St. Cleer Horizon Farm

FEASIBILITY REPORT

November 2019

Quality information

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Introduction

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1. Introduction

1.1. About this report

St Cleer Parish Council are producing a Neighbourhood Plan for their area and have secured technical support from AECOM via the MHCLG support programme delivered by Locality, to undertake masterplanning advice and feasibility testing for an emerging site allocation in their Plan.

The Parish Council intends to allocate the former Horizon Poultry Farm, Tremar, as a residential-led development delivering potentially 60 to 70 dwellings plus 50 extra care and employment use.

This is a brownfield site that was previously an intensive egg farm and packaging factory. There have been previous planning applications for development on this site and as a result it has been subject to considerable analysis by the existing owner and local people involved in the neighbourhood plan steering group, resulting in an high level of background information being available.

This AECOM seeks to build on, test and to some extent validate the existing findings and, importantly, present options for connecting the development site to surrounding villages of Tremar and St Cleer. Various options for connectivity, by proposing sustainable, safe and convenient routes will be explored within this report, and potential of the development site to influence various environmental and transport improvements. For this, a simple analysis of the site and surroundings has been produced within the document and explores how the site and associated routes to the surroundings are developed as integral elements to each other.

1.2. Objectives

This report has three main purposes:

- To present AECOM's baseline findings, based on work by technical specialists in planning, landscape, transport planning, geo-environmental, infrastructure and ecology;
- To present opportunities and constraints for development on the site and its connectivity to surrounding villages; and
- To demonstrate the feasibility for development on the proposed site.

1.3. Process

Guided by the Neighbourhood Plan Steering Group, the report has been prepared by AECOM in liaison with a range of interested parties, including Cornwall Council and Commoners of the neighbouring Common Land.

The broad steps undertaken to produce this report have been:

- Initial briefing with the St Cleer Neighbourhood Plan Steering Group;
- Site visit by members of the multi-disciplinary AECOM team, along with some of the above stakeholders;
- Desk-based review of information available;
- Exploration of masterplan options to connect the development to the surrounding villages; and
- High level feasibility study.

Existing site and context

02

2. Existing site and context

2.1. Location

The site is a former poultry farm located within a rural setting approximately 200m from the hamlet of Tremar, and the village of St Cleer. The site is also approximately 3km from the town of Liskeard (less than 2 miles away). The A38 can be accessed in Liskeard, which provides connections to Plymouth, Exeter and the M5. The Liskeard railway station is serviced by the Cornish Mainline Railway mainline with direct services to Plymouth, London, Birmingham and as far as Scotland. The two-hourly bus service 74 from Liskeard to Callington via Tremar and St Cleer runs past the site, and the 174 which runs one bus per day each way to Callywith College in Bodmin.

Cornwall has a diverse geography that has evolved from being a peninsula and the proximity of the sea. Activities such as mining, agriculture, fishing and tourism have influenced Cornwall's landscape including its countryside, villages and towns. These influences provide Cornwall with a strong local identity and a unique heritage.

The village of St Cleer is surrounded by agricultural heartland, with farming settlements documented before the 17th century AD. The field patterns here are morphologically distinct from the generally straight-sided fields of later enclosure. The agricultural character of the countryside changed significantly in the 18th and 19th centuries when industrial activities, mainly deep mining for predominantly copper occurred.

2.2. Context

The approximately 2ha site is located south of Lower Tremar on a former poultry farm that is now vacant, but the disused buildings remain. The site is classified by the local planning authority and the Planning Inspector as brownfield as its use was more intensive than agricultural use.

The site straddles a C road, Bakers Lane, which provides access to Lower Tremar to the north, approximately 300m away. This connects to Tremar Lane leading into St Cleer from the east. The road is narrow, unlit, has no road markings and no pedestrian footpath. The road is lined by Cornish Hedges and passes under a disused railway bridge which formed part of the former Liskeard and Caradon Railway Line, itself part of the Cornish and West Devon Mining Landscape World Heritage Site.

The larger village of St Cleer is approximately 1200m away by foot via Tremar Lane and contains day-to-day services including a pub, two hairdressers, primary school, church, a sports club and pavillion, playing fields and two community centres. The single track Tremar Lane is unsuitable for larger vehicles, which instead have to travel southwards from the site entering St Cleer via Fore Street (approximately 1800m away). The road approaching St Cleer via Fore Street is unlit with no footpath and runs through Registered Common Land that is also designated Access Land under the Communities and Rights of Way Act 2000. The Common Land also adjoins the western boundary of the site.

Tremar is a small linear hamlet with many mid-nineteenth century properties constructed to accommodate workers from nearby mines and quarries. This small settlement is predominantly residential. Puckator Lane is a traffic-free rural lane that extends from the north west corner of the site to a residential area within Tremar. Tremar Coombe is an additional and smaller hamlet located to the north of Tremar.

The village of St Cleer is a nucleated settlement and contains the Grade I listed St Cleer Parish Church. Several historic buildings surround the church and primary routes to nearby settlements and together form the historic core of the village. Prominent building materials comprise local rubblestone, left untreated or rendered, and slate while details and dressings are mainly of brick, ashlar or granite. Beyond its historic core, St Cleer experienced relatively extensive residential development throughout the 20th century.

The settlements of St Cleer, Tremar Coombe and Tremar have defined boundaries and are separated by green fields. A little way beyond these villages the environs are scattered with small mining settlements nestled within the 'mining landscape'.

The site lies within Landscape Character Area Description CA32 (Cornwall and Isles of Scilly Landscape Character Study) which describes this LCA as having a long history of mining, including areas to the south east around Cardon Hill (to the north of the site). Settlements of mainly isolated farms are serviced by larger villages of Camelford to the far north west, Liskeard and St Cleer. The nearest main village of St Cleer however, offers very limited community services.

Figure 1: Site and surrounding context aerial plan

AONB

HIGHER TREMAR COOMBE and COMMON MOOR

TREMAR COOMBE

DARITE and CROWS NEST

St. Cleer Horizon Farm

St Cleer Parish **sports field**

Hockings House

ST CLEER

Tremar Lane

TREMAR

LOWER TREMAR

ROSECRADDOC

Bakers Lane

COMMON LAND

DEVELOPMENT SITE

LISKEARD & CARADON RAILWAY LINE

2.3. Environment and planning

The following plans identify the planning designations within the vicinity of the development site.

- Figure 2: The site lies within a designated Area of Great Landscape Value (AGLV). The site therefore is within an area of high landscape quality with strong distinctive characteristics making the area sensitive to development. The objective of the ALGV is the conservation and enhancement of the landscape quality and individual character.
- Figure 3: The site is within the Bodmin Moor International Dark Sky Places.
- Figure 4: Shows the Bodmin Moor section of the Cornwall Area of Outstanding Natural Beauty (AONB) to the north west.
- Figure 5: There are 2 Sites of Special Scientific Interest (SSSI) to the north and north west.
- Figure 6: The Cornwall and Isles of Scilly Landscape Character Study defines the site as within Landscape Character Area Description (LCA) CA32 Bodmin Moor, however, is also within close proximity to CA24 Seaton River Valley and CA22 South East Cornwall Plateau.

  (refer to http://map.cornwall.gov.uk/reports_landscape_chr/areaCA32.pdf)

  Within this Character Area are 9 Constituent Landscape Description Units (LDUs). Three of these are completely covered by the AONB and a further five partly covered. All LDUs contain SSSIs. Two LDUs are within the Caradon District World Heritage Site. Five LDUs contain SACs (Special Areas of Conservation).
- Figure 7: There are a number of County Wildlife Sites surrounding the site including the Common Land.
- Figure 8: There is Common Land to the west adjacent to the site and to the north near Lower Tremar.
- Figure 9: There are Tree Preservation Orders (TPOs) on trees along Tremar Lane. This may restrict development sites and certain highway proposals such as road widening or provision of shared pedestrian and cycle route along the road etc.

Source: Cornwall Council Interactive Map (https://map.cornwall.gov.uk)

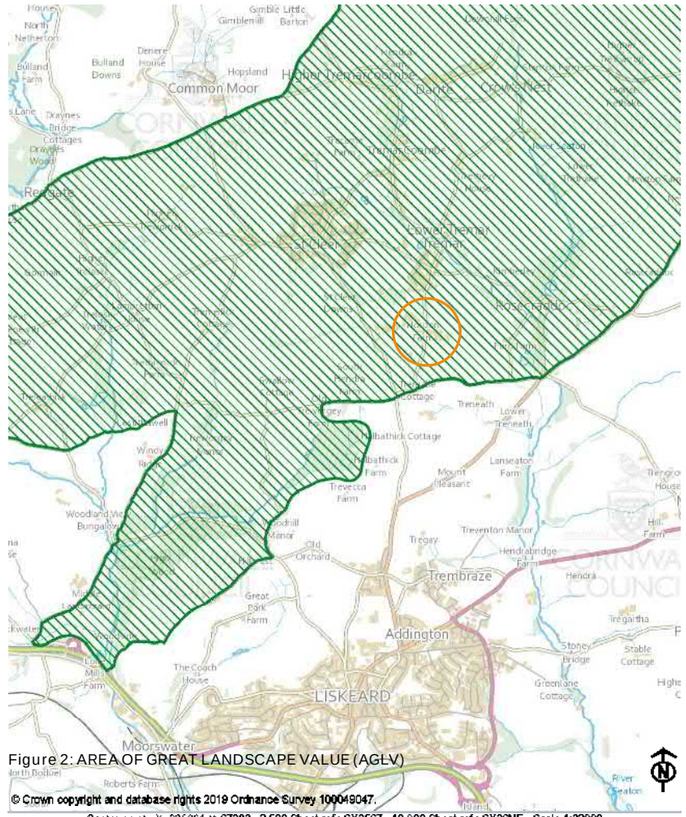

Figure 2: AREA OF GREAT LANDSCAPE VALUE (AGLV)

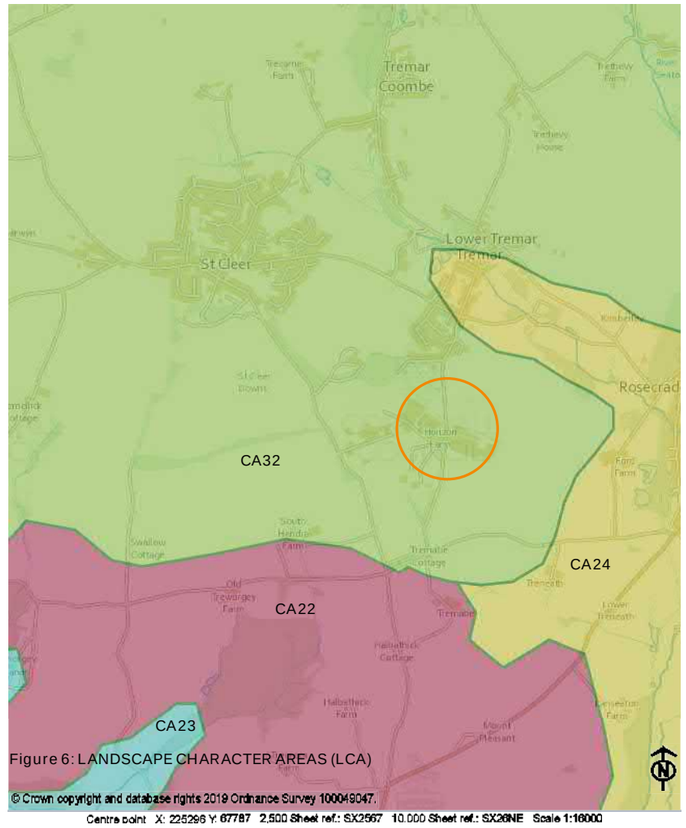

Figure 6: LANDSCAPE CHARACTER AREAS (LCA)

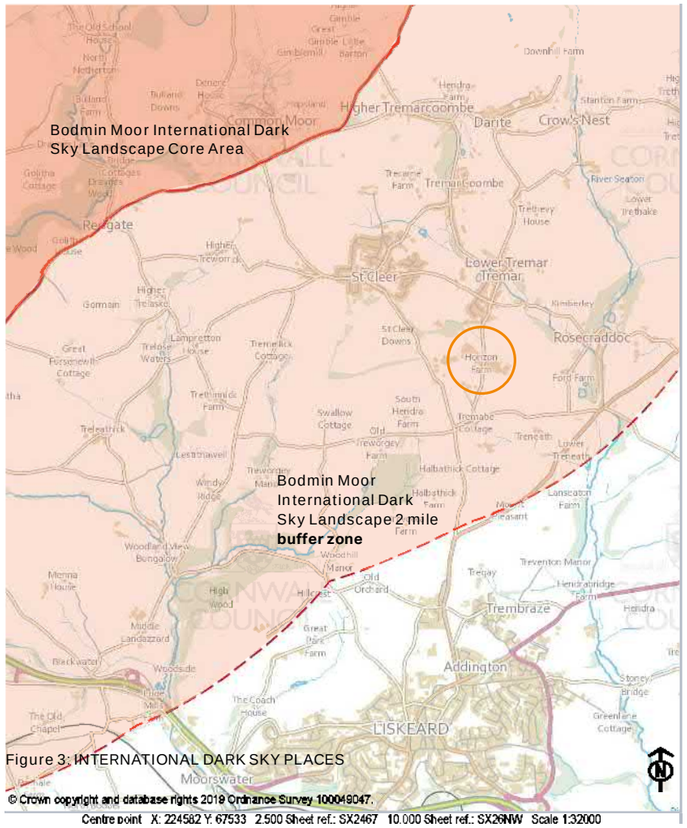

Figure 3: INTERNATIONAL DARK SKY PLACES

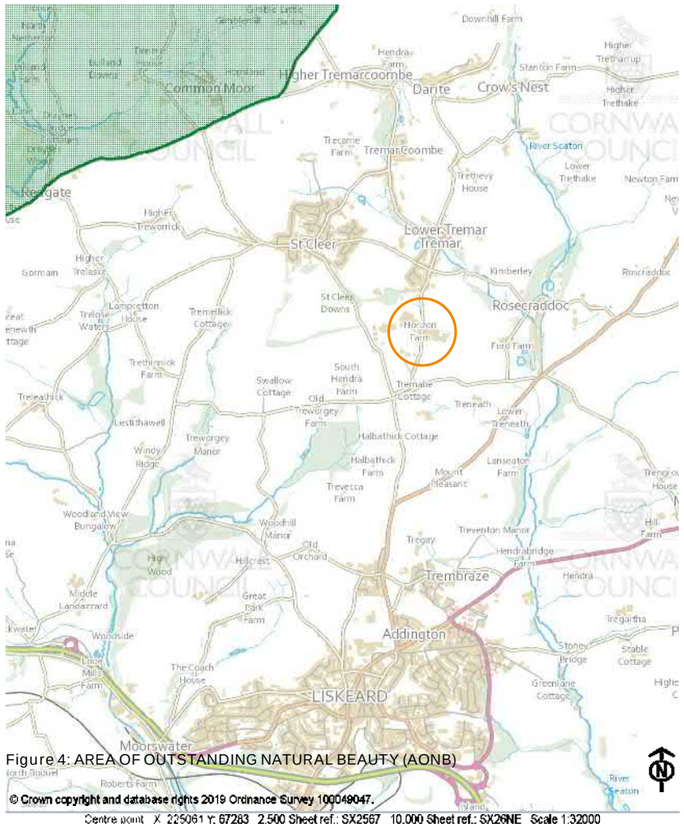

Figure 4: AREA OF OUTSTANDING NATURAL BEAUTY (AONB)

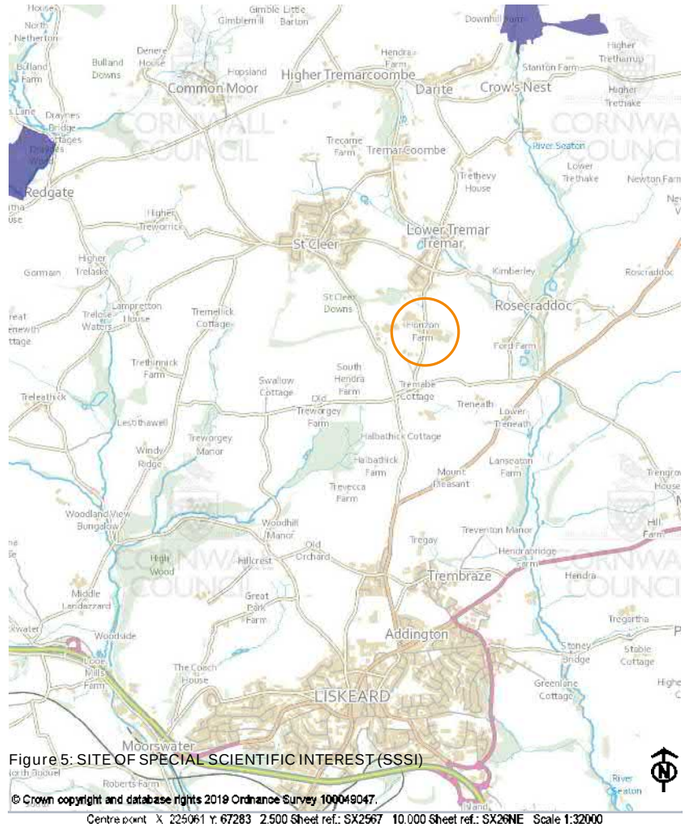

Figure 5: SITE OF SPECIAL SCIENTIFIC INTEREST (SSSI)

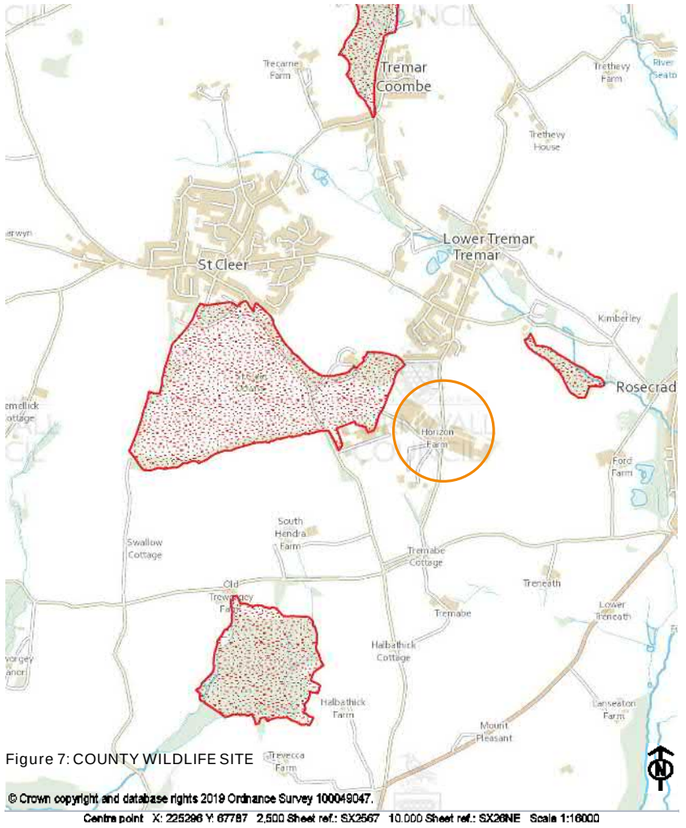

Figure 7: COUNTY WILDLIFE SITE

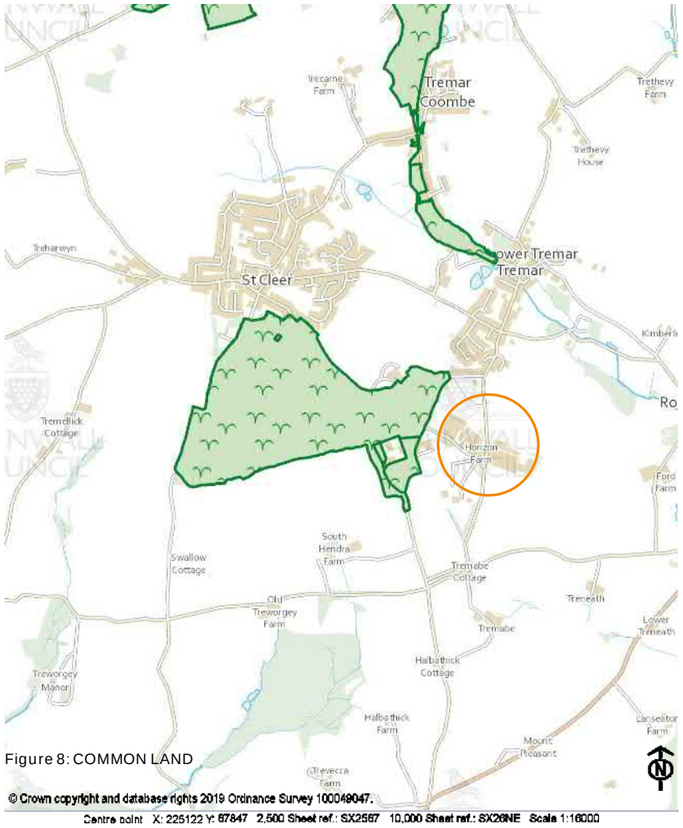

Figure 8: COMMON LAND

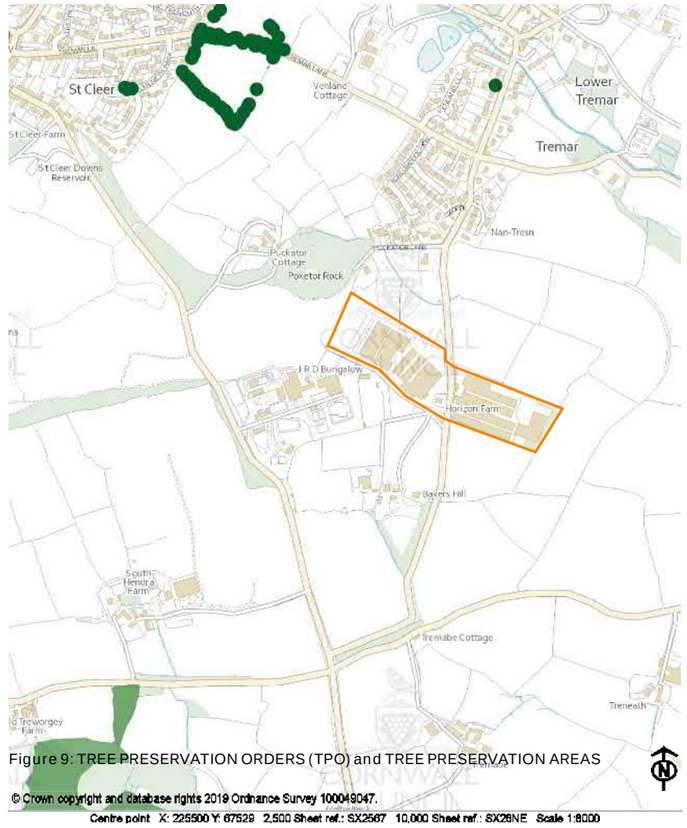

Figure 9: TREE PRESERVATION ORDERS (TPO) and TREE PRESERVATION AREAS

2.4. Existing site

Horizon Farm occupies an approx. 4.6 hectare site, which is divided by a public road from Lower Tremar to Liskeard. The western side of the site contains 2.6 hectares, and the eastern side a further 2.08 hectares.

Previously the site was used as an intensive Battery Hen Farm, egg packing and distribution centre for eggs produced both on and off the site. Approximately 516,100 birds were present at Horizon Farm (448,000 for intensive caged egg production, and 48,600 barn laying hens).

Use of the site ceased in the 2011 due to changes to EU Legislation relating to egg production using caged birds. The poultry sheds were built specifically for this purpose and are now unused and awaiting reuse or demolition. Several of the poultry sheds contain a large amount of asbestos which requires removal by a specialist contractor.

The site currently contains approximately 210,818 sq. ft of buildings which are apportioned as follows:

- Detached Farm Manager's bungalow 1500 sq. ft
- Intensive egg production 93,049 sq. ft
- Barn egg production 80,133 sq. ft
- Packaging/distribution/offices 21,054 sq. ft + additional storage 21,000 sq. ft
- Packing centre and farm shop 6712.00 sq. ft
- Farm office to front of site 871.8 sq. ft

At the eastern end of the site there is an administration/distribution building with functioning office space and extensive clean storage areas. The condition of this building remains good and suitable for reuse.

At present there is a residential property (farm/security managers dwelling) on the western side of the site, the current occupier provides management, security and maintenance of the site. Additionally, there is a functioning farm shop at the eastern entrance which is currently being extended to include a café area and community space.

The remaining and majority of the buildings on site are large poultry sheds of substantial construction ranging from 60m to 115m long, and of a general height of 8.5m to ridge. They have a bulky and dominant appearance in the wider landscape, particularly when approaching the site from Liskeard.

The site also contains several silos, a feed mill, egg collection conveyors, sub-station and other structures and infrastructure associated with the previous use.

When fully operational, the site attracted a significant amount of vehicle movements, particularly HGV's.

(source: Harrison Pitt Architects, Design and access statement, Horizon Farm)

The boundaries of the site are extensively vegetated with mature trees and vegetation that provide intermittent screening particularly when in leaf. However, despite the extensive screening, the bulk and size of the existing buildings are still a prominent feature in the surrounding rural landscape.

The site slopes gradually from west to east (fall in topography).

Puckator Lane is a traffic-free rural lane that extends from the north west corner of the site to a residential area within Lower Tremar. Tremar Coombe is an additional and smaller hamlet located to the north of Lower Tremar.

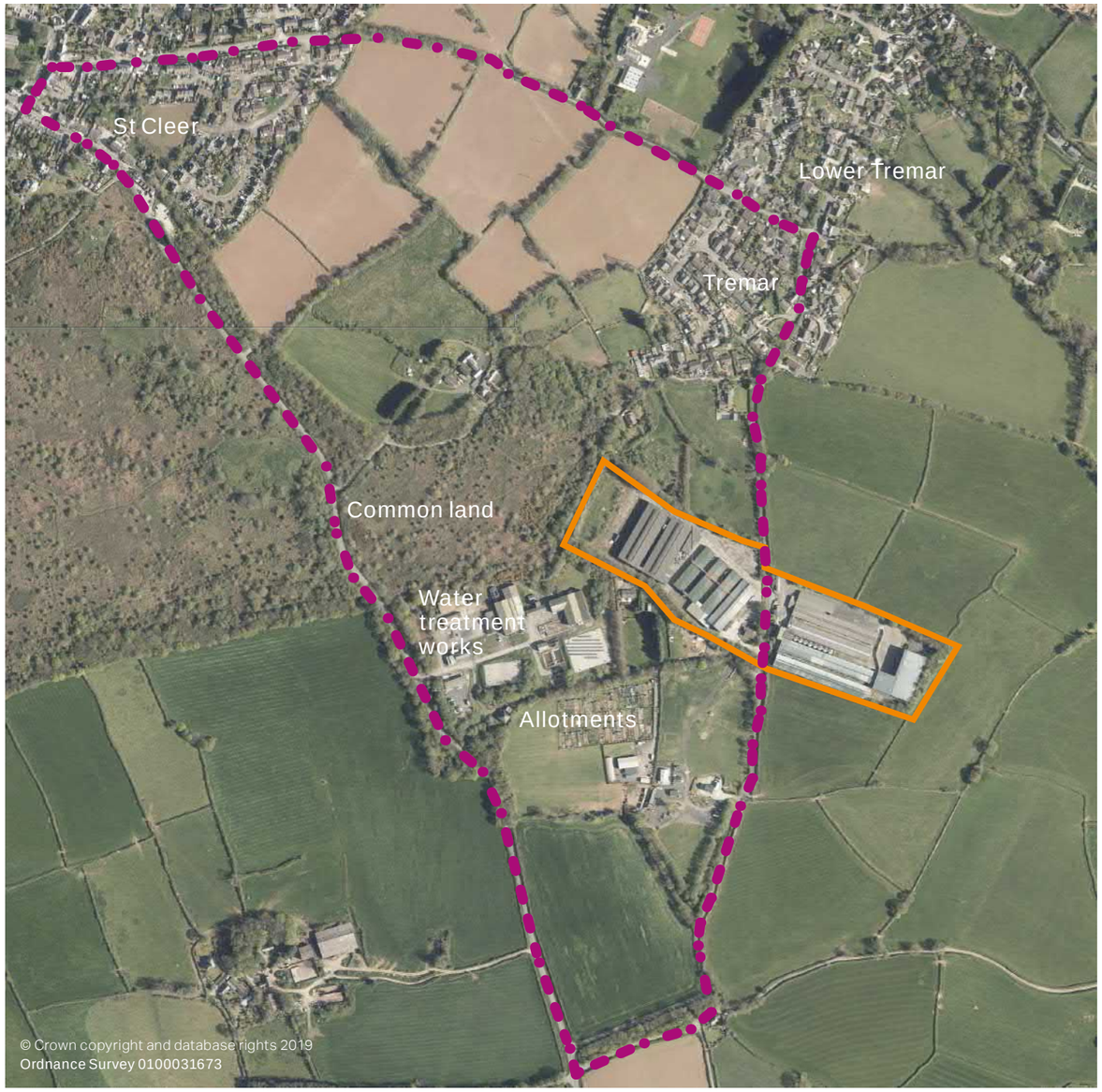

Figure 10: Site and surrounding context
At the entrance to the west site is the Horizon Farm Shop and cafe, nestled within imposing built forms.

Figure 11: Site photo reference plan
At the entrance to the west site is the Horizon Farm Shop and cafe, nestled within imposing built forms.

PHOTO 1: East site entrance
At the entrance to the east site looking south is the Horizon Farm Shop and cafe, nestled within imposing built forms.

PHOTO 2: North of the office building
View looking west with tree and shrubs on the northern boundary.

PHOTO 3 - View to loading bays
Expanse of hardstanding and storage / warehouse buildings.

PHOTO 4 - View to loading bays
Expanse of hardstanding and storage / warehouse buildings.

PHOTO 5 - View to loading bays
Views north east in between sheds to Caradon Hill.

PHOTO 6 - View south along southern boundary
Open southern views in between sheds at southern boundary.

PHOTO 7 - View south between sheds
View to storage sheds.

PHOTO 8 - View north west
View of northern boundary between shed and boundary hedge.

PHOTO 9 - View south west
View of eastern boundary.

PHOTO 10 - View west
Along southern boundary

PHOTO 11- View of southern face sheds at main access.
View of southern face sheds and silo, opposite site manager's bungalow.

PHOTO 12 - View north east towards main site access.
View to farm / site manager bungalow.

PHOTO 13 - View south along road from Tremar to Liskeard
View south at access points of site.

PHOTO 14 - View west to site across road from Tremar to Liskeard
View into site from the main access point

PHOTO 15 - View east outside office buildings
Semi-screened vegetation along eastern boundary

PHOTO 16 - View south from site boundary
Showing open and distant views south

PHOTO 17 - View south west along western boundary
Densely vegetated boundary

PHOTO 18 - View west to existing western gated access
Overgrown with scrub vegetation

Site analysis

03

3. Site analysis

3.1. Site analysis

The boundaries of the site are extensively vegetated with native hedge and trees, and create useful existing screening. Despite the extensive screening, the height and scale of the existing buildings are prominent in the landscape.

The existing landscaping physically and visually encloses the site with limited views to the wider landscape which are to be considered in the development masterplan design.

The site topography slopes gradually from west to east.

There is a traffic-free route from the site to the north west corner with potential access to a track leading to Common Land and to Puckator Lane which continues to Lower Tremar. This gated pedestrian access point however, is at a higher elevation than the site levels and is densely vegetated. The north west corner access point provides an opportunity to create a shared cycle and pedestrian link through Common Land, subject to further consultation and agreements with landowners and local communities.

There are distant views to the AONB and Caradon Hill to the north which is to be considered. The employment site is open along the southern boundary. The future development will need to incorporate screening along this boundary to obscure potential views from the south into the site.

The planting of trees within the proposed development will break the building mass and densify tree canopy cover. A varied species of native and non-native species trees will diversify the site and promote resilience. This will aid integrating the site into the context and provide opportunities for continuing into green infrastructure routes to Tremar and St. Cleer.

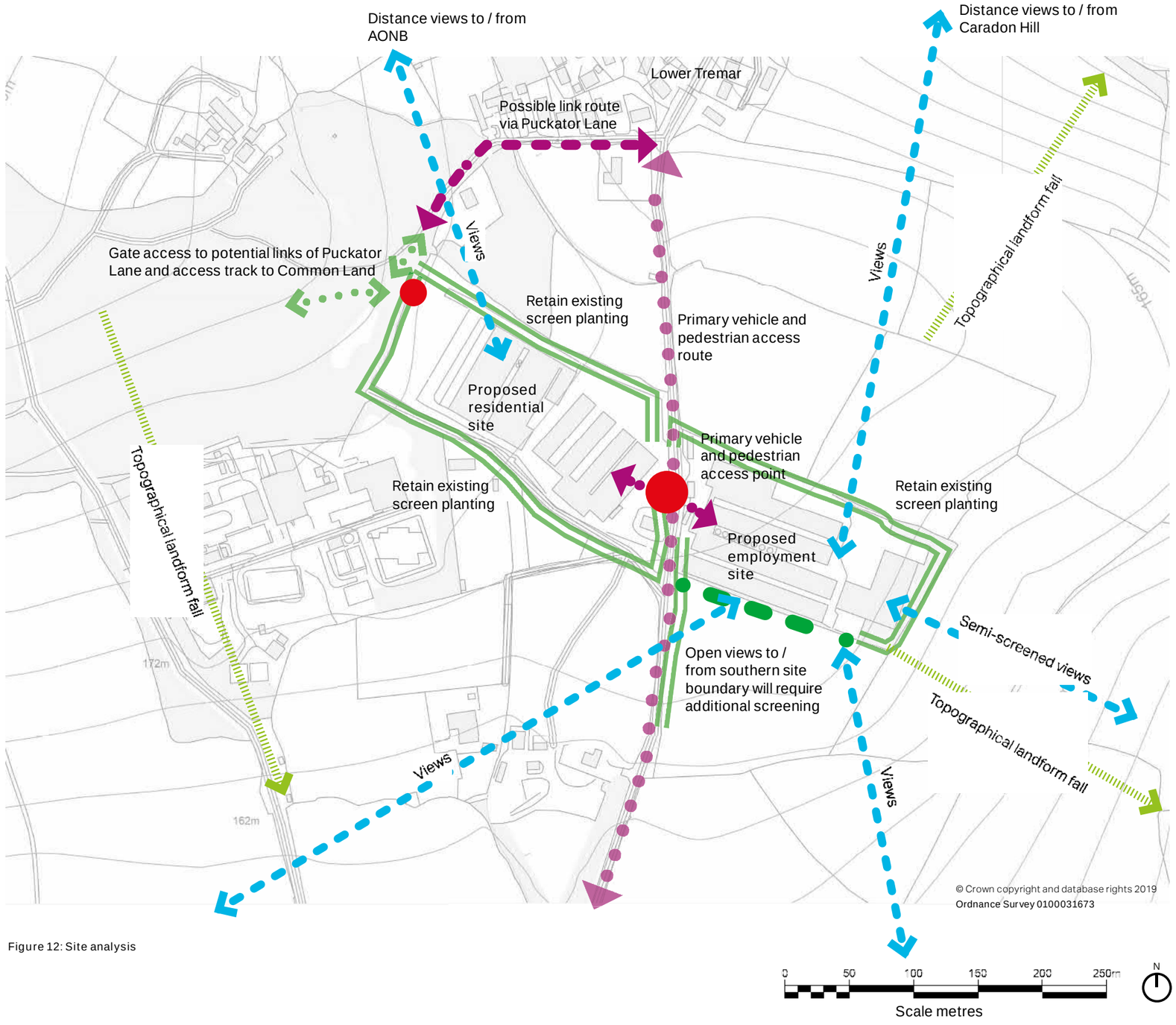

Figure 12: Site analysis

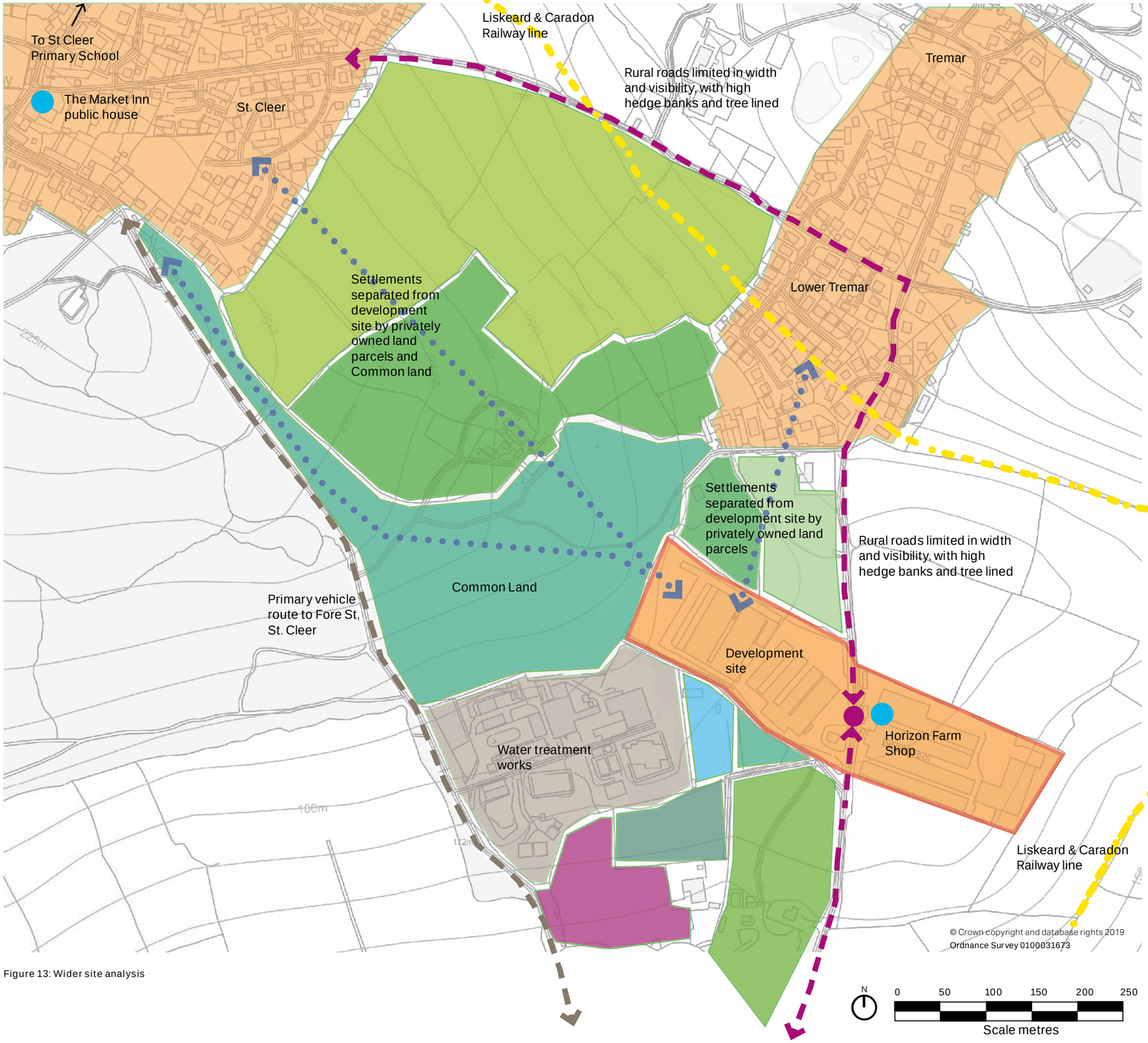

Figure 13: Wider site analysis

3.2. Wider Site analysis

The boundaries of the site are densely vegetated which are useful in screening larger unsightly built forms from local and distant views, however, restrict views outwards from within the site which may create an insular, enclosed and segregated site from its surroundings.

The pattern of settlements around St. Cleer, Tremar Coombe and Tremar are separated by green farmland / arable fields and Common Land. These land parcels are under private ownership by a number of different owners, and thus may restrict potential opportunities in land acquisition / purchase for the creation of green corridors and green routes and hamper opportunities for linking the development site and villages of Tremar and St.Cleer.

The road networks offer existing connections to Tremar and St.Cleer, however, will require improvements to provide safe and comfortable cycling and pedestrian travel.

The potential route through Common Land to directly connect the proposed site to St. Cleer is viable, and has opportunity to provide for green infrastructure along its route, as well as a safe off highway route.

View south from site with open views

Planning and Policy

04

4. Planning and policy

4.1. National policy review

AECOM had conducted a planning policy review and review of comments from previous site planning applications which outlined the following:

The 2019 National Planning Policy Framework (NPPF) contains three paragraphs of note with regard to housing in rural areas. Paragraph 77 identifies that planning policies in rural areas should be support developments that meet local housing needs and support rural exception sites to meet affordable needs. Paragraph 78 states that "housing should be located where it will enhance or maintain the vitality of rural communities. Planning policies should identify opportunities for villages to grow and thrive, especially where this will support local services. Where there are groups of smaller settlements, development in one village may support services in a village nearby". Paragraph 79 sets out the criteria for new isolated homes in the countryside to be permitted.

Cornwall Council considered that the site was "isolated" in its refusal reasons for application ref PA15/02602. In light of the Court's interpretation of NPPF policy on isolated homes in Braintree District Council v Secretary of State for Communities and Local Government and others [2017] EWHC 2743 (Admin) it is not considered that the site is 'isolated' as the villages of St Cleer and Tremar are located nearby, with St Cleer containing day-to-day services (including a primary school and pubs) that could be supported by new residents. The ability to support St Cleer's services is, however, dependent on accessibility to St Cleer, which is only accessible by private car and a limited bus service. As the site is not considered isolated the criteria in NPPF Paragraph 79 do not apply.

The NPPF contains two paragraphs on supporting a prosperous rural economy. Paragraph 83 is supportive of the conversion of existing buildings and well-designed new buildings; and supportive of "all types of business in rural areas" including sustainable rural tourism. Paragraph 84 recognises that in rural areas sites "may need to be found beyond existing settlements and in locations that are not well served by public transport", but qualifies this by ensuring that "development is sensitive to its surroundings, does not have an unacceptable impact on local roads and exploits any opportunities to make a location more sustainable (for example by improving the scope for access on foot, by cycling or by public transport)". Paragraph 84 also supports the use of previously developed land "where suitable opportunities exist".

Taking into account NPPF policy the site is not 'isolated' and residential development on the site is suitable in principle, providing that new residents can access the facilities on offer at St Cleer.

4.2. Local policy review

AECOM also oultined the following in the local policy review:

The development plan for St Cleer is the Cornwall Local Plan Strategic Policies 2010-2030, adopted in November 2016, and the saved policies of the Caradon Local Plan First Alteration 2007. Cornwall Council is preparing a Site Allocations DPD to allocate housing and employment land at the main towns in Cornwall, and as such no emerging allocations are made in St Cleer Parish.

The housing requirement for Cornwall is divided into individual Community Network Areas (CNAs). St Cleer is in the Liskeard and Looe CNA. The focus of residential and employment development in this area will be at Liskeard and Looe, with Cornwall Council supporting Parish Councils to meet the remainder of needs in the CNA through Neighbourhood Plans.

Policy 2a sets the key targets for each CNA in Cornwall with the Liskeard and Looe CNA Residual area (within which St Cleer is located) assigned the target of 1,500 dwellings, 20,667 sq m B1a (office) and B1b (research and development) class floorspace; and 23,667 sq m other B class (B1 c light industry, B2 general industrial or B8 storage or distribution) floorspace. The Local Plan Housing Implementation Strategy 2018 identifies that there is a 136 dwelling surplus of committed dwellings in the rest of Liskeard and Looe CNA. This surplus means that there is not a pressing need to identify additional housing sites in the Liskeard and Looe CAN Residual Area, although 224 dwellings is assumed to come forward as windfall development on as yet unknown sites of under 10 dwellings.

Part 3 of Policy 3 Role and function of places states the following:

"Other than at the main towns identified in this Policy, housing and employment growth will be delivered for the remainder of the Community Network Area housing requirement through:

- *identification of sites where required through Neighbourhood Plans;*
- *rounding off of settlements and development of previously developed land within* or immediately adjoining that settlement of a scale appropriate to its size and role;
- *infill schemes that fill a small gap in an otherwise continuous built frontage and do* not physically extend the settlement into the open countryside. Proposals should *consider the significance or importance that large gaps can make to the setting of* settlements and ensure that this would not be diminished;
- *rural exception sites under Policy 9".*

The first bullet point under Policy 3 allows Neighbourhood Plans to allocate sites for employment and housing development through the plan-making process. The remainder of the bullet points seek to influence the location of windfall development through the development management process. This means that Neighbourhood Plan allocations do not explicitly need to meet the criteria in bullet points 2-4, however other policies in the development plan such as those concerning access and landscape and visual impact will influence the suitability of sites for allocation.

Policy 9 Rural Exceptions Sites supports development proposals "adjacent to the existing built-up area of smaller towns, villages and hamlets whose primary purpose is *to provide affordable housing to meet local needs*" where they are affordable-housing led. Market housing must not represent more than 50% of the homes of 50% of the land take, which is higher than the 25% requirement for St Cleer under Policy 8 Affordable housing. The location of the site beyond the built-up area of Tremar means that the site would not be supported as a rural exception site through the development management process.

The policy approach for business and tourism is set out in Policy 5. Part 4 of this policy states that: "Site Allocations Development Plan Documents and Neighbourhood Plans should identify new land, and safeguard appropriate existing land, necessary for the delivery of the economic strategies for Cornwall. These allocations should be based on an assessment that considers the ability of the quantity, nature and quality of existing space and any commitments to meet the space requirements set out in Policy 2a and the needs of particular sectors. The assessment should:

- *assess the ability of vacant sites and buildings identified in the Employment Land* Review to meet that need; and
- consider if any shortfall can be reasonably met through windfall sites coming forward; and
- identify sites for further employment space, where necessary, to address the targets set out in the policy 2a; and
- identify existing employment land and/or buildings that are considered to be of *strategic, and where appropriate, local significance for safeguarding.*"

The third bullet point requires the Site Allocations DPD and Neighbourhood Plans to allocate employment floorspace where identified vacant sites (the first bullet) and windfall development (the second bullet) have not delivered enough floorspace to meet the requirement in Policy 2a. In the supporting text to Policy 2a Paragraph 1.36 states that "Allocations should also be considered where less than two thirds of the employment land target for the area (as set out in policy 2a) is 'available' in terms of planning permission". This is interpreted to mean that where less than two thirds of the requirement has been completed or is committed (through grant of planning permission) – and therefore one third is left to be found – allocations should be made in the Site Allocations DPD and Neighbourhood Plans to make up the shortfall.

The most recent Annual Monitoring Report (2018) identifies a residual requirement figure of 11,148 sq m office floorspace (53% of target remaining) and 8,863 sq m industrial floorspace (37% of target remaining) to be found in the Liskeard and Looe CNA before 2030. In line with the supporting text at paragraph 1.36 allocations should be made in the Site Allocations DPD and Neighbourhood Plans to meet the residual figure in the Liskeard and Looe CNA, and the St Cleer Neighbourhood Plan is able to make such allocations for office and industrial floorspace.

Policy 21 Best use of land and existing buildings encourages "sustainably located proposals that… use previously developed land and buildings provided that they are not of high environmental or historic value". The only environmental constraint at the site is the sites location within an Area of Great Landscape Value (Policy 23 and Policy CL9 of the Caradon Local Plan First Alteration 2007).

The CL9 Policy wording states "Proposed development in the Areas of Great Landscape Value identified on the Proposals Map will not be permitted if it would materially harm the character of the particular area and if it does not closely reflect the traditional building styles and local materials, or the characteristic pattern of settlement, in the particular area". The site contains large derelict poultry sheds that do not make a positive contribution to the Area of Great Landscape Value and due to the way the land slopes steeply beyond the site to the south east the vacant sheds are visually prominent in the landscape.

A sensitively designed redevelopment of this brownfield site at a lesser scale and a lower height would likely enhance the Area of Great Landscape Value.

Policy 27: Transport and accessibility states that "All developments should: Provide safe and suitable access to the site for all people and not cause a significantly adverse impact on the local or strategic road network that cannot be managed or mitigated. For major developments to ensure a resilient and reliable transport system for people, goods and services, development proposals should…

2. Locate development and / or incorporate a mix of uses so that the need to travel will be minimised and the use of sustainable transport modes can be maximised by prioritising safe access by walking, cycling and public transport to minimise car travel…

4. Be designed to provide convenient accessible and appropriate cycle and pedestrian routes, public transport and road routes within and in the immediate vicinity of the development".

Under the policy all development is required to provide a safe and suitable access, and at 2ha development at the former Horizon Poultry Farm would be major development under the Development Management Procedure Order (2015) therefore criteria 2 and 4 apply.

Safe pedestrian access to the site and in the immediate vicinity of the development is therefore required.

With regards to pedestrian safety and accessibility the Inspector stated in his decision letter that: "Although St Cleer is not a significant distance from the appeal site, the route from the appeal site to the village is along a narrow unlit road, with few pavements or areas where pedestrians could seek refuge from road traffic. An alternative route to St Cleer is across the unlit, unsurfaced common which could be accessed from the north western corner of the site."

The Inspector also stated: "the road to Tremar and then to St Cleer is undulating with corners, which affects the visibility for both drivers and pedestrians. The main road to the west of the site, across the common, is more heavily trafficked than Tremar Lane, and as a result vehicle speeds are higher. I find that the local road conditions would be unlikely to be an attractive walking or cycling route to St Cleer for the majority of the intended future occupiers of the scheme, particularly those with young children, for those with mobility issues and in inclement weather." As a result, the application would lead to a heavy reliance on the private car to access day-to-day services in St Cleer, Liskeard and further afield.

A properly considered and designed masterplan would address concerns of road users and pedestrian (including cyclist and equestrian users) safety.

4.2.1 St. Cleer Neighbourhood Plan

The St Cleer Neighbourhood Development Plan was published for public consultation in April 2019 and was submitted on 1st November 2019.

The aim of the plan was to make St Cleer parish 'a place where sustainable development has met community needs, preserved and enhance the rural moorland landscape, character and heritage, and ensure a healthy future.'

Development of the Horizon Poultry Farm site is hoped to provide improved significant benefit to the local area as retaining its intensive agricultural function or replacement with an extensive industrial use is perceived to lead to significant noise, traffic and pollution issues that would be detrimental.

Contained within the plan is '**Policy 22 – Horizon Farm Sustainable Rural Settlement**'. The intention is to realise the opportunity for a carefully mixed development to provide the necessary value and interest to potential developers, without involving levels of residential development that will make the development unsustainable.

The revised Policy 22 states:

1. Sustainable development options which regenerate the Horizon Farm site in a *way that maximises the social, environmental, economic and cultural benefits to the* community of St Cleer Parish will be supported including:

a. Residential development comprising about 60 to 70 dwellings, of which at least 25% *should be for affordable rented accommodation, with a mix of smaller units suitable for* younger and older residents, and family homes.

b. An Extra Care facility located close to community and retail facilities.

c. Employment uses which:

i. Provide employment and or business opportunities within A1- shops, A3 restaurants/ *cafes, B2- businesses, B3 – Storage, D1-Non-Residential Institutions and D2 assembly,* and

ii. Provide diversification or expansion opportunities for existing local businesses in the parish, and

iii. Provide or enhances community facilities in the parish, and

iv. Provide facilities that would attract tourism to the area,

d. Retail uses which:

i. Provide grocery and 'top up shopping' that reduces the need of Parish residents to travel to Liskeard

ii. Provide services which complement the residential and extra care facility

e. Leisure uses which provide facilities such as a community orchard, allotments, green open space, play spaces, recreation value in the form of a community park

2. Proposals to regenerate the site, to be set out in a master plan, must:

a. Use an appropriate mix of non-reflective material textures, subdued colours, characteristic building forms and massing, rooflines and landscaping to ensure that the appearance of the development is consistent with views from the WHS and AONB of *existing historic settlements in the vicinity and breaks up the profile of structures when* seen as the foreground to the AONB/WHS;

b. Provide shared pedestrian/cycle off highway routes through Commonland to connect the site with Tremar and St Cleer, in partnership with the St Cleer and District Commoners Association;

c. Incorporate an off-site traffic calming scheme for the road linking Lower Tremar to the B3254;

d. Mitigate any pollution remaining on the site remnant from its previous intensive *agricultural use and ensure that no off-site contamination occurs as a result of the* development;

e. Maximise opportunities for the incorporation of sustainable energy production and zero-carbon footprint development and occupation.

f. Provide for an archaeological watching brief as topsoil removed, and for any heritage features revealed to be retained in site layout and any landscaping scheme.

3. Applications should include a Design and Access Statement derived from the master-planning process that illustrates satisfactorily how the above requirements have been met, through the use of a Landscape and Visual Impact Assessment, Ecology Report, Flood Risk Assessment, Phase 1 Contamination Study and Green *Travel Plan and include an overall 'sustainability statement' which demonstrates how* the proposed new settlement will achieve a high degree of sustainability, covering issues such as sustainable energy use, waste water treatment, habitat and biodiversity enhancement, reduction in need to travel.

2. An outline application will be supported as a first step. This should include a Design and Access Statement derived from a master-planning process and illustrate satisfactorily how the above criteria have been met, and include a detailed *'sustainability statement' which demonstrates how the proposed new settlement will* achieve a high degree of sustainability, covering issues such as:

a. Sustainable energy use;

b. Waste water treatment;

c. Habitat and Biodiversity enhancement; and

d. Reduction in need to travel.

4.3. Planning review

4.3.1 Planning history

The site has been subject to a number of planning applications that are relevant to the current NPG aspirations for the site. The planning history is shown below.

Relevant Planning Applications:

- Planning Ref Application PA13/07176

Demolition and erection of 60 dwellings (affordable and open market) redevelopment of small-scale offices and industrial units B1 and B8, provision of assisted living complex/retirement units C2 and provision of store class A1 to eastern side of site

Outcome: Screening Opinion – EIA not required.

- Planning Ref Application PA14/00417

Mixed Use Development containing 50 Dwellings, 14 Warden Assisted Homes + 1 no Warden's House, a Food Retail Unit, B2 Commercial Units and a change of use of 1no building from Agricultural to B1 Use.

Outcome: Application withdrawn.

- Planning Ref Application PA15/02602

Outline application for a development containing up to 87no. dwelling houses, 1no. retail outlet, and change of use of 1no building from agricultural use to up to 40no. apartments.

Outcome: Application Refused. Appeal Dismissed.

- Planning Ref Application PA19/05999

Change of use of the redundant laboratory, kitchen and egg packaging area to a Cafe together with the provision of on-site parking

Outcome: Awaiting decision.

- Planning Ref Application PA19/04259

Refurbishment and extension of existing staff rooms and shop - variation of condition 3 in respect of decision notice 596/0124/F dated 30/04/1996

Outcome: Unconditional approval.

The planning permission for the extension to the existing small farm shop (PA19/04259) has provided a valuable retail offer for local residents form neighbouring villages, especially appropriate since the closure of the St Cleer villages stores. This is changing the nature of the site and arguably promotes trips to and from the shop, some which are likely to be non-car based trips from the nearest villages.

4.3.2 Planning appeal

An appeal was made following refusal of the aforementioned planning application for 87 dwellings, a retail unit and a 40-unit flatted conversion (ref PA15/02602), which was refused by the Local Planning Authority in August 2015.

The Inspector noted that the main issues in the case were;

- Whether new dwellings in this location would be acceptable having regard to the relationship to services and the characteristics of the local highway network;
- Whether or not the proposal would make adequate provision for affordable housing; and
- The appropriateness or otherwise of contributions sought towards public open space and education infrastructure.

In transport and highway related matters the inspector concluded that *'there would be a heavy reliance on the private car to access basic day to day services, in St Cleer, Liskeard and further afield. For those people that did not have access to a private car the service and facilities would not be accessible. This would be in conflict with the social role of sustainability, as well as the environmental role, which seeks to move to a low carbon economy. The absence of pedestrian injuries in the area is not good reason to encourage a development that is isolated and remote from local services and facilities'.*

Furthermore, the Inspector acknowledged that *'the high reliance on the private car as a result of the location of the site to services and facilities would result in the scheme not being acceptable.'*

In addition to the other matters and noting that the development was not part of the Local Development Plan at that time, the appeal was dismissed on 15 November 2016.

4.3.3 Similar planning applications

The NPG advised AECOM that similarities of this site can be seen from a Consented development at Summercourt, Newquay. Planning reference PA18/04360 refers whereby outline planning application for 38 residential dwellings and Office and leisure building with access, layout and scale with appearance and landscaping reserved, was approved following a successful appeal.

The Inspector noted that; *'In terms of the criteria under Policy 3 of the Local Plan it is not within or immediately adjoining the settlement of Summercourt and I am not persuaded that the holiday park forms a settlement in its own right. In these circumstances, the scheme would not fulfil the requirements of Policy 3, in particular in respect of rounding off'*. This would suggest that the development site is detached from the nearest conurbation and sits as a stand-alone location.

Furthermore, the Inspector concluded; *'In terms of the connection between the site* and Summercourt, Beacon Road (A3058) has a footpath from the village that, with the occasional gap where there is a grass verge, passes up to and over the A30 bridge and then there is a reasonably wide grass verge to the junction with the lane that goes down *to the holiday park. …. The lane has no street lighting or footway; however, the Highway* Authority has not raised objection to the use of this section of the route from the village to the site for pedestrians and I have no substantive evidence that the lane would provide a safety hazard for walkers or cyclists.

The route to and from Summercourt is reasonably level and, in all these circumstances, I consider that future occupiers of the site would have the ability to walk or cycle to the services and facilities at Summercourt, and this would not be an unreasonable distance. There would also be the public house and, if permitted and constructed, the sports facilities on the site itself. Taking all these matters into account, future occupiers of the development would be acceptably located in relation to Summercourt to be able to access the facilities and services.

Policy 21 of the Local Plan seeks to ensure the best use of land and advises that encouragement will be given to sustainably located proposals that use previously developed land and buildings provided that they are not of high environmental or historic value. Policy 21 sets the test that the land should be sustainably located but does not require it to be within or adjoining a settlement.

In this case, I have no robust evidence that the site is of high environmental or historic *value, other than the listed building which I consider later and find would not be harmed* by the proposal. The main parties agree that the site is previously developed land and I have found that the site is sustainably located. In these circumstances, the proposal is compliant with Policy 21 of the Local Plan. I have found no substantive reason why the scale of the development would not be appropriate to the scale and role of the nearby settlement and, therefore, would be compliant in this aspect with the approach in Policy *2 of the Local Plan.'*

There are comparisons to be made in regard to the lack of footways and streetlighting and the distance between the site and the service and facilities provided within Summercourt. Although the site was considered to be stand-alone location it was concluded that residents could walk and cycle between Summercourt and the site.

Similar to Horizon Farm the Summercourt development was previously developed land and was not considered to be a settlement in its own right. Therefore, the permission was granted even though the site was remote from the nearest service and facilities.

There have been suggestions that the site should be returned to agricultural use (please see Appendix A). This has been investigated by the Steering Group and is not considered to be a desirable outcome. Given the format and confined nature of Horizon Farm, the nature of alternative agricultural use most likely to be attracted is thought to be for concentrated animal feeding operations. Although the lack of additional land for corralling suggests that a beef-based venture is unlikely to be proposed, intensive chicken production for meat might be suggested. The Steering Group were extremely concerned that unless such a use was small scale and very well operated, it would inevitably result in the return of the serious traffic, odour, flies and other environmental issues associated with the previous egg production activity on the site, and therefore proposed the alternative uses put forward in Policy 22 of the NDP.

4.3.4 Consultations

The Neighbourhood group have had discussions with the local Commoners Association at a meeting in July 2019 where there was an agreement in principle to have a track across the common to the village of St Cleer.

Transport and sustainability

05

5. Transport and sustainability

5.1. Chapter aims

The aim of this chapter is to provide a review of the site and its position in the local environs of Tremar and surrounding villages with regard to sustainable access. It will offer suggestions to overcome issues raised by the Local Highway Authority and Planning Inspector following the previous refusal.

It is anticipated that the findings contained within may inform the Neighbourhood Plan and in turn future development proposals at the site.

This chapter includes:

- Review of National and Local policy;
- Review of previous planning applications, relevant to the site;
- Accessibility review of the current site;
- Issues and options for delivery of a development at the site; and
- RAG review and conclusions.

5.2. Transport National Policy

5.2.1 National Planning Policy Framework, NPPF (2019)

The revised National Planning Policy Framework (NPPF) was published in 2019, replacing the previous version published in March 2012. It sets out the Government's planning policies for England and how these are expected to be applied at a local level. It provides a framework within which locally-prepared plans for housing and other development can be produced.

The original framework produced in 2012 replace around 1,000 pages of planning policy and guidance into a single document. Critically, the document established a 'presumption in favour of sustainable development'.

The revised Framework, 'makes a number of structural changes, in particular dividing the document into clear chapters; incorporates policy proposals on which the Government has previously consulted; and incorporates additional proposals on which this document is consulting'. It is clear that the presumption in favour of sustainable development remains at the heart of the Framework.

The NPPF highlights the importance that transport infrastructure and transport related policies have in facilitating sustainable development and promoting wider health and sustainability objectives. 'Section 9 – Promoting sustainable transport' outlines the key transport policy considerations. It states that transport issues should be considered at the earliest opportunities when planning development so that:

- "The potential impacts of development on transport networks can be addressed;
- Opportunities from existing or proposed transport infrastructure, and changing transport technology and usage are realised – for example in relation to the scale, location or density of development that can be accommodated;
- Opportunities to promote walking, cycling and public transport use are identified and pursued;
- The environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and
- Patterns of movement, streets, parking and other transport considerations are integral to the design of schemes and contribute to making high quality places."

It is emphasised that development should 'give priority to pedestrian and cycle movements', 'address the needs of people with disabilities and reduced mobility in relation to all modes of transport', 'create places that are safe, secure and attractive' and 'designed to enable charging of plug-in and ultra-low emission vehicles in safe, accessible and convenient locations.

Importantly for assessing transport impacts of proposals now refers to highway safety as well as capacity and congestion. This change was made in order to make it clear that 'designs should prioritise pedestrian and cycle movements, followed by access to high quality public transport (so far as possible) as well as to reflect the importance of creating well-designed places'.

The NPPF states that, 'All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a Transport Statement or Transport Assessment so that the likely impacts of the proposal can be assessed'.

In assessing sites that may be allocated for development in plans, or specific applications for development, the document states that:

- Appropriate opportunities to promote sustainable transport modes can be, or have been, taken up, given the type of development and its location;
- Safe and suitable access to the site can be achieved for all users; and
- Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.

Importantly, paragraph 109 states "Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."

Within this context, applications for development should still give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas, facilitate access and the use of high-quality public transport, address the needs of people with disabilities and reduced mobility.

It is important that development proposals create places that are safe, secure and attractive, minimising the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards. Developments should also facilitate the efficient delivery of goods, and access by service and emergency vehicles and also designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.

5.3. Transport Local Policy

5.3.1 Cornwall Local Plan Strategic Policies (2010 – 2030)

The Cornwall Local Plan was formally adopted on 22nd November 2016. It provides a positive and flexible overarching planning policy framework for Cornwall, covering the period up to 2030.

In February 2016 Cornwall Council submitted the plan to the Secretary of State for examination. The inspector published a report in September 2016. The adopted plan includes the Inspector's recommended main modifications.

The Cornwall Local Plan replaces a number of policies from:

- The Local Plans of the former District and Borough Councils; and
- The Minerals and Waste Plans of the former County Council.

The document establishes the context for future growth and development within Cornwall, setting out a vision and targets for growth and identifying the quantity and broad location and key sites, for new housing, community facilities, shops and employment. Its policies are be the basis for planning decisions.

The Local Plan is supported by other formal documents including:

- Neighbourhood Plans;
- Development Plan Documents; and
- Supplementary Planning Documents

Accompanying the strategic policies of the Local Plan are the Community Network Area Place Based Plans.

5.3.2 Connecting Cornwall Local Transport Plan 2030

Connecting Cornwall 2030 is the third Local Transport Plan (LTP) for Cornwall. The strategy covers the period up to 2030 and sets out the vision, goals, objectives and policies for transport in Cornwall over the next 20 years.

Connecting Cornwall is the key strategic tool through which the Council exercises its responsibilities for planning, management and development of transport in Cornwall, for the movement of both people and goods. The Connecting Cornwall: 2030 vision is:

"Transport in Cornwall will be excellent. Our transport system will connect people, communities, businesses and services in a way that is reliable, efficient, safe, inclusive and enjoyable."

The LTP includes 17 objectives including the following which are of relevance to the proposal site:

- Objective 2: Support communities to live locally to reduce the need to travel;
- Objective 5: Ensure a resilient and reliable transport system for people, goods and services;
- Objective 10: Improve the health of our communities through provision for active travel;
- Objective 11: Increase awareness and an understanding of the health benefits of cycling and walking;
- Objective 12: Improve road safety;
- Objective 13: Increase public confidence in a safer transport network;
- Objective 15: Improve access to employment, education, healthcare and leisure;
- Objective 16: Improve access to public transport.

5.3.3 Connecting Cornwall 2030 Implementation Plan 2015-2019 (April 2015)

The Connecting Cornwall Implementation Plan sets out the schemes which Cornwall Council intend to deliver between 2015 and 2019, and the associated funding for each of the schemes.

5.3.4 Travel Plans – Advice for developers in Cornwall (2013)

This document outlines the approach that should be taken in developing and implementing effective Travel Plans delivered in support of a planning application. The document includes:

- Information on the thresholds of development and the requirement for Travel Plans;
- Information regarding the different type of Travel Plans and their requirements;
- Guidelines on the recommended content of Travel Plans, target setting, monitoring and evaluation;
- Information on contributions and enforcement.

The document also includes information on parking standards for vehicles and bicycles. Cornwall Council parking guidelines (maximum standards) state that there is a requirement for 1 space per unit where highly accessible, 2 spaces per unit elsewhere and 1.5 spaces per unit not to be exceeded overall for larger developments.

The guidance in this document states that Travel Plan statements are required for residential developments of between 50-80 units and full Travel Plans for developments over 80 units.

5.3.5 Summary

Although planning permission for a residential development was refused at the location on sustainability grounds the site does meet many of the policy requirements for development. Furthermore, a development could be provided to meet a wider range of policy requirements such as the Local Transport Plan, Travel Plan and Design Guide policies, is suitable mitigation and appropriate measures can be implemented.

St. Cleer Horizon Farm

5.4. Public transport

Public transport accessibility to the site is limited. The location is served by a local bus route and there are bus stops on each side of the road, at the entrances to the site.

The current service, Plymouth City Bus Route 74 / 174, provides a bi-hourly AM service and hourly PM service from Liskeard to Callington and calls at Tremar and St Cleer on its journey.

The service starts at 0728 with a school bus between Callington and Liskeard, collecting from the villages en-route, and continues bi-hourly throughout the morning. The service is hourly in the PM with the last bus past the site at 1748.

The route and bus stops are shown in Figure 14 in the vicinity of the site.

5.5. Non-motorised users

The site has a boundary to Common Land which has pubic rights of access / freedom to roam and is, in itself, close to a network of Public Rights of Way (PROWs) as shown in Figure 15.

Whereas the lanes in the vicinity of the site do not contain footways there are highway signs warning drivers that pedestrians are likely to be in the carriageway.

In rural areas this is common and a desktop review, using Crashmap, there are no accident clusters within the last five years. This would suggest that the mix of vehicles and pedestrians within the local roads do not give rise to matters of safety.

Source: Cornwall Council Interactive Map (https://map.cornwall.gov.uk)

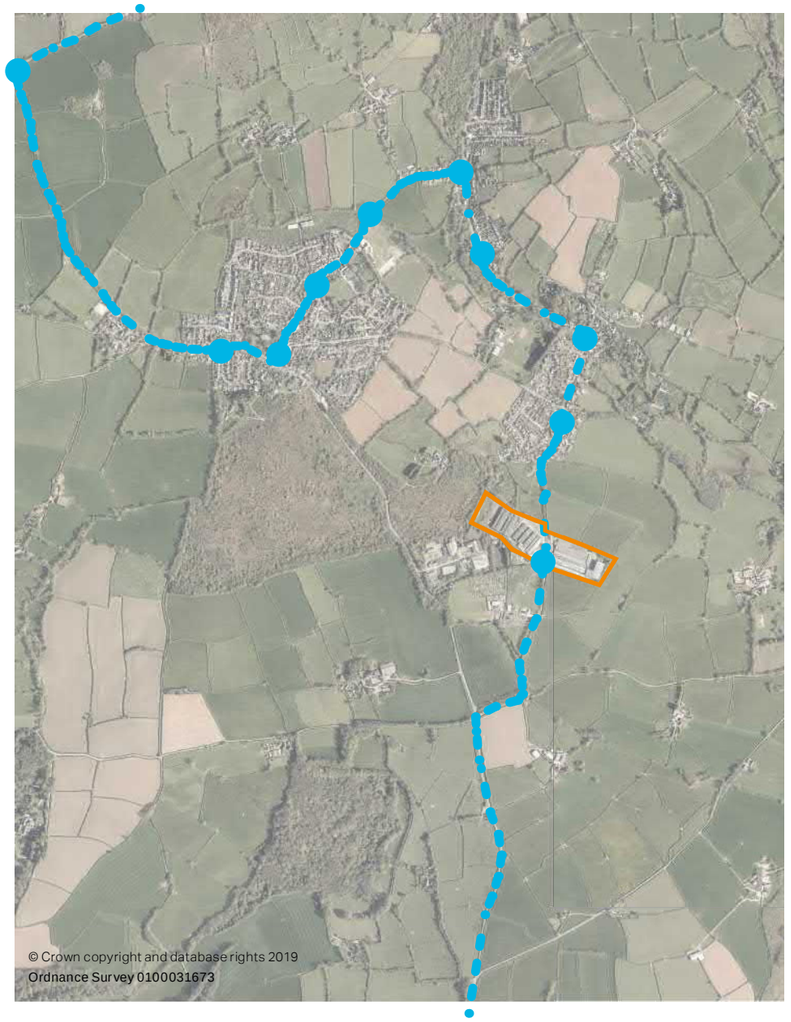

Figure 14: Public transport route

Bus route

Bus stop location

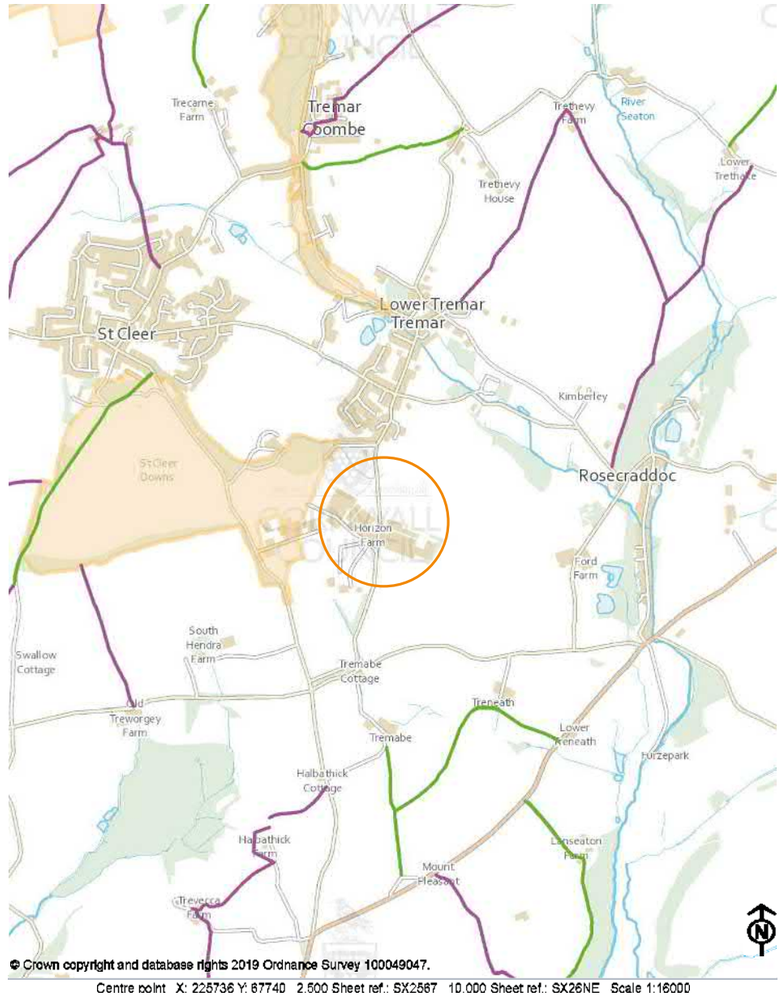

Figure 15: Non-motorised users

Common land / freedom to roam

PROW (Public footpath)

Public bridleway

5.6. Accessibility review

5.6.1 Local highway network

The premises lies to the south of Tremar and south-east of the village of St Cleer. Liskeard is the closest town to the site which lies approximately 3.5km to the south. Liskeard contains a wide range of services and facilities including a Hospital, School and shopping centres.

Access is achieved by the County Road, C0043, which runs north-south from its junction with the B3254, which connects Liskeard to Launceston.

The site is on both sides of the C road and access is achieved via staggered access points.

The road, which is rural in nature does not benefit from footways or streetlighting and varies in width, enabling two way passing along most of its length. Where widths are reduced to single traffic flow the passing places are generally inter-visible. The road is unrestricted and therefore conforms to the national speed limit.

Access at site

The road, which is rural in nature, does not benefit from footways or streetlighting and varies in width, enabling two way passing along most of its length. Where widths are reduced to single traffic flow the passing places are generally inter-visible. The road is unrestricted and therefore conforms to the national speed limit.

Footways in Tremar and St Cleer

Within the villages of Tremar and St. Cleer the speed limit changes to 30mph and intermittent footways / footpaths on verges are provided throughout the villages. Continuous footway provision is not characteristic through villages or on many roads in the local area.

Access route

Along the road to looking south towards the site from Lower Tremar, high Cornish hedges restrict potential road widening opportunities; also along Tremar Lane widths are restricted by hedge and tree planting, including TPO trees.

Main route to Tremar and St. Cleer

Looking south to the site from Lower Tremar. The site straddles a C road which provides access to Tremar to the north, approximately 300m away. The road is narrow, unlit, has no road markings and no pedestrian footpath. The road appears to be lined by Cornish Hedges and passes under a disused railway bridge which formed part of the former Liskeard and Caradon Railway Line, itself part of the Cornish and West Devon Mining Landscape World Heritage Site. The main road from Liskeard to St Cleer has fast moving traffic and offers very little safe pedetrian / cycle access.

5.7. Constraints and opportunities

5.7.1 Constraints

It is clearly evident from the planning history, and the dismissed planning appeal, that the location of the site was not considered to be in a sustainable location for the forms of development proposed at that time. The site has, historically, generated trips onto the local highway network, the majority of which would be car based or larger commercial vehicles. Commercial uses, such as the large scale egg processing activities carried out at the premises, are generally considered to generate destination based trips whereas residential development is origin based trips.

Although some mitigation was offered within the planning application, it was not considered to be of a sufficient scale to ensure that the objections could be overcome and thus reach a conclusion that the site should be considered as being sustainable. There were no issues raised about the level of traffic that could be generated by a residential development, so the traffic generation should not be a problem to overcome through mitigation. However similar measures, to those that would normally be used to reduced car-based trips, could be adopted at this location to ensure that any future residents, should the site be developed, are not reliant on their cars for short journeys.

Furthermore, as the local villages offer little in the way of services and facilities there is potential merit in promoting this site as a complementary local facility for the surrounding area, thus reducing trips to further afield.

5.7.2 Opportunities

There are a number of opportunities worthy of consideration that could be provided at the premises to assist future developments and to seek to address the matter of insufficient sustainability. By way of changing the type of development and reducing the barriers that reduce the sites accessibility and sustainable credentials, it is anticipated that the views of the Council could be addressed.

Options that can be considered are listed below and discussed in detail thereafter;

- Mixed use development to offer complementary facilities which reduce the need to travel;
- Enhance Public Transport;
- New footpath / cycle links;
- Quiet lanes;
- Travel Plan; and
- Electric Charging.

5.7.3 Mixed use development

The previous planning application, subject of the dismissed appeal, proposed a mixed-use development but the non-residential element of the scheme was minimal, to the extent of a single retail unit.

The retail unit, as proposed, would provide future residents with some limited provisions but was unlikely to cater for everyday needs for the residents of the site and its environs.

By way of introducing more uses at the site such as retail, community and commercial uses, the site could become more self-sufficient and provide the required services and facilities that would ensure that any residents needs would be met.

Facilities such as office space for small start-up businesses or hot-desk spaces would cater for local residents in this location and surrounding villages. Flexible working space or community areas could also be used for creches or extra care services, such as visiting Doctors, again reducing the need for travel further afield.

An Ecovillage type approach to development may be appropriate which would ensure that the residential properties are self-sufficient in their needs without needing to travel to the wider area.

5.7.4 Public transport

Bus stops are located at the entrance to the site and within the local area, connecting this development with nearby villages and towns, including Tremar, St Cleer, Commonmoor, Darite and Crow's Nest. However, the frequency of buses is limited and unlikely to be sufficient to promote bus use at an appropriate level for a residential estate.

A developer contribution towards funding an increase bus service and later into the evenings, in conjunction with provision of bus taster tickets for residents and any permanent staff at the site, would provide enhanced services and promote its use. Once the service becomes used on a regular basis it can become financially self-sufficient and commercially viable for continued operation without the need for further funding.

The duration and extent of funding should be commensurate with the scale of any development but would benefit the wider community who can make use of the mixed-use services and facilities the site could provide.

It may be appropriate to consider provision of smaller localised shuttle type bus which serves the villages on a ring and ride, or schedules service. These have been successful in other Cornish towns and villages, such as the Saltash Hopper or in Mevagissey for example. The buses are generally smaller minibus type vehicles, sometimes driven by volunteers, but can provide a vital service linking remote areas to the required services and facilities nearby.

5.7.5 Footpath links across Common land

The site lies adjacent to Common land where access rights to roam / freedom to roam are afforded to all. The westernmost boundary of the site has gates onto a lane known as Puckator Lane, which is possibly in private ownership. However, as the gates are already in existence, albeit overgrown with vegetation, it is anticipated that access rights already may exist.

The Common land is very overgrown although informal tracks / pathways do exist throughout. Subject to the appropriate permissions a purpose-built track / path could be across the land to provide a footpath / cyclepath connecting the development to the villages of St Cleer, via the common land and Tremar, via Puckator Lane. The path could be laid to compacted gravel which should offer suitable drainage during periods of inclement weather.

The most appropriate route would require detailed investigation but should take account of gradients and levels. It is suggested that a minimal width of 3.5m would be sufficient and although rights to roam prevent vehicular access, to the public, the track could be beneficial to landowners to cater for future access and maintenance needs, thus providing benefit to the Commoners as well as providing improved linkages between the site and the nearby villages.

A link across the Common land would provide access to and from the site and as such provide connection for existing residents who could make use of the commercial and retail facilities that the site could provide.

5.7.6 Quiet lanes

The previous planning application, PA15/02602, included highway mitigation in the form of design to change the configuration of highway past the site to a 'quiet lane'. The proposal would enhance drivers' awareness of pedestrians using the road and encourages lower speeds, providing a safer environment for all highway users.

The scheme is considered to be appropriate and it is suggested that the benefits would be suitable for any development at the site and should therefore be included as an option. The scheme would enhance the ability for pedestrians to cross the road between the two sites and could incorporate improvements to the bus stops.

Although there are no recorded injury collisions in this area, that would ultimately require implementation of some measures, the scheme would provide many other benefits.

5.7.7 Site wide Travel Plan

Travel Plans (TP) form an important element of the Government's Integrated Transport Strategy and would conform to the County Council Policy requirements, and are a means of managing the transport impacts generated by a development site. They are specifically designed to provide users of a development with an enhanced range of sustainable transport opportunities. The overall objective of a Travel Plan is to 'achieve a shift away from single-occupancy car use towards more sustainable forms of transport and to reduce the environmental impact of travel'.

TPs are tailor-made, site specific, long-term strategies for improving and managing access to a development focusing on promoting sustainable travel modes and minimising single-occupancy trips. It is a continuous process for influencing travel behaviour. It involves the development of various initiatives for encouraging travel by alternative modes to the use of the car, and draws upon the experience of both the

Council's Travel Plan staff and the commitment by the companies or residents at the site to actively promote the Plan.

The key focus of a TP is therefore to identify initiatives and measures to encourage sustainable travel, reduce the need to travel in the first instance and to promote the more efficient use of the car where travel by private motor vehicle is required. Such measures and initiatives should be used within the TP, which is likely to be required following any planning consent.

A full TP should include targets, monitoring and management arrangements to ensure that the objectives of the Plan are achieved and that it remains sustainable over the longer term.

Given the location of the site, it can be considered that a strong Travel Plan with enhanced non-car-based provisions is a key factor to delivery of a development.

Detailed objectives of a TP can be defined summarised as:

Increasing travel awareness;

- To reduce the need to travel to work every day or during peak periods;
- To minimise the dependence on use of the private car and vans;
- To reduce the number of single occupancy journeys by car;
- To encourage the use of non-car modes of travel; and
- To maximise the safety of people travelling to the site.

To support the aims and objectives of a TP, the DfT recommend that targets set should be SMART (specific, measurable, achievable, realistic and time-related), as summarised below:

- Specific: Target increase / decrease in mode share shown over a set timescale (commonly for the five year period from occupation of the site);
- Measurable: The mode share of staff will be measured and monitored using travel surveys;
- Achievable and Realistic: Given the information on preferred travel modes, and general Travel Plan promotion, it is considered that the targets are achievable and realistic; and
- Time-bound: The targets are to be monitored on a regular basis and met within five years of the Travel Plan's implementation.

5.7.8 Electric Vehicle Charging (EVC) / Bike points

As part of a site-wide Travel Plan any development should consider the installation of Electric Vehicle Charging equipment for each property. However, in July 2019 the Government, Office of Low Emission Vehicles (OLEV) opened a consultation to

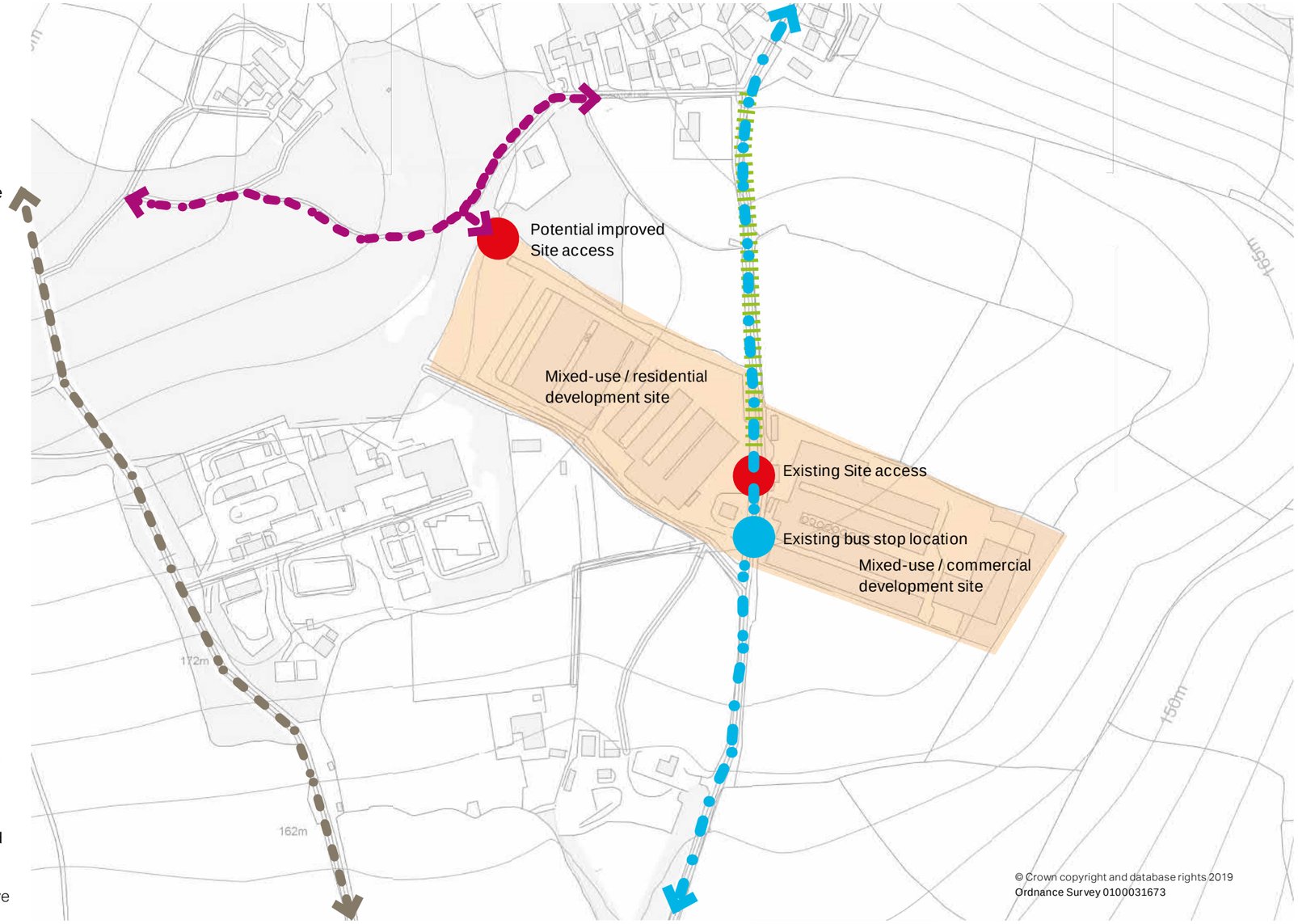

Figure 16: Public transport route

propose to ensure that all new build residential and non-residential properties are provided with EVC infrastructure. This will be accomplished through alteration to building regulations.

Electric Bikes could be provided to properties or perhaps communal shared facilities within the site operating as a rental scheme / bike club. This would offer residents a sustainable travel choice to the nearby villages and therefore reduce the need for car borne trips.

5.7.9 Summary

These options may be appropriate to meet a wider range of policy objectives, both national and local, and enhance the sustainability credentials of the site. Consideration of these opportunities is strongly recommended to meet the objectives of the Connecting Cornwall LTP which provides a strong emphasis on linking communities through various means.

5.8. Summary and conclusions

AECOM was commissioned to review options for the St Cleer Neighbourhood Planning Group to assist them in promoting the use of the Horizon Farm site, located south of Tremar, Cornwall for development within the Neighbourhood Plan.

The site has been subject to a number of planning applications of which the most significant, PA15/02602, for a residential development with a retail unit was refused and subsequently dismissed at appeal. The main reason in relation to Highways and Transport was that the site lacked sustainable credentials.

The matter of sustainability can be somewhat ambiguous and difficult to overcome as sites can be constrained and third party land is often required to enable adequate mitigation. The site does have a previous use and would have previously generated trips to and from the local villages and further afield. However, in this instance the associated traffic does not appear to be the issue, it is a matter of sustainability whereby development is likely to require car based trips rather than non-car based trips to reach local services and facilities.

Recent planning applications are under consideration at the site to provide an enhanced retail offer and café uses and therefore promotes the site as a destination for local residents. The shop has been trading for most of the year and is becoming a busy local shop for residents in the nearby villages, especially since the closure of the local stores within St Cleer.

A recent appeal in Summercourt was allowed and comparison can be drawn between that site and the Horizon Farm premises. Both sites were detached from neighbouring villages and both can be considered as previously developed land. However, within the Summercourt approval it was concluded that resident could walk or cycle to nearby service and facilities, even though, continual footways were not provided. The appeal site also provided some facilities within the site itself which could be used by nearby residents.

The Horizon Farm location cannot be 'connected' to nearby villages with full highway provisions, such as surfaced and lit footways. However, measures can be put in place to promote non-car based travel and sustainable travel modes can be enhanced with localised improvements and upgraded connections.

This study has identified a number of potential opportunities that could be encompassed within the Neighbourhood Plan and delivered through third party agreement and developer contributions should a planning application be submitted. The list is not exhaustive but as many of the proposals should be considered as possible to reduce the issues identified during the determination of the planning application and appeal.

5.8.1 Summary

In summary a list of deliverables is shown below, in Figure 17, and rated using a Red/ Amber/Green (RAG) rating. Not all measures will need to be developer led and local landowners, in this case Commoners, will need to be in agreement with the aspirations of the Neighbourhood Plan to enable delivery of measures across the Common Land. This would be outside of any developers' remit to deliver.

Bus service improvements, or perhaps a more localised village service, and new foot / cycle path networks in the local area will be a key benefit to improving linkages between the residents of existing villages and the site. Although bus service funding can be expensive for a number of years, once successful it can become self-sufficient so the longer-term benefits are substantial.

A Travel Plan is a very useful tool to promote use of non-car-based travel, although the appropriate infrastructure needs to be in place for it to be successful.

Providing complementary services and facilities within the site itself will improve the sustainability of the site. This will, in turn, internalise trips and provide valuable services which might be considered to be lacking in the surrounding area.

By promoting a range of options and requirements for development of the site, it is anticipated that the transport related issues, highlighted within the Planning Inspectors decision can be reduced in severity and mitigation can be secured to meet the policy requirements for delivery of a sustainable development.

Whereas any future development proposals will need to be accompanied by appropriate assessment it is suggested that a Neighbourhood Plan, which contains a range of measures to address such matters, could provide a justified approach to appropriate mitigation.

Analysis	Cost	Deliverability	Benefit
Mixed use development			
Enhance public transport			
New footpath links			
Quiet lanes			
Travel Plan			
Electric charging			

Figure 17: RAG (Red, Amber, Green) review of options

Landscape

06

6. Landscape

6.1. Introduction

The landscape section will explore constraints and opportunities based on the site analysis and wider site analysis of the surroundings, looking at how the development site has potential to influence landscape improvements within the wider context and create connections to the surrounding villages of St Cleer and Tremar.

Various options for these connections will be explored in conjunction with the other chapters, in particular, Transport and Sustainability.

The opportunities will describe what approaches can be taken with the development site to inform wider treatments and connection possibilities. From this, landscape principles can be defined to carry forward and inform proposals.

As well as physical constraints and opportunities, there are risks of and impacts associated with a return to intensive agriculture. Other considerations for the potential use of Common Land are to recognise that these areas are not urban commons. Common Land is protected for the Commoners who hold the right to graze cattle on it. The Common Land is 'access land' under the Countryside and Rights of Way Act 2000. This grants limited rights for people to access the land to walk, sightsee, bird-watch, climb or run, but more intensive forms of recreation are excluded. (Ref: https://www.gov.uk/guidance/open-access-land-management-rights-and-responsibilities) Under-grazing or the complete lack of grazing on Common Land is a significant local issue which is changing its habitat, appearance and accessibility. The provision of infrastructure such as water troughs and fencing which is required to a bring about active grazing and facilitate management of these commons is supported in St Cleer NDP Policy 13.'

6.2. Opportunities and constraints

6.2.1 Opportunities

A number of opportunities are available to integrate the development site into the local context, improved connectivity and improved landscape aesthetic and use.

Improved transport links.

The creation of a 'quiet lane' along has potential to improve the highway quality through material use, signage and wayfinding and in providing a safe, legible route connecting the development to Tremar and St. Cleer. A shared cycle / pedestrian route could compliment the highway and / or be separate from the road to create a completely segregated vehicular traffic free route. The provision of such a route would promote more sustainable travel options and a safe cycling route.

Segregated shared cycle / pedestrian cycle route.

A shared route accessible from the western boundary has potential to connect to Puckator Lane to connect directly to Lower Tremar. This western access could also provide an access route across Common land to connect to Fore Street into St. Cleer.

Other options include off-highway routes adjacent Tremar Lane and the Liskeard & Caradon Railway route. This could potentially be part of a wider trail to promote the Heritage asset and enhance / protect it as a tourist interest.

Wayfinding and lighting opportunities could provide legiility and safety of the routes.

Creation of community facilities and recreation opportunities.

There are a number of potential landscape improvements that would be beneficial to the new development residents and occupiers, and also the wider communities and Tremar and St. Cleer and beyond.

New off-highway routes could be part of integrated green corridors which have potential to serve wider local villages and communities. These could provide a community park, community orchards, additional allotments, play spaces, fitness trails and recreation opportunities. These green corridors could also provide landscape improvements such as new woodland planting, species rich grassland / wildflower meadows and habitat creation such as water courses / wetland. These opportunities create a varied landscape aesthetic, biodiversity gain, wildlife value, interest as well as providing educational learning and recreational opportunities.

A potential route across Common Land provides the opportunity for the introduction of troughs and fencing that would encourage grazing and thereby improved management, landscape enhancement and access.

Promotion of healthy living

A new route, or series of routes, could promote a more healthy lifestyle in provision of alternative transport modes such as cycling and walking. The routes have potential opportunities for landscape improvements which will all promote and provide for more healthy living and mental well-being. Fitness trails, cycle routes, off-road / trail biking, jogging, walking, recreation spaces including stop of points for rest and relaxation, spaces for contemplation and meditation.

Art in the landscape

The development site and associated routes can have interesting features throughout that evoke creativity and imagination. Art can take a variety of forms in the landscape and invite the users to interact with it. As well as sculptural elements made from and incorporated within the landscape, the art can invite play, music and fun. This can also promote local community involvement and design, local artists, schools etc, which can improve landscape value. Themes of interpretation as part of the language of the park could focus around the natural value of the site and surroundings such as water, trees and plants, stone, space, the sky, and the wildlife associated with these.

Landscape principles and site masterplanning.

Key landscape principles would inform various strategies and be integral in creating a site wide masterplan in promoting sustainable travel, sustainable drainage, ecology, biodiversity, recreation and education facilities and provide an integrated approach to new development within the site context.

6.2.2 Constraints

Landscape constraints consist of:

Land ownership.

Availability of land and land purchase will restrict potential new shared pedestrian / pathway routes and reduce opportunity to create associated recreational community spaces and green improvements. Opportunities to create a route within the Common land will require consultation, collaboration and approval with land owners. A potential access point on the west boundary could connect to Puckator Lane and to Common land although may be restricted by private land ownership.

Existing site boundaries.

Site boundaries are heavily vegetated which provides good screening to any new development within the site. These may also provide ecological value. This restricts potential of new planting of boundaries and conversely, any removals due to ecology and/or screening requirements.

Keeping within the context and Landscape Character Area description.

The development and landscape should contribute to the existing landscape character.

Planning policy.

The development and associated landscape needs to adhere to Planning Policy. Although within an Area of Great Landscape Value, the site and associated transport opportunities could greatly enhance the character of the area and AGLV. Potential

routes may be within the County Wildlife Area, therefore ecological assessments will be required to assess impacts and mitigation measures.

Heritage - Liskeard & Caradon Railway

The railway line is part of the UNESCO Cornish Mining World Heritage Site. The presence of the former railway is not immediately apparent when viewed from the site and any development is unlikely to have any impacts. However, it is possible to consider a route linking the site to Tremar and onto St Cleer using the railway line. Although this could have potential benefits to the Heritage Asset, a Heritage Assessment would be required. The line of the track is on private land and is not a Public Right of Way, therefore the potential for its availability for this use is limited.

Potential physical and visual impacts of development.

The development may have physical and visual impacts both within close vicinity and longer distance impacts. To fully assess these impacts and mitigate them, it will be necessary to conduct a Landscape Visual Impact Assessment which would influence the use of appropriate material textures, colours, characteristic building forms and massing, rooflines and landscaping to ensure that the appearance of the development is consistent with views from and into the WHS and AONB.

Existing site access and restrictions of new access.

The development has a convenient access location and interprets the access into the future development layout.

Existing Tree Preservation Orders.

There are existing TPOs within the hedgerows along Tremar Lane which prevents further development alng this road and restricts opportunity for road widening to allow a more adequate shared cycle / pedestrian route along the existing highway.

Ground contamination and conditions.

Ground contamination and conditions of the development site may require remediation and potentially restrict planting opportunities. Contaminated land may require removal, or hardstanding may need to be left insitu if required as a capping layer, or additional capping layers may be required.

Lighting.

The site and surroundings are within a Dark Skies designated area. This presents restrictions in opportunities for lighting the existing highway and any new shared cycle / pedestrian routes, however, this primarily restricts upward lighting. Further studies/ assessments will be required to balance restrictions of the designation, ensuring minimal disturbance to wildlife and night environment whilst considering health and safety for users of the proposed routes.

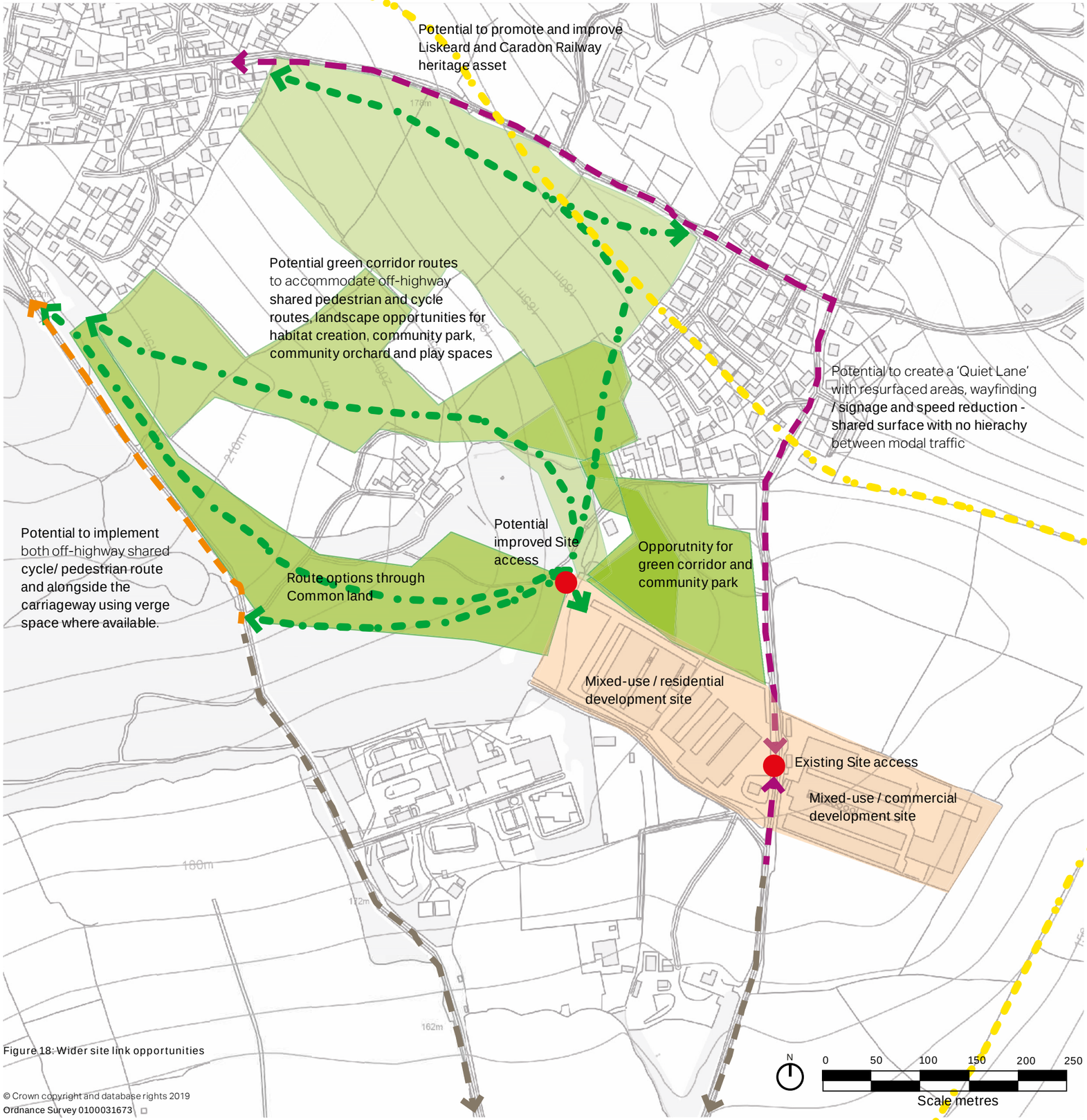

Figure 18: Wider site link opportunities

6.3. Strategic site opportunities

Both the commercial and residential development sites have potential to create and be an integral part of a green corridor that extends beyond the site boundary, and inform green infrastructure links to surrounding villages. The shared cycle / pedestrian routes would be an integral part of the green links, offering landscape improvements, biodiversity gains and recreational opportunities for residents, local communities and employees as well as offering a safe route for alternative transport modes, other than cars.

The green infrastructure within the site would include a diverse range of tree species; species rich / wildflower grassed areas, hedgerows and sustainable drainage systems (SuDS) such as water attenuation ponds, swales and rain-gardens. These would also offer opportunities for wildlife habitat and site biodiversity value.

Commercial development provides opportunities to include green-walls, green-roof systems, as well as tree planting within car parking areas and bolstered boundary planting to screen existing open views.

The boundaries of the site are extensively vegetated with native hedge and trees, and create useful existing screening. To aid the screening, the scale and massing of built form could be visually reduced by tree planting and green spaces within the site and in between buildings. New tree planting to the boundaries would bolster screening and future proof existing mature planting with succession planting as replacements as they age.

Residential development would offer green spaces for recreation, and play areas, both formal and informal, 'street' tree planting, and planting of boundary frontages such as hedges.

The landscape treatments would also offer ecological improvements and mitigate any potential impacts.

The principles of the 'Quiet Lane' along Bakers Lane (C0043) and beyond could be employed within the site by use of shared space surfacing and reduced speed limit of 20mph. This would improve safety, potential for improved surfacing, wayfinding and signage.

Surfacing types would be aesthetically attractive, but robust, and contribute to SuDS using permeable surfacing methods.

These principles would contribute to an 'Eco-village' concept.

A developed landscape design would be part of a holistic masterplan and mitigate potential impacts defined from a Landscape and Visual Impact Assessment. An assessment would identify key receptors to development impacts, views and screening requirements.

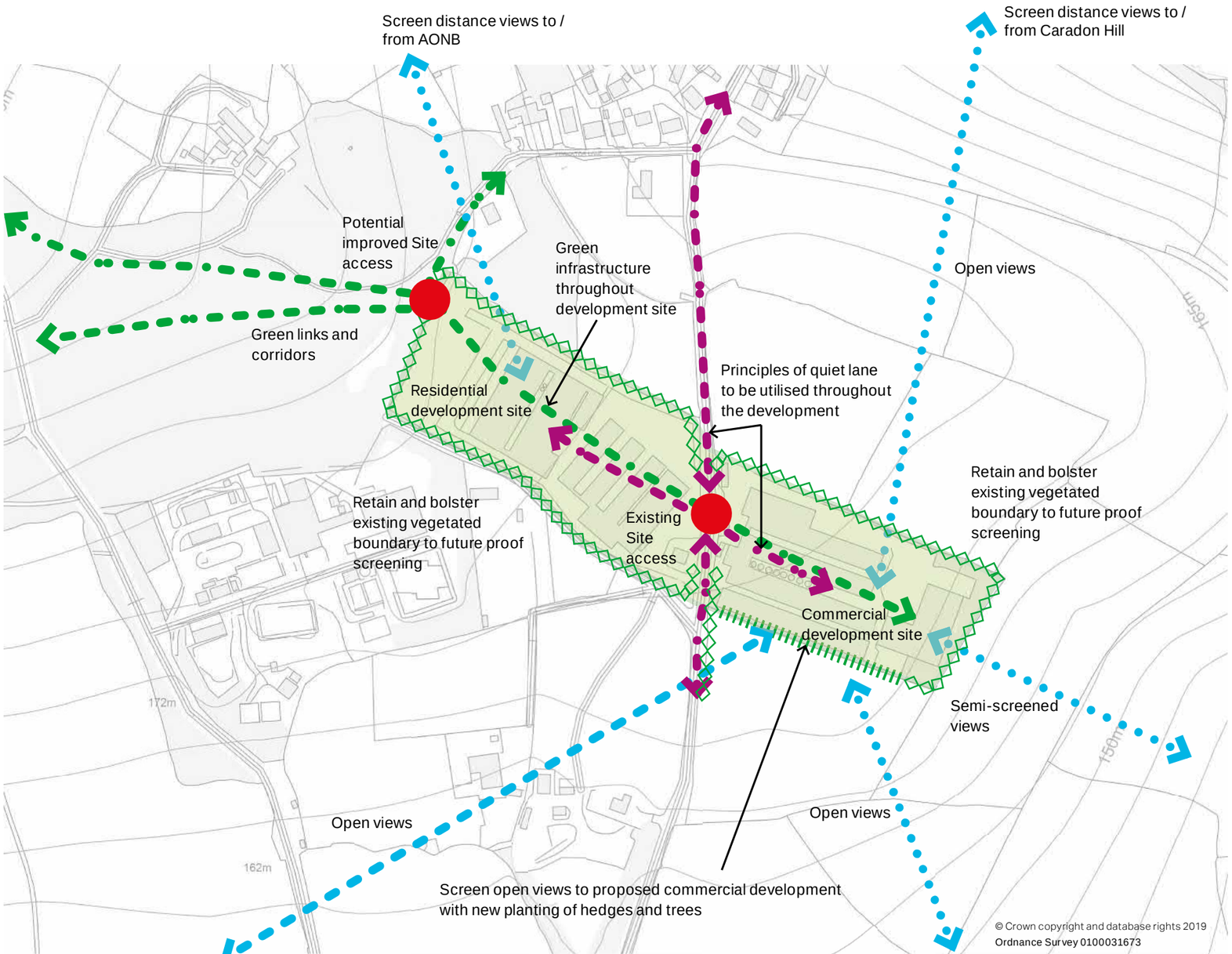

Figure 19: Development site opportunities

6.4. Landscape principles

Green infrastructure

The soft landscape will consider the existing site context and seek to improve the aesthetic quality and habitat opportunities. These include ensuring that there is an overall gain on wildlife value and connectivity. This will include tree planting and the creation of new habitats, along with improved management to be an integral part of the route options.

This green infrastructure has opportunity to be integral part of development, such as greenroof systems, green-walls, street tree planting, rain-gardens and Sustainable Drainage Systems (SuDS), species rich grass and wildflower meadows, promoting healthier lifestyles and awareness.

Sustainable and safe transport

The creation of a 'quiet lane' along has potential to improve the highway quality through material use, signage and wayfinding and in providing a safe, legible route connecting the development to Tremar and St. Cleer. A shared cycle / pedestrian route could compliment the highway and / or be separate from the road to create a completely segregated vehicular traffic free route. The provision of such a route would promote more sustainable travel options and a safe cycling route.

Ecology and biodiversity

Opportunities for habitat creation, biodiversity net gain and ecological considerations of development and potential routes. Any potential impacts are to be minimised and mitigated for.

Materials

The materials will be simple, durable and cost effective. They will aim to provide a good quality aesthetic at key points, such as entrances and provide a robust and safe surface for general pathways. Key materials will consider the site usage of pedestrian and cycle traffic, consider accessibility to provide a comfortable journey and the site context of wooded areas and open grassland. Therefore, the primary material needs to be usable in a variety of situations, hard-wearing and be maintainable. A simple anti-skid surfacing could used on existing highway to mark Quiet Lane entry points, and a loose self-binding gravel or hoggin for cycle and pedestrian routes.

Wayfinding, legibility and identity

The method of wayfinding and signage will be a significant element of legibility linking the site to surrounding villages and route identity. There are many options available including using 'off the shelf' products from simple finger post signs and bollards to a full suite of signs, waymarkers and interpretation board. However, the area has a distinctive rural character and waymarking should be restricted to the minimum necessary and of appropriate design reflecting local character, which will also reduce maintenance costs. Low level lighting could also be part of the wayfinding and language of the routes, however is very restricted and unlikely to be permitted on Common Land.

Wayfinding can also be incorporated onto ground such as painted / coloured surfacing and thermoplastic logos or motifs. These can identify Quiet Lanes and pedestrian / cycle ways, or simply deliver positive notes and messages along the way...

User health and well-being

The development and associated routes should aim to encourage a more healthy lifestyle and offer opportunities for activity, fitness and wellbeing. The site routes can accommodate walking, jogging and cyclist activities however, there could be fitness interventions along these routes. These could be 'fitness trails' of exercise equipment that promotes a beneficial and positive use and lifestyle of the users. Remote and tranquil spaces offer opportunities for activities such as resting points, spaces for relaxation, reflection and contemplation to promote wellbeing. Stop off points and resting places could be incorporated, other than on Common Land, where recreation opportunities could also be promoted / provided for.










6.5. Sustainable access options

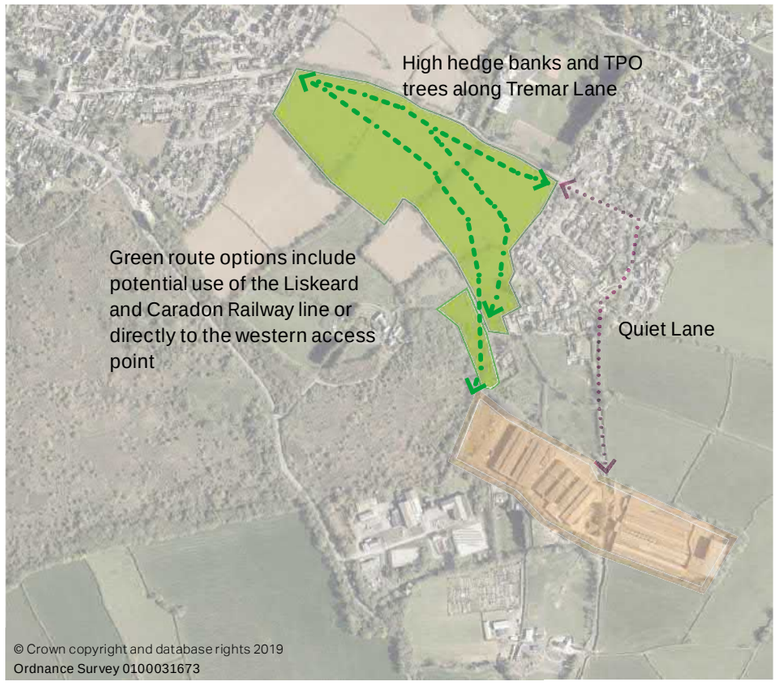

Figure 20 - Northern green corridor link

The northern link would accommodate land parcels adjacent to Tremar Lane between Tremar and St Cleer. This would also give opportunity to partly use the Liskeard and Cardon Railway line. Other route options would create landscape improvements across these parcels of land (see Figure 23). A shared pedestrian / cycle route could stem off the main highway where there are restrictions of road widening of high hedgebanks and trees protected under TPO and connect to a 'Quiet Lane' (see Figure 24). The Quiet Lane could be utilised as well as the green route options.

Land ownership and permission restrictions are the main issues with this option.

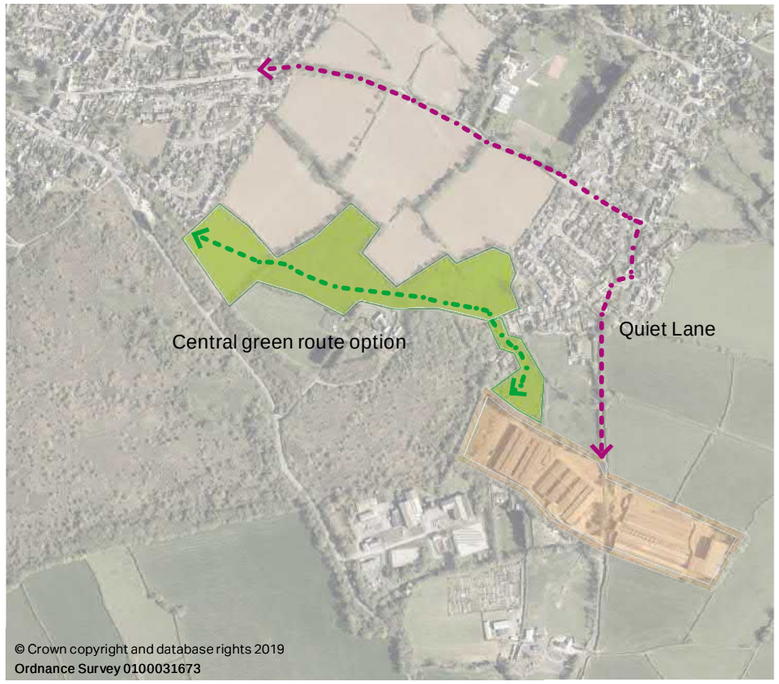

Figure 21 - Central green corridor link

A central corridor would create a linear park adjacent to the Common Land and link the development site, Tremar and St Cleer (see Figure 23). This could be as well as a Quiet Lane (see Figure 24).

Land ownership and purchase cost are obstacles with this option.

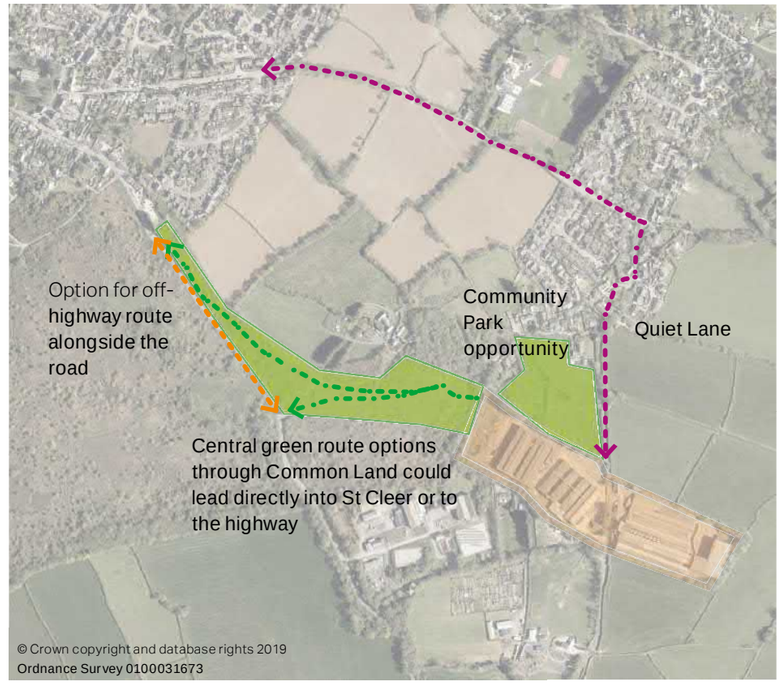

Figure 22 - Common Land link.

From the western existing site access, it is possible to create a link route through Common Land, with partnership with the landowners, to create a off highway route. The route could provide infrastructure such as water troughs and fencing which are required to a bring about active grazing and facilitate management of the commons.

The route could adjoin the existing highway further towards St Cleer or opportunity to create an adjacent route alongside the highway (see Figure 25). With consultation and collaboration with Commoners, this appears to be the most feasible option. However, it is unlikely any lighting will be permitted on the Common Land.

Other possibilities are to create a Community Park north of the development site to connect to Lower Tremar, and to use the Quiet Lane as well as green route options.

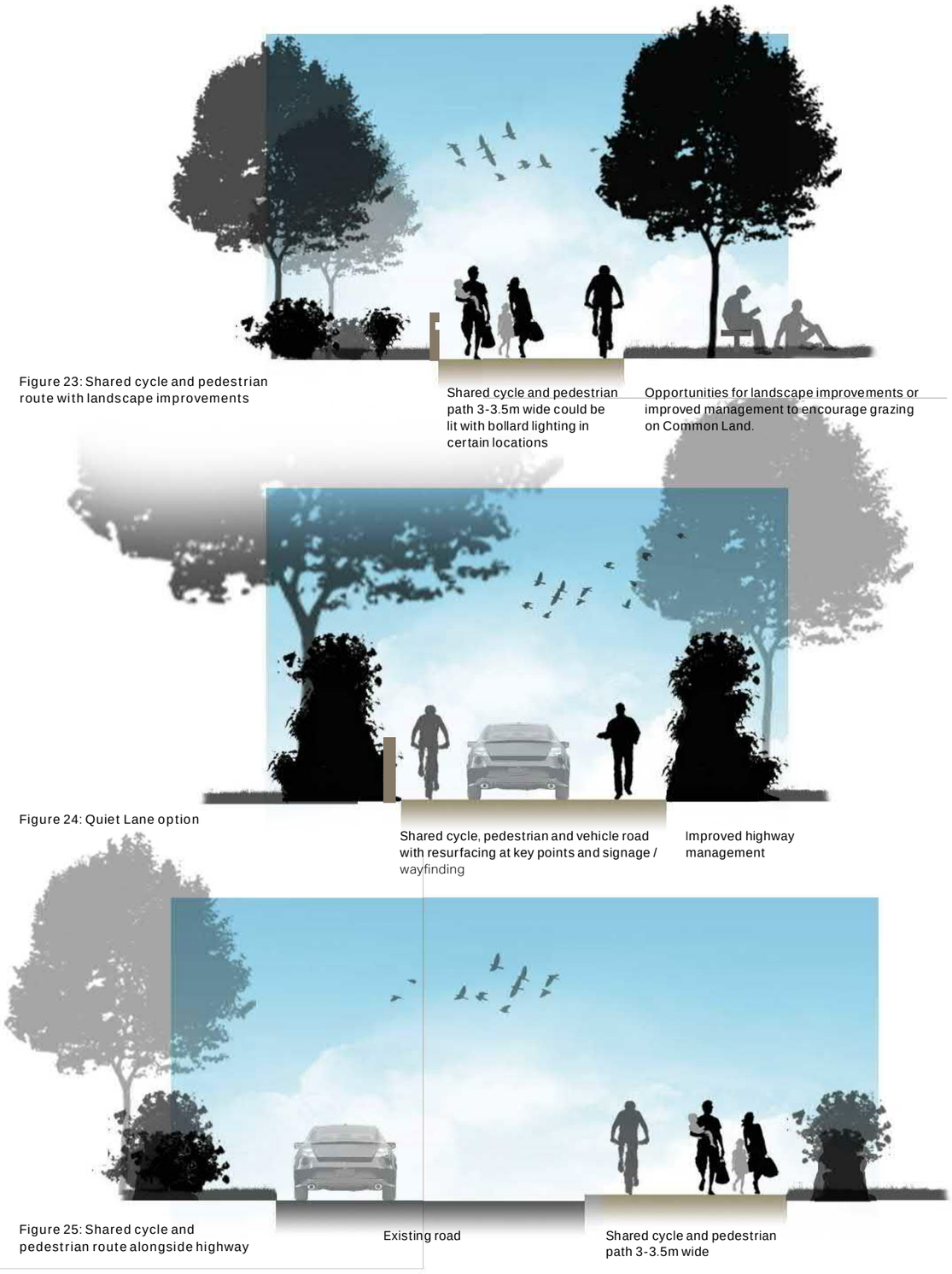

Figure 23: Shared cycle and pedestrian route with landscape improvements

Figure 24: Quiet Lane option

Figure 25: Shared cycle and pedestrian route alongside highway

6.6. Route options

Figure 23: Shared cycle / pedestrian cycle route.

A segregated (off-highway) route can be utilised to provide a shared route accessible from the western boundary which has potential to connect to Puckator Lane to connect directly to Lower Tremar. This western access could also provide an access route across Common Land to connect to Fore Street into St Cleer and other green route options across arable farmland fields.

Other options include off-highway routes adjacent Tremar Lane and the Liskeard & Caradon Railway route. This could potentially be part of a wider trail to promote the Heritage asset and enhance / protect it as a tourist interest. Other route options could be developed as part of green corridor connections and landscape improvements. These will offer opportunities for various landscape improvements, habitat creation, providing recreation and relaxation spaces or on Common Land where improved landscape management could encourage an increase in grazing.

The route should be at least 3-3.5 metres wide to accommodate two-way pedestrian and cycle traffic comfortably. The surfacing can be a cost effective self-binding gravel such as Cedec or hoggin, that can be easily be reinstated over time.

These routes could also be a catalyst for wider associated landscape improvements, resting places/picnic spots and more regular maintenance resulting in higher landscape quality.

The strategy could include wayfinding and lighting. Lighting should be low level, and can be bollard lighting or 5m high lamp columns. These could be timed to switch off at some time in the night, and / or could be fitted with motion sensors to only light when needed. However, due to ecological constraints such as bat corridors, any lighting proposals are to be developed with ecology considerations and within the constraints of the Dark Skies designation.

Figure 24: Quiet Lanes.

The creation of a 'Quiet Lane' along has potential to improve the highway quality through material use, signage and wayfinding and in providing a safe, legible route connecting the development to Lower Tremar and St Cleer. A shared cycle / pedestrian route could compliment the highway and / or be separate from the road to create a completely segregated vehicular traffic free route. The provision of such a route would promote more sustainable travel options and a safe cycling route. This would be particularly beneficial along narrow sections of road, enclosed by high hedge banks and tree planting where road widening is not possible. A contrast of surfacing such as resin bound gravel or an anti-skid overlay (if not the entire length then at certain key locations) along with signage or wayfinder markers define the road as a Quiet Lane, and a speed reduction to 20mph would also improve safety. There is no hierarchy of users as the use is shared. This would also enable sensitive management of adjacent roadside landscape features such as hedges, verges and trees to improve the landscape, and road safety for cyclists, walkers and horse riders.

Lighting opportunities are restricted by road classification and highway regulations, however, the route could be lit at certain locations in line with ecological and Dark Skies designation considerations.

Figure 25: Shared cycle / pedestrian routes alongside highway.

Where space allows alongside existing highways, for instance open grass verges, a shared cycle / pedestrian route could be installed to offer a safe, off-highway route. This option is limited along Baker Lane and Tremar Lane but possible along the main vehicle route leading to Fore Street into St Cleer. This could also be a continuation of a route leading to/from the Common Land. The road speeds along this road are national speed limit until the 30mph restriction into St Cleer.

6.7. Summary and conclusions

- Both the commercial and residential development sites have potential to create and be an integral part of a green corridor that extends beyond the site boundary, and inform green infrastructure links to surrounding villages. The shared cycle / pedestrian routes would be an integral part of the green links, offering landscape improvements, biodiversity gains and recreational opportunities for residents, local communities and employees as well as offering a safe route for alternative transport modes, other than cars.
- The green infrastructure within the site would include a diverse range of tree species; species rich / wildflower grassed areas, hedgerows and sustainable drainage systems (SuDS) such as water attenuation ponds, swales and rain-gardens. These would also offer opportunities for wildlife.
- The potential route through Common Land seems the most feasible option, due to land ownership and availability and the opportunity to help improve management of the Common, subject to relevant consultation, collaboration and agreement in partnership with the Commoners.
- The potential development site opens opportunities further than its boundaries, and can influence a wider, further reaching strategy for green corridors, landscape improvements and increased highway safety.
- Despite the Dark Skies designation, it is possible to light the route(s) with low level lighting, such a bollard lighting or 5m high lamp columns. Lighting of the road for the Quiet Lane will be subject to road classification type and highway regulations if necessary. Any lighting proposal will require ecological considerations such as provision of dark corridor routes for bats etc. However, it is recognised thta lighting should only be proposed where necessary and essential for safety. It is unlikely that lighting will be permitted on Common Land and elsewhere is very restricted.
- Any potential route will be subject to ecological surveys to assess any impacts and mitigation required.
- Any site development may be subject to a Landscape and Visual Assessment, which will identify both physical and visual impacts of development and mitigation required. This would influence the use of appropriate material textures, colours, characteristic building forms and massing, rooflines and landscaping to ensure that the appearance of the development is consistent with views from and into the WHS and AONB.
- Key landscape principles would inform various strategies and be integral in creating a site wide masterplan in promoting sustainable travel, sustainable drainage, ecology, biodiversity, recreation and education facilities and provide an integrated approach to new development within the site context.

Geo-environmental

07

7. Geo-environmental

7.1. Potential constraints to development

A phase one land contamination desk study[1] (the Desk Study) was produced for the site by Cornwall Consultants in 2013 and forms the basis of the following review[2]. The Desk Study presents a preliminary assessment on the land condition of the site, based on a site visit and desk top review only, no intrusive exploratory investigations have been conducted to prove the geo-environmental status of the site.

The following summarises the background environmental setting of the site:

Geology[3]. The site is almost entirely located on an igneous intrusion of microgabbro. The parent geology, surrounding the intrusion and which the far eastern section of the site may be located, comprises mudstone with thin sandstone beds of the Brendon Formation of the Teign Valley Group. There are no superficial deposits mapped at the site although a series of historical borehole logs[4] from St. Cleer Water Treatment Works, located adjacent to the west of the site identifies possible head deposits comprising approximately 2m of silty clay. This is shown to overly weathered mudstone of Upper Devonian Slate.

Hydrogeology. According to the Desk Study the underlying geology comprises a Secondary A aquifer and the site is not situated within a Source Protection Zone. There are four licensed boreholes on-site which abstract groundwater for general farming and domestic purposes.

Hydrology. According to the Desk Study, the nearest surface water feature is a stream is located 68m to the north. This flows north eastward in a culvert toward a tributary of the River Seaton. However, given the site topography, it is considered most likely that the closest down-gradient surface water feature is a tributary of the River Seaton located approximately 200m south of the site.

Based on the findings of the Desk Study, there are a number of locations across the site which have the potential to pose an unacceptable contamination risk. These areas are presented on Figure 17[5] and include:

- the former transformer building area which includes a substation and two above ground storage tanks which formerly contained amino acid and diesel;
- several vehicle wash down areas and associated drainage systems;
- the former poultry house area;
- the location of the site septic tank, within the former delivery truck parking area;
- the location of a second septic tank within a grassed area;
- location of the bungalow existing domestic heating oil tank;
- the location of an existing (empty) and former above ground storage tanks for diesel;
- the location of the substation which powers the lift to the packing area within a poultry house;
- area comprising imported made ground; and
- former pesticide storage areas.

Additional potential contamination sources, identified by the Desk Study include:

Ground gas: Historical mapping shows that a former quarry adjacent to the west of the site has been infilled. The nature of the material used to fill the quarry is unknown and may represent a contamination and / or ground gas source.

Radon: The site is located within a radon affected area.

Asbestos: The existing site buildings may include asbestos-containing material (ACM). Imported made ground may have included ACM.

Mining: According to the Desk Study, the site Is situated south of the former copper mining district centred on Caradon Hill. The nearest recorded mine is Wheal Venland, located 400m north. Naturally elevated concentrations of heavy metals may be present within soils at the site.

These existing features have the potential to have resulted in soil and / or groundwater contamination of metals, polycyclic aromatic hydrocarbons; total petroleum hydrocarbons, benzene, toluene, ethylbenzene, xylenes, volatile organic hydrocarbons and polycyclic biphenyls. Potential ground gases associated with the adjacent infilled quarry include carbon dioxide and methane.

The following potential constraints to development are identified:

- contamination of site soil and / or groundwater, associated with the sources listed above, with the potential human and environmental, including controlled waters, receptors;
- potential for hazardous ground gases to accumulate within the proposed development and represent an asphyxiation risk to site users and or explosive risk;
- although the site does not lie within a former mining lease boundary, the potential for historical mining of the site should be considered, which could have the potential to create a stability hazard to the proposed development or could provide preferential groundwater flow pathways;
- potential for restrictions on the use of soakaway drainage system in contaminated ground due to the potential impact to controlled waters;
- buried obstructions from the likely presence of relic foundations and structures may constrain the location of new foundations and service trenches of the proposed development;
- potentially chemically aggressive ground conditions with the potential to impact foundation design;
- potential for volatile organic contamination which could impact new water supplies of the proposed development; and
- the potential for radon gas to accumulate within the proposed development and impact the health for future site users.

The listed potential constraints will require assessment following site investigation. It is acknowledged that some of the site cannot be investigated until some structures have been removed and therefore a phased site investigation may be required. To enable the design of a targeted investigation, details of the site infrastructure including soakaways, drainage and borehole locations, together with the findings from the specialist asbestos assessment report, are required. If existing buildings are to be demolished, then appropriate measures should be employed to prevent the release or spread of contamination. A full asbestos survey will be required prior to demolition.

The listed potential constraints will require further risk assessment and the design and implementation of appropriate mitigation and remediation as part of the future site development and will likely be controlled by Local Authority planning conditions.

7.2. Potential opportunities to development

Given the site use history, it is anticipated that the site assessment will identify requirement for mitigation / remediation works. The implementation of planned remedial works will require validation, which will likely be controlled by Local Authority planning conditions. The revised draft NDP Policy 22, clause 2.d states '**Mitigate any pollution remaining on the site remnant from its previous intensive agricultural use and** *ensure that no off-site contamination occurs as a result of the development'.*

The following are possible mitigation / remedial measures to the identified potential constraints[6]:

- an appropriate level of site investigation, characterisation and risk assessment should be undertaken to ascertain whether remedial measures are necessary and, if so, to allow selection of the most appropriate mitigation options.
- contaminated soil could be removed off-site to a licensed landfill facility. A soil capping system could be utilised in soft landscaped areas, although to maintain site levels, some soil excavation and disposal may be required in conjunction with a capping system. No capping would be required in areas of proposed hard

landscaping such as beneath buildings, roads and drive ways. Imported material, used for soft landscaping or for a capping system would be required to meet chemical screening criteria, pre-agreed with the Local Authority;

- due to the age of the fill material within the adjacent quarry, the risk of hazardous ground gases being produced is considered to be low. However, if following site investigation a risk is identified, mitigation measures could include a subsurface physical barrier between the site and the former quarry and / or engineered mitigation within the floor slab of the proposed development;
- the potential risk to controlled waters could be mitigated with the removal of the contaminated source material. Should piling foundations be implemented, these should be designed to minimise or prevent the spread of contamination via new contaminant migration pathways;
- mitigation measures for mining features may include capping of shafts, replacement of poor quality mining spoil / fill material and / or the adaptation of foundation design;
- should soakaways be included in the proposed development, these should be designed so as not to create new contamination pathways to groundwater and in accordance with appropriate guidance[7];
- the risks of encountering buried structures can be managed by locating features of concern on historical maps and plans and undertaking geophysical surveying of affected areas to assess whether they are still likely present;
- protection of underground water pipes may be required which may include an alternative pipe material or the backfilling of service trenches with clean inert material; and
- full radon protection measures will be required for the proposed development. The form of the radon mitigation is dependent on the type of floor slab construction[8]. Planning conditions are likely to require that the installation of the mitigation measures is verified.

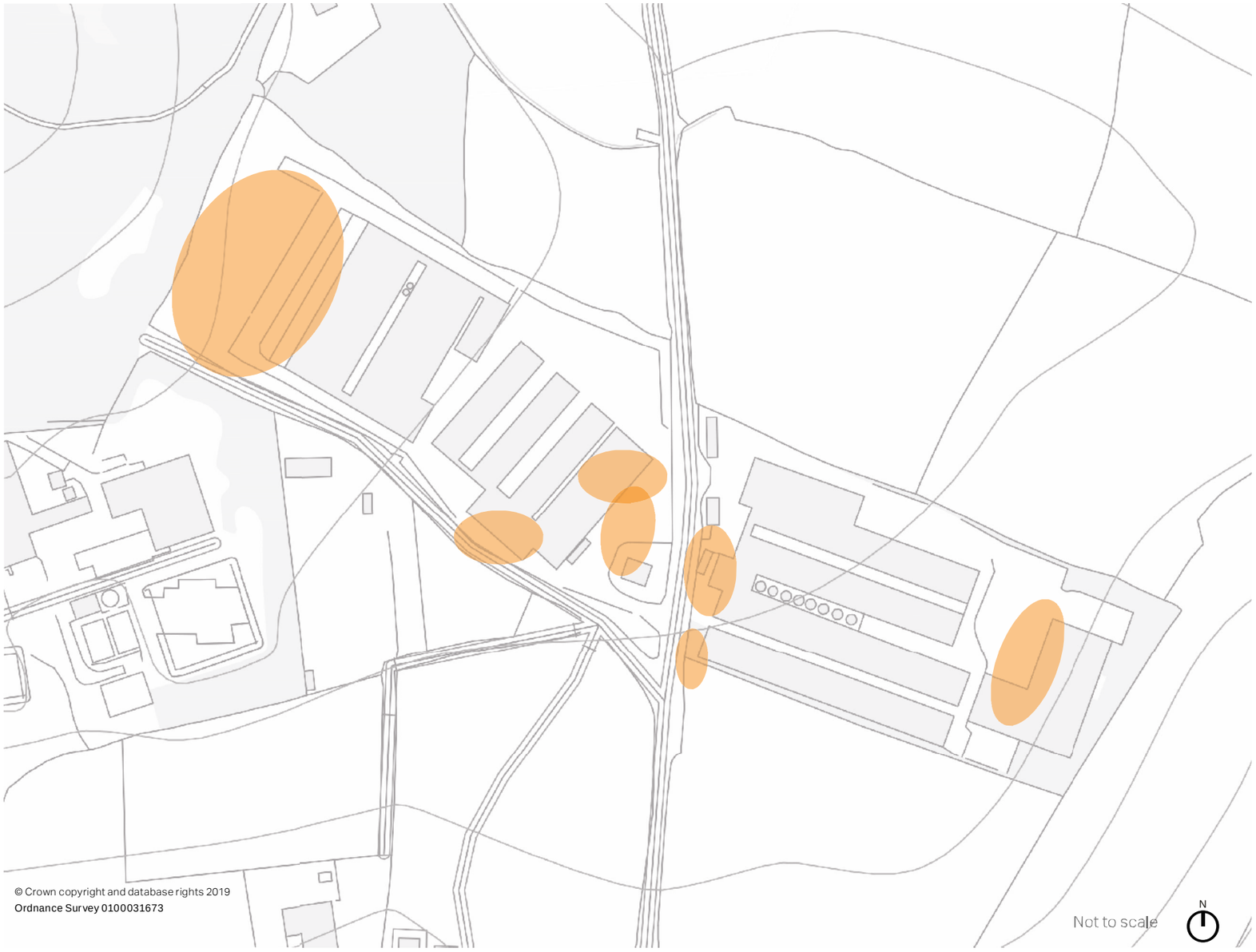

Figure 26: 'High risk' contamination areas

[1] Cornwall Consultants Ltd. (2013) Phase I - Land Contamination Desk Study Ref: CLC/CLC/SS/3503.e.DS. December 2013

[2] Limitations: The information used for this assessment has been sourced solely from the 2013 Cornwall Consultants Desk Study and although AECOM have attempted to verify, update and supplement the information using online sources, AECOM take no responsibility for the accuracy and completeness of the Desk Study report. Although site visits have been made by AECOM during 2019, the findings of which appear to corroborate those documented in the Phase I Desk Study, it is possible that the contamination status of the site may have changed during the intervening period and it is recommended that an updated Phase I assessment of the site is carried out. Any conclusions and recommendations made by AECOM are drawn from the information contained within the Desk Study and that sourced from online publicly available information sources.

[3] British Geological Survey. Geology of Britain Viewer. Viewed online 16/09/19

[4] BGS borehole logs viewed via the Geology of Britain Viewer. Pell Frischmann Water (2004). BGS ID: 608786

[5] The highlighted 'high risk' areas presented on Figure 18 are taken from the Desk Study and it cannot be ascertained whether all the features listed are included within the highlighted areas.

[6] Remediation options are those included within the Desk Study, as well as additional measures identified by AECOM.

[7] CIRIA (2015). The SuDS Manual. Ref: C753 2015

[8] BRE (2015) Radon: Guidance on protective measures for new buildings. BR211 2015

St. Cleer Horizon Farm

Ecology

08

8. Ecology

8.1. Ecological review

8.1.1 Summary of Ecological surveys to date

An Extended Phase 1 Habitat survey and subsequent Ecological Appraisal was undertaken by Tamar Consulting in 2013[1] , following this a bat activity survey was undertaken by Penpoint Ecology Services[2] . The results of these reports, and an updated desk study, form the basis of the following review.

It should be noted that ecosystems are dynamic and constantly changing, and therefore, species may move, or new species may be recorded in subsequent years. For this reason, and in accordance with current guidance, survey data has a 'shelf-life' of, and should only be relied on for, a period of 12-18 months from the date of survey (CIEEM)[3] . Therefore, a sense check and brief desk study has been carried out alongside this report, which seeks to confirm the validity of the conclusions drawn from these past studies.

The brief updated desk study was carried out using the data sources detailed below:

Desk Study Data Sources:

Data Source: Multi-Agency Geographic Information for the Countryside (MAGIC) website

Accessed: 8th October 2019

Data obtained:

International statutory designations

Other statutory designations

Sites designated for bats

Protected species mitigation licence applications

Information on habitats and habitat connections (based on aerial photography) relevant to interpretation of planning policy and assessment of potential protected and notable species constraints

Data Source: Ordnance Survey 1:2500 Pathfinder maps and aerial photography

Accessed: 8th October 2019

Data obtained:

Information on habitats including ponds with 500 m and habitat connections (based on aerial photography) relevant to interpretation of planning policy and assessment of potential protected and notable species constraints.

Results:

The following summarises the background ecological setting of the site:

The site comprises mainly buildings and hardstanding. Semi-natural vegetation is found in the hedgerows, tall ruderal vegetation at the western end of the site, and scattered trees at the eastern end. Some of the hedgerows are species-rich, and these are legally protected under the Hedgerow Regulations 1997 and the Natural Environment and Rural Communities Act 2006[4].

Three County Wildlife Sites (CWS) lie within a 1km radius of the site, as shown in Figure 7 of Chapter 2.3.

- CK37 St Cleer Downs, which borders the western boundary of the site;
- CK11.6 Pickshill Wood, which lies 400m to the north-east; and
- CK13 Halbathick Wood, which lies 900m to the south-west.

County Wildlife Sites are non-statutory nature conservation sites, selected by Cornwall Wildlife Trust because of the presence of distinctive, important or threatened species and habitats, in either a national, regional or local context. They are also designated to link and buffer other important areas for nature conservation, such as Sites of Special Scientific Interest (SSSI). County Wildlife Sites have no legal protection but are recognised in Local Development Plans and subject to planning constraints (Cornwall Wildlife Trust, 2011).

There are three nationally designated sites within 5 km of the site.

- Cornwall Area of Outstanding Natural Beauty (AONB) 2.1km northwest;
- Crow's nest SSSI, which lies 2.3km to the north and is designated for the presence of inland rock;
- Phoenix United Mine and Crow's Nest Special Area of Conservation (SAC) 2.3 km to the north and is designated for Calaminarian grasslands of the Violetalia calaminariae;
- Golitha Falls National Nature Reserve (NNR) lies 3.1km to the northwest and is designated for ancient woodland supporting dormice and valuable bryophytes and lichens;
- Draynes Wood SSSI lies 3.1km to the northwest and is designated for broadleaved, mixed and yew woodland; and
- Phoenix united Mine SSSI 4.4km north and is designated for the presence of inland rock.

The Ecological Appraisal concluded that habitats within the site have the potential to support the following species:

- Bats
- Dormice
- Hedgehog
- Reptiles
- Amphibians
- Breeding birds
- Butterflies and moths

The Preliminary Assessment[1] and bat activity surveys[2] concluded that:

- The western boundary of the site should be retained and buffered to protect the CWS;
- Increased lighting may affect potential bat commuting routes and foraging areas along the hedgerows;
- A buffer zone is required adjacent to the hedges to minimise disturbance to potential Dormouse habitat;
- Demolition of the buildings and any works to trees, shrubs or hedges must be timed to avoid disturbance to nesting birds;
- Vegetation clearance at the western end of the site must be undertaken according to best practice to avoid killing or injuring reptiles;
- A significant bat roost is present in the shed to the western rear of the site – Further survey is required, and a European Protected Species Licence will be required if any demolition works are required within the west of the site; and
- It is considered likely that a barn owl (Tyto Alba) roost is present in the shed to the western rear of the site – Further survey is required.

[1] Tamar Consulting (2013) Ecological Appraisal; Horizon Farm, Tremar.

[2] Penpoint Ecology Services (2013) Bat Activity Survey; Horizon Farm, Tremar.

[3] CIEEM (April 2019) On the Lifespan of Ecological Reports & Surveys, Advice Note

[4] Cornwall County Council (2016), The Cornwall Local Plan (CLP), 2016 - 2030

8.2. Wildlife legislation and planning policy

8.2.1 Wildlife Legislation

The following wildlife legislation is potentially relevant to the site:

- Wildlife and Countryside Act (WCA) 1981 (as amended);
- Countryside and Rights of Way (CRoW) Act 2000;
- Natural Environment and Rural Communities (NERC) Act 2006;
- The Conservation of Habitats and Species and Planning (Various Amendments) (England and Wales) Regulations 2018;
- Protection of Badgers Act 1992; and
- The Hedgerow Regulations 1997.

The above legislation has been considered when undertaking this review and when identifying potential constraints and recommendations for opportunities. Compliance with legislation may require the attainment of relevant protected species licences prior to the implementation of any development.

8.2.2 National Planning Policy

The NPPF states the commitment of the UK Government to minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity.

It specifies the obligations that the Local Authorities and the UK Government have regarding statutory designated sites and protected species under UK and international legislation and how this it to be delivered in the planning system. Protected or notable habitats and species can be a material consideration in planning decisions and may therefore make some sites unsuitable for particular types of development, or if development is permitted, mitigation measures may be required to avoid or minimise impacts on certain habitats and species, or where impact is unavoidable, compensation may be required.

The NPPF is clear that pursuing sustainable development includes moving from a net loss of biodiversity to achieving net gains for nature, and that a core principle for planning is that it should contribute to conserving and enhancing the natural environment and reducing pollution.

8.2.3 Local Planning Policy

Relevant local planning policies for Cornwall County Council (CCC) are detailed in the following document:

- The Cornwall Local Plan (CLP), 2016 - 2030.
- This provides specific guidance on the assessment of any biodiversity impacts with respect to planning applications. Relevant Policies are summarised below:

Relevant Core Policies

Policy 21 - Best use of land and existing buildings

To ensure the best use of land, encouragement will be given to sustainably located proposals that:

a. use previously developed land and buildings provided that they are not of high environmental or historic value;

b. use despoiled, degraded, derelict and contaminated land provided that it is not of high environmental or historic value;

c. increase building density where appropriate, taking into account the character of the surrounding area and access to services and facilities to ensure an efficient use of land; take into account the economic and other benefits (including food production) of Grade 1, 2 and 3a agricultural land. Where significant development of agricultural land is demonstrated to be necessary, poor quality land should be used in preference to that of higher quality.

Policy 22: European Protected **Sites– mitigation of recreational impacts from** development

Mitigation measures will include:

- On site access and management;
- Off-site provision of suitable alternative recreational facilities.

The required level of contributions will be set out in more detail in the European Sites mitigation Strategy Supplementary Planning Document.

Policy 23: Natural environment

1. Development proposals will need to sustain local distinctiveness and character and protect and where possible enhance Cornwall's natural environment and assets according to their international, national and local significance. Specifically:

2. Cornish Landscapes

2 (a). The Cornwall and Tamar Valley Area of Outstanding Natural Beauty

2 (b). The Heritage Coast and Areas of Great Landscape Value

3. Biodiversity and Geodiversity

3 (a). European Sites

3 (b). National sites

3 (c). Local Sites

3 (d). Priority species and habitats

3 (e). Ancient woodland and veteran trees

4. Avoidance, mitigation and compensation for landscape, biodiversity and geodiversity impacts.

Policy 25: Green infrastructure

The existing green infrastructure network in Cornwall, which is important to recreation, leisure, community use, townscape and landscape quality and visual amenity will be protected and enhanced:

1. Retaining and enhancing the most important environmental infrastructure assets and connections

2. Demonstrating that all the functional environmental infrastructure and connections have been taken into account in the design of the scheme or site layout, including impacts on ecosystem services; biodiversity

3. Providing appropriate buffers to natural spaces that have community, biodiversity and heritage significance

4. Restoring or enhancing connectivity for nature and people through the site and linking to adjacent sites or green routes.

For the precise wording of the CLP policies please refer to the source document [4]. These planning policies have been considered when assessing potential ecological constraints and opportunities identified by the desk study and previous surveys.

8.3. Ecological constraints and opportunities

Using the information gained on the biodiversity status of the site and its surroundings from the previous ecological surveys (carried out in 2013), a suite of constraints and opportunities have been anticipated regarding the Horizon Farm proposed development site. The proposed integration of the site with the local area through shared cycle / pedestrian routes and transport links to St Cleer is also considered.

8.3.1 Constraints

Protected sites

Horizon Farm lies adjacent to St Cleer Downs CWS. The hedge along the western boundary borders this designated area and is shared with the boundary of the CWS. Any proposed development could potentially impact on the CWS through disturbance to this boundary or within the site. Furthermore, one potential green corridor shared pedestrian / cycleway route runs through the CWS.

Recommendations:

- Protect the integrity of the CWS by incorporating a strip of undeveloped land along the western boundary. This should be between 2 - 5m wide to provide an effective buffer between the CWS and potential new development.
- Protect the western boundary and its buffer zone during the construction phase by installing Heras fencing. This will restrict access from vehicles and storage of materials and prevent disturbance to any species which are using the western boundary for nesting or shelter.
- Encourage the development of rough grassland and scattered scrub within the buffer zone to provide habitat for small mammals, reptiles and invertebrates. Cut the vegetation annually in late summer and remove the cuttings to encourage floral diversity.
- Incorporate sensitive lighting into the design of the development to avoid impacting on wildlife in the adjacent CWS .
- Use a Sustainable Drainage System within the development to minimise hydrological impacts to surrounding habitats.

Habitats

Both the development of the Horizon Farm site, and the implementation of routes proposed for shared cycle / pedestrian paths and transport links with St Cleer, may require breaks in hedgerows and/or the removal of trees. Hedgerows contribute significantly to biodiversity. Species rich and ancient hedgerows, which are prevalent throughout the Cornish countryside, are protected by the hedgerow regulations 1997[5] and it is an offence to remove any part of a protected hedgerow without first obtaining permission.

Species

Bats:

Three species of bats have been recorded from the Tremar area[1]: Common pipistrelle (Pipistrellus pipistrellus), Noctule (Nyctalus noctula) and Brown long-eared (Plecotus auritus). Within the wider area, Greater horseshoe (Rhinolophus ferrumequinum), Lesser horseshoe (Rhinolophus hipposideros) and Whiskered/Brandt's bats (Myotis mystacinus/ brandtii) have been recorded within 10km[1] of the site.

One common pipistrelle roost (potentially a significant maternity roost[2]) was found within a shed on site during the 2013 surveys. Trees and buildings within the potential green corridor routes have the potential to support roosting bats.

The well-established Cornish hedges with trees and shrubs, which occur to the north, east and west of the site, connect the site to St Cleer Downs CWS and the local hedgerow network. These hedgerows are present throughout the surrounding landscape and potentially where the shared cycle / pedestrian paths are proposed. It is possible that these hedges could be used as flight paths by bats commuting between their roosts and feeding grounds. Hedges on the east side of the site are generally of poor quality and are less likely to be used by bats[1].

Lighting:

Many species of bat are averse to light, with different species having different tolerances. External lighting can make areas of previous foraging habitat unsuitable or inaccessible and cause indirect habitat loss.

Badgers:

The desk study[1] found that Badgers have been recorded in the St Cleer area. Badgers and their setts are legally protected under the Protection of Badgers Act 1992, making it an offence to kill, injure or take a Badger or to damage a sett.

No evidence of badger was found on the site during the 2013 surveys. The site offers limited foraging habitat for badger, but badger setts may be present within the land proposed for use as shared cycle / pedestrian paths extending from the site boundary.

Dormouse:

The desk study1 found that Dormouse has been recorded from a garden in St Cleer, and further afield at Pensilva and Upton Cross to the north-east. Dormouse is a European Protected Species and is legally protected under the Conservation of Habitats and Species Regulations 2010, Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), and the CRoW Act 2000. This legislation makes it an offence to kill, injure, capture or disturb dormice and to damage, destroy or obstruct access to any place that a Dormouse uses for shelter or protection.

No evidence of dormouse was found on the site. However, according to Natural England guidelines, "The presence of dormice should be assumed in any area of woody habitat within their range" (Bright et al, 2006).

Hedgerows within the site and potential shared cycle / pedestrian routes are suitable for Dormouse and are well linked to areas of scrub and woodland habitat.

Otter:

Otter has been recorded from the original desk study[1] from a tributary of the River Seaton, which flows through the hamlet of Tremar to the north. The Horizon Farm site does not have any streams or running water which could support breeding Otters.

One potential shared cycle / pedestrian route runs alongside a ditch to the north of the site. Otter use an extensive territory which extends up to 40m along a watercourse and up to 50m either side. The site access lies approximately 300m from the River Seaton tributary and so is unlikely to be used as part of a wider territory.

Hedgehog:

Hedgehog has been recorded within the local area. This species is a UK BAP Priority species and receives some protection under the NERC Act 2006. Hedgehog could potentially use the hedgerows on the site and within the proposed shared cycle / pedestrian paths for shelter.

Birds:

Breeding Birds

Two schedule 1 species were recorded from the desk study; barn owl and wood lark (Lullula arborea). Barn owl was found to be nesting within one of the sheds on site. Therefore, further surveys will be required if any demolition works are required within the east of the site.

Scrub and woodland habitat within the potential shared cycle / pedestrian path routes have the potential to support breeding birds.

Wintering birds

Several important species of wintering birds were recorded from the desk study. Redwing (Turdus iliacus) and Black redstart (Phoenicurus ochruros) both listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) for their breeding populations, but only occur in Cornwall as wintering populations. Lapwing (Vanellus vanellus), a UK BAP Priority species, has also been recorded in the St Cleer area. Birds are likely to be attracted to feed on moorland nearby where the shared cycle / pedestrian paths cross, but the site itself offers little foraging habitat for wintering species.

Reptiles:

The desk study[1] found that grass snake (Natrix natrix), slow worm (Anguis fragilis) and common lizard (Lacerta vivipara) have been recorded from St Cleer Downs adjacent to the site. All species of reptile are legally protected from killing and injury under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).

The site assessment found that there were limited resources on site to support these species. Field verges and moorland surrounding the site where the shared cycle / pedestrian routes are planned has the potential to support reptile species.

Amphibians:

Common toad (Bufo bufo), smooth newt (Lissotriton vulgaris) and common frog (Rana temporaria) have been recorded from St Cleer Downs.

The site at Horizon Farm has no open water and could not be used for breeding, but it is possible that the hedges and tall ruderal vegetation may provide shelter and feeding habitat for amphibians throughout the local area. There may be open water in the vicinity of the planned shared cycle / pedestrian paths and additional terrestrial habitat suitable to support amphibian species.

Invertebrates:

Several priority species of butterflies have been recorded from the St Cleer area, including Small pearl-bordered fritillary (Boloria selene), Wall (Lasiommata megera) and Small heath (Coenonympha pamphilus).

Several important species of moths have been recorded specifically from Horizon Farm. These include, August Thorn (Ennomos quercinaria), Autumnal Rustic (Eugnorisma glareosa), Beaded Chestnut (Agrochola lychnidis), Blood-Vein (Timandra comae), Brindled Beauty (Lycia hirtaria), Buff Ermine (Spilarctia luteum), Centre-Barred Sallow (Atethmia centrago), Dark-Barred Twin-Spot Carpet (Xanthorhoe ferrugata), Dot Moth (Melanchra persicariae), Dusky Thorn (Ennomos fuscantaria), Flounced Chestnut (Agrochola helvola), Green-brindled Crescent (Allophyes oxyacanthae), Mullein Wave (Scopula marginepunctata), Pretty Chalk Carpet (Melanthia procellata), Rosy Rustic (Hydraecia micacea), Small Phoenix (Ecliptopera silaceata) and White Ermine (Spilosoma lubricipeda).

These invertebrates are typically found in woodlands, hedges and/or waste ground and so they could potentially occur at Horizon Farm. However, it should be noted that, due to the limited extent and/or quality of the habitats present, the site is not considered to be optimal habitat for these invertebrate groups. The habitats surrounding Horizon Farm which are proposed for use as part of the shared cycle / pedestrian paths have not been surveyed and may support more suitable habitat to sustain these species.

8.3.2 Opportunities

There is scope within the scheme to enhance the wildlife interest of the site and the shared cycle / pedestrian routes and transport links to St Cleer through a range of habitat creation and management measures. These could include:

- Managing and improving the existing hedgerows; (increase connectivity)
- Maintaining wildlife corridors around the site and transport route margins;
- Seeding species-rich wildflower/grassland;
- Planting native tree species;
- Providing log piles for reptiles;
- Installing sustainable drainage systems with integrated wildlife and biodiversity aspects; and
- Installing bat, insect and bird boxes.

8.3.3 Recommendations

The surveys used to inform this assessment were produced in 2013 and so are out of date, a sense check of the survey data and desk study has been carried out as part of this report. However, the advice provided is to inform the feasibility study and cannot be relied upon for planning purposes. All ecological surveys will need to be updated to inform a planning application.

Surveys will be required along the routes of any potential foot or cycleways which have the potential to impact protected species. Additionally, these proposed routes should be maintained as dark corridors for bats.

Furthermore, in order for a development to be approved it must attain a biodiversity net gain of at least 10%. Updated surveys and plans for ecological mitigation and enhancement of the site, in conjunction with the Core Planning Policies, must be prepared to ensure this is achieved.

[5] http://www.legislation.gov.uk/uksi/1997/1160/introduction/made

St Clere Horizontal

Conclusion

09

9. Conclusions and outline costs

9.1. Conclusions

The previous chapters set out the baseline for the potential redevelopment of the site. It is an impartial review of the available information and analysis of potential opportunities and defined constraints. It describes a site that although faces considerable constraints has potential to provide many opportunities for site improvements and the surrounding context.

The outline costings provided are for the sustainable green route options. The 'Quiet Lane' can be costed subject to consultation and detailed design to include resurfacing at key locations, signage and lighting.

This chapter also explores the possible impacts and risks that would be associated with the return of the site to an intensive agricultural use and refers to an assessment produced by the St Cleer Neighbourhood Steering Group.

Transport and sustainability

Opportunities for options that can be considered are listed below:

- Mixed use development to offer complementary facilities which reduce the need to travel;
- Enhance Public Transport;
- New footpath / cycle links;
- Quiet lanes;
- Travel Plan; and
- Electric Charging.
- The site does meet many of the policy requirements for development. Furthermore, a development could be provided to meet a wider range of policy requirements such as the Local Transport Plan, Travel Plan and Design Guide policies, is suitable mitigation and appropriate measures can be implemented.
- Bus service improvements, or perhaps a more localised village service, and new foot / cycle path networks in the local area will be a key benefit to improving linkages between the residents of existing villages and the site. Although bus service funding can be expensive for a number of years, once successful it can become self-sufficient so the longer-term benefits are substantial.
- A Travel Plan is a very useful tool to promote use of non-car-based travel, although the appropriate infrastructure needs to be in place for it to be successful.
- Providing complementary services and facilities within the site itself will improve the sustainability of the site. This will, in turn, internalise trips and provide valuable services which might be considered to be lacking in the surrounding area.
- By promoting a range of options and requirements for development of the site, it is anticipated that the transport related issues, highlighted within the Planning Inspectors decision can be reduced in severity and mitigation can be secured to meet the policy requirements for delivery of a sustainable development.
- Whereas any future development proposals will need to be accompanied by appropriate assessment it is suggested that a Neighbourhood Plan, which contains a range of measures to address such matters, could provide a justified approach to appropriate mitigation.

Geo-environmental

- Given the site use history, it is anticipated that a site assessment will identify the requirement for remediation / mitigation measures.
- The design of the proposed development could be masterplanned so that hardstanding areas cover the most contaminated areas and result in reduced remedial costs. Furthermore, mitigation measures and remedial costs can be minimised by the phased completion of a further targeted site investigation and monitoring to identify and delineate contamination sources.

Landscape

- The development site has potential to influence green corridors and landscape improvements beyond the site boundary.
- There are options for wider connectivity of the development site and surrounding villages including 'quiet lanes' and shared cycle and pedestrian routes. These could be through 'green corridor' opportunities. However, the option to create a shared cycle and pedestrian route through Common Land seems to be the most viable in terms of land acquisition and land permissions.
- Key landscape principles would inform various strategies and be integral in creating a site wide masterplan in promoting sustainable travel, sustainable drainage, ecology, biodiversity, recreation and education facilities and provide an integrated approach to new development within the site context.
- A developed landscape design would be part of a holistic masterplan and mitigate potential impacts defined from a Landscape and Visual Impact Assessment. An assessment would identify key receptors to development impacts, views and screening requirements. This then would also influence the use of appropriate material textures, colours, characteristic building forms and massing, rooflines and landscaping to ensure that the appearance of the development is consistent with views from and into the WHS and AONB.
- The site has potential to be a greatly improved environment within the Area of Great Landscape Value, and could provide a wealth of landscape, environmental and ecological improvements to the area. With reduced building scale and height, and further screening and tree planting, along with the creation of green routes and corridors, a new development and improved transport links will be highly beneficial.
- Lighting of the routes will be proposed as part of ecological assessments and in consultation with highway stakeholders / Cornwall Council. However, it is unlikely that lighting will be permitted on Common Land and elsewhere is very restricted due to the Dark Skies designation.

Ecology

- A sense check of the survey data and desk study has been carried out as part of this report, however, the advice provided is to inform the feasibility study and cannot be relied upon for planning purposes. All ecological surveys will need to be updated to inform a planning application.
- Surveys will be required along the routes of any potential foot or cycleways which have the potential to impact protected species. Additionally, these proposed routes should be maintained as dark corridors for bats.
- Furthermore, in order for a development to be approved it must attain a biodiversity net gain of at least 10%. Updated surveys and plans for ecological mitigation and enhancement of the site, in conjunction with the Core Planning Policies, must be prepared to ensure this is achieved.

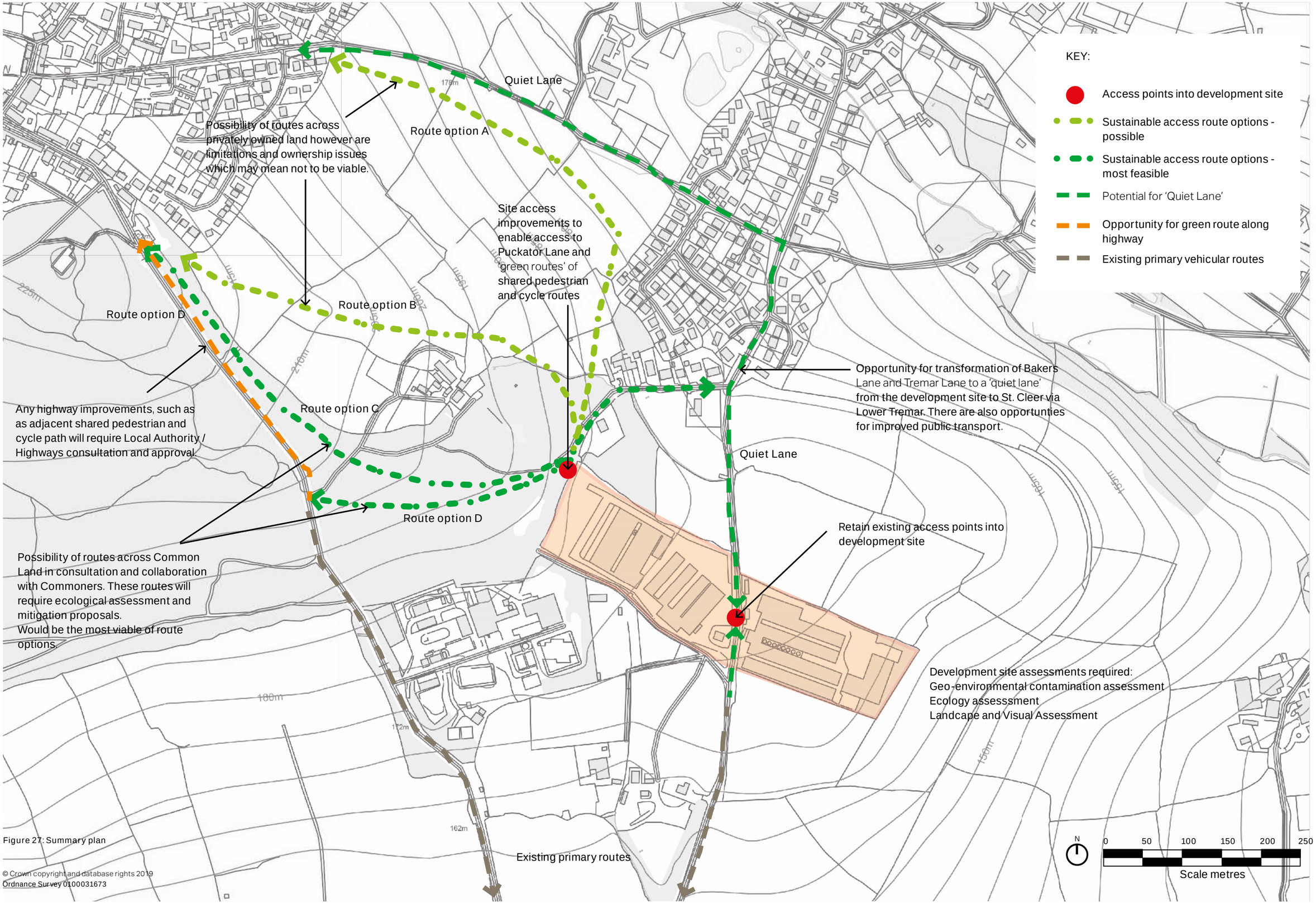

Figure 27: Summary plan

9.2. Outline costs for sustainable route options

Outline costs for the sustainable green route options, shown in Figure 27, are as estimates below and assumes a compacted gravel surfacing and lighting columns at 30m :

Route A - £450,000

Route B - £450,000

Route C - £450,000

Route D - £625,000

These costs are subject to the following assumptions and exclusions:

Assumptions

Ground conditions are reasonable.

There would be no requirement for any retaining walls as the profile would be relatively flat.

The works alongside the existing roads are limited to Routes C and D.

There's no requirement for any drainage works.

Lighting has been costed but may not be required due to ecological constraints and Dark Skies designaton restrictions, therefore can be considered as provisional costs.

Exclusions

Land acquisition.

VAT.

Inflation from November 2019.

Maintenance costs.

The 'Quiet Lane' costings would be subject to further consultation and detailed design.

A detailed breakdown of the cost estimate is shown opposite. It includes all excavation, removal of surplus material, preparation of formation level, sub base, edging and self binding gravel, together with the associated contractors site set up and management / supervision of the works.

Route A: Assumed no works alongside existing road

Site clearance

2205m² @ £3 £6,615

3 - 3.5m Shared cycle and pedestrian path using self binding gravel

630m @ £450 £283,500

Lighting based on columns @ 30m centres

22no @ £2500 £55,000

Sub Total £345,115

Professional fees @ 10% £34,512

Sub Total £379,627

Design development and construction contingency @ 15%

£379,627 no 0.15 £56,944

Total @ November 2019 prices £436,570 (£450,000 estimate)

Route B: Assumed no works alongside existing road

Site clearance

2205m² @ £3 £6,615

3 - 3.5m Shared cycle and pedestrian path using self binding gravel

630m @ £450 £283,500

Lighting based on columns @ 30m centres

22no @ £2500 £55,000

Sub Total £345,115

Professional fees @ 10% £34,511.50

Sub Total £379,627

Design development and construction contingency @ 15%

£379,627 no 0.15 £56,944

Total @ November 2019 prices £436,570 (£450,000 estimate)

Route C: Assumed 80m alongside existing road

Site clearance

2205m² @ £3 £6,615

3 - 3.5m Shared cycle and pedestrian path using self binding gravel

520m @ £450 £234,000

Lighting based on columns @ 30m centres

19no @ £2500 £47,500

3 - 3.5m Shared cycle and pedestrian path using self binding gravel alongside existing road

80m @ £750 £60,000

Lighting based on columns @ 30m centres

3no @ £3500 £10,500

Sub Total £358,615

Professional fees @ 10% £35,862

Sub Total £394,477

Design development and construction contingency @ 15%

£394,477 no 0.15 £59,171

Total @ November 2019 prices £453,648 (£450,000 estimate)

Route D: Assumed 340m alongside existing road

Site clearance

2205m² @ £3 £6,615

3 - 3.5m Shared cycle and pedestrian path using self binding gravel

350m @ £450 £157,500

Lighting based on columns @ 30m centres

12no @ £2500 £30,000

3 - 3.5m Shared cycle and pedestrian path using self binding gravel alongside existing road

340m @ £750 £255,000

Lighting based on columns @ 30m centres

12no @ £3500 £42,000

Sub Total £491,115

Professional fees @ 10% £49,112

Sub Total £540,227

Design development and construction contingency @ 15%

£540,227 no 0.15 £81,034

Total @ November 2019 prices £621,260 (£625,000 estimate)

Next steps

10. Next steps

10.1. Next steps

This report marks an important stage in promoting the Horizon Farm site for development and potential opportunities for improvements of the wider context. Future stages could include the following:

Further engagement with landowners

The sustainable green link that may make the scheme acceptable to planners requires the use of third party land. The local auhority will need to be convinced that this is deliverable. We understand that there has been an agreement in principle with Commoners to having a route through Common land, however, there are other land owners whereby consultation / discussion would be beneficial. It should be used to provide a basis for on-going discussions and pre-planning work.

Further engagement with Cornwall Council

Beyond its planning function, Cornwall Council also has an important role in housing delivery and investment.

Further engagement with other stakeholders

This report should provide further impetus for on-going discussions to unlock what is a complicated site such as utility providers and regulatory agencies, and further studies to maximise development potential and how improvements can be made in the wider context.

10.2. The Neighbourhood Plan

Policies

The masterplan presented in this report can be transposed into statutory policy within the Neighbourhood Plan or permitted development as part of a Neighbourhood Development Order.

The report can be used as evidence to support the forthcoming Neighbourhood Plan (and its draft policies) where the analysis highlights relevant issues and opportunities that can be influenced by land use planning interventions. The site options presented (and other recommendations and figures contained herein) can be used in the plan to aid consultation and then later decision making as part of a made plan.

The plans vision and objectives could be refined to include some of the aims and ideas contained in this report. The study has drawn out a series of possible options for the future of the Horizon Farm site and the wider context. Where there is public support for some of the ideas, the Steering Group should consider weaving the outputs into the Neighbourhood Plan vision and objectives so that they then act as the touchstone for policy making and decision taking moving forward.

Any policies put forward must be capable of meeting the basic conditions (e.g. having regard to national policies and general conformity with the strategic policies contained in the development plan).

The inputs from Cornwall Council's policy and development management specialists would be invaluable in advance of formal consultation and submission. The Steering Group should consider how our recommendations can be transposed into Policy through discussions with Cornwall Council and use the best practice guidance from Locality to prepare draft policies for consultation. Locality's 'Writing Planning Policies' guidance sets of how different planning policies are designed to achieve different things. The guide describes the three most common as:

Generic – a simple policy which applies universally to development across the entire neighbourhood plan area;

Criteria based – a policy with a series of requirements that should be met by development proposals. These can be set out as separate bullet points; and

Site specific – this is where a policy applies to particular areas of land. One of the most powerful tools for a neighbourhood plan is to allocate land for a particular type of development. As well as allocating land you can use your plan to set out the principles which need to be followed in developing a particular site. This might include specifying what needs to be covered in a design brief to accompany any planning application. If there are site specific policies then a clear map showing the location and boundaries is to be included.

Site specific allocations - most relevant here - are the hardest to do well. They would normally include associated policy related to land uses, quantum of development, configuration and design. The Steering Group should request a Strategic Environmental Assessment (SEA) screening opinion from the Council as soon as the objectives and nature of the plan are at a suitable stage. SEA is a process for evaluating, at the earliest appropriate stage, the environmental effects of a plan before it is made. Masterplanning and allocating sites will typically trigger a requirement for SEA. An SEA will provide objective information for local residents and businesses on the positive and negative environmental effects of your plan and wider policy proposals.

Horizon Farm site in relation to surrounding villages

The Neighbourhood Plan should also consider how the Horizon Farm development may impact or benefit surrounding villages by potentially improving access, connections, environment, public transport and the services and employment opportunities that a mixed residential and commercial site may provide. The other main inter-relationship is with potential housing sites. The Horizon Farm site could accommodate some contribution of Cornwall's housing need and its allocation would mean that other sites, perhaps in more sensitive areas, will not need to be developed.

Neighbourhood Development Orders

Neighbourhood Development Orders (NDOs) are an exciting route to Planning for Qualifying Bodies wishing to accelerate and secure a particular scheme, with project partners where appropriate, using the examination and referendum timetable and opportunity to provide a planning permission for an outline or detailed scheme.

The St Cleer Neighbourhood Steerig Group should discuss this opportunity with potential developer partners and Cornwall Council as it may help to de-risk the project and attract further funding to address any potential funding gap. It would also provide a level of continued involvement and influence that otherwise may not have as the scheme progresses.

Appendices

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11. Appendices

11.1. Appendix A - Alternative agricultural use

Given the format and confines of Horizon Farm, the most likely alternative agricultural use is thought to be for concentrated animal feeding operations (known as CAFOs in the US). This could be for cattle, pigs or poultry.

The advent of beef CAFOs is in response to supermarket demand for specified cuts of meat etc, and the difficulties that small and medium sized producers have experienced with extremely tight margins and rising input costs. The trend is for farm reared animals to be fattened for the market at very intensive feeding centres.

Also, as the 2012 EU ban on battery hen egg production has come into force and consumer choice has changed, egg producers are required to provide hens with larger and more comfortable cages, which include nesting and scratching areas that allow more natural behaviour. However, this does not apply in the same way to the fattening of chickens for meat.

Similar trends have also influenced pork production.

As a result, there has been a 26% rise in intensive factory farming in the last six years.

In contrast to large intensive pig and poultry farms, industrial beef units do not require a government permit,

Beef fattening can involve cattle being kept in buildings and outdoor pens, known as 'corrals', sometimes surrounded by walls, fences or straw bales. Although the cattle will have spent time grazing in fields prior to fattening, some will be confined in pens for around a quarter of their lives, until they are slaughtered.

Photos opposite: examples of beef based concentrated animal feeding operations (Source BIJ and The Guardian)

Intensive industrial-scale farms have attracted attention because of concerns raised by local residents, over smells, noise and the potential for pollution or disease outbreaks. Traffic profiles involve intensive periods of movement as freshly reared stock or chicks are brought on site, and later when the 'finished' product is taken for slaughtering (although this can also occur on site). In between, frequent deliveries of animal feedstuffs are generated.

Animal welfare campaigners argue that factory-style farming in which livestock are rarely or never permitted outdoors prevents animals from expressing their natural behaviour. They also worry that such farms are pushing smaller farmers out of business, leading to the takeover of the countryside by large agribusinesses, with the loss of traditional family-run units, and an inevitable change in the character of the countryside. It is also the case that industrial amounts of land need to be used elsewhere to grow food for the animals – often in huge crop fields using chemical pesticides and fertilisers that reduce habitat and species diversity.

On the other hand, producers point to the fact that in intensive units' animals are raised somewhere that is warm, dry and clean; the risk of air borne diseases, such as avian influenza, is greatly reduced; anti-biotic use can be reduced; and meat yields are good which helps keep supermarket prices down for the benefit of all. Intensive sites can also more easily make use of renewable energy and sustainable drainage than traditional farms. It is also suggested that impacts on biodiversity and natural, wild species would be greatly reduced through boosting yields on existing farmland so as to spare remaining natural habitats.

Conclusion: The development of a concentrated animal feeding operation at Horizon Farm may be a possibility, although the lack of additional land for corralling suggests that a beef-based venture is unlikely. However, intensive chicken production may be feasible. There must be concern that unless very well operated, such a use would lead to a return of the environmental issues associated with the previous egg production activity on the site.

Sources:

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- Intensive farming 'least bad option' for food and environment

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Contact
Ben Castell
Technical Director
ben.castell@aecom.com

aecom.com