen Road, and is generally hidden from view by virtue of its small scale and the existing woodland to the north, and the layers of hedging, mature hedgerow trees and field trees as the Landscape and Visual reviews detail further.

Site Context and Land use

- 2.7 The surrounding land is pastoral, comprising seasonally farmland of medium size fields bounded by well-maintained hedgerows, including copious hedgerow trees and occasional field trees predominately Oak and small woodlands and riparian vegetation following the local streams to the valley bottom and River Clwyd in the west.
- 2.8 The nearest properties to the existing (and proposed) site are, the farm and farmhouse of Plas Coch (approximately 325m distant from the existing works to the north east) the former farmhouse and storage business at Pen Isa'r Waen (approximately 350m distant to the north) and Hafod y Coed farm house and farm buildings (500m distant to the east) as the Landscape Context Plan (Figure 4 of the appendices) illustrates.
- 2.9 Tremeirchion village, (including Bryn Bella House and Garden) are some 1.2-1.3km distant to the east on slightly elevated land and forming the base of the Clwydian range beyond and above to the east.



Plate 2. Aerial Photograph of the existing (red arrow) and proposed site (blue outline) © - Bing Maps

Topography

- 2.10 Both the site and surrounding immediate and wider landscape is rural low-lying pastoral land approximately 10-15m AOD above the River Clwyd which meanders northwards over 1km distant.
- 2.11 Topographically, this flat valley landscape is overlooked by the rising Clwydian Mountains to the east (including Moel Famau) of over 475m AOD and the low hills to the west rising to the Clocaenog Forest.

Vegetation

- 2.12 The proposed site extent is currently part of a seasonally grazed agricultural field, bounded by mature woodland (as part of Nant Pen Isa'r Waen) to the north and mature hedgerows with hedgerow trees to the west, and a new boundary of hedging is proposed to the south east and north east to link to the existing works as Figure 2 shows.
- 2.13 Existing native tree and shrub vegetation following Nant Pen Isa'r Waen is mixed deciduous woodland comprising Oak, Ash, Alder, Hawthorn, Elder, Hazel and Bramble.
- 2.14 Ornamental tree and shrub planting separates the Gatehouse building from the existing site area and provides a screen for receptors passing the site entrance via the B5605.
- 2.15 Immediately surrounding the site to the north, south and east are wooded plantations, being part of the Landfill restoration scheme (Gorse Birch Alder Willow and Rowan) and with numerous surrounding mature woodland parts of the river embankments along the Dee valley and Estate woodlands; comprising Oak, Ash, Sycamore, Oak, Alder and Willow with further mature riparian vegetation along the river's edge and seasonally grazed level fields bounded by hedging on the lower alluvial flood plain.



Plate 3 - Immediate Site Content© - Bing Maps

Public Footpaths and Accessibility

- 2.16 Publicly available access in the vicinity of the proposed site is limited, due to extensive Private ownership of the surrounding farmland, and there being few Public Footpaths or areas of Publicly Accessible land and which are indicated within Figure 4 Site Context.
- 2.17 The Nationally Important Long Distance Offa's Dyke is over 2.5m distant at its closest point to the site with extensive views westwards and over the length of the Vale, however the existing and proposed site is not visible from the route due to its small scale, layering of valley vegetation and juxtaposition.
- 2.18 The site is accessed from Waen Road via an existing farm track to the existing works, and this is enclosed by existing native vegetation within Nant Pen Isa'r Waen which prevents views of the site from the immediate and surrounding area to the north.

- 2.19 Access to the site will remain unaltered and include continued agricultural access as indicated within the Appendices and will continue use of the existing parking and turning head within the site.

Designations

- 2.20 The site is located outside the Clwydian Range and Dee Valley Area of Outstanding Natural beauty which lies over 1.2km distant at its nearest point following the Clwydian Range hills including the village of Tremeirchion on its western edge, and where views of both the existing and proposed site are not available.

- 2.21 The site and surrounding area are located within the Vale of Clwyd Registered Landscape of Historic Interest in Wales (ref HLW(C) 1 described:

A broad, lowland river valley edged by the Clwydian Hills in central Denbighshire, representing the best surviving and most complete, typical historic part of the Vale of Clwyd. The area contains significant evidence of the late prehistoric and medieval land use and includes a spectacular, defensive chain of Iron Age Hill forts overlooking the valley floor, which is characterised by medieval estate enclosure, settlements and Denbigh and Ruthin defended town and castles.

- 2.22 The woodland located directly to the north of the site within Nant Pen Isa'r Waen is Ancient and Semi natural Woodland, and a small stream (Nant Pen Isa'r Waen watercourse) runs through this joining the River Clwyd some 1km distant to the north west.

- 2.23 With the exception of the above, the site is not within an otherwise designated landscape area, or protected landscape.

Views

- 2.24 Opportunities to view the site are restricted by a lack of receptor opportunity as a result of limited public access in the immediate area; the surrounding floodplain is widely farmland and privately owned and although several Public Footpaths are present, they are located some distance from the development, and whereby due to the existing site being small scale, located amongst woodland, it is Ancient and not readily evident.

- 2.25 The minor lane to the north of Nant Pen Isa'r Waen to the north is beyond the woodland belt which lies between the existing and proposed site and which is the main potential source of receptor opportunity for road users along this length when travelling in both directions past the site for a length of approximately 100m and when perpendicular to the site.

- 2.26 However the many layers of vegetation between the receptor and site prevent views when leaves are present, and in winter months the existing site is heavily filtered by the many layers of branches, trunks and undergrowth present and whereby the existing works are largely obscured.

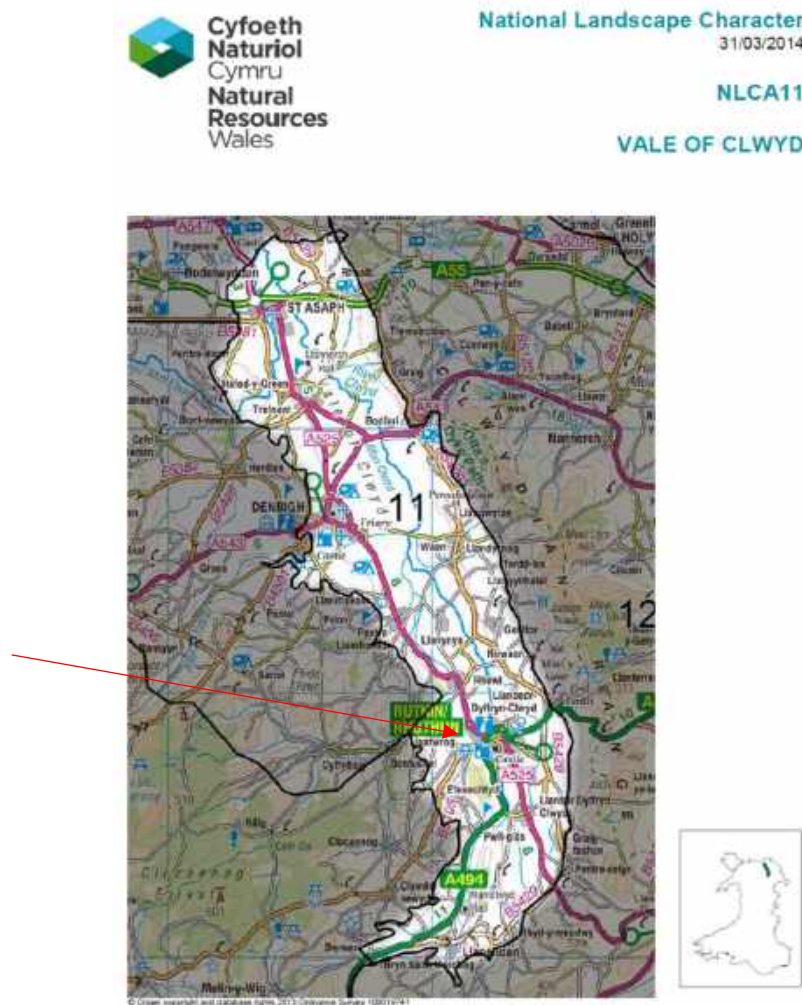
- 2.27 The nearest properties to the site Plas Goch, Pen Isa'r Waen and Hafod y Coed Lodge and Hafod y Coed are not able to view the existing site are present even in Winter leafless conditions, due to the presence of existing vegetation and juxtaposition.

- 2.28 The proposed site forms part of an adjoining agricultural field located south of the existing works and is again concealed by the presence of existing boundary hedgerows and hedgerow statuesque trees and field trees.

- 2.29 Photographs of the site context are contained within Figure 3 at the rear of the report.

Landscape Character

- 2.30 The Landscape character of the existing area is agricultural and pastoral as working farmland and with the small Waste Water Treatment Works Plant within this landscape since the late 1960's it has become an accepted landscape component.
- 2.31 Natural Resources Wales (NRW) National Landscape Assessment (based upon LANDMAP Characterisation) confirms that the proposed site area is located centrally within the boundary of **Area 11 – Vales of Clwyd** and confirms the area description as follows:



The main characteristics are defined as follows:

Key Characteristics

- *Abroad agricultural vales- between adjacent upland areas*
- *Distinctive line of hills forming the eastern boundary, also forming an upland lowland boundary following a geological fault line*
- *Limestone and sandstone -predominantly Permo-Triassic sandstone but localised areas of Carboniferous limestone.*
- *Undulating fringe either side of the vales – being deposits of fluvio glacial drift and till*
- *Flood plain – river alluvium marks the extends of the broad flat floodplain*

- 2.33 The site is located within LANDMAP **Visual and Sensory Character** Aspect Area - LANDMAP reference DNBGHVS031, which is classified as having a High Visual and Sensory evaluation with well-defined and vegetated pastoral agricultural landscape with attractive views throughout the area often framed by mature intervening vegetation and woodland blocks.

Q3 - Summary Description

- *Vale of Clwyd landscape but here displays a more wooded and stronger estate wooded character on the gently undulating flat valley floor. Hedgerow trees give the area a strong wooded effect character and provide good visual containment for views into and out of the area. A small to medium intimate field pattern gives the area a very rural agrarian appearance with the emphasis increasing on livestock rather than arable farming to the south of the area. Settlements are limited to a few small village/market towns settlements. Transport links through the area are largely relatively quiet rural roads with mature hedgerow and tree lined boundaries reinforcing the rural character, generally an attractive and settled area.*
- 2.34 The existing and proposed site are within LANDMAP **Historic Character** Aspect Area –Plas Newydd.
- 2.35 The existing and proposed site are within LANDMAP **Cultural Character** Aspect Area – Vale of Clwyd north of Denbigh.
- 2.36 The existing and proposed site are within LANDMAP **Habitats Character** Aspect Area Vale of Clwyd North Improved Grassland.
- 2.37 The existing and proposed site are within LANDMAP **Geological Character** Aspect Area – Waen Goleucoed.
- 2.38 The small scale, and restricted visual influence of the proposal and rural content will not create any detractive impact upon the surrounding Landscape Character Aspect Areas, or introduce any discordant, new features into the wider landscape.
- 2.39 With reference to Night skies- the site area has little light pollution and a rating of between 0.5-1 (Nano Watts/cm²/sr) and the proposal is not predicted to generate any additional change to the current Night Sky rating due to ambient background lighting already present.
- 2.40 The character of the proposed site is considered static and as part of a renowned pastoral landscape noted within the national and local LANDMAP Assessments and assessment on site.

3.0 The Site Proposal

- 3.1 The application site area (1.2ha) comprises an area of an existing agricultural field, adjacent and located to the south of the existing Waste Water treatment plant which was established on the site in the late 1960's.
- 3.2 The existing operational works will remain for some time until the proposed works are established, and will be retained as a standby facility throughout the commissioning and three-year operating technique agreement period; depending on the success of the ICTW technology, it is the intention that the existing WWTW would be removed after this period, and once demolished the area would be seeded with species rich meadow land plants.
- 3.3 Access to the existing (and proposed works) is via a small agricultural track through existing woodland known as Nant Pen Isa'r Waen which is retained for the proposed scheme access.
- 3.4 The proposals include:
- The creation of new innovative waste water treatment facilities, comprising 3 wetland cells in series - linked via pipes and utilising emergent wetland species for treatment.
 - Discharge to the Afon Pen Isa'r Waen stream (as at present)
 - A new Larch Clad Welfare Facility building (measuring 6.062m x 2.743m x 2.5m high)
 - An area of concrete hardstanding for access provision
 - 2 below ground Septic tanks
 - A Grass Crete vehicular access track for maintenance access to the wetland cells
 - 1.2m height Stockproof Agricultural Fencing (Rylock type with 2 strands of Barbed wire)
 - Soft landscape works* comprising Species Rich Grassland, Native hedgerow planting with Specimen Hedgerow trees. (* in addition to the native emergent planting of the Wetland cells)
 - The removal of selected 7no. immediate dead, diseased or dying trees which are of safety concern (Refer to the submitted Arboricultural Report provided separately.)
- 3.5 The proposed site will not require a new sign or altered highway or agricultural access, and the existing pedestrian bridge and parking layby on Waen Road will remain, and here is no additional lighting or signage required as the detailed proposals confirm.

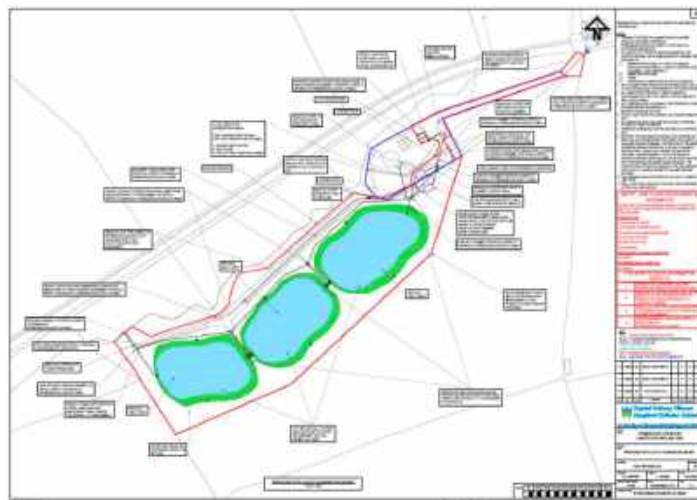


Plate 4 The Proposed site layout (Refer to Figure 2 of the Appendices)

4.0 Landscape and Visual Overview

- 4.1 The assessment of the proposal has been considered as a changed land use and operation within an area of agricultural land which is presently farmed and of a proposed content that is similar to the existing landscape, namely ponds, trees and hedgerows with the above ground components (Welfare Facility building and manhole chamber accesses, within the extent of the existing works where there are similar items already present).
- 4.2 The review has considered any visibility of the proposed site as part of the baseline condition and also the impact that the proposed development may or may not create upon individual receptors (both immediate and wider landscape) including any distant impact upon the wider landscape character (such as the AONB).
- 4.3 Because of the very limited scale and content of the proposal - together with the overlying topography and established natural visual barriers, the visual influence of the site is extremely limited - and only includes immediate views from private land or a heavily filtered glimpsed view for vehicle occupants and users of Waen Road in winter months only, and which will not alter current views for receptors, in terms of either view content or extents.
- 4.4 Mitigation proposals include planting of native hedgerows with hedgerow specimen trees to assist with the absorption of the proposed works into the landscape in a sensitive approach and as a positive biodiversity solution, using native species already evident in the landscape and to help the existing works become further enclosed in the long term.
- 4.5 The existing character of the area is generally agricultural with the presence of the existing treatment plant (which will not alter) and the proposed extent and significance of the proposed development considered to be of such as small scale, and land use content, (as ponds, fencing and tree planting) to have any impact upon the existing or wider landscape character, including the AONB due to its small scale and lack of visual connectivity and limited visual influence beyond its immediate physical boundary.
- 4.6 The proposed Welfare Facility Building is the largest proposed structure on site, located within the extent of the existing works, and as a small single storey building clad in Timber (naturally weathered Larch) , it is predicted to be undiscernible, and with the hedgerow and tree planting proposed, it is considered that the existing landscape character (and layering of hedgerows) will be strengthened by its implementation.
- 4.7 Therefore it is concluded that there will be a **Neutral Impact**, upon landscape character as a result of the proposals, i.e. no discernible difference - whereby the proposal would complement the scale, landform and pattern of the existing landscape and would not impact negatively upon the identified landscape quality or character.
- 4.8 The magnitude of the effect has been categorised as **Negligible** - Where the development or work or activity associated with the development is not predicted to be discernible over and above levels of activity currently undertaken and its rural content of ponds, hedges etc.
- 4.9 Visual Impact is predicted to be a **Neutral Impact**: i.e. no discernible difference or sensitive receptors groups (including receptors within the AONB or nearby properties) will be impacted by the proposed development due to its limited scale and proposal content which is enclosed by existing mature and established native vegetation preventing wider visual influence.
- 4.10 This includes the two CADW Registered Historic Parks and Gardens (Bryn Bella and Llannerch) who do not currently experience a view of the existing works due to its location and small scale, and will not experience a view of the proposed development.

- 4.11 As a very small-scale proposal in a large landscape extent with a neutral visual effect it will not negatively impact upon the CADW designated Vale of Clwyd Historic Landscape within which it is located.
- 4.12 There will be short term (during construction) impacts for a period of approximately 9 months, but no altered long term or operational effects - as the proposal requires no change to access or maintenance arrangements and will be for similar periods of occupation and use that the existing Treatment Plant requires.
- 4.13 In the long term (i.e. within the 3 -year period of completion and monitoring) it is anticipated that the existing Treatment plant settlement beds and existing equipment will be removed and the land restored as Wildflower Meadow.
- 4.14 Photographs of the site and its context are provided within Figure 3 of the Appendices.

5.0 Summary

- 5.1 The proposed development of an integrated constructed Treatment Wetland (ICTW) Scheme at the existing Waste Water Treatment Plant near Tremeirchion has been reviewed to provide an overview of any likely Landscape Character and Visual Impact of the proposed development based upon standard guidelines advocated by the Landscape Institute and Institute of Environmental Assessment – Guidelines for Landscape and Visual Impact Assessment (Third Edition dated 2013).
- 5.2 Given the small scale and rural content of the proposals which are largely underground and ponds at an existing waste water treatment plant, and following an initial review of the landscape baseline and context – a Landscape and Visual Impact Assessment was considered to be unduly required.
- 5.3 Following an initial visit to the site and knowledge of the proposed scheme – and to ascertain its likely impact, discussion was held with Denbighshire Planning Officers to agree the extent and scope of reporting coverage considered appropriate and necessary, where it was agreed that a Landscape and Visual review and accompanying Landscape Statement would be adequate for the development proposals.
- 5.4 Whilst the site has no protective Landscape Designation - the proposed scheme content was reviewed and its predicted Landscape and Visual Effects were assessed on site using both Natural Resources Wales LANDMAP character assessment, and an assessment of the existing landscape context by an experienced Chartered Landscape Architect.
- 5.5 Likewise the site context and visual implications of the proposal were assessed to identify any impact upon identified receptors with particular reference to the nearby Clwydian Range and Dee Valley Area of Outstanding Natural Beauty (AONB) The Registered Historic Vale of Clwyd Landscape and nearby properties which include 2 Registered Historic Park and Gardens.
- 5.6 After an initial site visit, it was concluded that the scale of the proposed development is very small and was unlikely to generate adverse landscape or visual effects, and following a review of the proposals in the field - this was confirmed in detail when carrying out the assessment.
- 5.7 The site is naturally well concealed by virtue of short and longer elevated views being filtered from within the level valley floor landform by existing layers of small field hedgerows and field trees, and existing vegetation along Nant Pen Isa'r Waen between the existing and proposed site preventing long views with very limited receptor opportunity, the rural content of the proposed scheme ponds, hedges, and trees, and use of the existing Treatment Plant access and areas of hardstanding.
- 5.8 The erection of a small timber welfare facility building of single storey amongst the existing Treatment works plant will be screened by the existing woodland surrounding the site, and is clad in timber to mitigate any glimpsed views in winter, and as a similar level of operational activities and access requirements which currently exist, the development will not generate any additional discordant activity, or conflict with the largely static agricultural landscape that presently exists.
- 5.9 Likewise the location of the site at an established Treatment Plant, established over 80 years ago which is part of the baseline landscape, together with the proposed development content small scale will have a Neutral Effect upon landscape character and a Neutral Effect for receptors.
- 5.10 This includes the nearby Clwydian Range and Dee Valley Area of Outstanding Natural Beauty which cannot discern the existing or proposed site despite the relative elevated receptor height and it is concluded that the submitted proposals will not generate any adverse Landscape or Visual Impact.

APPENDICES

Tremeirchion Water Treatment Works.

Proposed Integrated Constructed Treatment Wetland (ICTW) scheme

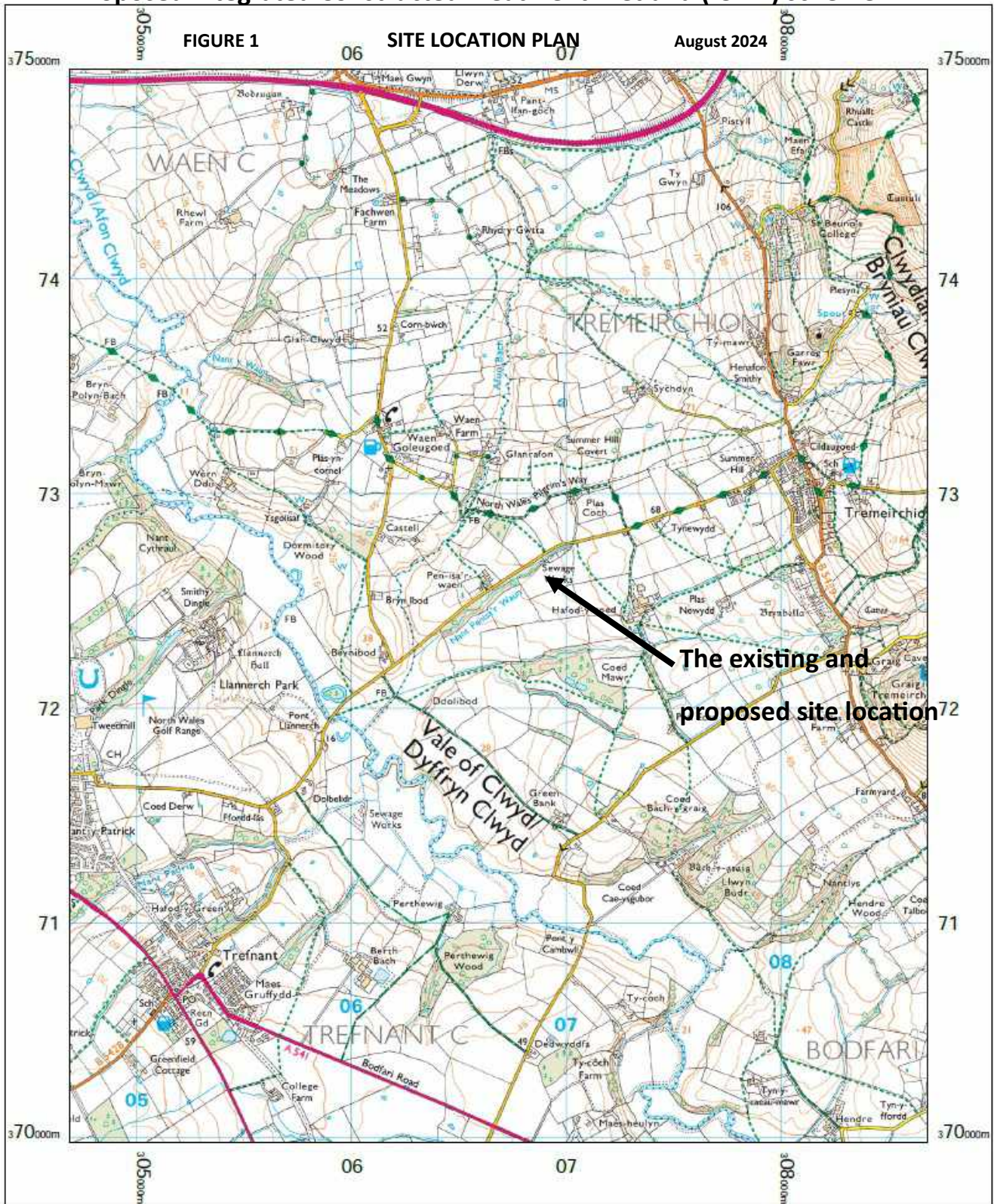


FIGURE 1 SITE LOCATION PLAN August 2024

OS 25k scale raster
Tuesday, July 30, 2024, ID: CM-01177879
www.centremapslive.co.uk
1:25000 scale print at A4, Centre: 306683 E, 372477 N
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 - ALL ASPECTS OF THE DETAIL DESIGN PROVIDED BY THE CONTRACTOR SHALL BE IN COMPLIANCE WITH THE MOST RECENT REVISIONS OF:
 - DCWW SPECIFICATIONS, AS LISTED IN STANDARD SPECIFICATION APPENDIX A - INDEX OF SPECIFICATIONS DOCUMENT - TS001 APPENDIX A
 - WIMES SPECIFICATIONS
 - CESWI
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 - FINAL LAYOUT AND POSITION OF DUCTING TO BE CONFIRMED ON SITE BY CIVIL CONTRACTOR.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

IN ADDITION TO THE HAZARDS/RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING:

CONSTRUCTION

- A15 WORKING AT HEIGHT
- A16 WORKING OVER/NEAR WATER
- A31 WATER OR WASTEWATER SERVICES
- A33 LIFTING ACTIVITIES
- B2 DEEP EXCAVATION
- G18 LIGHTNING

MAINTENANCE / CLEANING / OPERATION

AS ABOVE.

DECOMMISSIONING / DEMOLITION

AS ABOVE.

FOR MORE DETAILED INFORMATION REFER TO:

1	DESIGNER RISK ASSESSMENTS DOCUMENT REFERENCE B17505-00DM13-03-AB-RG-CA-DH0014
2	EVERYDAY OR LOW RISK HAZARDS HAVE NOT BEEN INDICATED ON THIS DRAWING, NEITHER HAVE HAZARDS THAT SHOULD BE OBVIOUS TO A COMPETENT TENDERER
3	SHOULD ANY ADDITIONAL HAZARDS BE IDENTIFIED, THE TENDERER SHALL NOTIFY ALL THE RELEVANT SCHEME TEAM MEMBERS
4	FOR ENVIRONMENTAL CONSTRAINTS REFER TO CAF317 CHECKLIST B17505-00DM13-03-AB-CL-CA-EI0010

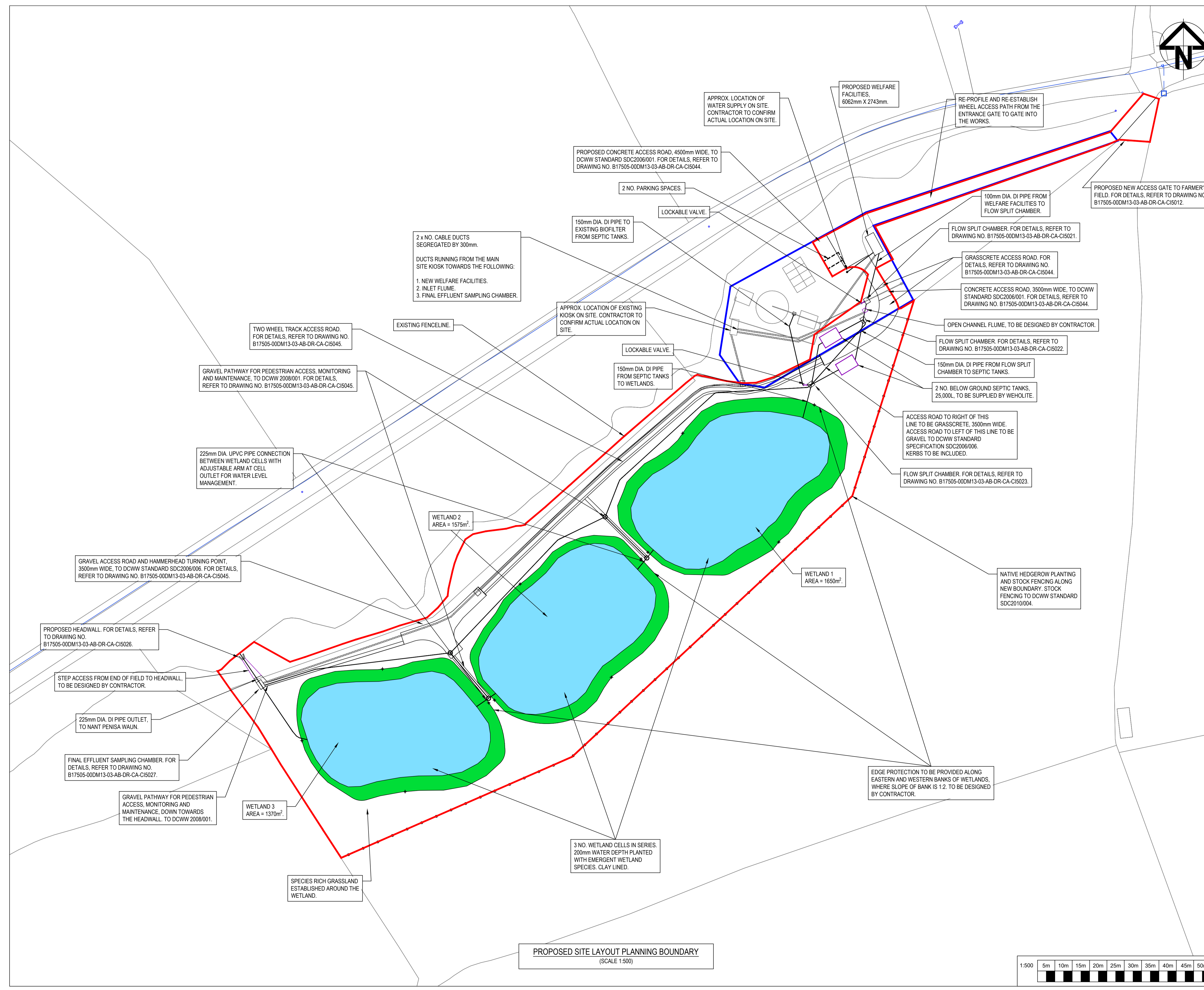
KEY:

- GREY - EXISTING EQUIPMENT/STRUCTURES
- BLACK - PROPOSED EQUIPMENT/STRUCTURES/PIPEWORK
- PURPLE - VENDOR PACKAGE
- LIGHT BLUE - WETLAND
- GREEN - WETLAND BANKS
- RED - PLANNING APPLICATION BOUNDARY
- BLUE - LAND WITHIN THE APPLICANT'S OWNERSHIP

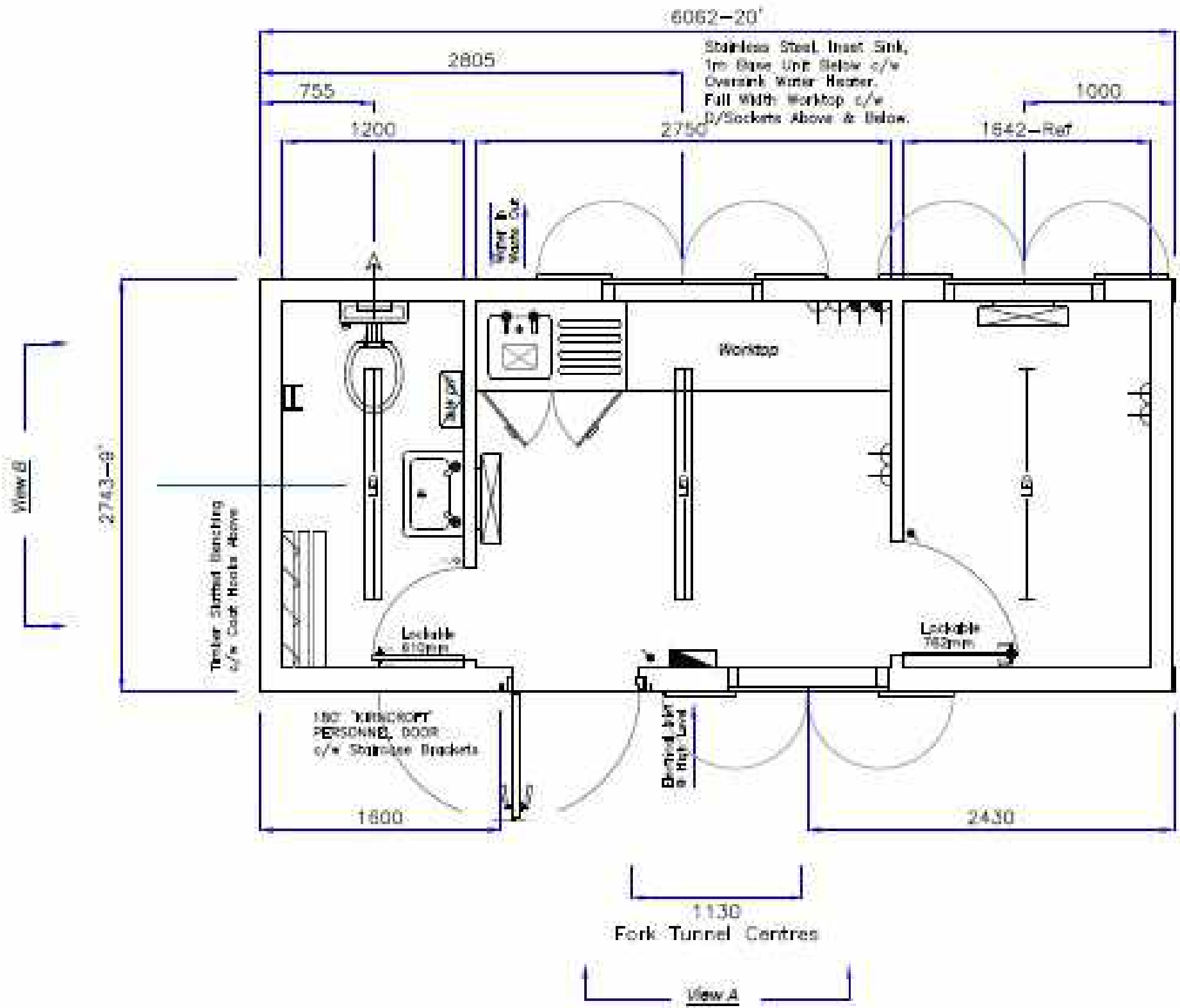
Rev.	Date	Drawn	Description	Rev.	Chkd.	Appd.	Date
11.2	11/09/24	MC	MINOR AMENDMENTS	ZJ	RT	RT	15/10/24
11.1	11/09/24	MC	MINOR AMENDMENTS	ZJ	RT	RT	11/10/24
11.0	11/09/24	MC	FOR INFORMATION	ZJ	RT	RT	27/09/24



Project Name: TREMEIRCHION INTEGRATED CONSTRUCTED WETLAND TRIAL		
Drawing Title: PROPOSED SITE LAYOUT PLANNING BOUNDARY		
Subsidiary: FOR INFORMATION		Suitability Code: S2
Originator: M. CARTER	Designer: Z. JANAS	Date: 15/10/2024
Internal Project Number: 17505	Scale: AS SHOWN AT A1	Rev: 11.2
Drawing Number: B17505-00DM13-03-AB-DR-CA-CI5042		



View C
FLAT SIDED CONSTRUCTION



Legend	
	Consumer Unit
	Light Switch
	Light Pull Switch
	5' LED Light
	5' LED Vapour Proof Light
	3kW Convector Heater
	3kW Downflow Heater c/w Adjustable Thermostat
	6M. Slt. @300mm F.F.L.
	6M. Slt. @100mm F.F.L.
	3kW 10Lit. Under-sink Water Heater
	12x 100mm Extraction Fan Taped with Gaskets c/w Downfall



Illustrative Image of Cedar Clad Cabin

WALLS	E0810 & INSULATED		
CEILING	WOOD WHITE & INSULATED		
TRIMS	WHITE PLASTIC		
FLOOR	VINYL FLOORING OVER 15mm PLYWOOD		
PROFILED			
FLATSIDED		<input checked="" type="checkbox"/>	
Rev.	A	Date	03/03/08
Approved By:		Drawn By:	JR
Drawn	SR	Date	03/03/08

Approved By:
 Name:
 Signature:
 Date:

Title:
 Portable Offices
 6062 L x 2743 W x 2502 H (20'x9'x8'H) – Complex



Proj. No.
 PRT_2008CXND1A
 Tab 1 of 2 – Plans
 Do Not Scale



Plate 1– Photograph taken from within Tremeirchion village looking west over the Vale of Clwyd towards the existing and proposed site from the B5429 and village centre.
Date: 31.07.24 **Height:** circa 120m AOD **Conditions:** Clear and bright **Distance from site:** 1.2km



Plate 2– Photograph taken from Heol y Brenin near Bryn Bella Historic Park and Garden Tremeirchion village looking west over the Vale of Clwyd towards the existing and proposed site.
Date: 31.07.24 **Height:** circa 90m AOD **Conditions:** Clear and bright **Distance from site:** 1.1km

Tirlun Barr Associates

FIGURE 3

All photographs taken with a Standard 67mm lens and assembled using Photoshop unless indicated otherwise.



Plate 3– Photograph taken from Heol y Brenin Tremeirchion village looking west over the Vale of Clwyd towards the existing and proposed site.

Date: 31.07.24 **Height:** circa 90 m AOD **Conditions:** Clear and bright **Distance from site:** 1.1km



Plate 4– Photograph taken from Waen Road near Argoed looking west south west towards the direction of the existing and proposed site.

Date: 31.07.24 **Height:** circa 75m AOD **Conditions:** Clear and bright **Distance from site:** 0.8km

Tirlun Barr Associates

FIGURE 3

Photographs of the site context Sheet 2



Plate 5– Photograph taken from Waen Road near Hafod y Coed Lodge looking west south west towards the direction of the existing and proposed site.

Date: 31.07.24 **Height:** circa 65m AOD **Conditions:** Clear and bright **Distance from site:** 0.7km



Plate 6– Photograph taken from Public Footpath at Hafod y Coed looking west towards the direction of the existing and proposed site.

Date: 31.07.24 **Height:** circa 60m AOD **Conditions:** Clear and bright **Distance from site:** 0.7km

N.B Viewpoint 3

Tirlun Barr Associates

FIGURE 3



Plate 7– Photograph taken from Waen Road near the existing (and proposed) Site access looking south west towards the existing and proposed site.
Date: 31.07.24 **Height:** circa 47m AOD **Conditions:** Clear and bright **Distance from site:** 0.1km



Plate 8– Photograph taken from Waen Road looking east towards Tremeirchion and the proposed site from the west
Date: 31.07.24 **Height:** circa 20m AOD **Conditions:** Clear and bright **Distance from site:** 0.8km
N.B Viewpoint 2

Tirlun Barr Associates

FIGURE 3

Photographs of the site context Sheet 4



Plate 9 – Photograph taken from the Public Footpath near Ddolibod south west of the existing (and proposed) Site access looking north east
Date: 31.07.24 **Height:** circa 20m AOD **Conditions:** Clear and bright **Distance from site:** 0.9km



Plate 10 – Photograph taken from road junction of Waen Road and Brynibod looking north east towards the existing (and proposed) site.
Date: 31.07.24 **Height:** circa 30m AOD **Conditions:** Clear and bright **Distance from site:** 0.9km

Tirlun Barr Associates
February 2022
FIGURE 3

Photographs of the site context Sheet 5



Plate 11– Photograph taken from Waen Road passing the existing (and proposed site) location travelling north eastwards towards Tremeirchion village, with Nant Pen Isa'r Waen woodland to the right of the road.
Date: 31.07.24 **Height:** circa 43m AOD **Conditions:** Clear and bright **Distance from site:** 0.1km



Plate 12– Photograph taken from Waen Road passing the existing (and proposed) site entrance location travelling in a south westerly direction from Tremeirchion village.
Date: 31.07.24 **Height:** circa 45m AOD **Conditions:** Clear and bright **Distance from site:** 0.1km

Tirlun Barr Associates

FIGURE 3

Photographs of the site context Sheet 6



Plate 13– Photograph taken from the proposed site adjacent to the existing Works fenceline looking towards the Nant Pen isa'r waen—south west
Date: 31.07.24 **Height:** circa 44m AOD **Conditions:** Clear and bright **Distance from site:** 0.0km



Plate 14– Photograph taken from the proposed site adjacent to the existing Works fenceline looking south –southwest
Date: 31.07.24 **Height:** circa 44m AOD **Conditions:** Clear and bright **Distance from site:** 0.0km

Tirlun Barr Associates
FIGURE 3

Photographs of the site context Sheet 7



Plate 15– Photograph taken from the proposed site adjacent to the existing Works south western fenceline looking north east towards Tremeirchion village
Date: 31.07.24 **Height:** circa 44m AOD **Conditions:** Clear and bright **Distance from site:** 0.0km



Plate 16– Photograph taken from the proposed site adjacent to the existing Works south western fenceline looking south west at the Nant Pen Isa'r Waen
Date: 31.07.24 **Height:** circa 44m AOD **Conditions:** Clear and bright **Distance from site:** 0.0km

Tirlun Barr Associates

FIGURE 3

Photographs of the site context Sheet 8



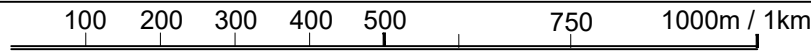
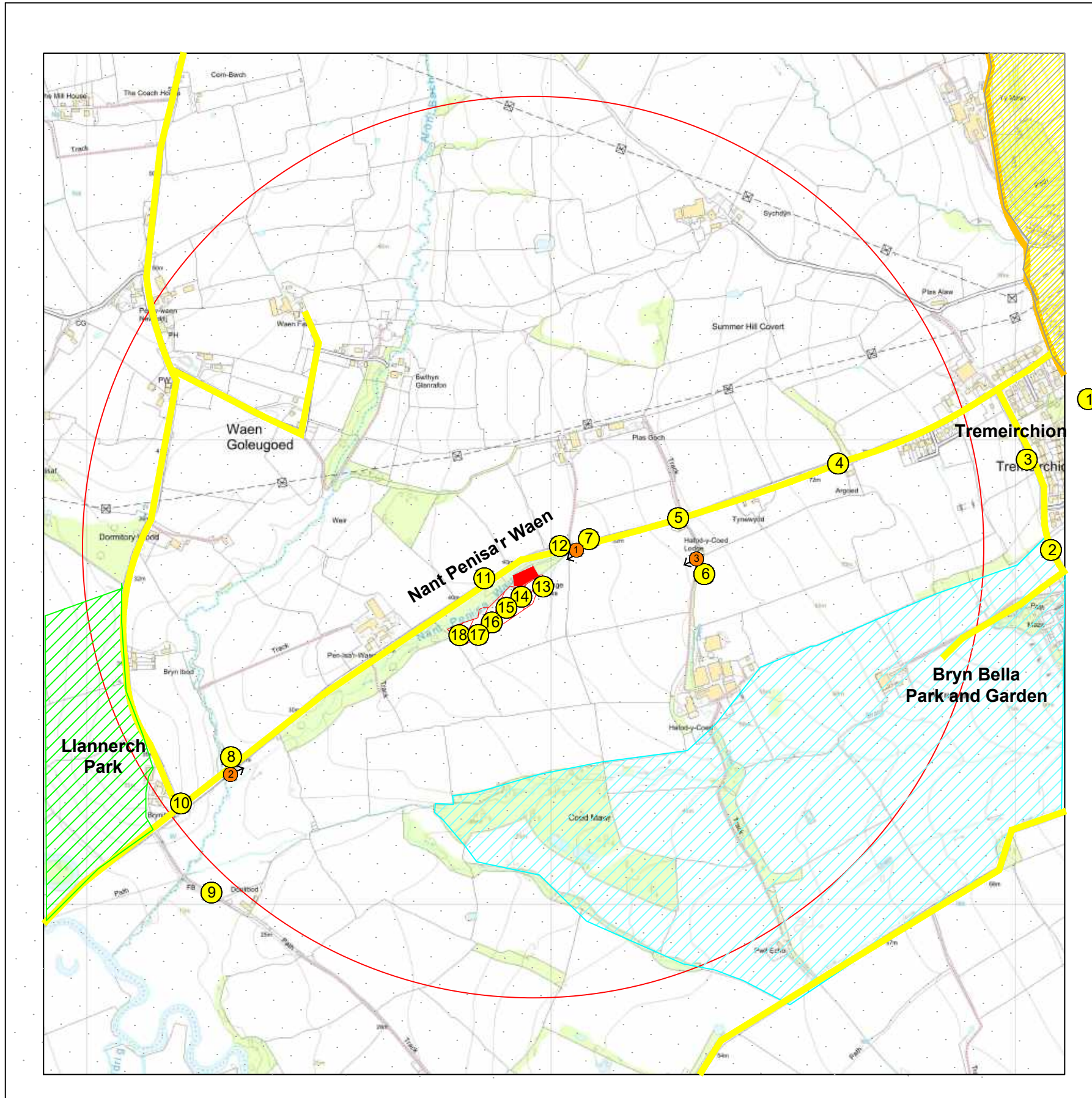
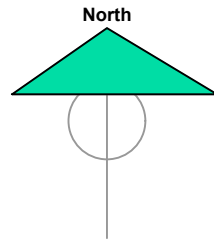
Plate 17– Photograph taken from the proposed site looking north east towards Tremeirchion village with the Nant Pen Isa'r Waen to the left of the plate.
Date: 31.07.24 **Height:** circa 44m AOD **Conditions:** Clear and bright **Distance from site:** 0.0km



Plate 18– Photograph taken from the proposed site looking north east towards Tremeirchion adjacent to the Nant Pen Isa'r Waen
Date: 31.07.24 **Height:** circa 43m AOD **Conditions:** Clear and bright **Distance from site:** 0.0km

Tirlun Barr Associates
FIGURE 3

Photographs of the site context Sheet 9



Key

- Proposed Site Location
- 1km radius from Site centre
- B5429
- Minor lanes
- Footpaths/Rights of way
- Bryn Bella Registered Park and Garden
- Llannerch Registered Park and Garden
- Clwydian and Dee Valley AONB.
- LANDMAP Visual & Sensory DNBGHVS028 Clwydian Slopes south of Rhuallt
- LANDMAP Visual & Sensory DNBGHVS031 Vale of Clwyd - north of Denbigh

- Photograph Location Points
- Viewpoint Location

Notes:

1. Crown Copyright Ordnance Survey Licence No:100019980
2. For photographs of the site context refer to Figure 3
3. For Viewpoint analysis refer to Figure 6.
4. N.B. Viewpoints 1& 2 Locations indicated on Figure 1

v1	PW	JB	JB	14.10.2024
Issue	Drawn	Checked	Approved	Date

Tirlun Barr
 Chartered Landscape Architects
 Tan-y-Berllan, Llanbedr y Cennin, Conwy LL32 8UY
 Tel. 01492 650333 Fax. 01492 580081

Client

Dwr Cymru Welsh Water

Project Title

Proposed ICUW At Tremeichion Waste Water Treatment Works Facility

Drawing Title

Landscape Context

Drawing Number

FIGURE 4

Size	Scale	Issue
A3	1:10,000	v1.

SURVEY DETAILS FOR DNBGHVS031 - 2024-08-28

Area Unique ID: DNBGHVS031

Aspect: Visual and Sensory

Area: Vale of Clwyd-North of Denbigh

Region: Denbighshire

Survey Date: 2005-01-11

- Level 1: Lowland
- Level 2: Flat Lowland/Levels
- Level 3: Flat Lowland Mosaic





SURVEY DETAILS FOR DNBGHVS031 - 2024-08-28

Area Unique ID: DNBGHVS031

Aspect: Visual and Sensory

Area: Vale of Clwyd-North of Denbigh

Region: Denbighshire

Survey Date: 2005-01-11

- Level 1: Lowland
- Level 2: Flat Lowland/Levels
- Level 3: Flat Lowland Mosaic

Monitoring

Q1 - Date of monitoring?

- 2015-02-06

Q1a - Monitoring undertaken by

- Stages 1, 2 and 3 change detection, field verification and amendment completed by White Consultants, in conjunction with the planning authority. Quality Assurance completed by Land Use Consultants.

Q1b - Has this record been updated following monitoring work?

- This record remains unchanged following monitoring work

Q1c - Change indicated by

- No Answer

Q1d - What has changed?

- No Answer

Q1e - Has the information ever been verified in the field?

- Yes
- N/A

Q2 - Does this area have a special or functional link with an adjacent area?

- Yes
 - Forms the continuation of the wider agricultural coastal plain the separated the dense urban settlement of the northern study area from the more rural inland areas

Q2a - During which season(s) was fieldwork carried out?

- No Answer

Description

Q3 - Summary Description

- Vale of Clwyd landscape but here displays a more wooded and stronger estate wooded character on the gently undulating flat valley floor. Hedgerow trees give the area a strong wooded effect character and provide good visual containment for views into and out of the area. A small to medium intimate field pattern gives the area a very rural agrarian appearance with the emphasis increasing on livestock rather than arable farming to the south of the area. Settlements are limited to a few small village/market towns settlements. Transport links through the area are largely relatively quiet rural roads with mature hedgerow and tree lined boundaries reinforcing the rural character, generally an attractive and settled area.

Q4 - Physical Form And Elements: Topographic Form?

- Hills/Valleys

Q5 - Physical Form And Elements: Landcover Pattern?

- Field Pattern/Mosaic

Q6 - Physical form and elements: Settlement pattern

- Village

Q7 - Physical form and elements: Boundary type

- Managed Hedge

Q8 - Aesthetic Qualities: Scale?

- Medium

Q9 - Aesthetic Qualities: Sense of Enclosure?

- Enclosed

Q10 - Aesthetic Qualities: Diversity?

- Simple

Q11 - Aesthetic Qualities: Texture?

- Coarse

Q12 - Aesthetic Qualities: Lines?

- Curved

Q13 - Aesthetic Qualities: Colour?

- Muted

Q14 - Aesthetic Qualities: Balance?

- Harmonious

Q15 - Aesthetic Qualities: Unity?

- Unity

Q16 - Aesthetic Qualities: Pattern?

- Organised

Q17 - Aesthetic Qualities: Seasonal Interest?

- Mixed

Q18 - Other Factors: Level of Human Access?

- Infrequent

Q19 - Other Factors: Night Time Light Pollution?

- Question 19 night time light pollution data has been moved to question 56. Additional dark skies data is available from questions 57 and 58.

Q20 - Other Factors: Use of Construction Materials?

- Appropriate

Q21 - What materials? Give Details:

- Emphasis on natural and traditional materials as usually found in a rural agrarian landscape

Q22 - There are attractive views...

- ...both in and out
 - Attractive views available throughout the aspect area of rolling pastoral landscape, with well defined field pattern comprising hedgerows with hedgerow trees and small areas of mixed woodland

Q23 - There are detractive views...

- ...neither in or out

Q24 - Perceptual and Other Sensory Qualities

- Attractive
- Tranquil
- Safe
- Settled

Q25 - What is the sense of place/local distinctiveness

- Strong
 - Well defined and vegetated pastoral agricultural landscape that remains relatively intact and unspoilt

Evaluation

Q26 - Value:

- High
 - Well defined and vegetated pastoral agricultural landscape with attractive views throughout the area often framed by mature intervening vegetation and woodland blocks

Q27 - Condition:

- Fair
 - The field definition and proportion of woodland to open agricultural land appears balanced and in relatively good condition

Q28 - Trend:

- Constant

Recommendations

Q29 - Existing management

- Generally Appropriate

Q30 - Existing management remarks:

- Appears in relatively good condition and well managed with a balanced diversity in vegetation type - hedgerow, hedgerow and trees and woodland blocks/wooded field margins

Q31 - Principal management recommendation:

- Maintain woodland and diversify with British native and local provenance species

Q32 - Guideline

- Long Term
 - Diversify dominant vegetation
- Long Term
 - Maintain boundary type and enhance field margins to promote biodiversity
- Immediate
 - Instigate long term management - many hedgerow trees mature and overmature

Q33 - Define the key qualities that should be conserved:

- Rural agrarian field pattern and land use

Q34 - Define the key qualities that should be enhanced:

- Diversity in vegetation type and maturity

Q35 - Define the key qualities that should be changed:

- None

Q36 - Define the key elements that should be conserved:

- Field pattern and balance of woodland and hedgerow vegetation

Q37 - Define the key elements that should be enhanced:

- Field margins and long term management of vegetation in hedgerows and woodland blocks

Q38 - Define the key elements that should be changed:

- None

Tolerance To Change

Q39 - Are there any significant threats to the current integrity and condition of the visual & sensory features of the area?

- Not known

Aspect Area Boundary

Q40 - To what level was this information site-surveyed?

- Level 3

Q41 - At 1:10,000, how much of the Aspect Area boundary is precise?

- All

Q42 - What baseline information source was used for Aspect Area boundary mapping?

- Other
 - OS data and aerial photographs

Q43 - If OS Data was used, what was the scale?

- 1:10,000 and 1:25,000

Q44 - What is the justification for the Aspect Area boundaries?

- Topography, land use and field pattern

Evaluation Matrix

Q46 - Evaluation Criteria: Scenic quality

- High
 - Attractive pastoral landscape with good short distance views

Q47 - Evaluation Criteria: Integrity

- Moderate
 - The field definition and proportion of woodland to open agricultural land appears balanced and in relatively good condition

Q48 - Evaluation Criteria: Character

- High
 - Very attractive rural landscape character, giving appearance of a traditional agrarian landscape

Q49 - Evaluation Criteria: Rarity

- High
 - Good example of a rural agricultural landscape which appears relatively stable although would benefit from instigation of long term management to promote greater diversity and to ensure stability in the maturity of the vegetation cover

Q50 - Evaluation Criteria: Overall Evaluation

- High
 - See Q.51

Q51 - Justification of overall evaluation

- Very attractive rural landscape character, giving appearance of a traditional agrarian landscape although would benefit from instigation of long term management to promote greater diversity and to ensure stability in the maturity of the vegetation cover = High

Bibliography

Q45 - List the key sources used for this assessment

- Landscape Assessment for Clwyd 1996

Assessment

Q52 - Additional Assessments

- None

Q53 - Additional Comments

- None

LMP 14 & 09

Q54 - LANDMAP derived landscape types (LMP14)

- Valleys, rolling and flat lowland (wooded >50%)

Q55 - LANDMAP derived landscape types (LMP09)

- Lowland mosaic >20% wooded

Dark Skies

Light Pollution Percentage

< 0.5	0.5 - 1	1 - 2	2 - 4	4 - 8	8 - 16	16 - 32	> 32
0.2	71.9	23.9	3.2	0.8	0.0	0.0	0.0

Data has been classified into eight colour bands of brightness values (nw/cm2/sr). <0.5 (darkest); 0.5 - 1; 1 - 2; 2 - 4; 4 - 8; 8 - 16; 16 - 32 and > 32 (brightest). Lower values equate to lower light pollution and darker skies. Questions 57a - 57h collectively provide colour band data by %.

Further information: [11365 Wales Dark Skies \(arcgis.com\)](https://arcgis.com). Green C, Manson D, Chamberlain K 2021. Tranquillity and Place - Dark Skies. NRW Report No: 514, 70pp. Data download from Lle/DataMapWales.

Data source: December 2019 composite image of monthly average night light produced by the Earth Observation Group at Colorado School of Mines. Derived from Visible Infrared Imaging Radiometer Suite (VIIRS) Day/Night Band (DNB) sensor from Suomi National Polar-orbiting Partnership (Suomi NPP) satellite, National Oceanic and Atmospheric Administration (NOAA).

Light Pollution km²

< 0.5	0.5 - 1	1 - 2	2 - 4	4 - 8	8 - 16	16 - 32	> 32
0.1	19.9	6.6	0.9	0.2	0.0	0.0	0.0

Data has been classified into eight colour bands of brightness values (nw/cm2/sr). <0.5 (darkest); 0.5 - 1; 1 - 2; 2 - 4; 4 - 8; 8 - 16; 16 - 32 and > 32 (brightest). Lower values equate to lower light pollution and darker skies. Questions 58a to 58h collectively provide colour band data by km2.

Further information: [11365 Wales Dark Skies \(arcgis.com\)](https://arcgis.com). Green C, Manson D, Chamberlain K 2021. Tranquillity and Place – Dark Skies. NRW Report No: 514, 70pp. Data download from Lle/DataMapWales.

Data source: December 2019 composite image of monthly average night light produced by the Earth Observation Group at Colorado School of Mines. Derived from Visible Infrared Imaging Radiometer Suite (VIIRS) Day/Night Band (DNB) sensor from Suomi National Polar-orbiting Partnership (Suomi NPP) satellite, National Oceanic and Atmospheric Administration (NOAA).

Q56 - Night Time Light Pollution

- Slight
 - A few medium to small scale village settlements to the east of the aspect area Consultant led night time light pollution assessment conducted at time of survey record or survey update

Q57a - % in brightness colour band <0.5

- 0.2
 - Data has been classified into eight colour bands of brightness values (nw/cm2/sr). <0.5 (darkest); 0.5 - 1; 1 - 2; 2 - 4; 4 - 8; 8 - 16; 16 - 32 and > 32 (brightest). Lower values equate to lower light pollution and darker skies.

Q57b - % in brightness colour band 0.5-1

- 71.9
 - Data has been classified into eight colour bands of brightness values (nw/cm2/sr). <0.5 (darkest); 0.5 - 1; 1 - 2; 2 - 4; 4 - 8; 8 - 16; 16 - 32 and > 32 (brightest). Lower values equate to lower light pollution and darker skies.

Q57c - % in brightness colour band 1-2

- 23.9
 - Data has been classified into eight colour bands of brightness values (nw/cm2/sr). <0.5 (darkest); 0.5 - 1; 1 - 2; 2 - 4; 4 - 8; 8 - 16; 16 - 32 and > 32 (brightest). Lower values equate to lower light pollution and darker skies.

Q57d - % in brightness colour band 2-4

- 3.2
 - Data has been classified into eight colour bands of brightness values (nw/cm2/sr). <0.5 (darkest); 0.5 - 1; 1 - 2; 2 - 4; 4 - 8; 8 - 16; 16 - 32 and > 32 (brightest). Lower values equate to lower light pollution and darker skies.

Q57e - % in brightness colour band 4-8

- 0.8
 - Data has been classified into eight colour bands of brightness values (nw/cm2/sr). <0.5 (darkest); 0.5 - 1; 1 - 2; 2 - 4; 4 - 8; 8 - 16; 16 - 32 and > 32 (brightest). Lower values equate to lower light pollution and darker skies.

Q57f - % in brightness colour band 8-16

- 0.0
 - Data has been classified into eight colour bands of brightness values (nw/cm2/sr). <0.5 (darkest); 0.5 - 1; 1 - 2; 2 - 4; 4 - 8; 8 - 16; 16 - 32 and > 32 (brightest). Lower values equate to lower light pollution and darker skies.

Q57g - % in brightness colour band 16-32

- 0.0
 - Data has been classified into eight colour bands of brightness values (nw/cm2/sr). <0.5 (darkest); 0.5 - 1; 1 - 2; 2 - 4; 4 - 8; 8 - 16; 16 - 32 and > 32 (brightest). Lower values equate to lower light pollution and darker skies.

Q57h - % in brightness colour band >32

- 0.0
 - Data has been classified into eight colour bands of brightness values (nw/cm2/sr). <0.5 (darkest); 0.5 - 1; 1 - 2; 2 - 4; 4 - 8; 8 - 16; 16 - 32 and > 32 (brightest). Lower values equate to lower light pollution and darker skies.

Q58a - km2 in brightness colour band <0.5

- 0.1
 - Data has been classified into eight colour bands of brightness values (nw/cm2/sr). <0.5 (darkest); 0.5 - 1; 1 - 2; 2 - 4; 4 - 8; 8 - 16; 16 - 32 and > 32 (brightest). Lower values equate to lower light pollution and darker skies.

Q58b - km2 in brightness colour band 0.5-1

- 19.9
- Data has been classified into eight colour bands of brightness values (nw/cm2/sr). <0.5 (darkest); 0.5 - 1; 1 - 2; 2 - 4; 4 - 8; 8 - 16; 16 - 32 and > 32 (brightest). Lower values equate to lower light pollution and darker skies.

Q58c - km2 in brightness colour band 1-2

- 6.6
- Data has been classified into eight colour bands of brightness values (nw/cm2/sr). <0.5 (darkest); 0.5 - 1; 1 - 2; 2 - 4; 4 - 8; 8 - 16; 16 - 32 and > 32 (brightest). Lower values equate to lower light pollution and darker skies.

Q58d - km2 in brightness colour band 2-4

- 0.9
- Data has been classified into eight colour bands of brightness values (nw/cm2/sr). <0.5 (darkest); 0.5 - 1; 1 - 2; 2 - 4; 4 - 8; 8 - 16; 16 - 32 and > 32 (brightest). Lower values equate to lower light pollution and darker skies.

Q58e - km2 in brightness colour band 4-8

- 0.2
- Data has been classified into eight colour bands of brightness values (nw/cm2/sr). <0.5 (darkest); 0.5 - 1; 1 - 2; 2 - 4; 4 - 8; 8 - 16; 16 - 32 and > 32 (brightest). Lower values equate to lower light pollution and darker skies.

Q58f - km2 in brightness colour band 8-16

- 0.0
- Data has been classified into eight colour bands of brightness values (nw/cm2/sr). <0.5 (darkest); 0.5 - 1; 1 - 2; 2 - 4; 4 - 8; 8 - 16; 16 - 32 and > 32 (brightest). Lower values equate to lower light pollution and darker skies.

Q58g - km2 in brightness colour band 16-32

- 0.0
- Data has been classified into eight colour bands of brightness values (nw/cm2/sr). <0.5 (darkest); 0.5 - 1; 1 - 2; 2 - 4; 4 - 8; 8 - 16; 16 - 32 and > 32 (brightest). Lower values equate to lower light pollution and darker skies.

Q58h - km2 in brightness colour band >32

- 0.0
- Data has been classified into eight colour bands of brightness values (nw/cm2/sr). <0.5 (darkest); 0.5 - 1; 1 - 2; 2 - 4; 4 - 8; 8 - 16; 16 - 32 and > 32 (brightest). Lower values equate to lower light pollution and darker skies.

Tranquillity & Place

Q59a - % in visually tranquil category 1

- 0.00
- Sourced from the nationally consistent Tranquillity & Place Visually Tranquil Areas 2022 (rural themes 1, 2 and 3 combined). The visually tranquil categories range from 1 (least visually tranquil) to 10 (most visually tranquil). For further information, t

Q59b - % in visually tranquil category 2

- 0.00
- Sourced from the nationally consistent Tranquillity & Place Visually Tranquil Areas 2022 (rural themes 1, 2 and 3 combined). The visually tranquil categories range from 1 (least visually tranquil) to 10 (most visually tranquil). For further information, t

Q59c - % in visually tranquil category 3

- o 0.00
- o Sourced from the nationally consistent Tranquillity & Place Visually Tranquil Areas 2022 (rural themes 1, 2 and 3 combined). The visually tranquil categories range from 1 (least visually tranquil) to 10 (most visually tranquil). For further information, t

Q59d - % in visually tranquil category 4

- o 0.00
- o Sourced from the nationally consistent Tranquillity & Place Visually Tranquil Areas 2022 (rural themes 1, 2 and 3 combined). The visually tranquil categories range from 1 (least visually tranquil) to 10 (most visually tranquil). For further information, t

Q59e - % in visually tranquil category 5

- o 0.01
- o Sourced from the nationally consistent Tranquillity & Place Visually Tranquil Areas 2022 (rural themes 1, 2 and 3 combined). The visually tranquil categories range from 1 (least visually tranquil) to 10 (most visually tranquil). For further information, t

Q59f - % in visually tranquil category 6

- o 0.61
- o Sourced from the nationally consistent Tranquillity & Place Visually Tranquil Areas 2022 (rural themes 1, 2 and 3 combined). The visually tranquil categories range from 1 (least visually tranquil) to 10 (most visually tranquil). For further information, t

Q59g - % in visually tranquil category 7

- o 32.30
- o Sourced from the nationally consistent Tranquillity & Place Visually Tranquil Areas 2022 (rural themes 1, 2 and 3 combined). The visually tranquil categories range from 1 (least visually tranquil) to 10 (most visually tranquil). For further information, t

Q59h - % in visually tranquil category 8

- o 66.86
- o Sourced from the nationally consistent Tranquillity & Place Visually Tranquil Areas 2022 (rural themes 1, 2 and 3 combined). The visually tranquil categories range from 1 (least visually tranquil) to 10 (most visually tranquil). For further information, t

Q59i - % in visually tranquil category 9

- o 0.22
- o Sourced from the nationally consistent Tranquillity & Place Visually Tranquil Areas 2022 (rural themes 1, 2 and 3 combined). The visually tranquil categories range from 1 (least visually tranquil) to 10 (most visually tranquil). For further information, t

Q59j - % in visually tranquil category 10

- o 0.00
- o Sourced from the nationally consistent Tranquillity & Place Visually Tranquil Areas 2022 (rural themes 1, 2 and 3 combined). The visually tranquil categories range from 1 (least visually tranquil) to 10 (most visually tranquil). For further information, t

Q59k - Data Source

- o Sourced from the nationally consistent Tranquillity & Place Visually Tranquil Areas 2022 (rural themes 1, 2 and 3 combined). The visually tranquil categories range from 1 (least visually tranquil) to 10 (most visually tranquil). For further information, the report and webapp, visit the Storymap available from <https://storymaps.arcgis.com/stories/865c1876d9f64280a3dfc6e2769a46a5>

SLAs

Q60 - List the Special Landscape Areas (SLAs) in this local authority or region

- No
 - No SLAs

Q61 - SLA policy and resources

- Not applicable

Visible Settings

Q62 - Visible settings of LANDMAP V&S areas

- [View a map image showing the visible setting of the area](#)

This is a Zone of Theoretical Visibility (ZTV), calculated using a 30 metre Digital Terrain Model (DTM), using multiple observer points scattered across the area, 1.5m above ground level, and taking into account the Earth's curvature. The data does not extend beyond 35km from an observer point, meaning that more distant views may also be possible.

- [Read user guidance](#) that explains the map image
- [Bulk download](#) the map images for Wales.
- [Read a detailed technical report](#) which explains the data calculations

Q63 - Visible Settings of Designated Landscapes

- [View map images showing the visible setting of each National Park and Area of Outstanding Natural Beauty.](#)
 - These are Zones of Theoretical Visibility (ZTV), as per Q62, but applied to Designated Landscape areas. Also, for areas not visible, colour-steps show the Height of an object before it would become visible (HOBV), up to 350m high. See Q62 to access the user guidance and a technical report.

Q64 - Key views into or out from Designated Landscapes

- [View map images showing the ZTV and HOBV of a selection of key views for each National Park and Area of Outstanding Natural Beauty in or affecting Wales](#)
 - These are Zones of Theoretical Visibility (ZTV), as per Q62, but applied to selected key views into or out from Designated Landscapes. Also, colour-steps show the Height of an object before it would become visible (HOBV), up to 350m high. It is not an exhaustive key view list. See Q62 to access the user guidance and a technical report.

VIEWPOINT 1: Waen Road . Photograph taken from Waen Road looking west towards the site via the existing (and retained) accesstrack to both the existing and proposed Site.
 PHOTOGRAPH DATE: 31.07.24
 Photograph taken in clear bright atmospheric conditions.

Existing landscape baseline

The existing landscape is consistent in character, comprising lowland valley floor and extensive alluvial features, including level short views from lower levels, with few new landscape components. A settled pastoral landscape reflecting the valley landform of rich alluvial and floodplain level areas of grazing and parkland, or smaller woodland and scattered copse areas of the steeper hill slopes to the east and west. Medium scale fields and formal woodland blocks and with limited public access and sparse settlement. Abundant hedgerows and hedgerow trees.

Existing Visual baseline

Views from lower elevations are generally short due to the abundance of vegetation and lack of public access opportunity. Views of the proposed site are very well contained and limited to the immediate area. Only an existing glimpsed view heavily filtered by dense vegetation in winter months is possible, but not easily discernible. Receptors in the general area are potentially of High and Medium sensitivity, but predominantly as vehicle occupants and users of the minor road.(Waen Road). The new works comprising wetland, hedgerows and trees will not be an obvious new landscape component

Predicted Visual Impact

The existing (and proposed site) is not visible from this viewpoint when travelling past the site in either direction from Waen Road. Views towards the site are heavily filtered by dense vegetation even in winter leafless months, as the existing and proposed site development scale and presence of established deep layers of woodland and riparian trees between the site and receptors impedes views.

Visual impact is predicted to be neutral.

Predicted Landscape Impact

The limited visual impact of the proposed site and its small footprint extent limits wider landscape impact potential and there is a predicted Negligible magnitude of change envisaged, where the elements, features and characteristics of the landscape will remain unaltered.

Landscape impact is predicted to be neutral.

Cefn Wood

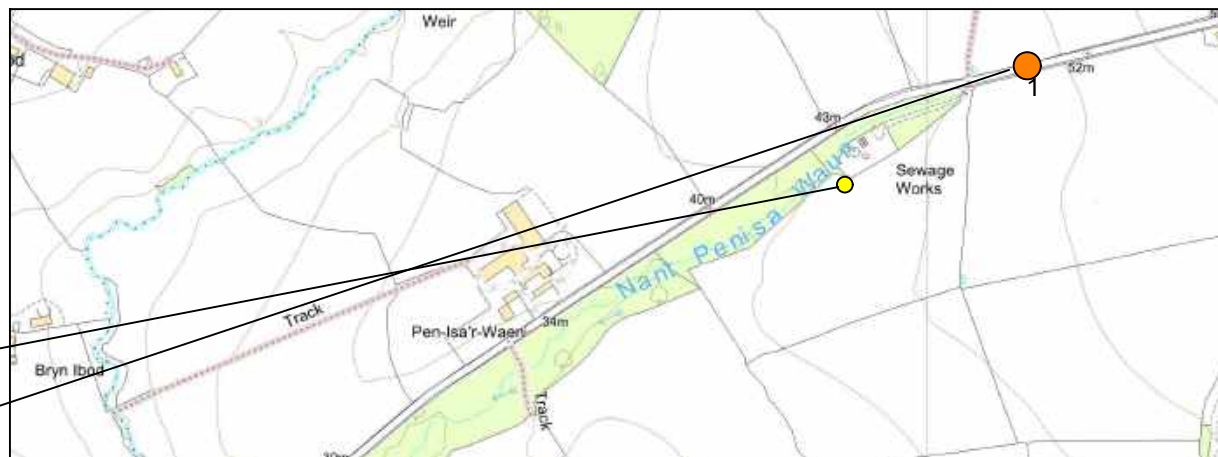
Existing gate retained

Existing access track retained

Existing access to remain

Existing woodland belt unaltered

Existing boundary unchanged



Notes:
 Photograph taken to illustrate the proposal location within the surrounding landscape in clear atmospheric conditions .

Distance to site circa - 25m
 Elevation circa +50m AOD
 Orientation 240°

Existing and Proposed Site Location

Viewpoint Location

Notes:

Camera: Canon EOS 600D
 Focal length 55mm (35mm format equivalent)
 Date of photograph: 31.01.22

NB - Photograph illustrates the view from a given stated position and as photographs will never exactly replicate what an individual may or may not readily see with the naked eye, they are produced as an aide memoire as a representation.

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Project Title			
Proposed Integrated Constructed Wetland Scheme			
Tremerichion Waste Water Treatment Works			
Issue	Drawn	Checked	Approved
	PW	JB	JB
			23/09/2024
<p>Tirlun Barr</p> <p>Chartered Landscape Architects Tan-y-Berllan, Llanbedr y Cennin, Conwy LL32 8UY Tel. 01492 650333 www.tirlunbarr.com</p>			
Drawing Title			
Viewpoint 1 Waen Road			
Client			
Dwr Cymru Welsh Water			
Drawing Number			
22/03/VP.01			
Size	Scale	Issue	
A3	As shown		

VIEWPOINT 2: Waen Road . Photograph taken from Waen Road looking east towards the site from Waen Road with Pen Isa'r Waen woodland to the north and parallel with the site and Waen Road.

PHOTOGRAPH DATE: 31.07.24

Photograph taken in clear bright atmospheric conditions.

Existing landscape baseline

The existing landscape is consistent in character, comprising lowland valley floor and extensive alluvial features, including level short views from lower levels, with few new landscape components. A settled pastoral landscape reflecting the valley landform of rich alluvial and floodplain level areas of grazing and parkland, or smaller woodland and scattered copse areas of the steeper hill slopes to the east and west. Medium scale fields and formal woodland blocks and with limited public access and sparse settlement. Abundant hedgerows and hedgerow trees.

Existing Visual baseline

Views from lower elevations are generally short due to the abundance of vegetation and lack of public access opportunity. Views of the proposed site are very well contained and limited to the immediate area. Only an existing glimpsed view from Waen Road through the woodland as a heavily filtered view in winter months is possible, and not easily discernible. Receptors in the general area are potentially of High and Medium sensitivity, but predominantly as vehicle occupants and users of the minor road. (Waen Road). The new works comprising wetland, hedgerows and trees will not be an evident new landscape component.

Predicted Visual Impact

The existing (and proposed site) is not visible from this viewpoint when travelling past the site in either direction from Waen Road. Views towards the site are heavily filtered by dense vegetation even in winter leafless months, as the existing and proposed site development scale and presence of established deep layers of woodland and riparian trees between the site and receptors impedes views.

Visual impact is predicted to be neutral.

Predicted Landscape Impact

The limited visual impact of the proposed site and its small footprint extent limits wider landscape impact potential and there is a predicted Negligible magnitude of change envisaged, where the elements, features and characteristics of the landscape will remain unaltered.

Landscape impact is predicted to be neutral.



Approximate direction and location of proposed ponds

Clwydian Range

Existing field boundaries unaltered

Existing Pen isa'r Waen woodland

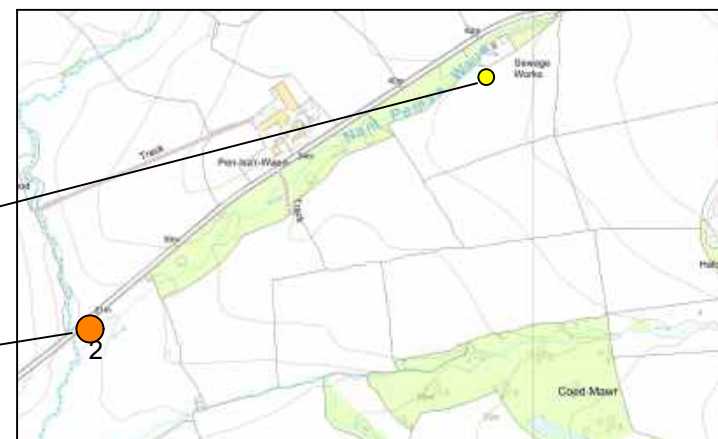


Notes:
Photograph taken to illustrate the proposal location within the surrounding landscape in clear atmospheric conditions .

Distance to site circa - 400m
Elevation circa +21m AOD
Orientation 30°

Existing and Proposed Site Location

Viewpoint Location



Notes:

Camera: Canon EOS 600D
Focal length 55mm (35mm format equivalent)
Date of photograph: 31.01.22

NB - Photograph illustrates the view from a given stated position and as photographs will never exactly replicate what an individual may or may not readily see with the naked eye, they are produced as an aide memoire as a representation.

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				Project Title	
				Proposed Integrated Constructed Wetland Scheme	
				Tremereichion Waste Water Treatment Works	
Issue		Date			
PW	JB	JB	23/09/2024		
Drawn	Checked	Approved	Date		
Tirlun Barr				Drawing Title	
Chartered Landscape Architects Tan-y-Berllan, Llanbedr y Cennin, Conwy LL32 8UY Tel. 01492 650333 www.tirlunbarr.com				Viewpoint 2 Waen Road	
Client				Drawing Number	
Dwr Cymru Welsh Water				22/03/VP.02	
Size	Scale	Issue			
A3	As shown				

VIEWPOINT 3 . Photograph taken from the Public Footpath to Hafod y Coed - beyond Hafod y Coed Lodge, looking west towards the existing and proposed site from approximately 300m distant.

PHOTOGRAPH DATE: 31.07.24

Photograph taken in clear bright atmospheric conditions.

Existing landscape baseline

The existing landscape is consistent in character, comprising lowland valley floor and extensive alluvial features, including level short views from lower levels, with few new landscape components. A settled pastoral landscape reflecting the valley landform of rich alluvial and floodplain level areas of grazing and parkland, or smaller woodland and scattered copse areas of the steeper hill slopes to the east and west. Medium scale fields and formal woodland blocks and with limited public access and sparse settlement. Abundant hedgerows and hedgerow trees.

Existing Visual baseline

Views from lower elevations are generally short due to the abundance of vegetation and lack of public access opportunity. Views of the proposed site are very well contained and limited to the immediate area. Although in relatively short focal distance the existing site is not easily discernible. Receptors in the general area are potentially of High and Medium sensitivity, but predominantly as vehicle occupants and users of minor roads and public paths. The new works comprising wetland, hedgerows and trees will not be an evident new landscape component as they are a ground level and the replacement welfare facility is the same scale as the existing welfare facility and clad in timber for increased visual mitigation benefit .

Predicted Visual Impact

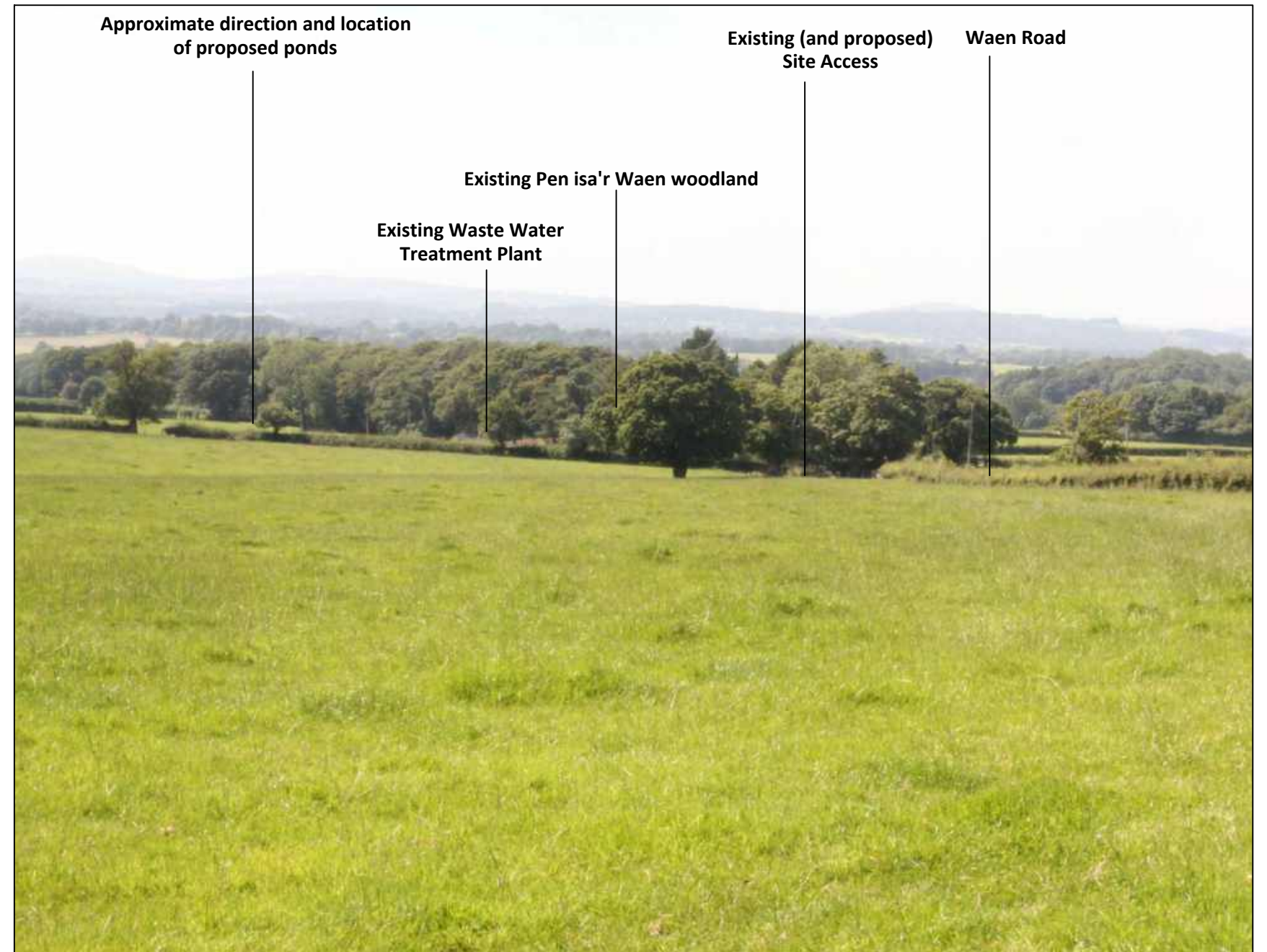
The existing (and proposed site) is not apparent from this viewpoint due to distance, and the small scale and content of the existing and proposed works (predominantly landscape elements). Views towards the site are filtered by layers of vegetation between the site and receptors impedes views, and whereby the development comprises a small and insignificant part of an expansive view and not readily discernible.

Visual impact is predicted to be neutral.

Predicted Landscape Impact

The limited visual impact of the proposed site and its small footprint extent limits wider landscape impact potential and there is a predicted Negligible magnitude of change envisaged, where the elements, features and characteristics of the landscape will remain unaltered.

Landscape impact is predicted to be neutral.

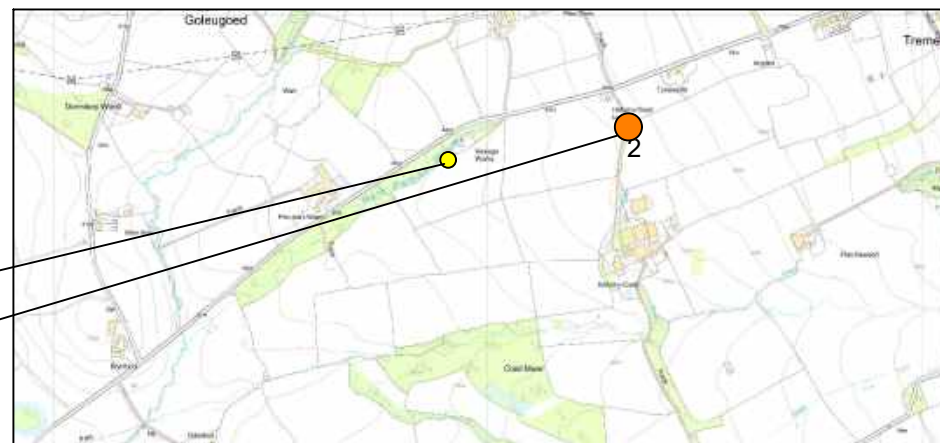


Notes:
Photograph taken to illustrate the proposal location within the surrounding landscape in clear atmospheric conditions .

Distance to site circa - 300m
Elevation circa +58m AOD
Orientation 270°

Existing and Proposed Site Location

Viewpoint Location



Notes:

Camera: Canon EOS 600D
Focal length 55mm (35mm format equivalent)
Date of photograph: 31.01.22

NB - Photograph illustrates the view from a given stated position and as photographs will never exactly replicate what an individual may or may not readily see with the naked eye, they are produced as an aide memoire as a representation.

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				Project Title	
				Proposed Integrated Constructed Wetland Scheme	
				Tremereichion Waste Water Treatment Works	
				Drawing Title	
				Viewpoint 3 Hafod y Coed Public Footpath	
				Drawing Number	
				22/03/VP.03	
				Client	
				Dwr Cymru Welsh Water	
Size		Scale		Issue	
A3		As shown			