

Abergavenny Velo Park

Design & Access Statement

November 2020





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1 - Introduction

Monmouthshire County Council (the Council) wishes to build a cycling hub, or 'velo park' with a mix of different cycling facilities concentrating around a Closed Road Circuit (CRC). The site is located on land known as Racecourse Farm, Llanfoist and near to Abergavenny. The facility will be of regional and potentially national importance for the growth and development of cycling and other wheeled sports. It will further enhance Abergavenny's reputation as one of the most successful cycling towns and destinations in Wales.

The national governing body, Welsh Cycling, has worked closely with the Council and local cycling clubs in recent years to promote very popular and successful national and local cycling events in the town. The town boasts several cycling clubs, including Abergavenny Road Club, one of the largest and most successful in Wales. Support for a velo park located in Abergavenny has been identified in the Welsh Cycling's Facilities Strategy and the emerging Monmouthshire Cycling Strategy.

The velo park including CRC will be a purpose-built cycling facility used for leisure, coaching, training and competitive cycling. It will also be available for other wheeled sports (e.g. wheelchair and Nordic skiing) and running. It combines recreational trails with a purpose-built circuit - a traffic free road used as a sports and leisure facility. The CRC will be 6 metres wide and 1km in length with street lighting covering part of the circuit to allow its use during the evening.

This document has been produced in support of a full planning application for the development of the site for a 'Velo Park' comprising a closed road circuit with ancillary bicycle storage units (three cargo containers), car parking and street lighting.



The application also seeks permission for associated public realm, landscaping, access and open space. The document is structured according to the guidance document 'Design and Access Statements in Wales' (2017).



2 - Brief & Vision

Background

At the centre of the vision is the Closed Road Circuit – a purpose-built cycling facilities used for leisure, education, coaching, training and competitive cycling. A CRC is similar to a traffic free road. Typically, CRC's are between 1km-1.5km in length and with some 20 similar facilities located across the UK. This includes a recent scheme at Pembrey in Carmarthenshire and others nearby in Stourport in Worcestershire. The use of CRC's is much broader than cycle sport, and they often cater to mixed-use wheeled sports, running and leisure activities.



Pembrey CRC



Stourport CRC

Strategic Need & Objectives

Welsh Cycling's Facilities Strategy, has identified the lack of suitable regional facilities for closed road cycling as one of the main barriers to the development of the sport in Wales. The document gives a rationale for the development of new facilities that goes much further than the competition and producing athletes. The strategic benefits for investment include evidence that facilities increase the numbers participating regularly in a sport in the community setting, and regular participation is key to behaviour change that leads to a healthier lifestyle.

In the same way that the introduction of all-weather pitches has seen an increased participation at grassroots football, CRC's have the same impact for cycling and other wheeled sports by bringing many parts of the community together to use the facility. There are numerous reasons why people aren't comfortable riding for pleasure, training, and racing on the open road. These include poor quality rural roads, long distances between places, and poor fitness and health. A CRC addresses these barriers head-on, by removing a reliance on the open road that neglects the needs of cyclists wishing to participate but having nowhere safe to go on a regular basis during the day and evenings. The open road can also be an intimidating and dangerous place for novices and the disabled, and whilst the rural network of quiet lanes and traffic free paths of Monmouthshire are a resource for recreation, they are not suitable for learning basic bike handling skills and coaching.

Welsh Cycling believes that CRC's are key to developing cycling and can play a significant part in having a positive impact by promoting healthy participation in exercise and well-being agendas. A CRC provides a facility to be used by the young and old, new, lapsed, occasional cyclists, families, disability groups and local schools and colleges.

Local cycling clubs without suitable and safe facilities can benefit from developing their community coaching programmes, the number of volunteer coaches, cycling events, and the provision of a pathway for talented riders to maximise their potential in competitive cycling.

Welsh Cycling's facilities audit concluded cycling would be: 'greatly improved by further investment in a BMX race or pump track, and CRC's in South East Wales (possibly Monmouthshire), and also the Central South, potentially Cardiff'.

Welsh Cycling recommends:

- The creation of regional standard facilities;
- The development of a hub, or 'velo park' with a mix of different cycling facilities; and
- Linking with other facilities and opportunities such as leisure centre development and the 21st Century Schools programme.

In Monmouthshire, there is a commitment to increase the accessibility and quality of physical activity opportunities for all residents, with the aim of supporting healthy lifestyles for its residents and allowing them to achieve their sporting potential. The Monmouthshire PSB's Well-being Plan is concerned with creating an active and healthy Monmouthshire, supporting children and young people, and promoting volunteering. The 'Creating an Active & Healthy Monmouthshire Plan' identifies ambitious but achievable opportunities to make more people more active.

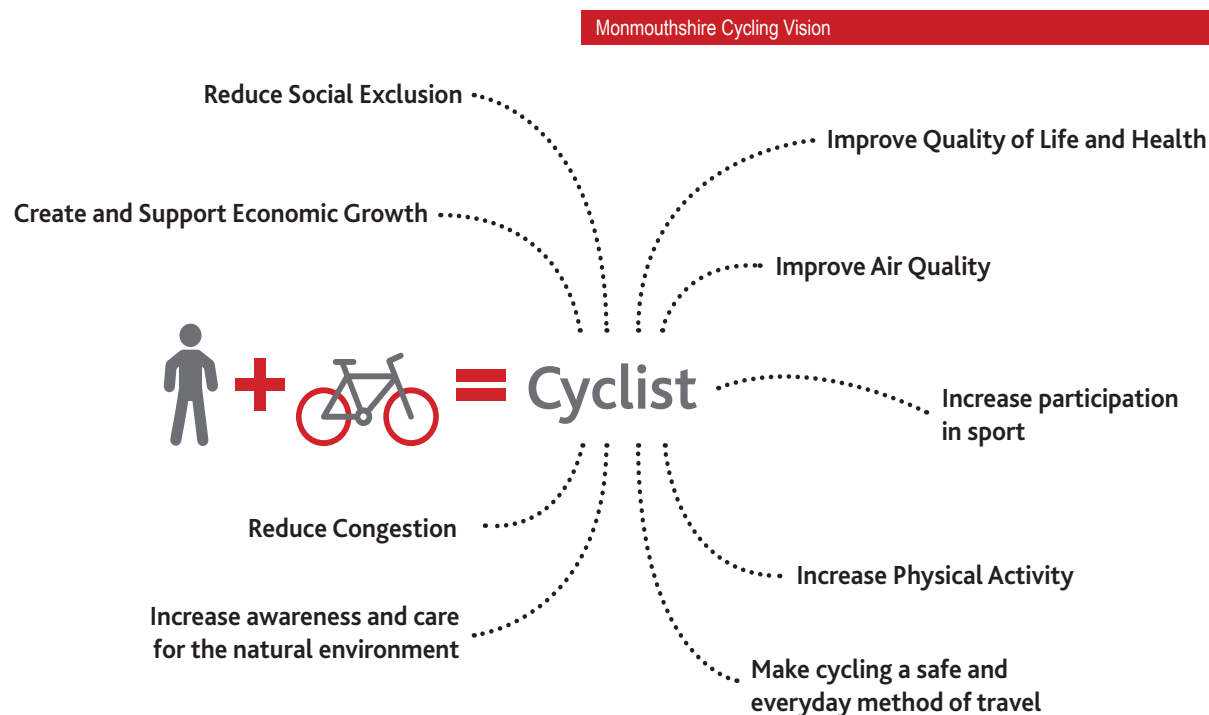
Through its Monmouthshire Cycling Strategy (draft 2019), the Council is committed to:

- Making Monmouthshire a healthier and more prosperous place, offering its residents and visitors a higher quality of life;
- Maximising the effectiveness of existing resources and capturing new investment to future needs;
- Ensuring cycling is a mainstream activity, and for Monmouthshire to meet its National and International reputation for cycle sport and tourism;
- Increasing the number of individuals of all ages and gender cycling for leisure, commuting/utility and sport through improvements to education and training;
- Developing the physical infrastructure, making cycling safer, easier and more integrated across Monmouthshire; and
- Working with partners and key stakeholders to encourage and enable a diverse range of cycling in Monmouthshire.

The Strategy is committed to developing a CRC/Velo Park to act as a base for cycling across the county and to enhance its reputation as a cycling destination. The facility will support the promotion of more high-quality cycling events and cycling for leisure and tourism and grassroots club and schools development. Objectives for a cycling facility and CRC in Monmouthshire are:

- To provide high-quality sporting facilities to create a permanent home for the established cycling clubs and respond to the growing participation in local, regional and national cycling.
- To provide opportunities to increase volunteering and participation in active recreation, sport and community activity within Monmouthshire.
- Supporting Monmouthshire's Well-being objectives.
- To create multi-purpose facilities for education, community use, and major events.
- Much of Abergavenny's success as a cycling town in recent years has been built upon the strong foundation of the sports grass roots. There are several local clubs (Abergavenny RC, CC Abergavenny, Gateway Cycling, Monmouthshire Wheelers) encouraging participation, coaching children and adults, organising local training and rides as well as successful cycling events of regional and national scale.

Whilst there are no purpose-built facilities, an area of the Abergavenny Leisure Centre/King Henry VIII School site has been used by Abergavenny Road Club as its base for coaching, training and events for over 10 years. The area is likely to be redeveloped as part of the schools modernisation programme and therefore lost as a cycling facility. The need for a replacement and purpose-built cycling facility for the cycling club is an important justification for the proposed scheme.



Establishing the Design Brief

British Cycling provides design guidance for the design, layout, and specification of CRC's. It states that from the beginning, the design should be dependent on a full appraisal of what is required to support cycling regionally and locally and the particular site characteristics and options.

A Sites Option Appraisal was completed for the Council and Welsh Cycling in December 2018. The appraisal identified the strategic case for the CRC located in Abergavenny and the presence of a high level of activity necessary to support a viable new facility. In summary, the study found:

- Welsh Cycling's Strategy has identified Monmouthshire as an under-served area, and Abergavenny as the preferred location.
- A need/demand analysis has indicated that there is an absence of suitable facilities within the local catchment area
- The level of need both locally and regionally for a hub or 'velo park' scale facility
- High demand levels with 24 cycling clubs and 1,200 British Cycling members within 20 miles of Abergavenny
- Local Go-Ride clubs to sustain active use of a new facility

Two alternative site options were considered in terms of their location, physical opportunities, constraints, management, funding, and deliverability (Racecourse Farm and the King Henry VIII School site). The land at Racecourse Farm was found to be the favoured location for the following reasons:

- Strategic location next to the A465 with complementary visitor facilities nearby
- The site is large enough for a cycling hub or 'velo park' with terrain suitable for a mix of different cycling facilities built around a core CRC. This would meet the demand for road, cyclocross/introduction level MTB
- Availability of funding specifically for the location
- Opportunities to deliver and integrate the facility with existing community and education facilities including adjoining primary school and One Planet Centre.

However, Racecourse Farm has several challenges including physical and environmental constraints, difficult ground conditions and the need to minimise the impact on the landscape and nearby land uses.

In July 2019 a Scoping Study was completed to improve the understanding of the nature of the site opportunities and constraints whilst at the same time undertaking a pre-application enquiry with the Local Planning Authority to inform the design and development brief.

The study identified and investigated several key design issues including:

- Landownership including third party owners and rights of access.
- The location of a High-Pressure Gas Main across the site
- A Landfill site that potentially allows the area to be considered as part of any future facility design.
- One Planet Centre & Llanfoist School – integration with existing facilities for meeting space, changing, toilets, parking etc.
- The inclusion of a new allotment area – however the presence of areas with a high risk of flooding and potential contamination from the landfill area indicated the area is unlikely to be favoured as a growing space.
- Ecology – the Preliminary Ecological Appraisal identified the presence of protected Great Crested Newts in the pond adjacent to the site and bats.

The Design Brief

The scoping exercise established the site's potential for a CRC of between 1km and 1.3km, with other formal and informal landscape feature suitable for the recreational use of the site and other forms of cycling including mountain biking and cyclo-cross. This meant that the Racecourse Farm had the potential to support a hub or velo park scale facility. In addition, the attractive and important landscape setting meant that the development is an opportunity for the Council to promote its environmental management and Green Infrastructure policies.

The design brief and vision has emerged from the initial options appraisal, site scoping study and the input from key stakeholders including British Cycling, Welsh Cycling, Monmouthshire County Council and local cycling club Abergavenny RC.

The vision is for a multi-use cycling facility in the form of a hub, or 'velo park' with a mix of different cycling amenities built around a core CRC for road cycling. The aim is to get several cycling activities taking place within one site to maximise the use and to develop participation in cycling across several different forms as well as level of challenge e.g. cyclocross, trails, skills, family use. Preferably, a national standard CRC facility would be achieved (1.5km length), although as a minimum the facility will need to achieve regional standards (1km) that serves at least a one-hour travel-time catchment area. Lighting of the circuit at night, particularly during the winter months is required to ensure the CRC is sustainable as a facility.

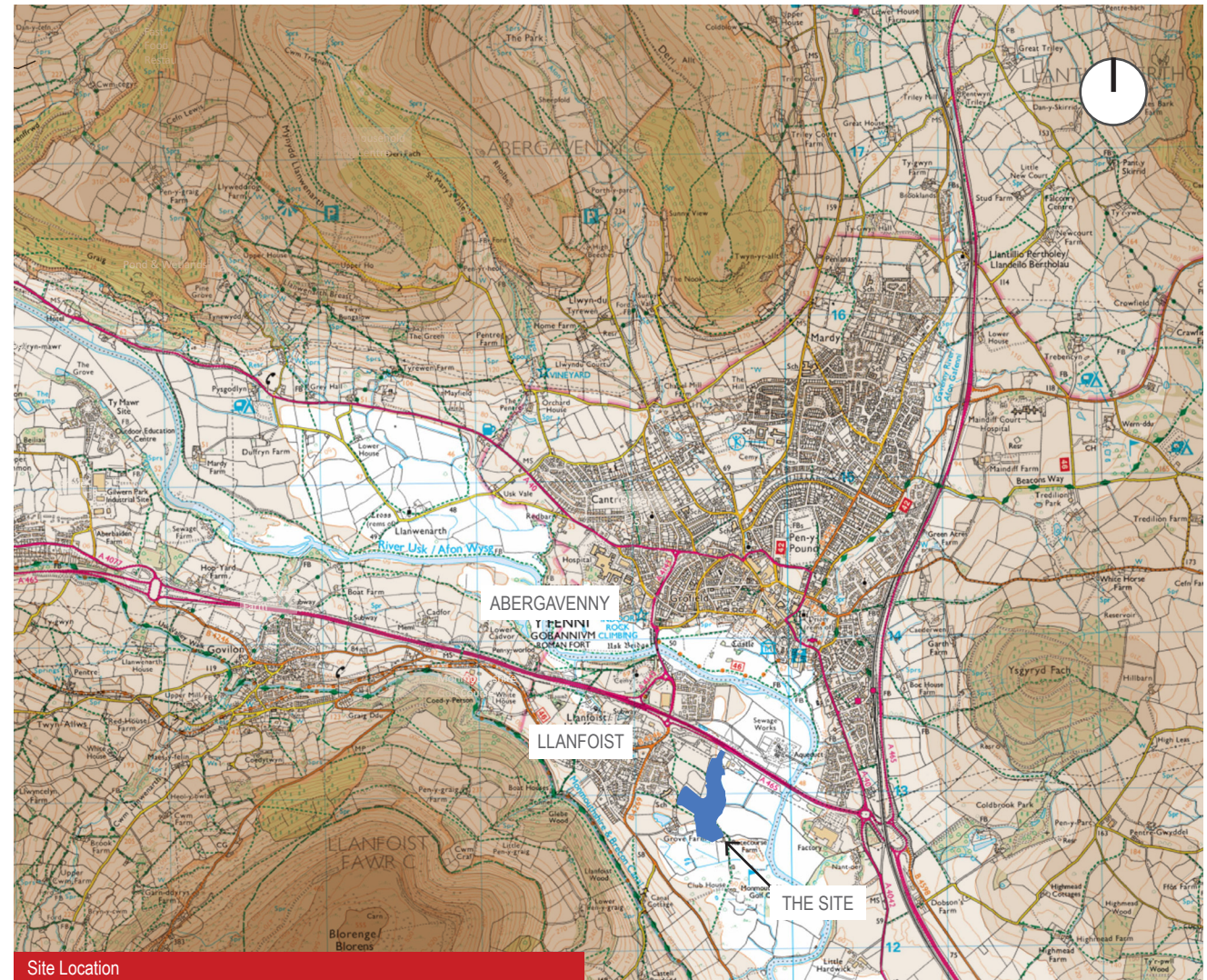


3 - Site & Context Analysis

Location

The land at Racecourse Farm (the site) is 1.5 miles south of Abergavenny Town Centre, or 25 minutes walking / 10 minutes cycling distance. It is positioned in a mixed-use area adjacent to a junction of the A465 Heads of the Valleys Road. The area around the road junction has been developed to accommodate new housing, residential care home, roadside leisure/retail operators including a hotel, restaurant, and drive-through restaurants.

The current access to the land is adjacent to Llanfoist Household Waste Recycling Centre and the One Planet Education Centre. Llanfoist Primary School is positioned at the western boundary of the Racecourse farm site. Other important features include the River Usk to the east and Monmouthshire Golf Course to the south. This is an established development area, and already includes a mix of land uses including education and leisure.



Site Features

The whole site is 6.4 ha in size and is currently used for the grazing of horses. Temporary uses of the land in recent years has included overspill events and camping for the National Eisteddfod.

The floodplain of the River Usk covers the low-lying areas to the east and is categorised as Zone C2, an area of floodplain without significant flood defence infrastructure where only less vulnerable development should be considered. The land to the west of the site is at a higher level, including an area of the former household waste landfill. This area is undulating with some steeply sloping banks

As well as the unusual topography including a raised mound and former landfill site, there are several utility features including the footings and towers for the overhead power lines, a high-pressure gas main (beneath ground) and a gravity fed sewer pipe.

Access into the site exists at two locations, a vehicle entrance formed in the opening between McDonald's and the Foxhunters Care Home and an existing field access adjacent to the One Planet Centre.

In terms of the environmental qualities of the site, there are no national or local environmental designation, although the area exhibits a range of natural habitats including ponds and wetland areas. Ecological considerations are important to the site's development.





Planning & Development

The adopted Local Development Plan indicates the site is positioned outside of the development boundary; however, it is not safeguarded as a Green Wedge. The small pond area is protected as an Area of Amenity Importance (DES2) where no unacceptable adverse effect are permitted:

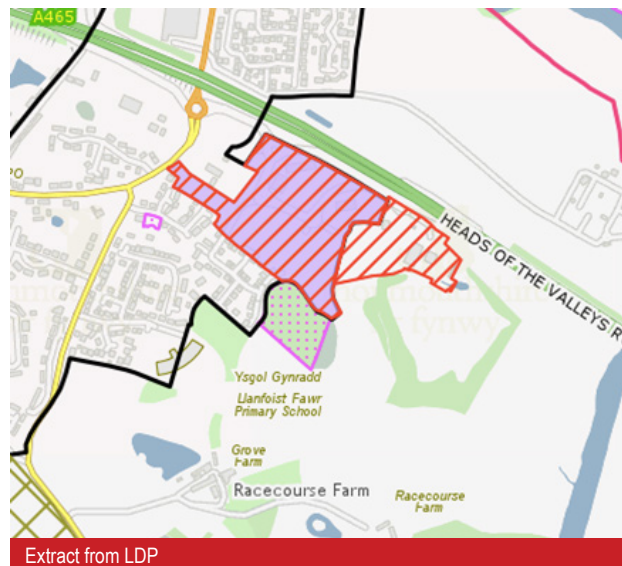
- On visual and environmental amenity;
- The role of the area as a venue for formal and informal sport;
- General recreation and as community space;
- The nature conservation interest of the area (policy EN1).

The area of the existing Waste Recycling Centre and the land located between McDonald's and the One Planet Centre has been protected as a Waste Site.

Recent developments include a Re-use Shop on land adjacent to the Waste Recycling Centre near to the entrance to the site.

Planning permission was also granted in 2018 for 120 residential dwellings and open space to the south on land at Grove Farm.

A proposed development (subject to approval) is the construction of c.26 residential dwellings on the site adjacent to the Foxhunter Care Home.



Community Uses

The site has previously been used as an overspill area for events and camping for the Nation Eisteddfod in 2016. With the benefit of additional infrastructure, the site could lend itself to support major events activity in future years.

The Council also wishes to make provision for a replacement allotment in the Abergavenny area on a site with a larger car parking provision and easy access to the road.

Built Assets

One Planet Centre - The One Planet Centre is a purpose-built environmental education centre for groups of up to 30 children and adults. It is located at the entrance to the Racecourse Farm site within the Waste Recycling Centre. Managed by the Council, the centre supports schools and community groups for 2 hours visits and escorted tour of the site, and the building has electricity, toilets, and wi-fi. The centre is regularly used during the day, although there is scope for shared use with the proposed velo park during the evenings and weekends. This requires a new separate and secure access that avoids passing through the operational areas of the waste management site.

The new Re-use Shop is positioned nearby with opportunities to establish initiatives for the re-use and recycling of bicycle parts and cycles.

Llanfoist Primary School has 200 pupils and is located to the west of Racecourse Farm and close to the site boundary. The sports and play areas overlook the site from an elevated position. Discussions with the Headmaster has indicated 'in principle' support for the CRC and an interest for the school to be involved in the use of a new facility as an opportunity to develop its new 'transformational curriculum' around healthy and ambitious pupils. The school also has a staff/visitor car park located within a short walking distance of the site accessed via an existing public right of way.

Highways & Movement

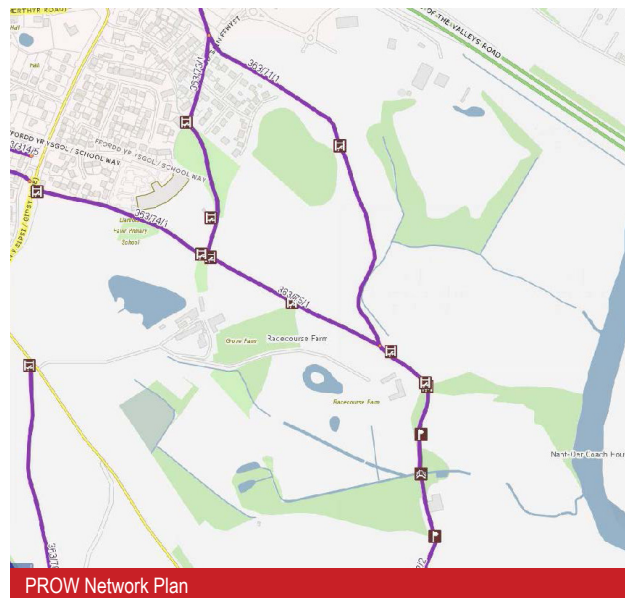
Public Rights of Way

There are two Public Rights of Way (PROW), 363/71/1 (71) and 363/75/1 (75) which cross the application site. Footpath 71 crosses the site from the south-eastern corner of the site to the north-west of the site, to the south of Hunters Care Community.

Footpath 75 crosses the southern part of the site from its south-eastern corner to the south-west of the site.

To the west of the application site Footpath 363/73/1 (73) links between Footpath 71 and 75, from the rear of Llanfoist Fawr Primary School through a wooded area and new housing development. The route comprises a relatively steep gradient and is currently inaccessible due to overgrown vegetation through the wooded area.

A map illustrating the extent of the PROW network within the vicinity of the application site is provided below. There is an existing footpath order, which is awaiting certification, for Footpath 71 and Footpath 73. The order will see Footpath 71 slightly amended from the application site's boundary, to the rear of Foxhunters Car Community and other developments off Iberis Road. Footpath 73 is sought to be redirected to account for further residential development.



Highways

Llanfoist Household Waste Recycling Centre Access Road (LHWRC) forms the northern arm of its roundabout junction with Iberis Road. It has a general southwest to northeast alignment, an approximate width of 7m and is subject to a 30mph speed limit. There are no footways on the LHWRC Access Road.

Iberis Road is a single carriageway road that forms the western arm of its roundabout junction with the LHWRC Access Road and the eastern arm of its roundabout junction with Ffordd Sain Ffwyst. It has a west to east alignment, an approximate width of 7m and is subject to a 30mph speed limit. Iberis Road benefits from 2m wide illuminated footways on both sides

of the carriageway, with dropped kerb crossings and tactile paving at all adjoining junctions. The only exception is the McDonalds access which does not have dropped kerbs and the access to the Foxhunters Care Community which has a dropped kerb at its junction.

The LHWRC Access Road / Iberis Road roundabout junction is a four-arm roundabout with Iberis Road forming the western and eastern arms, LHWRC Access Road forming the northern arm and the southern arm currently comprises a stub arm. The eastern arm provides access to McDonalds and the Foxhunters Car Community. The western arm provides access to Ffordd Sain Ffwyst and leads to Merthyr Road (B4246 / A4143) and the A465 Head of the Valleys Road.

Ffordd Sain Ffwyst is a single carriageway road which forms the northern and southern arms of its roundabout junction with Iberis Road with the northern arm leading to the roundabout junction with Merthyr Road. It has an approximate width of 7m and is subject to a 30mph speed limit. It benefits from illuminated, 2m wide footways on both sides of the carriageway with dropped kerb crossings and associated tactile crossings at adjoining junctions.

Merthyr Road (B4246 / A4143) is a local distributor road which forms the northern and southern arms of its roundabout junction with Ffordd Sain Ffwyst and Heads of the Valleys Road (A465) westbound slip. It generally has a north to south alignment, an approximate width which ranges between 7m and 8m, and is subject to a 30mph speed limit. In the vicinity of the site, it benefits from footways on both sides of the carriageway with dropped kerb crossings and associated tactile crossings at adjoining junctions.

The Heads of Valleys Road (A465) is a dual carriageway road which is situated beyond the northern boundary of the site. It has a southeast to northwest alignment and is subject to the national speed limit. It is a trunk road managed and maintained by the South Wales Trunk Road Agent (SWTRA) on behalf of the Welsh Government (WG).

Landscape & Visual Assessment

Given the protected status of the landscape setting and the landscape assets across the site, careful consideration has been given to potential landscape and visual impacts associated with the introduction of the track.

Pre-application discussions have been held with Monmouthshire County Council to agree a methodology for production of a Landscape and Visual Impact Assessment along with the selection of viewpoints and Local Landscape Character Areas for assessment.

The assessment is intended to identify potential effects and to inform and guide the emerging development proposals and support the integral design of effective mitigation. The completed study will be submitted to Monmouthshire County Council in conjunction with the planning application.

Landscape Character Assessment

Following a process of site analysis and desk top study, the area surrounding the site was categorised into seven Local Landscape Character Areas ranging from 'urban centre' to 'open and natural upland'. Each Character Area was evaluated in terms of the effect that the CRC development could have on landscape character.

For most Character Areas, any effects were reduced by the delivery of a strong landscape framework and strategies such as the omission of lighting for the western field.

For the adjacent River Usk Riparian Meadows Landscape Character Area, moderate effects are considered to remain in relation to the length of track and lighting which runs close to the floodplain in the south-east of the site, where planting is unable to fully mitigate effects.

Visual Effects

After a process of site survey and theoretical visibility modelling, fourteen viewpoints were selected for visual assessment. Viewpoints included three locations with direct views over site, two in the Brecon Beacons National Park and one within the Blaenavon World Heritage Site.

Of the fourteen viewpoints assessed, six were considered to have minor or negligible effects. The remaining eight had moderate residual visual effects following mitigation planting. These effects arose either through the presence of relatively close and/or elevated views over site, where mitigation planting would be less effective, or were residential views were considered and 'sensitivity to change' is judged to be heightened. It is noted however, that even where residual visual effects remain, no buildings are introduced into the main body of the site, so that the wider visual relationship with the surrounding uplands is fully retained.



The project site looking south from western boundary

Ecology

A series of ecological surveys have been undertaken since June 2019. The Phase 1 habitat survey identified that the site predominantly comprised semi-improved grassland with an area of marsh grassland divided by narrow corridors of broadleaved woodland and dense scrub and ditches containing running water. Great Crested Newts and bats have been recorded on site.

Recommendations include that the following considerations be undertaken:

- Maximum protection and habitat connectivity/creation afforded to these species
- Sensitive lighting design in the vicinity of potential nocturnal species
- Retention of all trees if possible and further survey works for hazel dormice within any areas of potential felling
- Retention of as much dense scrub-land as possible
- Treatment of all invasive weed species as part of ongoing management
- Use of predominantly native species within planting proposals
- Management of areas of grassland swards as wildflower meadow
- Incorporation of additional wildlife features within the design including insect hotels, hibernacula.
- Creation of an ongoing biodiversity management plan

An overgrown pond sits between the site and the Llanfoist's residential edge. The eastern boundary opens out to the low-lying areas of the River Usk floodplain (apart from the man-made topography of the landfill site) and although the A465 and the substation intersect the landscape, there is a visual connection beyond to open countryside. This open landscape wraps around the site to the south where the farmland and Monmouthshire Golf course extend to meet the lower slopes of the Bloreng.

The green infrastructure concept plan has been developed in consultation with the project ecologist to ensure maximum protection and habitat connectivity/creation is afforded to this species.

Green Infrastructure

The site is located within the low-lying landscape which sits just above the floodplain of the River Usk, adjacent to the urban edges of Llanfoist and Abergavenny and the transport corridors of the A465 and A40. The wider setting includes the upland areas of the Brecon Beacons National Park and the Blaenavon Industrial Landscape World Heritage Site.

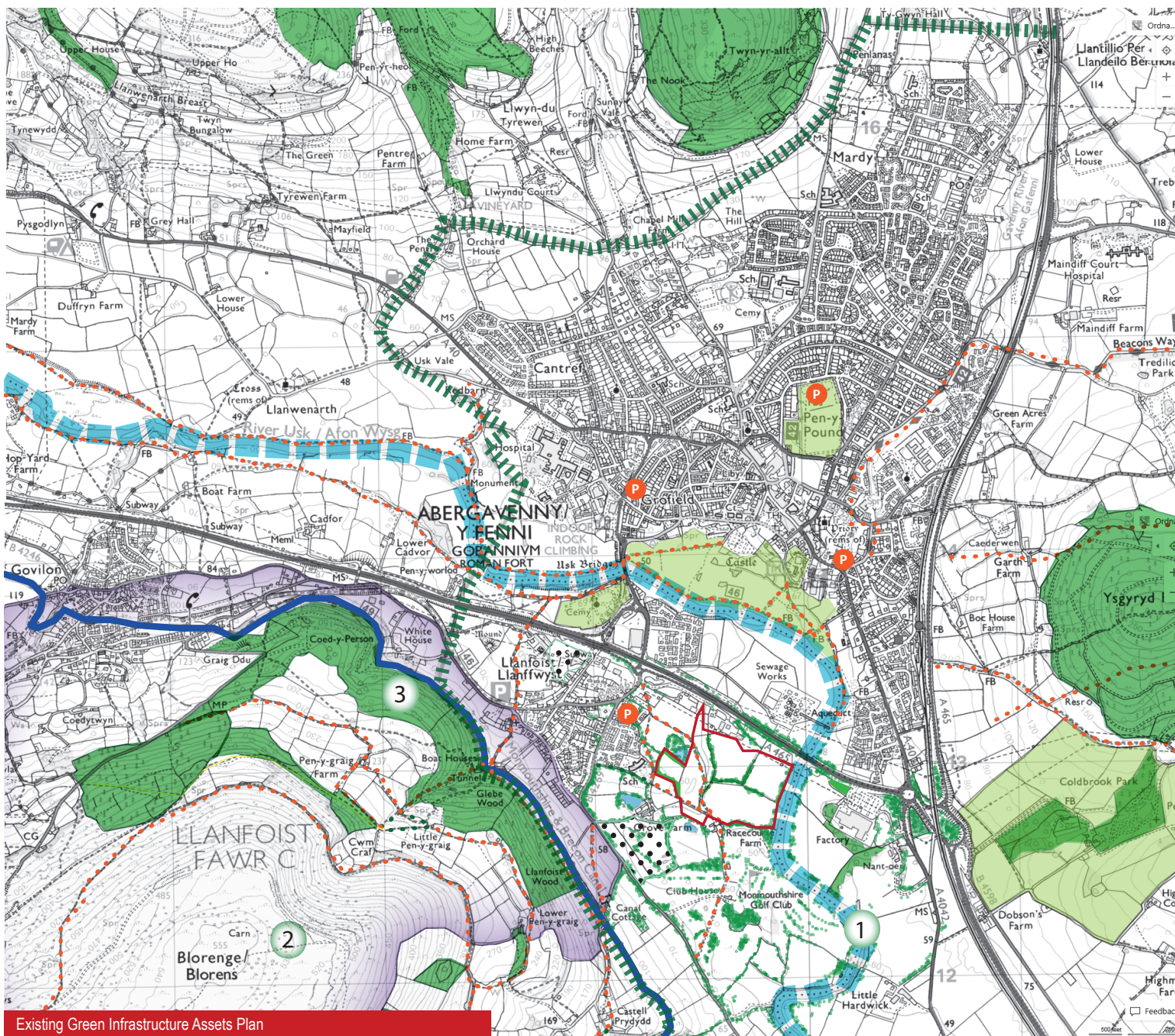
The site itself covers an area of approximately 2 ha and is currently managed as a mixture of scrub and grazing which is subdivided into small paddocks. The site's topography is heavily undulated with a high point to its centre, falling both north and south and most steeply towards the River Usk floodplain.













The most notable existing vegetation comprises native boundary hedgerows interspersed with hedgerow trees, together with a small group of 'Category C' trees including an over-mature Ash in the centre of the site and a mature Oak adjacent to the care home. The majority of the site's hedgerows have not been managed in recent times and have become over-mature and gappy. The remainder of the site consists of semi-improved grassland with areas of encroaching scrub, particularly in the north of the site.

Within the immediate vicinity of the site, there are a number of significant Green Infrastructure assets including the tree lined River Usk and its floodplain, the overgrown pond and associated marginal habitat to the west, two small ponds within the adjacent farms, and several mature tree groupings along the boundaries of the floodplain fields to the east.

Two public rights of way cross the site. A north/south footpath enters the site between the northern edge of the pond and the care home. From here, the path runs in a south easterly direction towards Racecourse Farm and beyond, to cross Monmouthshire Golf Course. A second footpath runs in a broadly east-west direction passing the southern boundary of the Llanfoist Fawr Primary School and continuing to cross the site and join with the north/south footpath at Racecourse Farm. Currently a dense bank of brambles blocks the linkage between the care home and the site at the boundary.

In addition to the ecological assets already described, the adjacent plan maps the existing green infrastructure assets to be protected and where possible, strengthened.



-  Application Boundary
-  Large woodland areas
-  Areas of Amenity Importance (Monmouthshire)
-  Historic Parks and Gardens
-  Site of Special Scientific Importance
1 The River Usk; 2 Coed-y-Person; 3 The Blorence
-  The River Usk
Special Area of Conservation
-  Blaenavon World Heritage Centre
-  Public Right of Way
-  Site of Importance for Nature Conservation
-  Brecon Beacons National Park Boundary
-  Play Areas
-  Monmouthshire & Brecon Canal
-  Earth Centre
-  Potential groups of tree planting
topsoil placement to soften landfill
-  Grove Farm SINC
-  Notable trees with Veteran status
or bat roosting potential
-  Key Opportunities
- 

Existing Green Infrastructure Assets Plan

4 - Interpretation

The sites context, physical and environmental features and constraints are identified in the preceding sections of the design and access statement. These have been interpreted as a series of opportunities and constraints that synthesises all of the key information that influences the design objectives of the brief.

Opportunities

- To use the contours of the site to design a challenging and unique CRC with cambered bends and vertical climbing
- To use the level areas of the site near to the entrance that will be suitable for coaching beginners and school children
- The size of the site allows multi-circuit options to allow for separate coaching and training to take place at the same time
- To use the site levels to create excellent spectator viewing areas
- To use the natural features to create opportunities for cyclo-cross and MTB trails around the site.
- To integrate with existing supporting infrastructure located at the One Planet Centre and Llanfoist School
- To strengthen natural habitats and green infrastructure corridors – e.g. ecological diversity, native planting, wetland improvement, key views
- To improve pedestrian access into the site and to features including the pond
- To use existing vehicle access points into the site

Constraints

- Minimise development within the C2 flood risk area and focus on the higher ground to the west
- To retain key views to the wider setting, protecting natural habitats and the pond
- Minimise construction above the high-pressure gas main
- Minimise construction within the area of former landfill area

5 - Design Development

Initial Concept

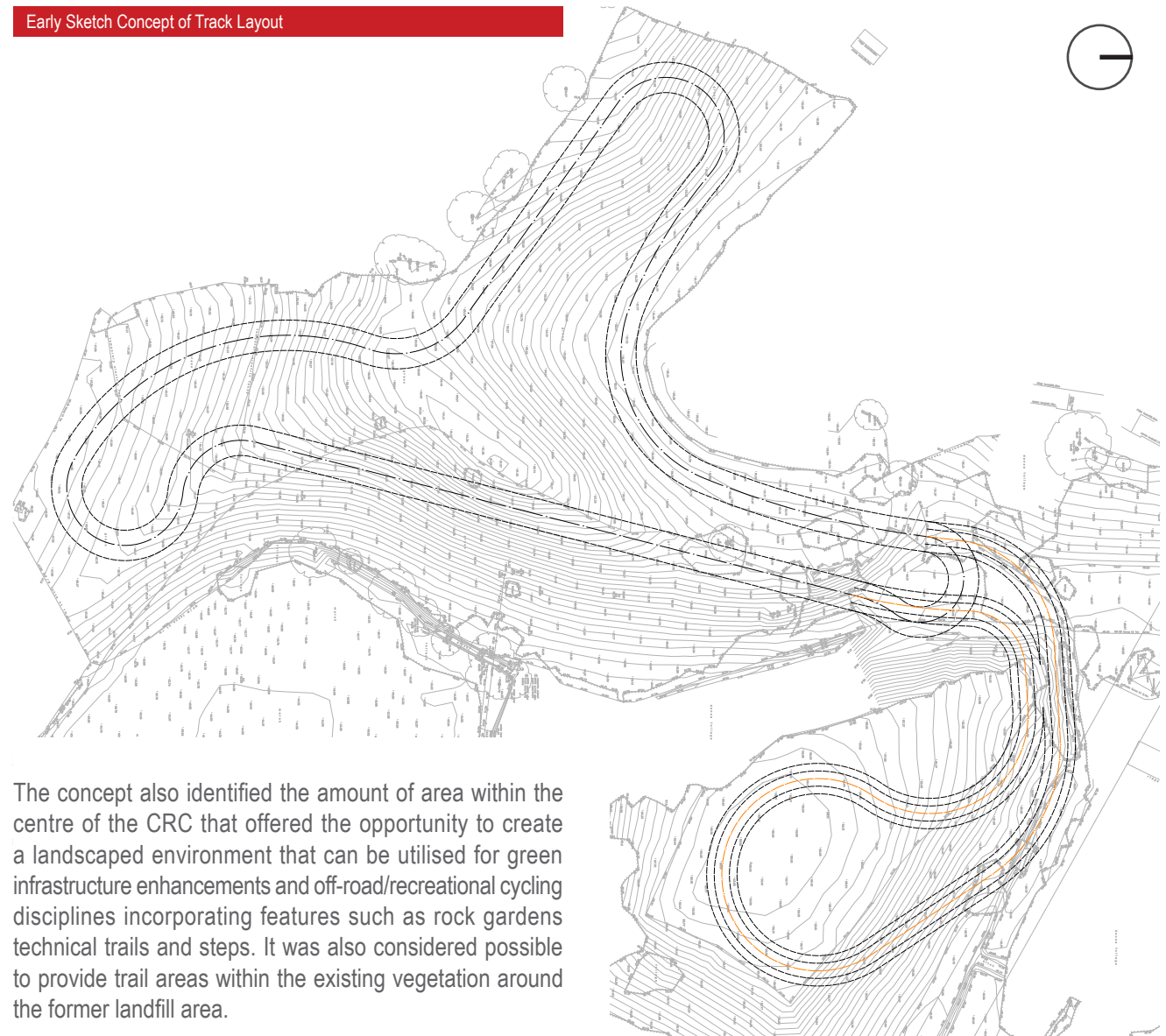
The initial concept focused on establishing the general arrangement of the CRC as the most challenging feature to position within the site.

The design aimed to maximise the length of the potential circuit whilst working within the constraints of the site in terms of levels. The concept for a circuit used the topographic features of the site to create a challenging layout that would be unique amongst similarly closed road circuits but still providing the key components of design recommended by the British Cycling design guidance in terms of widths, length of start / finish straight and level areas for use in training and by groups with more limited mobility.

The concept layout of the closed road circuit results in a potential layout that provided a track length of just over 900m on the main section of the site and around 1300m using the area of the landfill. A 250m start/finish straight was included as required by the design guidance for regional level racing - the area would be at a natural high point on the site that will assist officials in being able to maintain an overview of the circuit.

The design of the closed road circuit was positioned to be located outside of steeply sloping land and the areas of the flood plain. As a result, this opened up those areas for use in creating formal or informal tracks for recreational and off-road cycling.

Early Sketch Concept of Track Layout



The concept also identified the amount of area within the centre of the CRC that offered the opportunity to create a landscaped environment that can be utilised for green infrastructure enhancements and off-road/recreational cycling disciplines incorporating features such as rock gardens technical trails and steps. It was also considered possible to provide trail areas within the existing vegetation around the former landfill area.

Developed Concept

The concept was subsequently developed with the findings from several technical studies.

The Phase I and II Geo-environmental and Site Investigations (January 2020) was key to establishing the development potential of key areas of the site including the area of landfill. The report recommended that no development is progressed on the landfill due to the thickness of the clay capping layer resulting in the presence of waste materials at shallow depth including metal and glass.

The Health and Safety Executive (HSE) is a statutory consultee for certain developments within the Consultation Distance of Major Hazard Sites/ pipelines. Because of the presence of a high-pressure gas main, a formal consultation in January 2020 under the Town and Country Planning (Development Management Procedure) (Wales) Order 2012, established that the HSE did not advise, on safety grounds, against the development although restriction on occupied buildings or major traffic routes within a certain proximity of the pipeline would apply.

Initial ecological and green infrastructure assessments resulted in a greater understanding of the importance of the pond habitat and the need to position the track further away from the pond edge. This resulted in simplification of the track layout and the removal of cross-over inter-sections between various combinations of loops.



An arboricultural survey was carried out in the spring of 2020 with any trees of particular merit have been noted and where necessary, additional protection measures have been considered

Three trees were identified that make up the small clump in line with the proposed track – two Hawthorn and one Ash. All are in the mature or over-mature category and have a variety of structural defects present, including the decay fungus. Given the setting, the large number of other mature Ash and Hawthorn around the edges of the site, and their structural condition their removal to facilitate the design of the site was agreed.

A series of ecological surveys have been undertaken since June 2019. The Phase 1 habitat survey identified Great Crested Newts and bats have been recorded on site and the green infrastructure concept plan has been developed in consultation with the project ecologist to ensure maximum protection and habitat connectivity/creation is afforded to this species.

The ecological recommendations included that the following considerations be undertaken in the design:

- Sensitive lighting design in the vicinity of potential nocturnal species
- Retention of trees and as much dense scrubland as possible
- Use of predominantly native species within planting proposals
- Incorporation of additional wildlife features within the design including insect hotels, hibernacula

Lighting of the circuit at night, particularly during the winter months is a design requirement. However, the impact of light on bats and their habitat as well as light spill on the ground habitats of Great Crested Newts was identified as an ecological concern. The landscape visual impact assessment also identified the impact of lighting columns visible within the landscape.

Evaluation of these concerns established certain design objectives

- Minimising the area of the circuit with street lighting, particularly near to the pond and to maintain darkened corridors
- Reducing the height of lighting columns to minimum through the use of extended lighting arms
- Lighting positioned on the outside edge of the track and the use of back cut off louvres to reduce back spill onto the pond and hedgerows
- Reduce lighting spill outside of the circuit area and including the green areas inside the track to below 1 LUX
- The use of warm white colour LEDs in accordance with conservation guidance

Track & Recreational Components

Track length

The exclusion of the landfill area for the CRC route removed the potential to create a circuit length greater than 1km in length. Discussions with British Cycling and Welsh Cycling indicated that a c1km circuit length would be acceptable if it was combined with a greater focus on variety to provide a multitude of interest for different users. Recent experience of velo park developments across the UK showed that interest and participation levels were greater where developments provided variation.

Track width

Variation of the track width has also been considered with current design guidance specifying 6 metres as this maximises race numbers. However, it is possible to reduce the width with the overall race numbers determined post construction and at the final risk assessment stage when the impact of bends and straights approaching bends on rider safety can be assessed. However, given the challenging nature of the circuit, and the use of the topography to create corners with downhill sections it was concluded that the 6m width was appropriate for rider safety.

Lighting

Further discussions with Welsh Cycling established that lighting a smaller section of the circuit was acceptable so long as it maintained the potential for the facility to be used for training and coaching at night.

Recreational and off-road features

Further discussion with Welsh Cycling identified that recently developed facilities such as Wakefield, Leeds Brownlee Centre that a road circuit in isolation hadn't generate enough user throughput to be sustainable. Greater emphasis would be required on additional features that can keep participants interested in longer and attract more users (families/recreational cyclists). Discussions with representatives of Abergavenny RC confirmed that options for cyclo-cross to take place on the site would be a major attribute with growing participation in the sport. Consideration was given to carefully placed steps, gates, sandpits and access points to bring cyclo-cross events onto the circuit.

Ancillary facilities

A café/social hub building can help drive use of a facility and provide the opportunity for secondary income. Given the nature of the site physical constraints and the availability of nearby fast food and coffee shop facilities, such features have not been included at this stage. However, the One Planet Centre has potential to be used or a suitable modular eco-building could be added at a later date for this purpose. The One Planet Centre will provide access to toilets and changing.

Storage facilities

Storage facilities for cycling club and user equipment and bikes is a key requirement. Recycled shipping containers are a popular choice because of their adaptability and security and Welsh Cycling has specified the need for 3 containers to be included within the scheme.

Access to water

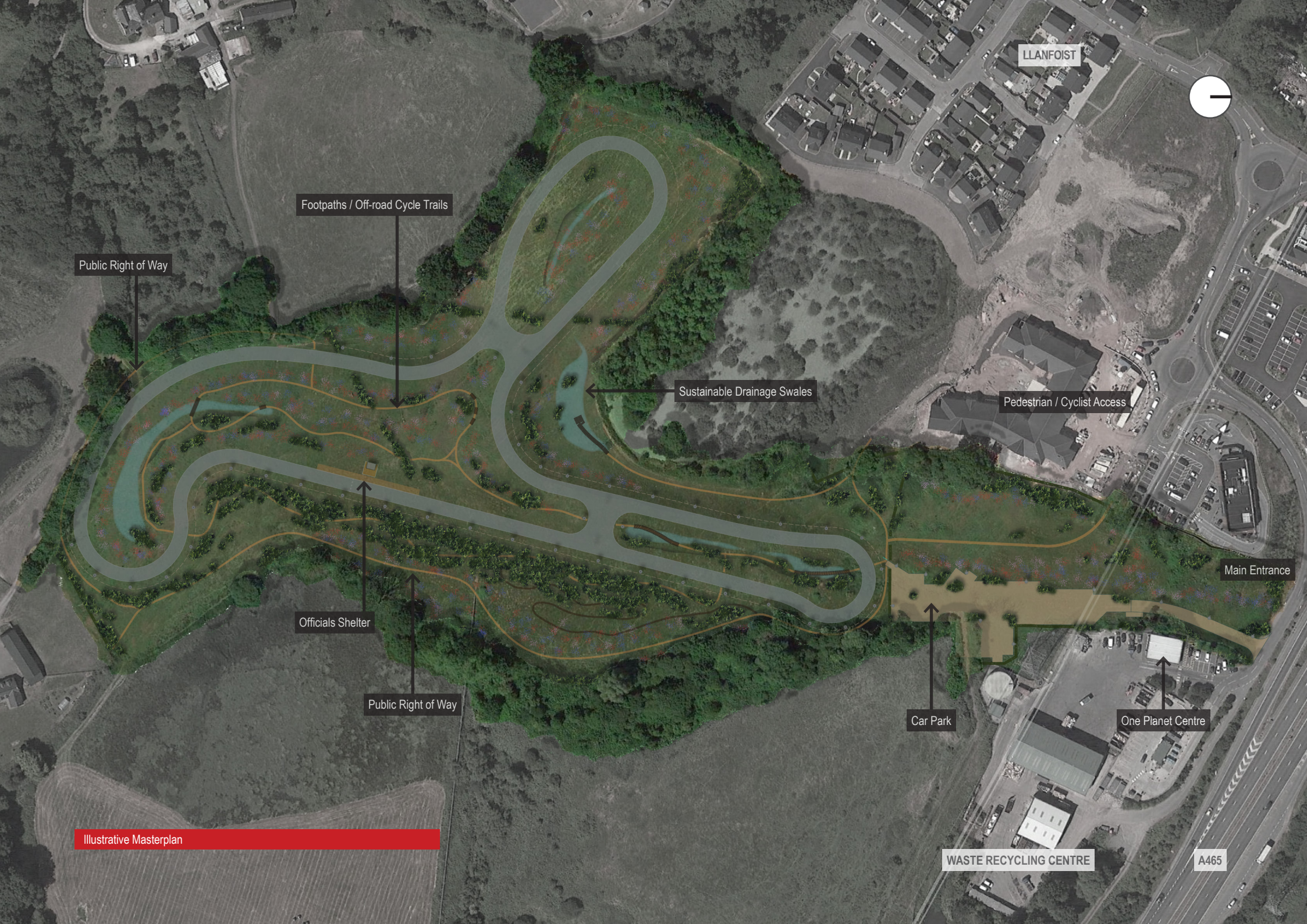
The facility users are unlikely to require bike wash facilities because the primary activity will be cycling on a road surface. The nature of the recreation routes using gravel paths will also not need washing facilities. However, an outside tap in the vicinity of the car park would be an advantage for winter season regional and national cyclocross events to service the pit areas.

6 - The Proposal

Monmouthshire County Council and Welsh Cycling have identified the need to develop a closed road circuit (CRC) or 'Velo Park' to act as a base for cycling across the county and to enhance Monmouthshire's reputation as a premier cycling destination. The facility will support the promotion of more high-quality cycling events and cycling for leisure, tourism, grassroots club and school's development.

The Velo Park includes a mix of leisure and competitive cycling facilities suitable for road, cyclocross and entry-level mountain biking. The emphasis is on providing features that attract a broader range of users (families, leisure cyclists, competitors) to experience coaching, training, racing as well as recreational use. It will also be available for other wheeled and non-motorised sports including running, roller skiing and use by wheelchairs and adapted bikes.

The proposal should be read in conjunction with the background studies and documentation including the planning statement, transport statement, green infrastructure and landscape and visual impact assessment, flood consequences assessment and ecology studies.



LLANFOIST



Footpaths / Off-road Cycle Trails

Public Right of Way

Sustainable Drainage Swales

Pedestrian / Cyclist Access

Main Entrance

Officials Shelter

Public Right of Way

Car Park

One Planet Centre

WASTE RECYCLING CENTRE

A465

Illustrative Masterplan



Cycling Facilities

The design reflects the suitability of the terrain for a mix of different cycling facilities built around a core closed road circuit (CRC) together with cyclocross and introduction level mountain biking. The velo park includes:

- A 6m wide circuit that is 1.13km long with 41m of ascent per lap. The circuit is capable of being used as three individual smaller circuits that allows maximum flexibility for managing several coaching and training activities at the same time.
- The main circuit is 0.91km long with 35m of ascent (excluding the western loop) and benefits from street lighting that allows winter and evening activity to take place.
- A 250m start and finish straight suitable for regional and national events with a finish line shelter for timekeepers and officials
- The proposals incorporate a series of recreational trails located within and alongside the CRC that encourages recreational cycling as well as cyclocross and entry-level mountain biking.
- Three shipping containers are located within the car park and adjoining the One Planet Centre for the storage of cycling equipment for Welsh Cycling and local clubs. There are opportunities for integrating with the Centre's classroom for associated velo park activities including coaches training, event registration etc.

Overall, the facility has been designed for leisure, coaching, training and competitive cycling as well as other wheeled and disability sports(e.g. wheelchair, Nordic skiing as well as running).

Response to Planning Policy

The design has been developed in accordance with the Monmouthshire County Council Local Development Plan (2011-2021) as well as other national and local level plans and guidance including:

- Planning Policy Wales (PPW) (Edition 10), December 2018
- Technical Advice Note (TAN) 16 - Sport, Recreation and Open Space
- Green Infrastructure SPG (MCC April 2015)

The Planning Statement supporting the Design and Access Statement considers the design in the context of these policies and found it in accordance with national and local planning policies in relation to its purpose and function. The site itself is considered to be acceptable in terms of the potential impacts of the facility within its boundary but also the potential impacts the surrounding area including upon the wider landscape, wildlife and neighbouring uses.

Site Sections

The following pages detail a series of cross-sections through the site, illustrating the spatial arrangement of various elements within the proposals and the existing and proposed profiles of the landscape. The iterative design process sought to achieve a balance between providing a dynamic and challenging CRC, whilst minimising the requirements for excessive import or export of materials and the creation of a landform that is both complementary to the surrounding landscape and reduces any visual intrusion.

Racecourse Farm post & wire boundary strengthened with tree & hedge planting

800mm mown grass edge to 6m cycle track grading into wildflower meadow

Area between cycle tracks managed as wildflower meadow

Tree Planting to upper slopes to filter views of the cycle track

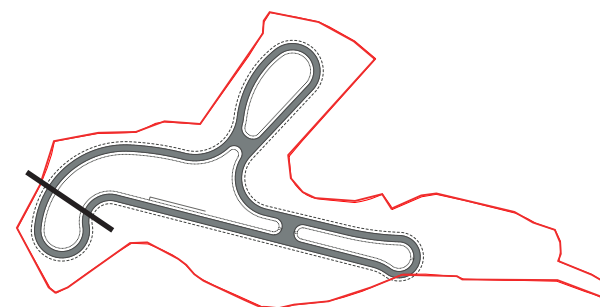
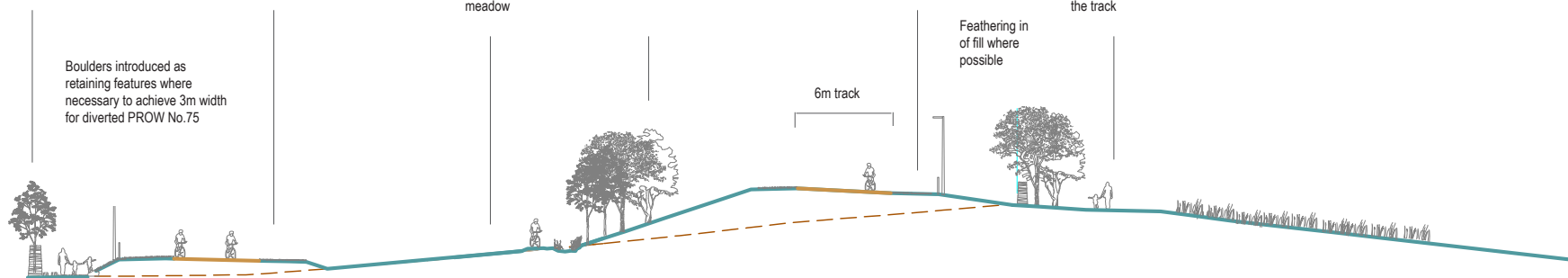
800mm mown grass edge to 6m cycle track grading into wildflower meadow

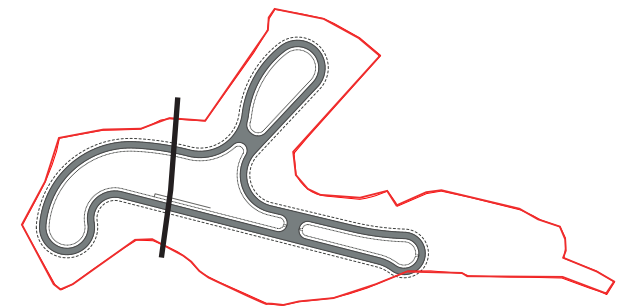
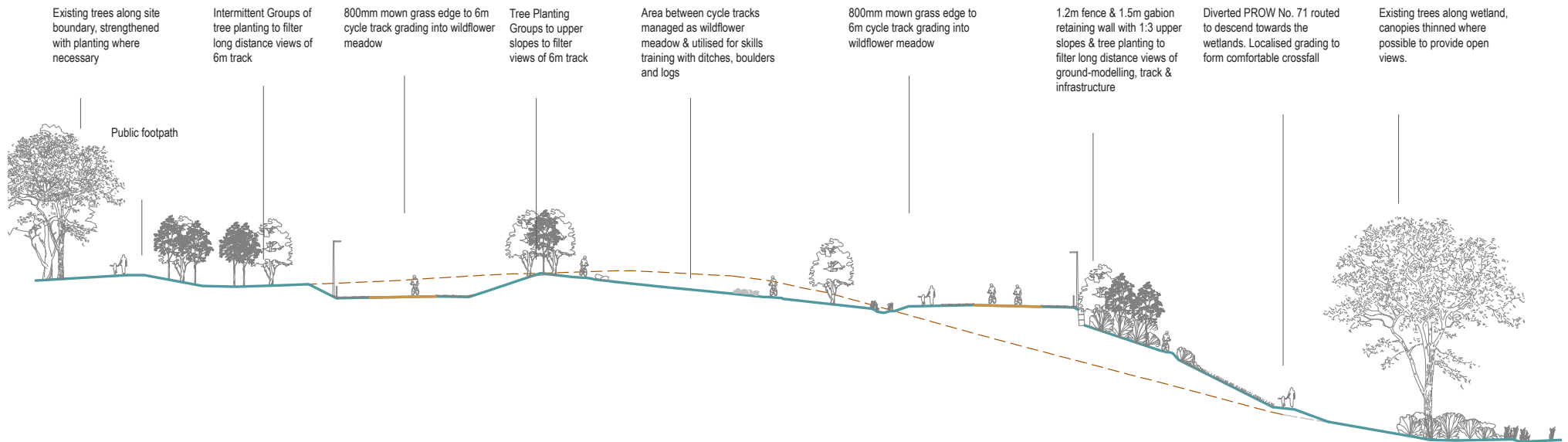
Hedge & tree planting between track & PROW to filter close views of the track

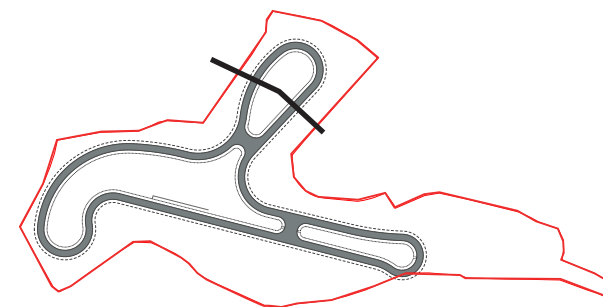
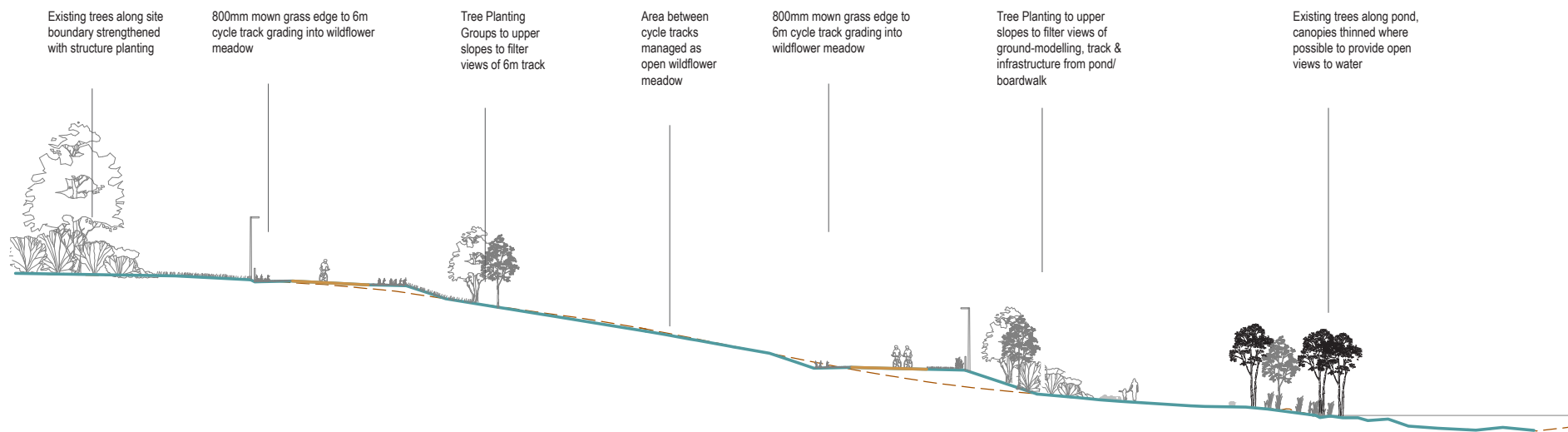
Boulders introduced as retaining features where necessary to achieve 3m width for diverted PROW No.75

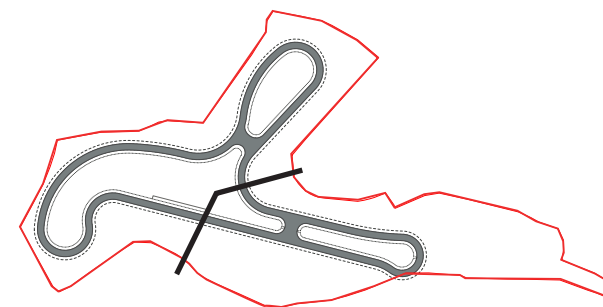
Feathering in of fill where possible

6m track









Landscape Character Enhancement and Mitigation of Impacts

Key character enhancement objectives are to strengthen existing vegetation features and to form new linkages including infill planting to hedgerows and low level planting along the floodplain margin. These 'Green Infrastructure' linkages would strengthen landscape character, provide visual filtering and form important wildlife corridors. Largely linear blocks have been introduced in response to the local field network character and pockets of planting extend existing hedge-lines. Open 'field like' zones have been retained such as the 'western field' and the 'eastern meadow slopes' which fall to meet the floodplain.

Lighting Mitigation

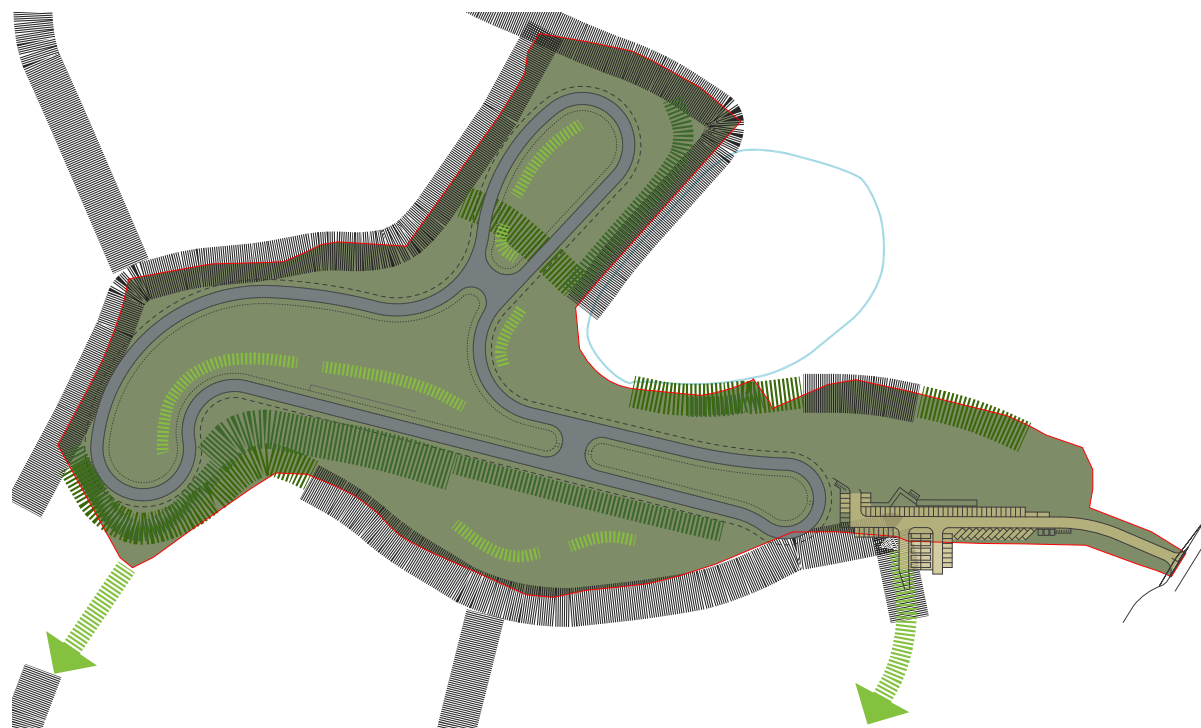
Baseline studies have revealed that the mitigation of lighting effects will be necessary. Belts of planting along the western bank of the cycle track and across the eastern arm of the track have been introduced to filter views. Lighting has been omitted in the 'western field', which was visible from many of the viewpoints, so that it remains largely free of light and taller features. Track use in the evening will exclude the western field.

Visual Mitigation

In addition to the robust belts of planting described above, which will provide visual filtering of the track, smaller pockets of planting have been introduced across the site where they would provide a softening of the new embankments particularly at the transition between new and existing topography. Where attractive views to the wider upland setting are available, a careful balance has been struck between filtering views of the track and retaining those wider views, such as adjacent to the Nursing Home.

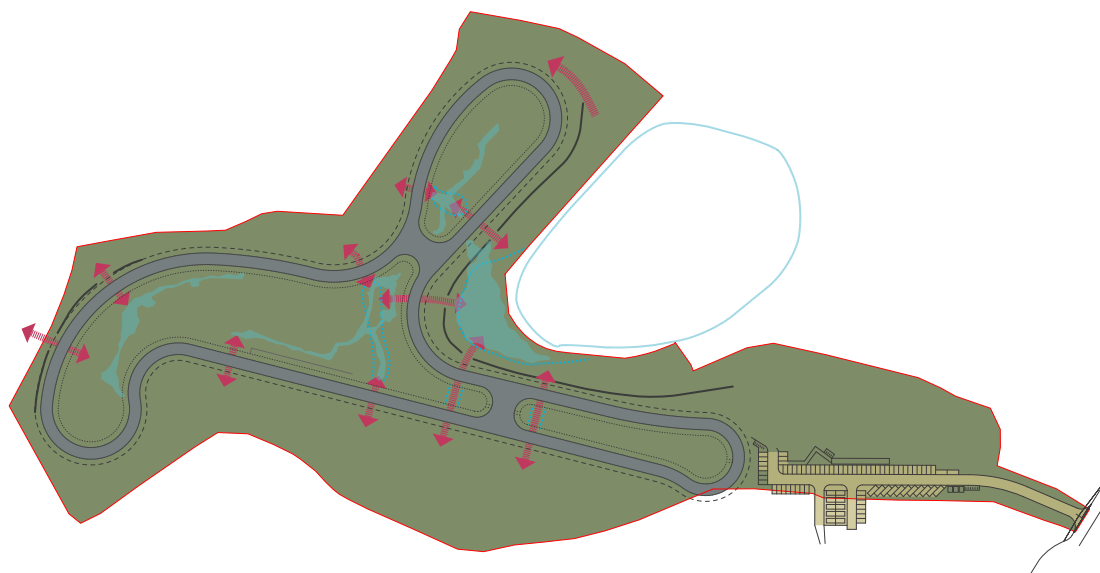
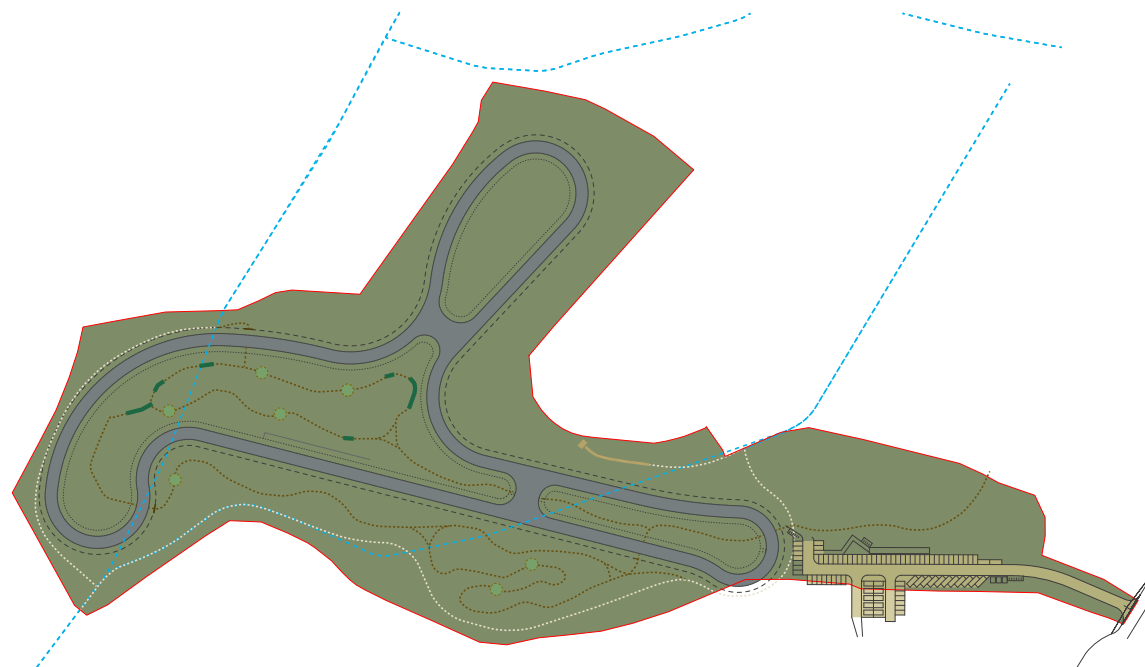
Landscape / ecological structure and connection

The existing boundaries and edges are a key asset in terms of ecological and landscape value. The proposals reinforce these elements to create substantial continuous hedge-lines and woodland belts that will expand and connect habitats, and provide landscape enhancement and visual screening. Their arrangement will also help to repair the local landscape character.



Integrated drainage, habitat creation and connectivity

The interior elements of the site also provide extensive opportunities for habitat creation, and the proposals include areas of wildflower meadow, low scrub, and small groupings of trees. The landform will include slopes and undulations, together with areas of stone, boulders and log piles. The SuDS drainage will provide a network of routes to help direct amphibians towards tunnels which pass under the cycle track, to aid their safe migration.



Integrated recreation routes and facilities

The proposals include the diversion of two public rights of way and additional new connecting routes. Increased accessibility is also supported through the installation of pedestrian gates, well constructed paths and gentle gradients. The experience of the visiting the area is enhanced through substantial improvements to the integrity of the landscape and provision for informal recreation including seating, play, board-walks, nature observation and interpretation.

Ecology

Great Crested Newts – the survey concluded based on the evidence found, that it's unlikely that there is a moderate population present. In accordance with the recommendations the scheme has been designed which ensures that suitable high quality features will be included that will be managed and monitored adequately by MCC. Amphibian underpasses will be installed under the track, hibernation and safe haven opportunities will be provided inside the track, and the remaining grasslands quality maintained and improved.

Bats - activity occurs principally along the dark fringes of the site which are made up of hedgerows and tree-lines and are planned for retention. The light spill from the proposed velo park into these existing zones of dark vegetated habitat has been minimised.

The lighting design has taken all necessary steps to achieve the performance criteria required by British Cycling design guidance as well as limit the environmental impact outside of the circuit area following environmental guidance produced by the Bat Conservation Trust/Institute of Lighting Professionals (Bats and Artificial Lighting in the UK – Guidance Note 08/18)

- No street lighting for the western area of the circuit to minimise environmental impacts in the area closest to the pond and to maintain dark corridor
- Specification of extra warm white lighting colours (warm white 2200k LEDs) to minimise impacts on bats and reptiles
- Full cut off internal louvres fitted to all track lighting for full light cut off behind luminaire.
- Minimising and avoiding where possible lighting on key habitats and features. The light spill outside of the circuit surfaced area would be below 1 LUX and achieves acceptable ecological standards.

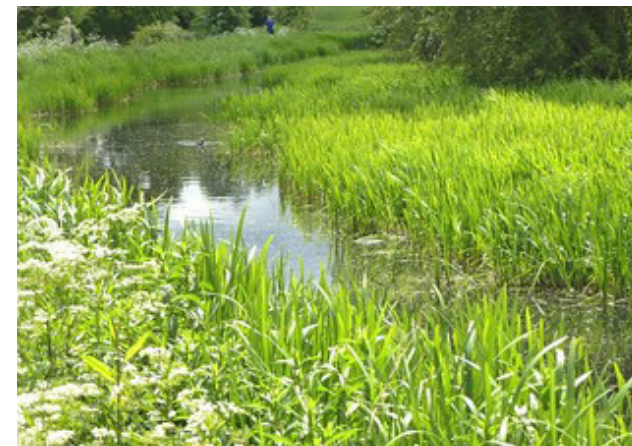
It is considered that the proposed development satisfies LDP Policy NE1 – Nature Conservation and Development.



Cycle track underpass for amphibians

Flood Risk and Drainage

A Flood Consequence Assessment has been prepared for the site and design which concludes that the consequences of flooding can be acceptably managed for the lifetime of the development. The velo park, would be expected to remain dry in all but the most extreme weather conditions. Certainly, the proposed development would be operated with minimal risk from flooding, would not increase flood risk elsewhere and is compliant with the requirements of TAN15.



SuDS managed as wetland habit

Parking

The design includes 80 parking spaces which is in accordance with the assessment of similar CRC's and accommodate the entire demand associated with training and coaching activity as well as most larger scale events. A number of parking bays have been enlarged to accommodate camper-vans popular among traveling competitors. The field owned by Monmouthshire CC to the east of the site and adjacent to the Llanfoist Household Waste Recycling Centre shall serve as the primary ad-hoc overflow parking area if required during the dryer summer months and can accommodate a total of 320 spaces. The overflow parking spaces will comfortably accommodate demand associated with national scale events and prevent overspill parking on the adjacent highway network. Furthermore, should further off-site parking provision be required or if the field is unavailable, other options exist including the nearby Llanfoist Fawr Primary School car park (52 spaces). All off site and overflow parking options, including the use of the school's parking, shall be agreed prior to any large-scale events being sanctioned and managed in accordance with the velo parks Event Management Plan .

Lighting

In contrast with other outdoor sports facilities, cycling circuits do not require floodlighting. CRC's require street lighting that extends the use of the facility for coaching and training into evening and throughout the winter months. Presently, British Cycling regulations do not allow racing and competitions to take place under street lighting.

Ecological surveys have established the presence of bats and reptiles that could be affected by lighting of both the cycling circuit and parking areas. Accordingly, the lighting design scheme has been designed to the specific environmental and physical features of the site and use. The lighting scheme includes two separate elements - the lighting of the car park and street lighting that allows a reduced area of the circuit to be used during the evening.

The lighting design has taken all necessary steps to achieve the performance criteria required by British Cycling design guidance as well as limit the environmental impact outside of the circuit area following environmental guidance produced by the Bat Conservation Trust/Institute of Lighting Professionals (Bats and Artificial Lighting in the UK – Guidance Note 08/18)

- No street lighting has been included for the western area of the circuit to minimise environmental impacts in the area closest to the pond and to maintain dark buffers and corridor
- 5m high lighting columns combined with extended arms to reduce the visual impact
- All lighting columns positioned on the outside edge of the track behind the outside barrier fence line for rider safety

- Circuit lighting levels within the range of 15 and 22 LUX following British Cycling design guidance
- Specification of extra warm white lighting colours (warm white 2200k LEDs) to minimise impacts on bats and reptiles
- Full cut off internal louvres fitted to all track lighting for full light cut off behind luminaire. The car parking area uses semi cut off internal louvres.
- Minimising and avoiding where possible lighting on key habitats and features. The light spill outside of the circuit area would be below 1 LUX and achieves acceptable ecological standards.

The use of LED lights is specified because they are more directional with light produced in a narrow beam and warm white 2200k LEDs are specified to help limit any ecology impact.

The car park optic has an average of 10 LUX which is appropriate for the type of usage in this setting. Lighting spill grid calculations have been produced at various heights including 0m, 2.5m and 5m. The 5m results show no direct light outside of the circuit area as all the light leaving the fittings goes downwards. At 2.5m and 0m the light spill outside of the track and within the green areas located inside the track is kept below 1 LUX.



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