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Treforest Weir, Pontypridd

Visual Appraisal

November 2024

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Contents

01 Introduction

1.1. Randall Thorp has prepared this Visual Appraisal on behalf of Rhondda Cynon Taf County Borough Council.

1.2. The proposals involve installing a hydroelectric turbine and substation next to an existing weir. An underground cable link will extend to Ynysangharad Park, where a proposed substation will provide power to the National Lido of Wales.

1.3. The development area lies within the administrative boundary of Rhondda Cynon Taf Council. The site location is shown on Figure 2.

1.4. Rhondda Cynon Taf County Borough Council have requested a Visual Appraisal to illustrate the impact of the proposals on the context.

1.5. This Visual Appraisal has been undertaken by a Chartered Member of the Landscape Institute and its key objective is to review the existing visibility of the site and it's features, and consider the visual effects of the proposed hydroelectric turbine and substations.

1.6. The assessment has been undertaken with reference to, and using aspects of, the **Guidelines for Landscape and Visual Impact Assessment** (GLVIA3), by the Landscape Institute and the Institute of Environmental Management and Assessment. Rather than utilising a full Landscape and Visual Impact Assessment Methodology, which would normally ascertain the anticipated 'sensitivity', 'magnitude of effect' and resulting 'significance of effect' upon the visual resource, this Visual Appraisal considers the likely visual effects by way of an appropriately detailed narrative. **Landscape Institute Technical Guidance Note LITGN-2024-01** (2024)- Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment Third Edition (GLVIA 3) has also been referred to.

1.7. In order to prepare this document, desktop studies were undertaken prior to a site based survey. This work informed the preparation of a landscape and visual baseline, taking into account the visual qualities of the landscape as well as the perceptual characteristics. The baseline confirmed the relevant planning policy, the nature of the site and the surrounding landscape, before ascertaining the key visual receptors and associated representative viewpoints.

1.8. The visual assessment considers publicly obtained views from Public Rights of Way (PRoW), public open spaces and roads in the vicinity. These were walked and representative photographs taken to illustrate views towards the site. **Landscape Institute Technical Guidance Note 06/19** (2019) – Visual Representation of Development Proposals has been followed in respect of Type 1, Annotated Viewpoint Photographs.

1.9. This type of assessment typically omits effects on private views, with the GLVIA 3 stating "*views from houses and individual properties are a matter of private amenity*". In this case, it was deemed appropriate to comment on changes to views experienced from properties adjacent to the proposed turbine, due to their proximity and the extent of tree felling required. Private views have been based on those taken from publicly accessible locations.

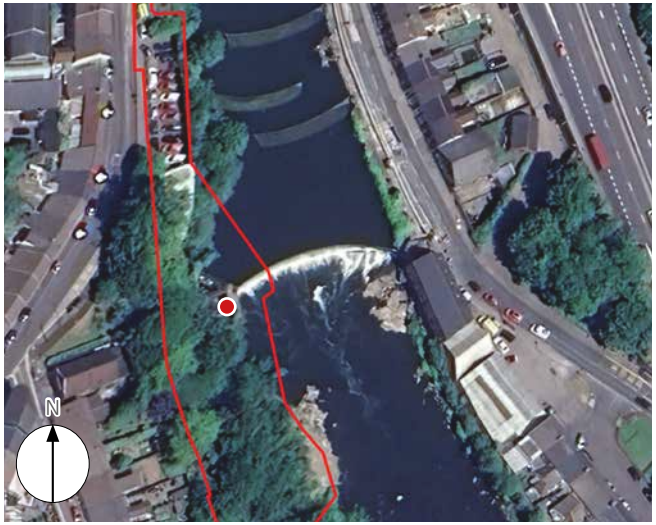


FIGURE 1 | Aerial view of existing weir

Development boundary

Proposed location of hydroelectric turbine and substation

Proposed location of substation (adjacent to existing substation building)

FIGURE 2 | Aerial view of whole development area including proposed construction area and cable route

02 Planning policy

NATIONAL PLANNING POLICY

Planning Policy Wales

2.1. Planning Policy Wales (February 2024) controls the development and use of land in the public interest. It looks to improve the social, economic and environmental wellbeing of Wales, ensuring that natural resources are sustainably managed and protected whilst preserving, promoting and enhancing the historic and built environment. Along with a series of Technical Advice Notes (TANs), Welsh Government Circulars and policy clarification letters, it comprises the national planning policy framework for Wales.

2.2. Duty is placed on public bodies to carry out sustainable development to comply with the *Well-being of Future Generations (Wales) Act* (2015), which requires an improvement in the delivery of all four aspects of well-being: social, cultural, environmental and economic.

2.3. The *Well-being of Future Generation's* Goals most relevant to this proposals are:

- A Globally Responsible Wales; and
- A Resilient Wales

2.4. Key Planning Principles of most relevance to this report include:

- 'Making the best use of resources' – including de-carbonising society and solving problems locally.
- 'Maximising environmental protection and limiting environmental impact' – including protecting and enhancing historic and natural assets. It states that "*negative environmental impacts should be avoided in the wider public interest*".

2.5. Planning Policy Wales mentions how "*the layout, form, scale and visual appearance of a proposed development and its relationship to its surroundings are important planning considerations*". These are important for reducing or mitigating any potential visual impacts from a proposed development.

2.6. Of relevance is Section 5 'Productive and Enterprising Places'. The 'Energy' sections states that the planning system should "*maximise renewable and low carbon energy generation*". The Welsh Government aims to generate 70% of its electricity consumption from renewable energy by 2030. It strives for "*new energy projects to have at least an element of local ownership*". One Gigawatt of renewable energy capacity in Wales should be locally-owned by 2030.

2.7. Planning Policy Wales states that "*there should be a general presumption in favour of the preservation or enhancement of a listed building and its setting, which might extend beyond its curtilage*". This is of particular relevance to the proposals, which look to expand upon the Grade II Listed Treforest Tinplate Works Feeder Sluice and Weir.

2.8. With regards to Conservation Areas, Planning Policy Wales states that "*there should be a general presumption in favour of the preservation or enhancement of the character or appearance of conservation areas or their settings*". The development site lies within Treforest's Castle Square Conservation Area. The proposed route for the cable, which will power the National Lido with hydroelectric power, runs through Pontypridd Town Centre Conservation Area.

2.9. The Environment (Wales) Act 2016 introduced a Section 6 Duty – enhanced biodiversity and resilience of ecosystems. The planning system "*should ensure that overall there is a net benefit for biodiversity and ecosystem resilience*".

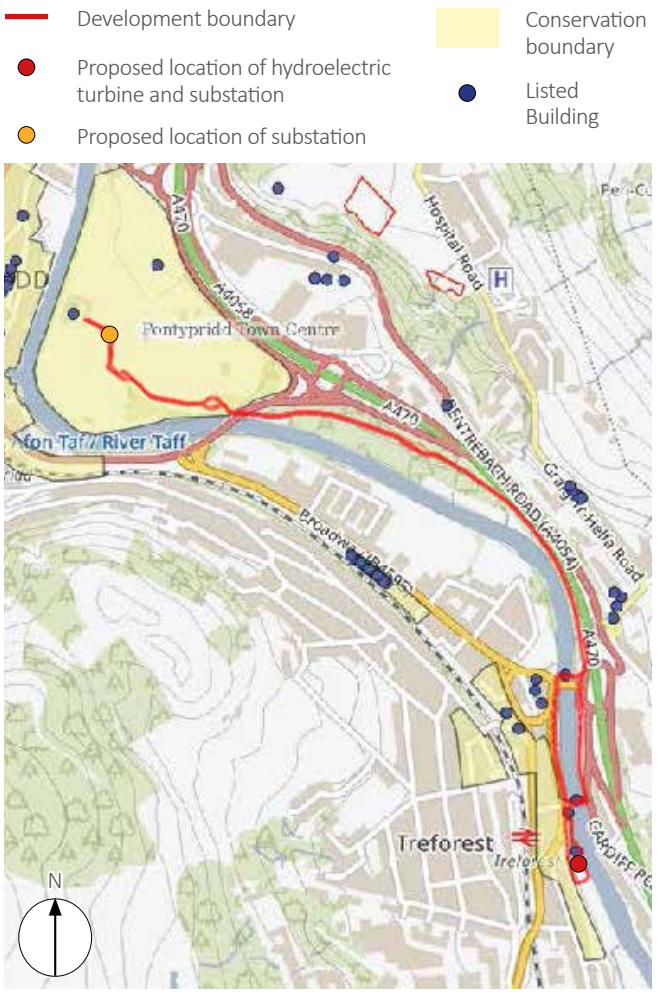


FIGURE 3 | Aerial view of whole development area including proposed construction area and cable route

02 Planning policy

DEVELOPMENT PLANS

2.10. Development plans apply the key principles of Planning Policy Wales, and how these may be implemented at various scales:

- National Development Framework (NDF): *Future Wales - The National Plan 2040*
- Regional: Strategic Development Plans (SDPs)
- Local: Local Development Plans (LDPs) or Local Development Plan 'Lites' (LDPLs)

2.11. They address where new development should be over the next 15-20 years.

Rhondda Cynon Taf Local Development Plan up to 2021 (Adopted March 2011)

2.12. The LDP provides Rhondda Cynon Taf Borough Council with an overarching development and land use strategy that will guide decisions on planning applications.

2.13. The site lies within the settlement boundary and is not within any special landscape areas. Cycle network improvements are suggested along parts of the proposed cable route.

2.14. The LDP objectives most relevant to the scheme are:

- **Better quality of life**: enhance the historic landscape of the Rhondda including the historic parks and gardens.
- **Develop and protect the county borough for future generations**: protect and enhance the "*diverse and abundant wildlife habitats and native species that exist throughout Rhondda Cynon Taf*" and increase the supply of renewable energy to manage the effects of climate change.

2.15. Policies of most relevance to the proposed scheme include:

- **Policy CS 2** - Development in the South: including "*protecting historic built heritage and the natural environment*"
- **Policy AW 4** - Community Infrastructure & Planning Obligations: includes renewable energy and energy efficiency initiatives
- **Policy AW 5** - New Development:

  1a) "*The scale, form and design of the development would have no unacceptable effect on the character and appearance of the site and the surrounding area*;

  1b) *Where appropriate, existing site features of built and natural environment value would be retained"*;

- **Policy AW 6** - Design and Placemaking: Development Proposals will be supported where:-

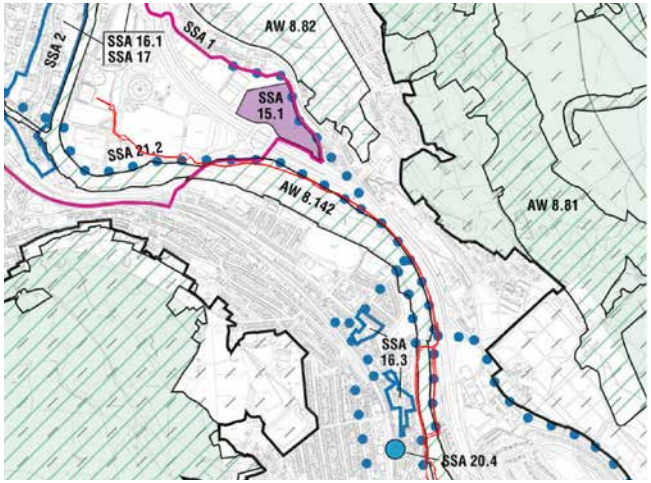
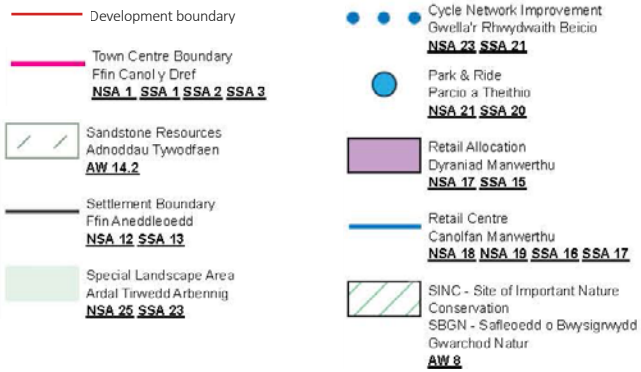


FIGURE 4 | Map from adopted Rhondda Cynon Taf LDP (to 2021)



2. "*They are appropriate to the local context in terms of siting, appearance, scale, height, massing, elevational treatment, materials and detailing"*;

13. The development reflects and enhances the cultural heritage of Rhondda Cynon Taf.

- **Policy AW 7**- Protection and Enhancement of the Built Environment: "*Development proposals which impact upon sites of architectural and/or historical merit and sites of archaeological importance will only be permitted where it can be demonstrated that the proposal would preserve or enhance the character and appearance of the site.*" The proposed scheme falls within two Conservation Areas.
- **Policy AW 8** - Protection and Enhancement of the Natural Environment:

"*Rhondda Cynon Taf's distinctive natural heritage will be preserved and enhanced by protecting it from inappropriate development*". This is relevant to the scheme as it falls within two Conservation Areas and concerns a Listed Building.

02 Planning policy

- **Policy AW 12** - Renewable & Non-Renewable Energy:

  "*Development proposals which promote the provision of renewable and non-renewable energy such as schemes for ... hydro-electricity, ... will be permitted where it can be demonstrated that there is no unacceptable effect upon the interests of soil conservation, agriculture, nature conservation, wildlife, natural and cultural heritage, landscape importance, public health and residential amenity.*"

  "Development proposals should be designed to minimise resource use during construction, operation and maintenance."

2.16. The Local Development Plan is applicable to the site as it considers sustainable communities, and infrastructure, appropriate development, placemaking and renewable energy.

Upcoming Local Development Plan 2022-2037

2.17. Rhondda Cynon Taf County Borough Council are in the process of preparing a Revised Local Development Plan for 2022-2037.

2.18. The current LDP (2006-2021) will be followed until the revised LDP is adopted.

SUPPLEMENTARY PLANNING GUIDANCE

Welsh Government Strategies

Environment Strategy for Wales (2006)

2.19. This document sets out a strategy for the environment of Wales over the next 20 years. It provides a framework for achieving a clean, biologically diverse and valued environment that contributes to the social and economic wellbeing of the Welsh population.

People, Places, Futures – The Wales Spatial Plan (2008)

2.20. This strategy sets out a vision for how each area in Wales should develop socially, economically and environmentally over the next 20 years. It provides a detailed context for development of the Rhondda Cynon Taf. Pontypridd is highlighted as one of 14 hub settlements vital to the success of the city-region.

Economic Renewal: A New Direction (July 2010)

2.21. One of the five priority areas is 'Investing in high quality and sustainable infrastructure'. One of the goals is to "*move towards a low-waste, less resource intensive, low-carbon economy*".

Technical Advice Notes (TANs)

2.22. TANs provide detailed planning guidance which Local Planning Authorities refer to when preparing development plans.

2.23. Those of greatest relevance to this scheme include:

- **Technical Advice Note 5: Nature Conservation and Planning (September 2009):** sets out key principles of planning for nature conservation and enhancing biodiversity.
- **Technical Advice Note 24: The Historic Environment (May 2017):** provides specific guidance on how the planning system should consider aspects of the historic environment including Listed Buildings and Conservation Areas.

03 Landscape and visual baseline

NATIONAL LANDSCAPE CHARACTER

3.1. The study area is located within the South Wales Valleys National Landscape Character Area 37. National Landscape Character Areas (NLCA) are defined by Natural Resources Wales as distinctions between different regions in terms of landscape identity, characteristics and qualities.

3.2. The South Wales Valleys NLCA comprises extensive uplands dissected by deep urbanised valleys. Extensive ribbon development with an industrial character contrasts with steep hillsides, forests and moors. Valley settlements are connected by road and railway networks, with topography constraining passages between valleys.

3.3. The summary describes the area as "*part of a wider, increasingly post-industrial, 'city region', the largest in Wales*" with "*heritage-based activities set within a softer, greener environment".*

3.4. The summary also states:

> *"Waterways are slowly welcoming back fish, and mammals such as otters. The importance of wildlife conservation being undertaken hand-in-hand with economic regeneration is being recognised as one of the keys to the sustained revitalisation of this most iconic Welsh 'bro', in the Heads of the Valleys and Valleys Regional Park initiatives".*

3.5. The key characteristics relevant to this application include:

> *"Numerous steep-sided valleys - typically aligned in parallel, flowing in southerly directions, shaped by southward flowing glaciers, leaving behind distinctive corrie ('cwm') and crag features. Major rivers include the Tawe, Taff and Rhymney."*

> *"Ribbon urban and industrial areas in valleys – in places extending up valley sides and to valley heads. The area is sometimes regarded as being part of a 'city region'. Middle and eastern valleys tend to be the most heavily and continuously developed, e.g Rhondda Valley. The uplands by comparison have little or no settlement."*

> *"Contrast of urban valley activity next to quiet uplands – e.g. busy roads, new developments, traffic noise, night lighting, verses the adjacent wilder, remoter, quieter uplands."*

> *"Large blocks of coniferous plantation and deciduous woodland fringes – covering many steep hillsides and hilltops, most notably in the middle to western portion of the area, providing a softer contemporary landscape where there was once industry."*

> *"Transport routes restricted to valleys – the intervening topography makes valley to valley travel difficult, except at heads and bottoms of valleys. Occasionally there are roads that climb steeply over passes with dramatic views and 'hair pin' bends."*

3.6. The National Landscape Character Area assessment gives a 'Visual and Sensory profile' for the South Wales Valleys, which includes the following key characteristics:

- combining the wilder and often inclement upland setting with the heavily industrialised and busy valleys
- A "*legacy*" of mines and industry remains "*extensively apparent*"
- "*intensively urbanised*" valley floors
- Along the A470 north-south road corridor "*travel is now much quicker*" and the area has become "*far more easily accessed*"

3.7. The complexities of the local landscape are better defined by the regional and local landscape character assessments.

Approximate location of proposed hydroelectric turbine

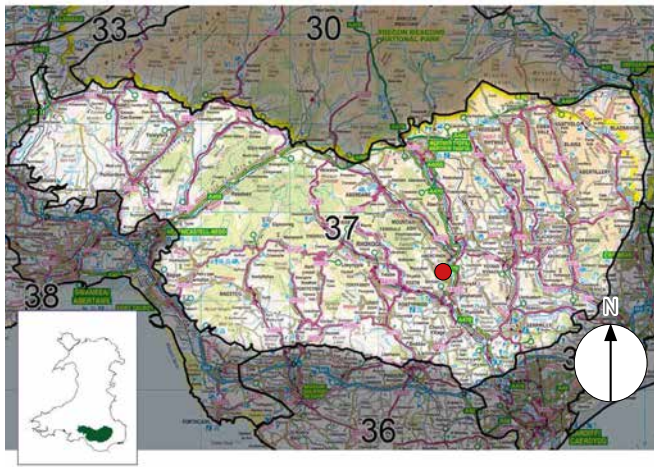


FIGURE 5 | Map of NLCA 37: South Wales Valleys (NTS)

03 Landscape and visual baseline

LOCAL CHARACTER

3.8. LANDMAP, produced by Natural Resources Wales, describes and evaluates landscape character. It uses spatial datasets for Landscape Habitats, Visual and Sensory data, Geological Landscape, Cultural Landscape Services and Historic Landscape.

LANDMAP Visual and Sensory Description

3.9. The description given to the site and its surroundings is:

> *"Series of towns/villages set within a larger valley landscape. Dominant form is the transport corridors that pick out the valley trend running along the valley floor. Development on valley floor and valley sides. Some views up to upland areas on valley tops. Traffic noise from the A4054 and A473 is constant background sensory factor in central areas adjacent to road corridors."*

3.10. This is of relevance as it highlights the urban character of the local area.

LANDMAP Historic Landscape Description

1. THE WIDER AREA

3.11. The **summary description** for this area mentions:

> *"A heavily industrialised urban aspect area representing a transport and communications corridor between the docks to the south, and the industrial valleys to the north."*

3.12. This highlights the urban, industrialised character of the area for which the hydroelectric turbine is proposed.

2. YNYSANGHARAD PARK

3.13. The **summary description** for this area includes the statement:

> *"Ynysangharad Park, Pontypridd, opened on 6 August 1923 by Field Marshal Viscount Allenby as a war memorial park, is included on the Register of parks and gardens (Cadw) as a good example of an early 20th century public park laid out in Edwardian style ... "*

3.14. This emphasises that the park is not a 'natural' area but a designed, 'man-made' landscape.

Public information board for Ynysangharad Park

1. The Wider Area - Treforest Weir

2. Ynysangharad Park

03 Landscape and visual baseline

THE SITE AND IMMEDIATE CONTEXT

3.15. Figure 6 shows the site within its landscape context.

3.16. The site is accessed from a track off B4595 Forest Road. The track runs in a south-easterly direction adjacent to the River Taff. It is a gravel track that provides vehicular access to The Weir Garage, and access to the existing weir/fish pass structure for maintenance. Mature trees and dense vegetation along the western bank of the River Taff means that the site is well-screened from the west.

3.17. The Grade II Listed Treforest Tinplate Works Feeder Sluice and Weir was rebuilt in 1834-5 by Cyfarthfa Iron Co., one of Britain's largest ironworks companies at the time. The existing fish pass at the western end of the weir was installed behind the main walls of the sluice in 2003. The sluice comprises a northern wall of rubble stone with metal railings, concrete cappings and modern grilles at water level. On the opposite side of the wall are two uprights supporting a cast iron lintel, which water flows through. A splayed recess contains the cast iron frame and lifting rack of a former sluice. The fish pass has concrete block walls topped by metal railings which step down behind the original sluice walls.

3.18. The tree survey identified an Ash tree and mix of Yew, Goat Willow, Laurel and Elder to the west of the weir. South of this is a tree group comprising Alder, Sycamore, Goat Willow, Buddleia and Leylandii, as well as a Silver Birch. All of this vegetation is Category B (moderate quality). Around the Cenotaph north of the weir is a mix of small Laurel, Pampas grass and Buddleia.

Development boundary

Viewpoint location

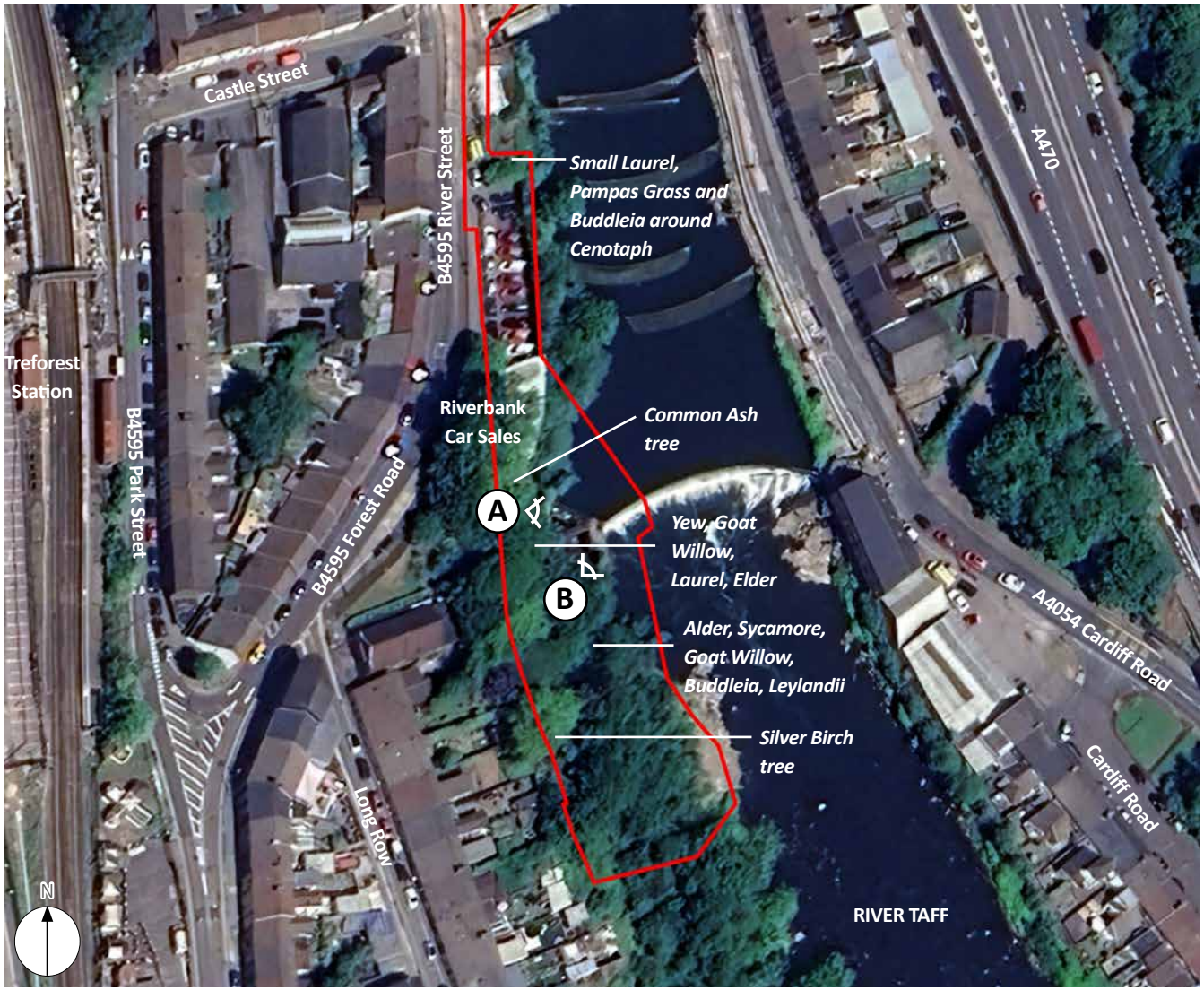


FIGURE 6 | Site Context Plan - weir area (NTS)

03 Landscape and visual baseline

PHOTOGRAPH A | View looking east across the existing sluice and weir

PHOTOGRAPH B | View looking north east across the existing sluice/fish pass towards the weir

03 Landscape and visual baseline

PHOTOGRAPH C | View looking northwest towards National Lido, from main path through Ynysangharad Park.

FIGURE 7 | Site Context Plan - park area (NTS)

VIEWS FROM THE SITE

3.1. Photographs A, B and C are taken within the site and illustrate the character of the existing fish pass/sluice and Ynysangharad Park.

3.2. Photographs A and B show how the low elevation and vegetation west of the sluice provides a good level of enclosure for the proposed hydroelectric turbine and substation.

3.3. Photograph C shows how there is an existing substation adjacent to the proposed site for the new substation.

Development boundary

Viewpoint location

Approximate location of proposed substation

03 Landscape and visual baseline

VIEWS TOWARDS THE SITE FROM SURROUNDING AREAS

3.19. A visual survey was carried out and representative photographs were taken from public viewpoints.

3.20. Views towards the existing weir and fish pass, the site of the proposed turbine house, substation and hydroelectric power station (the 'development site') were identified from:

1. River Street

2. Castle Street

3.21. An Arboricultural Impact Assessment was used to inform the viewpoints required, as tree felling required for construction could have an effect on views.

3.22. The site survey revealed that intervening buildings and vegetation screen views of the site from the A470 and B4595 Park Street. Dense mature vegetation screens the majority of views from the track west of the development area.

3.23. The proposed cable route will deliver hydroelectric power from the turbine house to Ynysangharad Park, where an additional substation will be installed. This would affect views from:

3. Ynysangharad Park

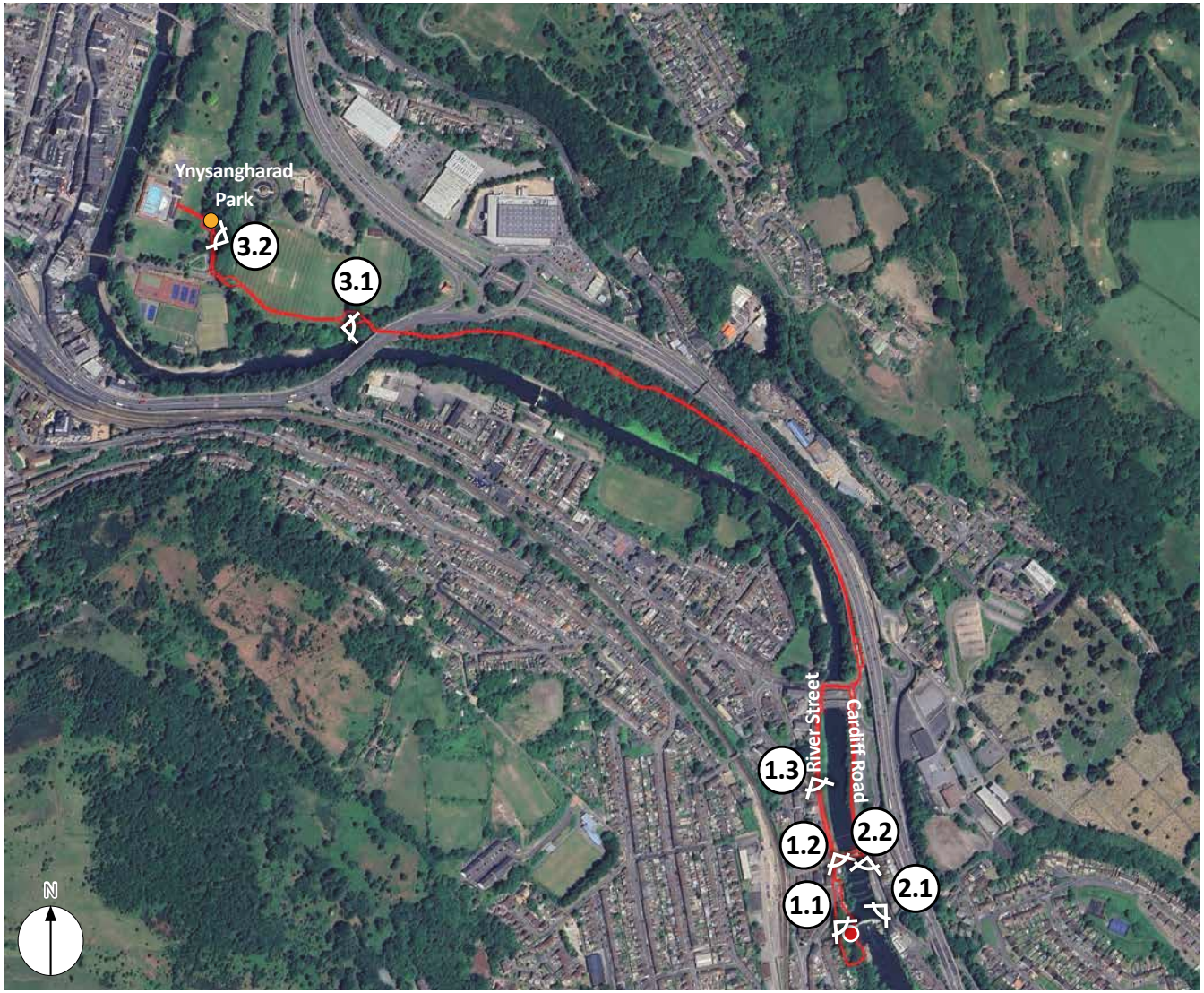
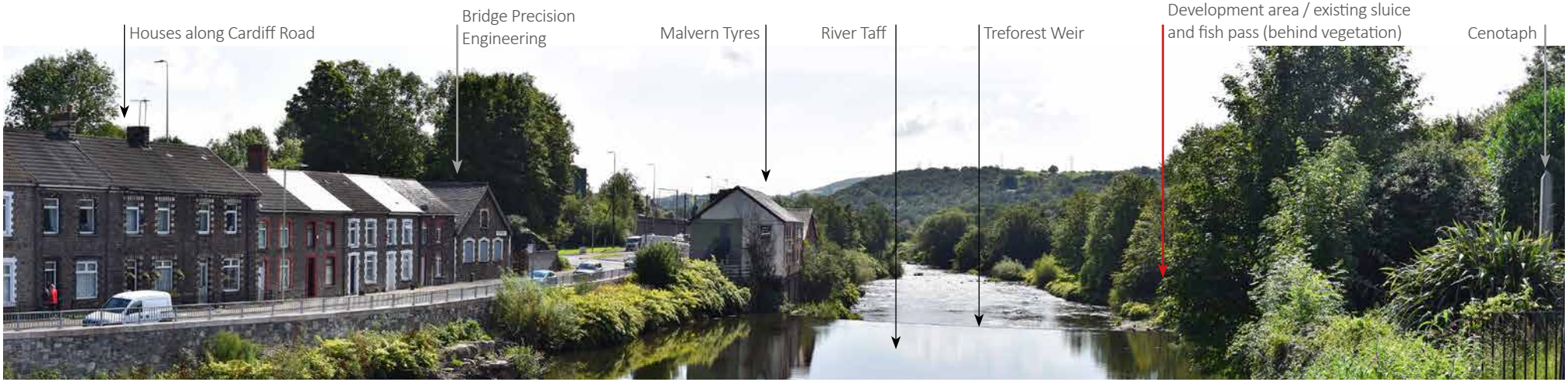


FIGURE 8 | Aerial view of whole development area including proposed construction area and cable route

03 Landscape and visual baseline

PHOTOGRAPH 1.1 | View looking south east towards the development area from track south of Riverbank Car Sales. The track follows the western bank of the River Taff before connecting to Raymond Terrace. As the track is inaccessible to vehicles, views are experienced by pedestrians and cyclists only. The track is proposed in the Adopted Local Plan as part of the Cycle Network Improvements. The steel gates above the fish pass are visible through gaps in dense vegetation lining the track. Whilst the vegetation is in leaf, the views are more enclosed. The development area would be more visible in winter when the trees lose their leaves.



PHOTOGRAPH 1.2 | View from footbridge connecting River Street with Cardiff Road, looking south east towards the development area. The weir is visible, along with the eastern edge of the existing fish pass/sluice wall. Mature vegetation screens most of the development area, but this could become more visible in winter when the trees are no longer in leaf. Views will be experienced by pedestrians and cyclists crossing the river.

03 Landscape and visual baseline

PHOTOGRAPH 1.3 | View looking south east towards the development area from B4595 River Street. The weir can be glimpsed beyond the footbridge. Vegetation largely screens the development area, but this will become more visible in winter as the trees lose their leaves. Views will be experienced by pedestrians and motorists. Motorists will be travelling at faster speeds so their views will be fleeting. Views are likely to occupy greater attention of pedestrians.

03 Landscape and visual baseline

PHOTOGRAPH 2.1 | View looking south west towards the development area from A4054 Cardiff Road. The existing sluice and fish pass are clearly visible against a backdrop of mature vegetation. Views will be experienced by motorists and pedestrians, but due to their slower speed pedestrians are likely to pay greater attention to views. Residents of houses along Cardiff Rd overlooking the river will experience similar changes.

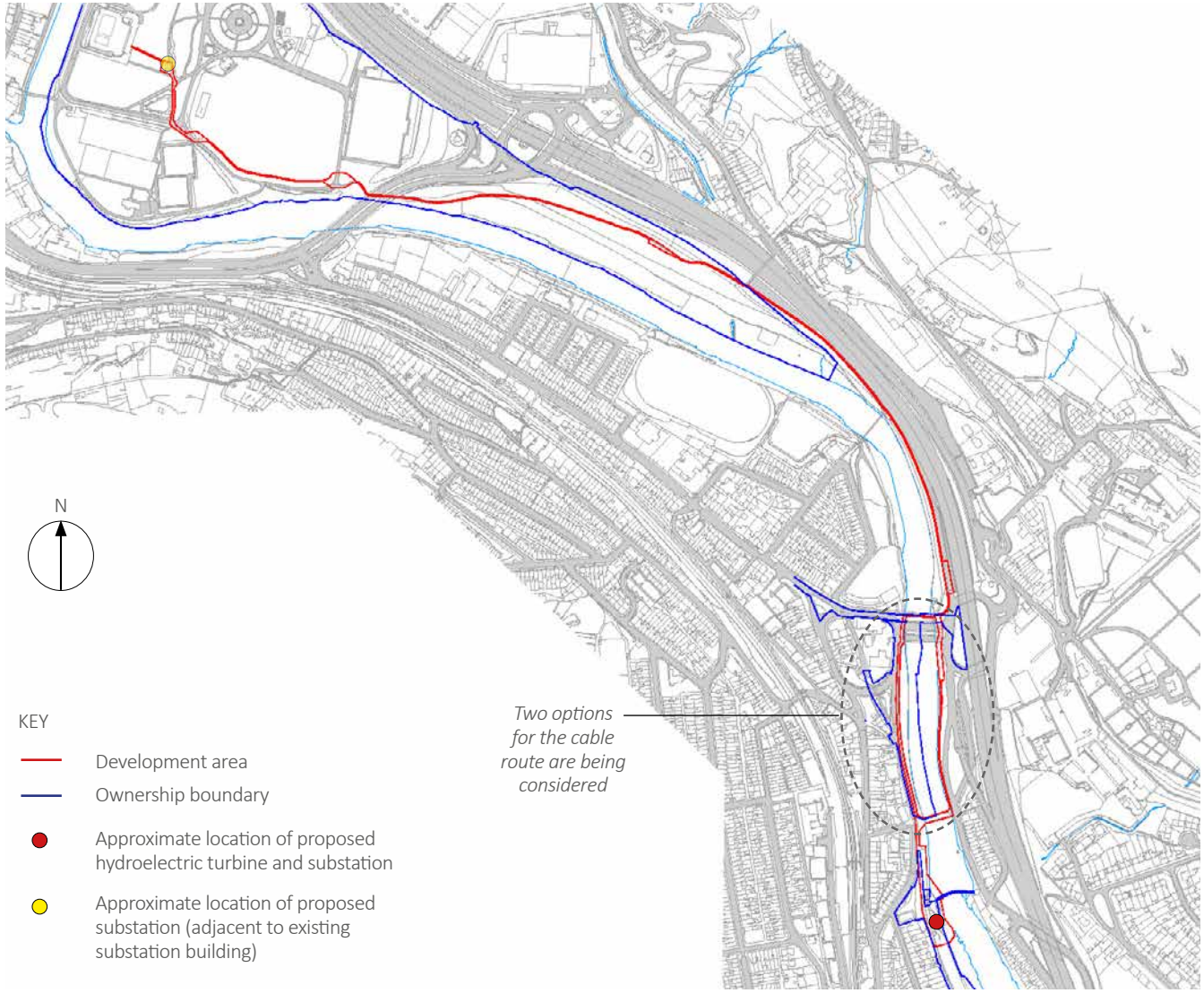
PHOTOGRAPH 2.2 | View looking south west towards the development area from A4054 Cardiff Road. The existing sluice and fish pass are clearly visible against a backdrop of mature vegetation. Views will be experienced by motorists and pedestrians, but due to their slower speed pedestrians are likely to pay greater attention to views. Residents of houses along Cardiff Road overlooking river will experience similar changes.

03 Landscape and visual baseline

PHOTOGRAPH 3.1 | View looking east from the south-east entrance to Ynysangharad Park. The A4058 overpass can be glimpsed through gaps in mature woodland which line both sides of the path. Views will be experienced by pedestrians and cyclists.

PHOTOGRAPH 3.2 | View looking northwest towards the National Lido, from the main path through Ynysangharad Park. The existing substation is clearly visible due to the high canopy of mature trees within the park and lack of planting west of the path. Views will be experienced by pedestrians and cyclists, but their focus is more likely to be on the Lido or play area.

04 Proposals



Existing weir and fish pass as seen from Cardiff Road

Existing fish pass as seen from footpath off River Street

FIGURE 9 | Plan to show development area and proposed location of hydroelectric turbine and substations (NTS). See Baileys & Partners drawings for more information.

HYDROELECTRIC TURBINE

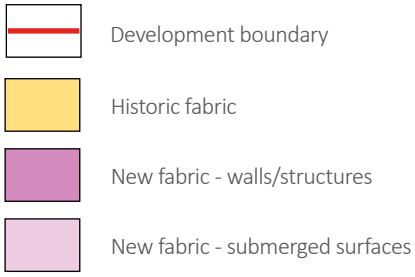
4.1. The hydroelectric power station will be a low head scheme with 200-300kW total installed capacity. The main user of the generated power will be the National Lido of Wales.

4.2. The hydraulic channel and turbine/powerhouse will be cast in-situ concrete. Prominent walls, including elevations facing the river, will be faced with stone to match the historic structures present. The fish pass, sluices and screens will be prefabricated steel structures with a galvanised finish.

4.3. A vertical Kaplan turbine will be located within the footprint of the fish pass installed in 2003. The turbine house will contain an Axial Flow turbine. The turbine house design will be stone clad with a slate or green roof.

4.4. A new fish pass will comprise galvanised steel and offer ecological benefits to the riparian system. A permanent fish passage may be incorporated within the existing penstock channel but this is unlikely to change the development footprint.

4.5. There will also be a hydro substation. Two options are being considered for its position. The substation will be approximately 6m² in size.



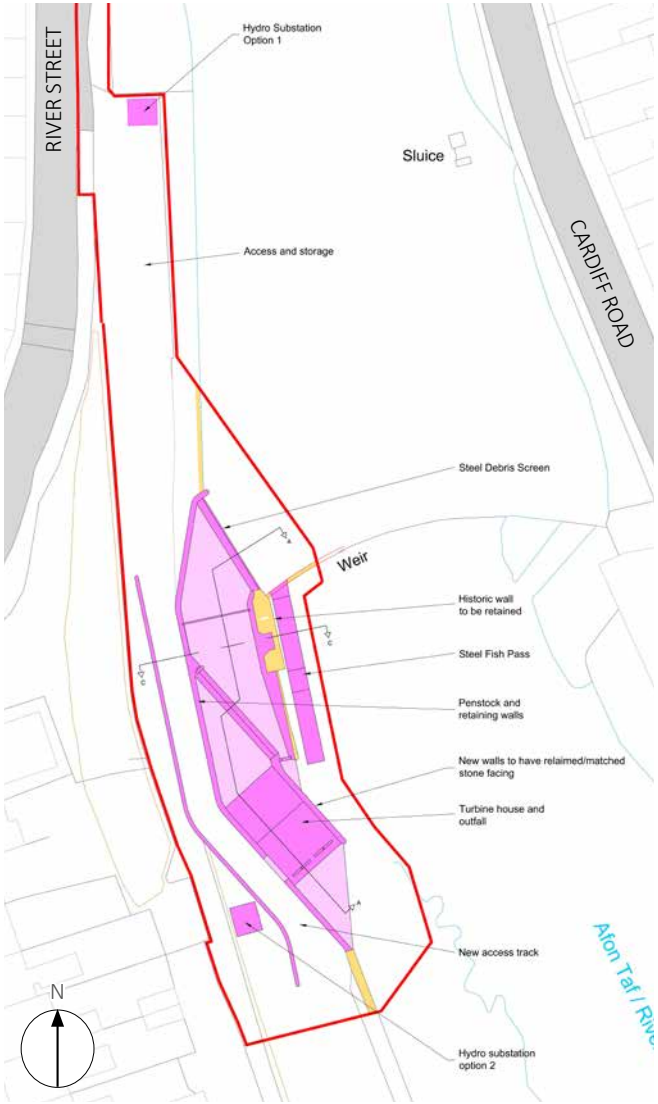
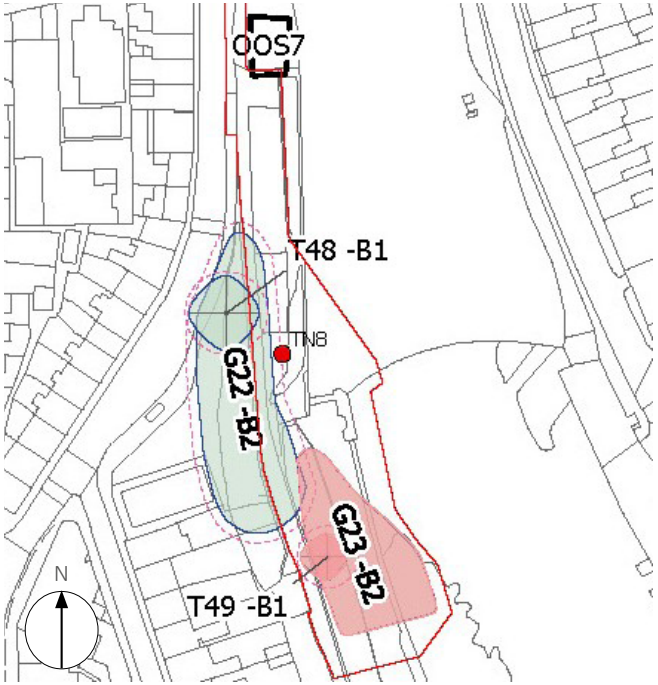


FIGURE 10 | Proposed hydroelectric turbine and substation (NTS) - See B & P drawings for more information



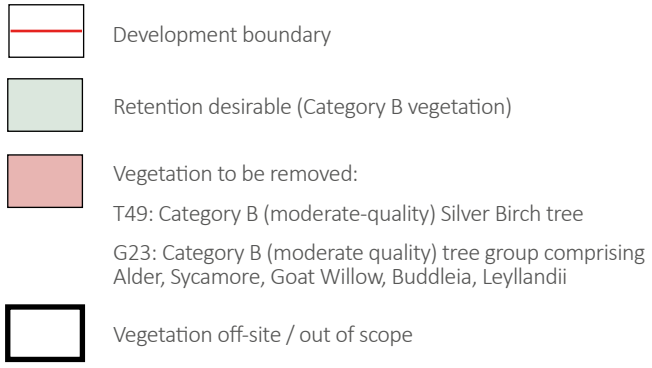


FIGURE 11 | Extract from Tree Retention and Removal Plan. See Barton Hyett Associates drawings and reports for more information

04 Proposals

3.6. The 'historic fabric' of the existing structure comprises the Grade II Listed Treforest Tinplate Works Feeder Sluice and Weir.

3.7. The 'new fabric' refers to the fish pass installed in 2003.

3.8. The 'new structures' comprise the development proposals.

3.9. A proposed improved fish pass made of steel will sit in front of the historic fabric and proposed sluice, extending downstream from the weir.

3.10. The sluice and turbine house will be stone-faced and use reclaimed materials. The section elevations show that there will be some vegetation clearance to enable the construction of these features.

Existing view (right) from Cardiff Road

Historic fabric

New fabric (2003) - walls/structures

Proposed view (below) from Cardiff Road

Historic fabric

New structures (using reclaimed materials for stone facing)

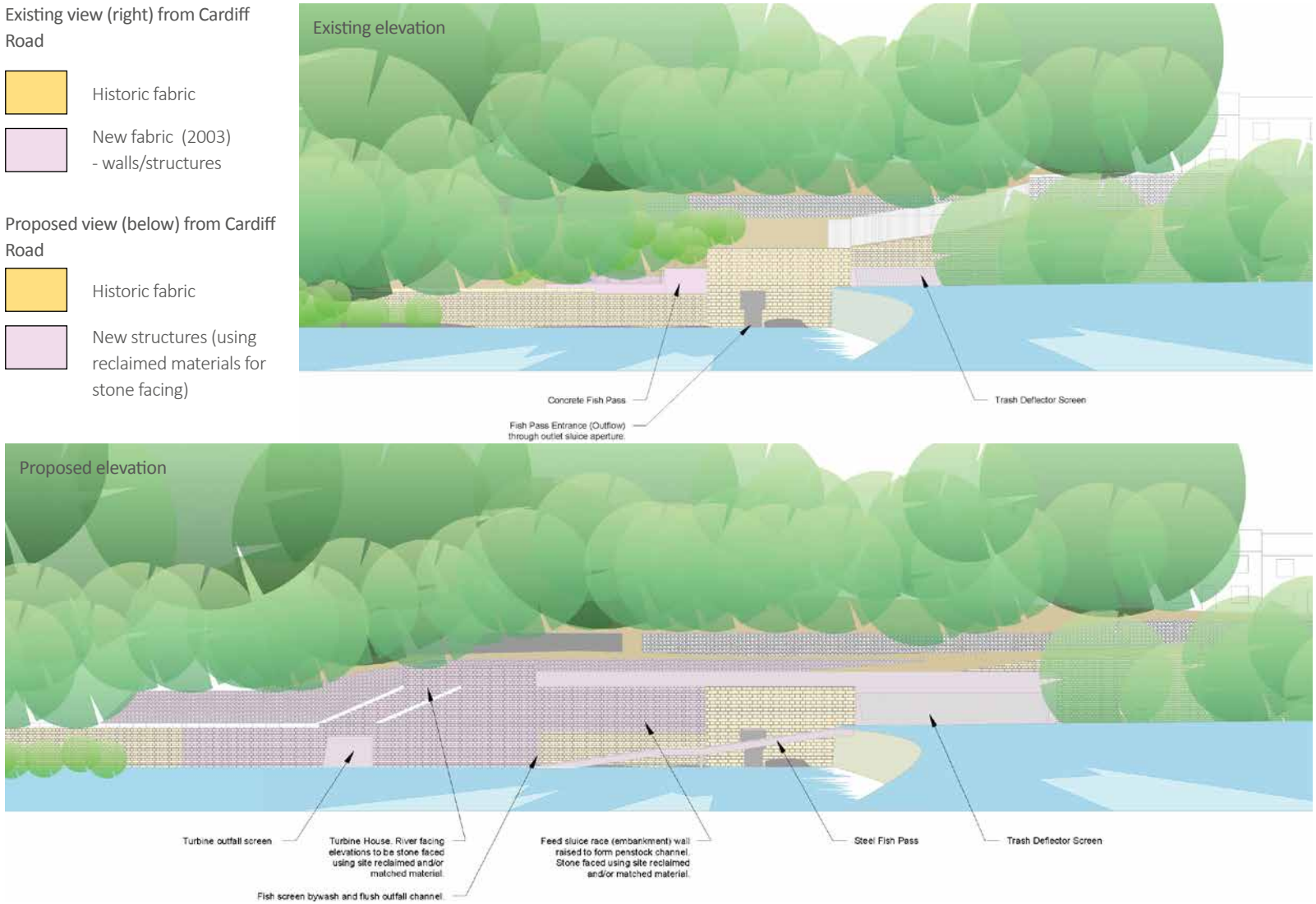


FIGURE 12 | Existing and proposed section elevations (NTS) - See B & P drawings for more information

04 Proposals

CABLE

4.11. An underground cable link will extend all the way to Ynysangharad Park. The cable will be installed in the surfaced cycle route that follows the river, to avoid any potential impact on trees. Two potential cable routes are being considered.

4.12. This cable will extend to Ynysangharad Park, where a proposed substation will provide power to the National Lido of Wales. This substation will be similar in size and appearance to an existing substation next to which it will be positioned.

4.13. Whilst the exact cable route has not yet been finalised, it is advised that the trench follows the edges of Root Protection Areas (RPAs) to allow trees to be retained. Where it is necessary to install the cable close to or within RPAs, National Joint Utilities Group (NJUG) guidance should be followed.

4.14. The Arboricultural Impact Assessment found that localised felling would need to be undertaken to the following Category B (moderate quality) tree groups:

- G3: Sycamore, Goat Willow, Holly
- G4: Sycamore, Goat Willow, Hazel

SUBSTATION

4.15. The proposed substation will be similar to the one already within the Park (both in size and appearance).

4.16. The most cost-effective solution is a standard design (see existing substation, right) or the usual green boxes. The client is open to recommendations for style and finish to sensitively integrate the new substation within its context.

The cable will run along the existing path that runs adjacent to the A470 main road.

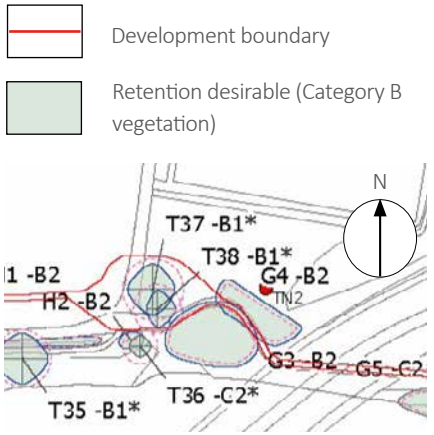


FIGURE 13 | Extract from Tree Retention and Removal Plan. See Barton Hyett Associates drawings and reports for more information

The proposed substation will sit adjacent to the existing substation, and be similar in terms of scale and appearance.

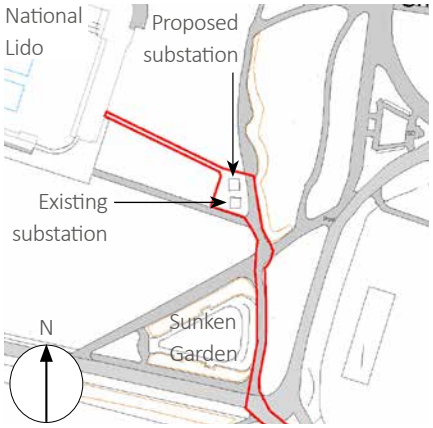


FIGURE 14 | Extract from B & P Location Plan. See B & P drawings and reports for more information

05 Visual Effects

EFFECTS ON VIEWS FROM RIVER STREET

5.1. Motorists, cyclists and pedestrians using River Street have direct views towards the weir site, which is largely screened by intervening vegetation. The site is more visible during the winter months when the trees have lost their foliage.

5.2. The footpath off B4595 River Street / Forest Road enables pedestrians to get closer to the weir site. Due to its lack of formal surfacing, it is largely inaccessible to cyclists. Intervening, mature vegetation largely screens the weir site, but glimpse views may be possible, particularly in the winter months when the trees have lost their leaves.

5.3. The Arboricultural Impact Assessment determined that the construction of the hydroelectric plant and associated infrastructure would require the removal of:

- a Category B (moderate quality) Silver Birch tree (T49)
- a Category B (moderate quality) mixed tree group; Alder, Sycamore, Goat Willow, Buddleia, Leyllandii (G23)

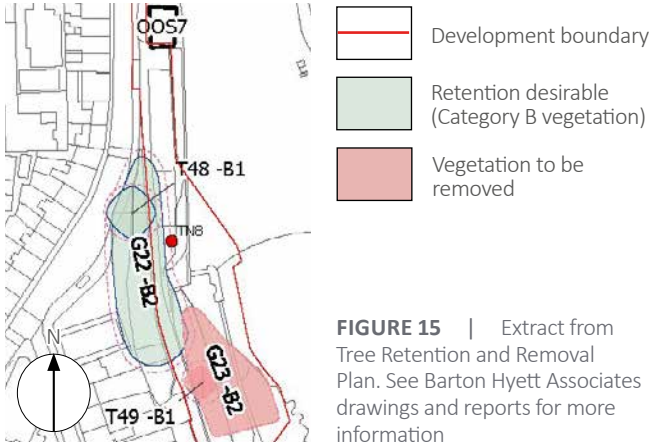


FIGURE 15 | Extract from Tree Retention and Removal Plan. See Barton Hyett Associates drawings and reports for more information

5.4. The Leyllandii is an evergreen conifer which would have provided coverage all year-round. Its removal would increase the effect on views during winter.

5.5. **Viewpoints 1.1** and **1.2** will experience a significant change to views due to the proposed vegetation removal. Pedestrians are the most sensitive visual receptors, as they are travelling at a slower speed and their focus is more likely to be on the river and weir. Along the footbridge (**viewpoint 1.2**), pedestrians and cyclists may stop to take in views, from which the proposed development will be clearly visible. Whilst pedestrians along River Street are likely walking to work, school, home or the nearby train station, they may still place some value on river views. In particular, pedestrians and cyclists using the track off River Street / Forest Road (**viewpoint 1.1**) are likely to be using the track for recreational purposes. Susceptibility of the view to change will be high, with a high scenic value placed on the tree-lined path with glimpse views of the river. Whilst there are already glimpse views towards the existing fish pass, with metal railings visible through vegetation, additional infrastructure and the removal of vegetation will have an effect on views.

5.6. The change to existing views from **viewpoint 1.3** will be minimal. Tree group (OOS7) comprising small Laurel, Pampas grass and Buddleia established around the cenotaph provides some screening, along with additional riparian vegetation north of the weir. The footbridge connecting River Street with Cardiff Road also obscures views of the site. Due to proximity to the site and intervening vegetation/features, changes to this view will have a minimal effect on pedestrians, cyclists and motorists.

5.7. Private views from **housing on Long Row** have been estimated based on site photographs taken from the footpath and the *Tree Retention and Removal Plan*. Views from housing on Long Row, in particular properties 2-10, will be largely affected by the removal of vegetation for construction of the hydroelectric plant. Rear garden vegetation will provide some level of screening but glimpse views of the proposals may still be possible.

5.8. As shown on B&P's *Heritage Structures - Proposed Plan* (see Figure 10), the majority of infrastructure visible from viewpoints 1.1, 1.2 and 1.3 is "new fabric", around half of which will be submerged under water. The features most visible from these viewpoints will be the top of the new fish pass, penstock and retaining walls, new access track, steel debris screen and turbine house.

5.9. Should option 1 be selected for the hydro substation, it would be visible from B4595 Forest Road. From the north, it would be screened by tree group OOS7 (see Figure 15) but may become more visible in winter when vegetation has lost its foliage. Substation Option 2 would be visible to pedestrians and cyclists using the track to the west of the weir, and potentially residents living on Long Row.

5.10. Due to the existing urban elements such as the weir, 2003 fish pass with associated metal fencing and the car garage, the proposals would not be out of character. The low elevation of the proposals, which will mainly be sat at the base of the bank above the water level of the river, will provide additional screening from **viewpoint 1.1** and **houses on Long Row**.

5.11. The removal of vegetation, however, would alter the character of views, which particularly along the footpath are strongly enclosed by dense, mature vegetation. It is suggested that, following the construction period, vegetation along the footpath is replaced where space allows.


Fish pass fencing along footpath


Existing fish pass structure

05 Visual Effects

EFFECTS ON VIEWS FROM CARDIFF ROAD

5.12. Motorists, cyclists and pedestrians along Cardiff Road have oblique views towards the weir site. The existing fish pass and stone wall are clearly visible above the water level of the river.

5.13. The southern part of the fish pass is obscured by low-hanging vegetation. This vegetation (identified in the Arboricultural Assessment as Tree Group G23) would be removed to enable construction of the turbine house.

5.14. The new structures proposed for the hydroelectric plant would extend the existing structure southwards along the river bank. Consequently, **viewpoints 2.1** and **2.2** would experience slight changes to the view. The development will be most visible directly opposite the site, from viewpoint 2.1 and **housing along Cardiff Road**, **Bridge Precision Engineering** and **Malvern Tyres.**

5.15. Pedestrians have a higher susceptibility to change. They are more likely to place their focus on views, as opposed to motorists who are travelling at higher speeds. Pedestrians and cyclists may place greater value on these riverside views, which are integral to their enjoyment of the route. Again, users of Cardiff Road are likely to be travelling to work, school or home but pedestrians and cyclists in particular may still place some value on river views

5.16. Due to the visibility of the existing fish pass structure, the development would not be out of character. The turbine house and new walls would use reclaimed stone facing to match the historic fabric (see image, right).

5.17. The removal of mature vegetation would effect views and increase visibility of the hydroelectric turbine and new fish pass. It is recommended that, where possible, trees are replanted to restore and enhance the wooded backdrop to the river.

Existing fish pass structure as viewed from Cardiff Road

Existing substation in Ynysangharad Park

EFFECTS ON VIEWS FROM YNYSANGHARAD PARK

5.18. The visual receptors experiencing changes to views will be pedestrians and cyclists using the park. As the park is a destination, people are likely to be there for pleasure and may give greater attention to views. Some people may be passing through to access Pontypridd Town Centre, in which case views are still likely to be integral to their enjoyment of the route.

5.19. The views from **viewpoint 3.1** will change as a result of localised tree felling required to allow clearance for the cable route trench. This will affect the following moderate-quality tree groups identified in the *Arboricultural Impact Assessment*:

- G3: Sycamore, Goat Willow, Holly
- G4: Sycamore, Goat Willow, Hazel

5.20. Without the exact tree stem locations, the extent of felling required is unknown. To reduce the number of trees that require removal, convenient gaps should be exploited. The arboriculturalists have recommended a walkover of the site to plot tree stem locations and identify the cable route that requires the least amount of felling. Replacement tree planting is advised to mitigate the effects of tree loss. Visual effects at **viewpoint 3.1** will be minimised as there are no new structures proposed, only the possibility of existing features (trees) being removed to install the cable.

5.21. Views from **viewpoint 3.2** will change as a result of the proposed substation, which will sit adjacent to the existing substation and be similar in terms of scale and appearance. These substations will sit at the intersection of paths leading towards the National Lido, Ynysangharad Children's Play Area, Ynysangharad War Memorial Park and Pontypridd Sunken Garden.

05 Visual Effects

5.22. Users of the park, pedestrians and cyclists, will have a higher susceptibility of views, especially if they are using the park for recreational purposes rather than just “passing through”. Their attention, however, is more likely to be on their destination, for example the lido or the play area.

5.23. The substation location is positioned close to the path and is highly visible to park visitors. The new and existing, if possible, substations could use stone facing to improve their appearance. Stone cladding would tie in with the stone walling used throughout the park (see below left), contributing to sense of place.

5.24. Due to the prominent location of the existing and proposed substations, it is recommended that herbaceous and shrub planting in keeping with the formal character of the park is utilised to screen views of both substations.

5.25. There are examples of where substations have been successfully incorporated into open spaces, such as at Cambourne near Cambridge, as below:

Low stone wall containing planting within Pontypridd Sunken Garden

Stone wall enclosing Pontypridd Sunken Garden

Tree and shrub planting helps this substation at Cambourne to ‘blend in’ with its surroundings.

06 Conclusion

SUMMARY OF VISUAL EFFECTS

6.1. The hydroelectric power station and associated infrastructure will be visible from a number of public and private viewpoints along River Street and Castle Street.

6.2. Views from River Street would be fleeting and proposals would not alter the character of the view. The elevation of the proposed development is lower than that of the surrounding roads and footpaths, limiting views of the proposals. Consequently, whilst the development would be difficult to see from the riverside footpath stemming off River Street, associated tree felling to allow for construction of the turbine would significantly affect views from both the footpath and houses along Long Row.

6.3. Views from Castle Street would be oblique and fleeting. Private properties along Castle Street, however, face the river so views would be direct. Due to the visibility of the existing wall and fish pass, the lengthening of the structure will not alter the character of the view. There would be some removal of mature vegetation to allow for the turbine house and associated infrastructure- it is recommended that this vegetation is replaced where possible.

6.4. The additional substation located in Ynysangharad Park will be visible from the north, west and south over a long distance across the park, due to a lack of intervening vegetation and buildings. Its location at an intersection between paths will increase its visibility as visitors will be channelled towards and past it. Due to its position adjacent to an existing substation, the proposals will not be out of character. It is recommended that the substation is designed to have stone cladding or similar to complement other stone features within the park. Complementary planting should be used to the north and west of the substations to help integrate them within the park.

CONCLUSION

6.5. The main effect of the proposed development will be vegetation loss. This may be avoided along the cable route with careful positioning of the trench. At the weir, trees will have to be removed, but effects may be mitigated through compensatory tree planting. The proposals will not be out of character from their surroundings.

6.6. The proposals add to existing man-made structures and are proposed within an urban setting, within the settlement boundary. Visibility of the proposals is confined to a small and localised area, with few people experiencing views of the development.

View along River Taff, from Footbridge connecting River Street with Cardiff Road.

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