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EXPRESS PARK BUXTON, COWDALE

Design & Access Statement

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To whom does design address itself:
to the greatest number,
to the specialist of an enlightened matter,
to a privileged social class?
Design addresses itself to the need.

Charles Eames

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1 Introduction

Purpose of the Document

This statement has been prepared by Delta Architects on behalf of Express Park Buxton Ltd..

This statement has been prepared in accordance with the Department of Communities and Local Government's (DCLG) Circular 01/2006 which requires applications to be accompanied by a Design and Access Statement. Reference has also been made to the Commission for Architecture and the Built Environment's (CABE) guidance on "Design and Access Statements: How to write, read and use them" (CABE, 2006)

The purpose of this statement is to explain;
"the design principles and concepts that have been applied to the proposed development and how issues relating to access to the development have been dealt with" (para. 80, DCLG Circular 01/2006)

This document achieves this within the following sections:

Section 1 Introduction – outlines the purpose of the document;

Section 2 Site Assessment – considers the site and its surroundings in physical, social, economic and planning terms;

Section 3 Planning Statement – presentation of the design proposals

Section 4 Evaluation and Design Objectives – identification of the site's constraints and opportunities in order to establish the design objectives which underpin the development of the site;

Section 5 Design Proposal – presentation of the design proposals including uses and amount proposed, access arrangements, layout of the development, scale of buildings, landscaping treatments, appearance, use of resources and development implementation.

Appendices – these include documentation relating to the water source.

This statement should be read in conjunction with the full planning application and its accompanying documents including the Environmental Survey, Transport Assessment and Flood Risk Assessment.

2 Site Assessment

This section provides a summary of the assessment of the site and its surroundings and identifies the issues pertinent to the design of the proposed development. More details on the impact of the proposals and any need for mitigation is, however, provided within the accompanying Environmental Survey.

Comprehensive Area

The Application Area is located within the site known as Cowdale Quarry. The quarry is located approximately 1.5km east of Buxton Town Centre, bordered by the A6 to the north, the Staden Lane Industrial Estate to the west and a mixture of residential and undeveloped land to the south and east. A disused railway line also runs to the north of the quarry. The Staden Lane Industrial Estate to the west comprises light industrial, retail and other commercial development and some residential units. The site is not in the Peak District National Park.

A Comprehensive Masterplan (see page 7) for the whole of the Cowdale Quarry site has been produced alongside the masterplan for the Application Area to demonstrate how the employment and leisure elements will integrate with, and contribute towards, the longer-term development of the site and the wider urban area. The planning application to which this statement relates does not, however, seek planning permission at this stage for the employment and leisure facilities but shows them as a potential context. Due to the integral relationship of the Application Area within the Comprehensive Area, this Statement has regard to the whole of the Comprehensive Area in order to determine the constraints and opportunities which underpin not only the development of the Comprehensive Masterplan but also the Masterplan for the Application Area. It is important to note, however, that the planning application to which this Statement relates, seeks planning permission for only the Application and not the Comprehensive Area. Further applications relating to the remaining areas within the Comprehensive Area will be made in due course.

The Application Area

The Application Area comprises 20 Ha of land within the disused quarry and is indicated on the Site Location Plan (see page 6).

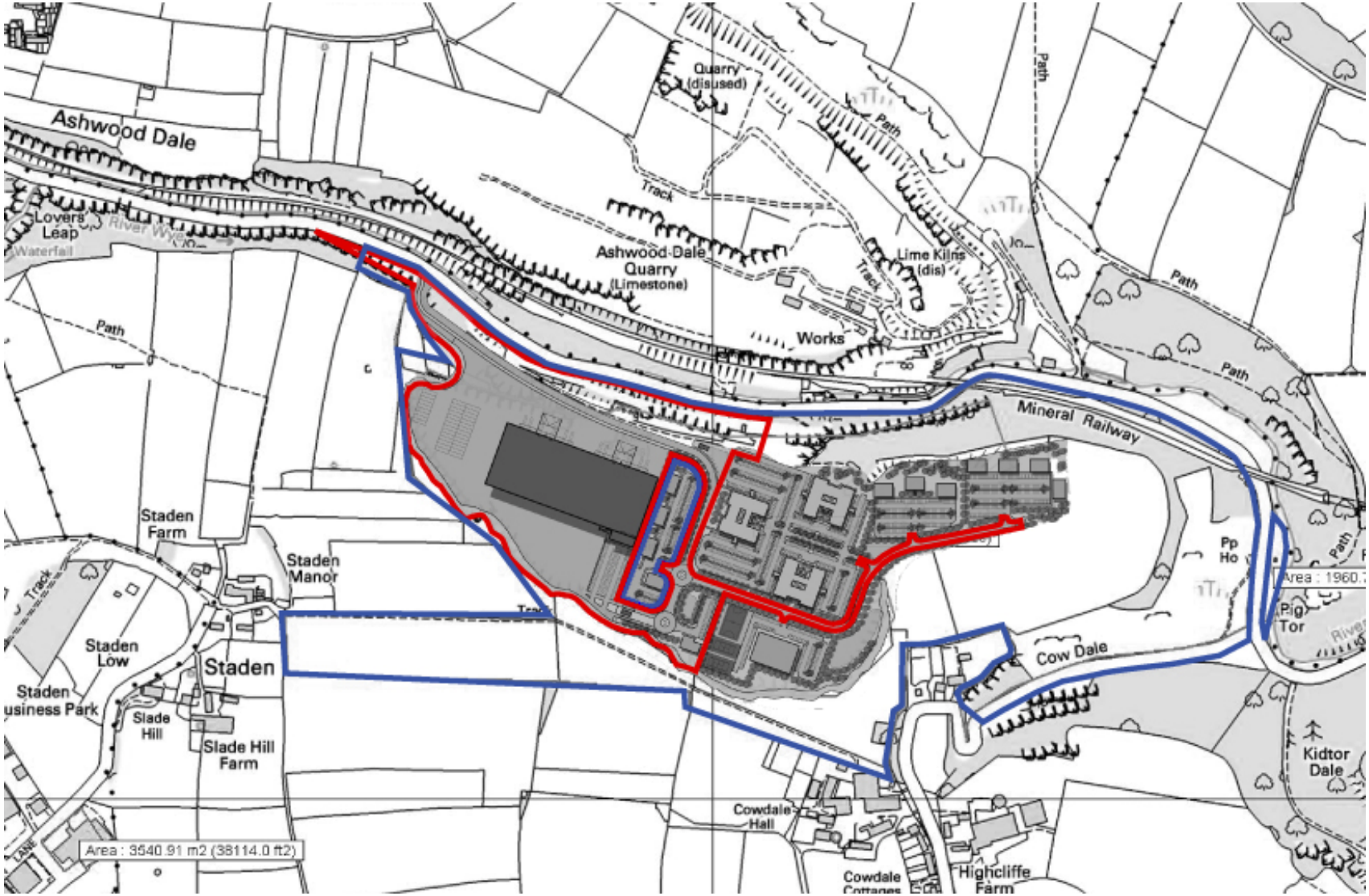
Physical context

Existing land uses

The Application Area occupies part of the former Cowdale Quarry to the south of the A6 route into Buxton. The northern part of the application site adjoins the existing A6 with the remainder of the application area being within the quarry itself. Part of the existing quarry, to the north east boundary, contains two large spoil heaps. A disused railway line and small, redundant associated buildings lie to the north alongside the A6.

The former quarry is now disused and is used for grazing.

The village of Cowdale lies approximately 200m to the south east of the site with the Staden Lane Industrial Estate 500m to the south west.



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Topography

The quarry floor within the Application Area is virtually flat with approximately 2m of variation in level across the site (295m AOD). The quarry floor is generally 25m below the top of the quarry and the surrounding land. The A6 to the northern side is approximately 30m below the quarry floor.

The escarpment between the quarry and the A6 is more varied, rising up to approximately 10m above the A6 to 25m at its highest.

Landscape

Views of the site from the surrounding area are typically distant from surrounding elevated ground, principally to the south east. The quarry floor is not visible from the surrounding areas and the quarry faces, where visible, are frequently screened by intervening vegetation, topography or built development.

As such, the proposed development has very little visual impact on the surrounding areas.

Ecology

The grassland, hedgerow and scrub habitats on the site are of limited intrinsic nature conservation value, but support reptiles and nesting birds. Please see the Ecology Report for further information and suggested mitigation measures.

Hydrology

There are no streams or rivers within the site. The nearest watercourse is the River Wye which runs alongside the northern edge of the A6 to the north.

History

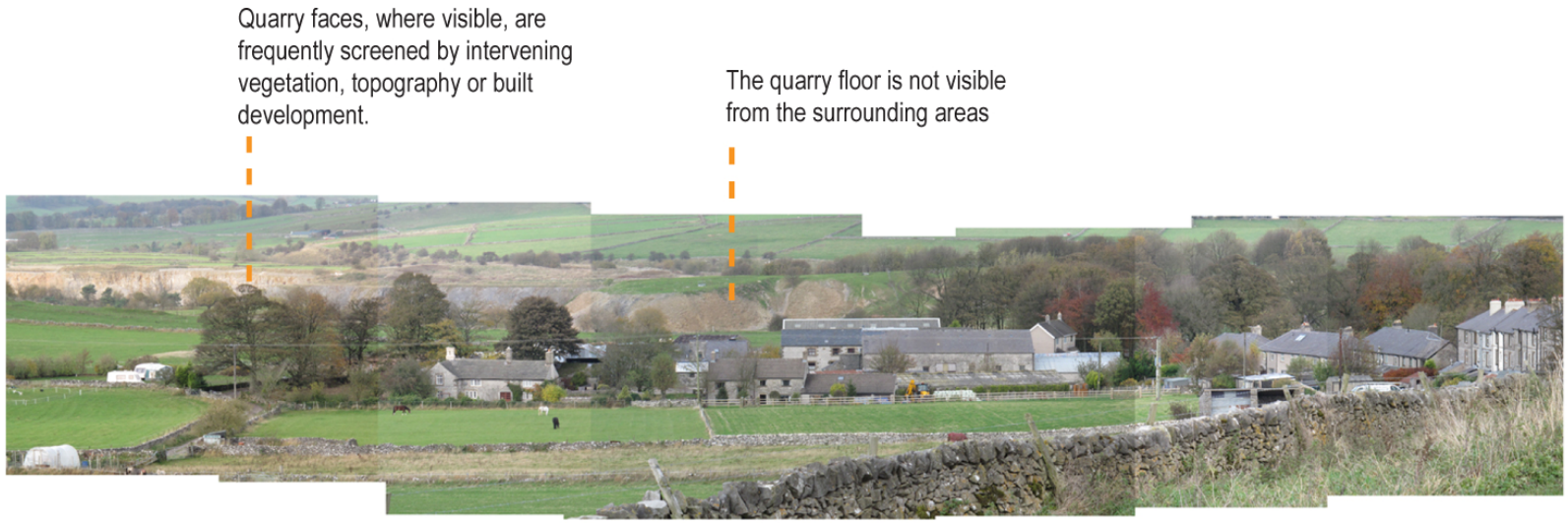
The quarry was last used in the1940's or early 50's and was operated for the production of burnt lime and used hand working methods for the selection of limestone for the vertical kilns. All product transportation was by rail. The site has been left with a level quarry floor and extensive mounds of the quarry spoil.

Movements and circulation

Since the abandonment of the quarry, there have been no movements to and from the site, hence the necessity for the creation of a new access road joining the A6 to the north west of the site.

Public transport

The two nearest bus stops to the site are 1.5km west along the A6 or 800m east along the A6. There are five services operating along this route. Please see the Transport Assessment for further information. There are currently proposals to convert the existing disused railway lines, bridleways and minor roads in the area to create a major cycle route.



View towards the site from the south east standing at the closest boundary of the National Park near Cowdale

Public rights of way

There is one public footpath that runs along the southern edge of the site linking Staden Lane to Cowdale.

Built development

There are only two redundant buildings within the application area which were part of the railway operation when the quarry was in operation. They have been empty since the closing down of the quarry and will be removed as part of the development.

Noise and Vibration

The proximity of the A6 to the site is masked by the escarpment that exists between the quarry floor and the A6. The large level differences between the two areas will also mitigate any noise or vibration transference. This will also be the case with regards to Cowdale and the site as the quarry floor is on average 30m below the level of Cowdale so any direct noise or vibration is contained by the quarry.

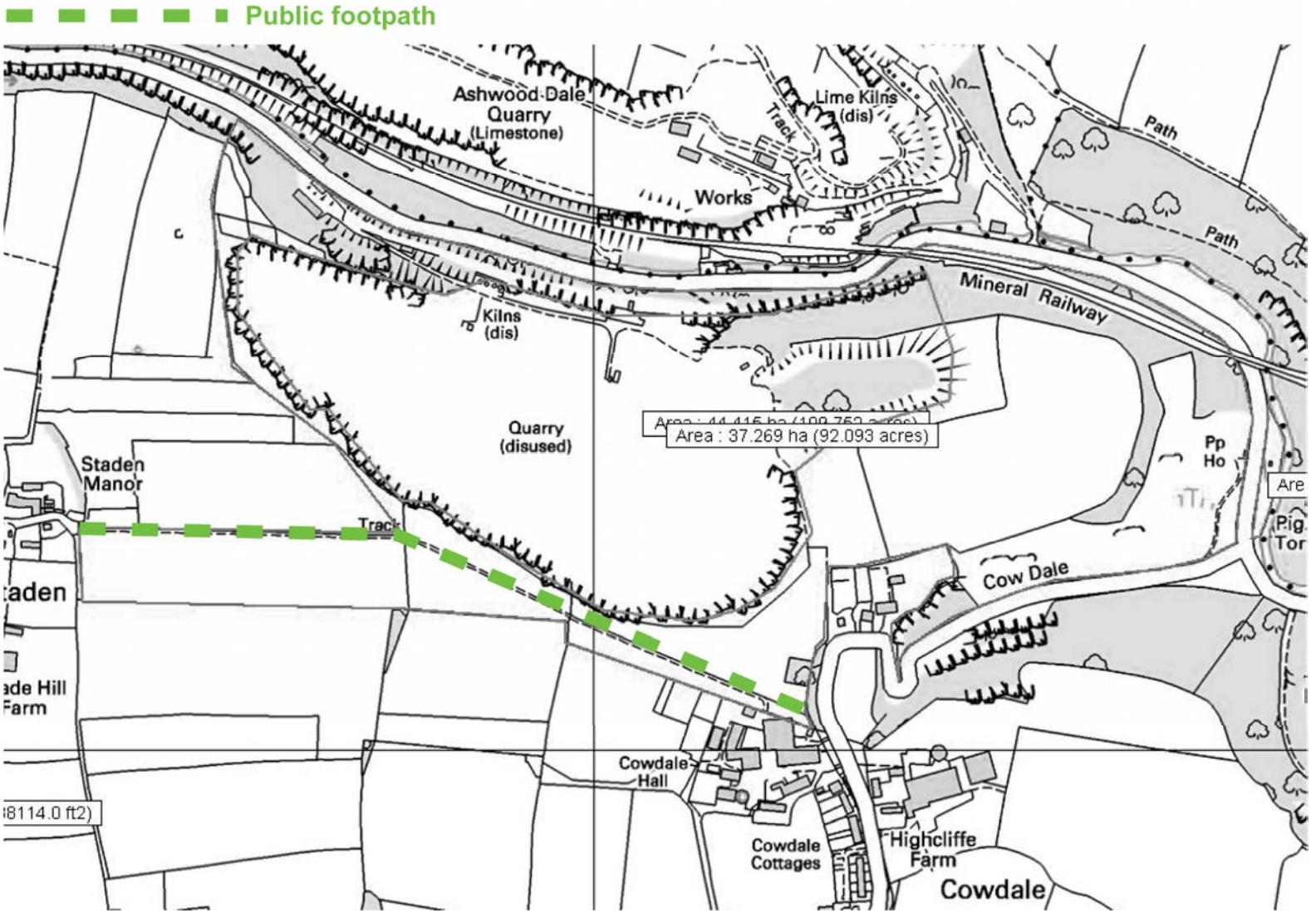
Social context

The proposed redevelopment of Cowdale Quarry involves a strategic development comprising employment uses which will be complemented by support facilities along with landscaped areas and leisure facilities for public use. Careful consideration has been given to the social and economic implications of the development proposals, and appropriate provisions have therefore been included as part of the development proposals to ensure that the needs of prospective employees are met, whilst also responding to the issues affecting the wider surrounding area.

Economic context

The proposed development offers Buxton a unique opportunity to enhance an important entrance to the east of the town alongside the A6 through regenerating the area and by providing a sustainable employment site in an attractive and easily accessible location. It is also advantageous for the local economy through attracting new investment in accordance with regional and local planning guidance.

The proposed development will bring substantial economic benefit to the area through the provision of a range of employment uses, through new industrial based business and office buildings. The new resident working population will also create additional demand for local shops, services and public transport network.



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Water Statement

The nearby Rockhead Spring is a natural Artesian spring located towards the north-north eastern boundary of Cowdale Quarry, Buxton.

The spring has a very high flow rate of between 10-15 litres per second, depending on the time of year, discharging via a conduit below the A6 into the adjoining River Wye watercourse.

The water from the spring was granted as a recognised natural mineral water source under directive 80777 by the European Commission on 2 March 2000, further ratified as a natural mineral water source under the Spring Water & Bottled Drinking Water Regulations 1999 by High Peak Borough Council on the 12 June 2000.

The spring is licensed by the Environment Agency (license serial number 3/28/39/26/1/S dated 12 July 2006) for a maximum abstraction of 175,000 cubic metres per annum or 480 cubic metres per day. The license expires 31 March 2018.

The water is of a high quality and at its abstraction point has a limited temperature range of between 8 and 9 degrees Celsius.

To enable the Rockhead Spring mineral water aquifer to be drawn at up to its maximum abstraction allowable under its licence the ability to provide compensation water back into the River Wye watercourse at periods of low flow is required. The applicants have such a facility via a borehole located at Rockhead House, Staden Lane, Buxton. This borehole has an abstraction licence (licence serial number 03/28/39/72/1/G dated 16 February 2004) for the abstraction of up to 125,200 cubic metres per annum or 600 cubic metres per day. The licence expires on 31 March 2018.

Please see Appendices for technical information on water quality, licences etc.

3 Planning Statement

The Proposal

The proposed development is a water bottling plant and associated storage areas together with a new access off the A6, internal roads and a visitors' / climbing centre.

The Site

The site is on previously developed land within the disused Cowdale quarry, approximately 1.5 km from Buxton town centre. The quarry has a floor area of some 13 ha and is bordered by rock faces ranging from 10 to 20 m high. It was abandoned some years ago and its margins are naturally re-vegitating with trees and scrub. Because of the surrounding topography, the quarry is not visible at all from the east, south, or west, while from the north its southern face is all that can be seen, at a distance of 1 km or so.

The site is within the Special Landscape Area and close to the National Park boundary. There is a local wildlife site adjoining the quarry. The proposed site is an artificial landform with a flat floor and a large building as proposed would not be especially prominent in the landscape.

Rockhead Spring, a natural mineral water spring is located within the quarry, which is the main reason for choosing this site for a bottling plant. The planning inspector when considering the adoption of the High Peak Local Plan stated, "there is no dispute that the Rockhead Spring is an important resource for Buxton, for the mineral water has the potential to further promote the name of the town as well as to provide employment."

The bottling of mineral water requires that the bottling plant is located as close as possible to the source, which again was recognized and accepted by the planning inspector. This requirement has placed unusual constraints on the search for suitable sites. This is considered further below.

Planning Policy

National Guidance

National policies and guidance are set out in Planning Policy Guidance notes (PPGs) and Planning Policy Statements (PPSs). These set out the Government's national policies on different aspects of land use planning in England.
The main guidance that has been reviewed for this application is set out below;

PPS1 – Delivering Sustainable Development

This sets out the overarching planning policies on the delivery of sustainable development through the planning system. Whilst seeking to protect the environment, PPS1 recognizes the need for prudent use of natural resources and the maintenance of high and stable levels of economic growth and employment. The guidance also states that planning authorities should recognize the wider sub-regional, regional or national benefits of economic development and consider these alongside any adverse local impacts.

There is emphasis on a number of issues all of which this application has taken into account. These include;

- high quality design
- robust policies for design and access
- optimizing the potential of the site
- incorporation of green and public space
- creation of safe and accessible environments

PPS4 – Planning For Prosperous Economies (consultation paper)

This continues the theme of the importance of economic growth and employment. There is emphasis on building on previously developed land rather than on Greenfield sites. It also states that the development principles in the document should be taken into account as material consideration when considering planning applications which may supersede relevant policies in development plans.

PPS9 – Biodiversity and Geological Conservation.

The principles set out in this document have been incorporated into the design of the proposed development and an Ecology Report has been submitted as part of this application.

PPS11 – Regional Spatial Strategies and PPS12 – Local Spatial Strategies

These are considered below under Regional and Local Planning Policies.

PPG13 – Transport

This has been considered in detail and a Transport Assessment is submitted as part of this application.

PPG17 – Planning For Open Space, Sport and Recreation.

The design of the proposals has incorporated open spaces into the development and has recognized the existing recreational use of the quarry by incorporating the visitors climbing centre into the proposals.

PPS23 – Planning and Pollution Control

The proposed development has incorporated the principles set out in this guidance.

PPS25 – Development and Flood Risk.

A Flood Risk Assessment is included as part of this application.

Regional Guidance

Regional planning policies are set out in the East Midlands Regional Plan. The Peak area is included in this as a sub-region. The emphasis is on the protection of the National Park whilst ensuring vibrant local economies. This development is considered to fit well with these policies given its special locational requirements and the measures proposed to ensure the sustainability of the site.

Local Guidance

High Peak Saved Local Plan Policies

The policies most relevant to this application are considered below. It is worth noting that the document specifically refers to the importance of Buxton's mineral water.

Policy OC1 – Countryside Development

Countryside development is defined as any development outside the built up area.

Although this proposal is for previously used land, it will be considered to be development in the countryside.

The Policy states that within the countryside, planning permission will be granted for development which is an integral part of the rural economy and which can only be carried out in the countryside provided that:

- the development will not detract from an area where the open character of the
  countryside is particularly vulnerable because of its prominence or the existence of a narrow gap between settlements; and
- the development will not generate significant numbers of people or traffic to the
  detriment of residential amenity, highway safety, landscape or air quality or otherwise have an unacceptable urbanizing influence; and
- the development will not have a significant adverse impact on the character and distinctiveness of the countryside

Given the siting of the quarry and the special locational requirements of the development, it is considered that the proposal is not contrary to this policy. It is a well hidden previously used site housing the source of the mineral spring, There are no open views of the proposed development and no adverse effect on residential amenity or highway safety.The character and distinctiveness of the countryside will not be materially affected by the proposal.

Policy OC3 – Special Landscape Area Development.

Within the Special Landscape Area new development is normally resisted unless it can be shown to be essential in its proposed location. The policy states that within the Special Landscape Area development in accordance with Policy OC1 will be permitted, provided that it will not detract from the special qualities and character of the Special Landscape Area. Where development is permitted, the developer will be required to have special regard to the landscape quality of the area in relation to siting, design and landscaping.

This proposal is not contrary to this policy given the location of the quarry, its siting, the design principles of the development and the need to be close to the source of the mineral spring.

Policy OC5 – Development Conspicuous From The Peak District National Park.

The policy states that planning permission will not be granted for development which due to its use, scale, design, siting, external appearance or landscape treatment, would materially harm the purposes or valued characteristics of the National Park. Various viewpoints of the site have been visited and it is not considered that the proposed development is contrary to this policy.

Policy EMP7 – Industry and Business in the Countryside

The plan states that in general the Borough Council supports business development in the countryside which will contribute to the rural economy, is appropriate to a rural location, and is compatible with the fine landscape and the natural resources of the plan area.

The policy states that planning permission will be granted for business and industrial development in the countryside provided that:

- the development can be accommodated within existing buildings; or
- any new buildings, alterations or extensions are essential, and well-related to existing buildings and appropriate to a countryside location in terms of scale, siting, design and external appearance; and
- adequate site access is available and the development will not significantly increase traffic movements, particularly on unsuitable narrow roads

The planning inspector when considering the local plan policies and objections was not prepared to allocate this site as an employment site, but he stated that his recommendation did not preclude the use of Cowdale Quarry for a bottling plant if, after a full investigation of all potential options it could be demonstrated that there was no alternative. He stated that the special locational requirements of the mineral water industry might ultimately justify the proposal, either under policy EMP7 or as an exception to the general policies seeking to restrict development in the countryside.

Alternative Sites

Rockhead Spring is one of only two groundwater sources in the High Peak that has been recognized as a Natural Mineral Water. These two sources are the only Natural Mineral Waters exploiting limestone water in the whole of the Peak District. This emphasizes how important a resource Rockhead Spring is. To achieve full potential a large purpose built factory is essential. This needs to be as close as possible to the source to ensure the integrity of the connecting pipeline. This distance has been estimated to be 2km from the source.

It is evident from a desk exercise as well as an inspection of all possible sites around Buxton that Cowdale quarry is the only location that can meet the requirements to develop a water bottling plant exploiting the Rockhead Spring. The recognised natural mineral water artesian spring is located within the boundaries of Cowdale Quarry about 700 metres to the east of the proposed site for the water bottling plant. The inspector's report into objections to the local plan accepted that the plant needed to be in close proximity to the source and the figure given was 2 km. A wide search has been carried out for alternative sites both with employment allocations as well as greenfield sites, with particular attention being given to possible sites within 2.5 km of the source.

The planning application is for a bottling plant on a site of some 5 hectares which is the minimum required to provide adequate warehousing, ancillary offices, car parking and loading with the ability for business expansion. We do not consider off site storage to be appropriate in a time of climate change where unnecessary journeys should be kept to a minimum. For example the current Buxton Water site is located on a land locked site of about 2.8 hectares which is fully developed and does not include any warehousing. Storage is on Harpur Hill on the other side of town. It is also important for the site to be level (each pallet of water weighs in excess of 1 tonne) and that the site should have a direct access to an 'A' road without passing through residential areas.

The two primary employment sites which fall within a radius of 2.5 km from Rockhead Spring are Fairfield Industrial Estate and Staden Lane Industrial Estate.

Fairfield is not suitable as there is not an available site large enough and its access is very poor with its distributor road through a residential area.

At Staden Lane there is a plot of land fronting on to Ashbourne Road which comprised the former Duron Brake Lining Company site. This site is some 3.4 hectares which is not large enough and would not allow for any future expansion of the business. Whilst the site is allocated for employment, one large building which would be impossible to screen might not provide the best tourism image on a gateway approach to Buxton. It is understood that the site is potentially contaminated with asbestos and in addition, we understand that the emergency services have plans to develop a new emergency services centre on a significant part of the site.

Neither of the other two main employment sites of Harpur Hill and Waterswallows have a suitable site available and both are too far away from Rockhead Spring.

With regard to unallocated sites that could be considered, the Borough Council had originally allocated Foxlow Farm as a business park in the draft local plan. This was removed by the planning inspector who did not think that the site was appropriate for a business park or for residential use. The inspector specifically stated that it was not suitable for a large bottling plant, or for any other large buildings, as these would be detrimental to residential amenity and to the tourism industry. A large part of the site is not level which would be an additional disadvantage. The site is highly visible on a gateway route into Buxton and impossible to screen, it is also a greenfield site and its development would be contrary to the policies outlined above.

In conclusion, we believe that development of the Cowdale Quarry as outlined in the application is the best solution to exploiting the important resource of Rockhead Spring for the economy and landscape of Buxton and High Peak.

4 Evaluation and Design Objectives

Constraints and opportunities

Following the assessment of the site and its surroundings, as set out in previous sections, a number of constraints and opportunities associated with the proposed development on the site have been identified. These are outlined below:

Constraints

- Existing land use, rights of way and ownership;
- Highways, access and other traffic issues;
- Minimising the impact of the development on the surrounding area- visually and physically;
- To create a development that is permeable and allows for the movement of wildlife across it;
- Existing good quality landscape features including trees, scrub and boundary hedgerows to be retained wherever possible;
- Noise from adjoining transport corridors;

Opportunities

- Create a new development that will regenerate the area;
- Use of existing quarry and the retention of its setting which represents the opportunity to add character to forthcoming development and serve as a reminder of the importance of the role the quarry played in the history of the area;
- Access to local transport network across study area and beyond site boundaries – integration into the existing bus services.
- Enhancement of landscape character through new structure planning using indigenous species consistent with the characteristics of the surrounding ;
- Extension of the Strategic Cycle Route and integration into the development proposals:
- Improved public realm and pedestrian environment within the quarry;
- Provide landmark buildings within the quarry to encourage new activity in this part of Buxton and to use landscape enhancement to further define this key gateway site;
- Re-development of a Brownfield site;

Design objectives

Inclusive design approach

In line with national and local Government guidance and policy, considerable importance has been placed on achieving a high standard of design across the site. The application of urban design objectives will ensure a high quality layout is achieved whilst the identification of the constraints and opportunities will ensure that the proposals are sensitively assimilated into the surrounding landscape and urban fabric. Success of the design of the development will be dependant upon achieving an appropriate relationship between development objectives, development form and a positive response to local conditions.

The design objectives follow the six principles stated within Better Places to Work, with the application of site specific objectives which underpin the development proposals. We have defined the way we will respond to these principles as follows;

Ease of movement and legibility

"Workplaces that are located to be accessible by a wide range of transport modes, including foot, cycle, public transport and car"

(Better Places to Work, CABE and Llewelyn Davies Yeang 2005)

- Established new links with established movement networks;
- Design individual plots that are easily distinguishable to define ownership;
- Provide clear definition of ownership of car parking areas;
- Masterplan other land uses such as leisure and community facilities so that they are easily accessible;
- Create new spaces and routes that connect with existing and potential future development;
- Create well lit overlooked pedestrian/cyclist routes through the development that consider existing and likely desire lines;
- Consider access for everyone as an integral part of inclusive design;
- Create an urban structure where it is easy to find your way around;
- Integrate features, such as existing landscaping and views;
- Reinforce important destinations; and
- Established a hierarchy of routes.

Character, quality and continuity

"Workplaces that exhibit a strong positive relationship with surrounding areas, services and facilities."

(Better Places to Work, CABE and Llewelyn Davies Yeang 2005)

- Look to create a design that promotes good architecture and urban design that will be the catalyst for regeneration and renewal;
- Create a new character that responds to the surrounding uses and strengthen links so that the development is seen as a integral part of the surrounding neighbourhood;
- Locate services areas away from the main public areas and out of view;
- Ensure continuity in built form and design to create enclosure, thereby developing a safe, overlooked public realm;
- Create a well defined attractive frontage to the landscaped area alongside the A6;
- Use building frontage to reinforce the structure of the layout; and
- Consider how building frontage, building height and road section will relate to one another to define space.

Diversity

"Workplaces that contribute to the vitality and viability of their locality by providing, adding to, and supporting a mix of complementary uses"

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(Better Places to Work, CABE and Llewelyn Davies Yeang 2005)

- Integrate a range of uses and support facilities that provide for a varied workplace.
- Promote quality detailed design with durable materials that enliven the environment;
- Encourage spatial variation and building interest; and
- Ensure variety of detail and materials whilst maintaining a coherent overall sense of place.

Sustainability

"Workplaces that minimise energy use through design, both during construction and in occupation."

(Better Places to Work, CABE and Llewelyn Davies Yeang 2005)

- Maximise non-vehicle access to development and facilities;
- Ensure easy access by foot and cycle and allow for convenient links to public transport and the strategic cycle route;
- Building techniques should adhere to BREEAM's (Building Research Establishment Environmental Assessment Method) energy efficiency standards;
- Ensure that development accords with Government guidance on ensuring the efficient use of land;
- Provide a positive contribution to the local economy;
- Minimise resource use in building construction and operation;
- Increase biodiversity and enhance landscape features;
- Create a healthy and attractive working environment; and
- Seek to achieve good passive solar gain by orientation and massing.

Adaptability

"Workplaces that are able to accommodate changing requirements, including responding to changing market forces practically and cost effectively".

(Better Places to Work, CABE and Llewelyn Davies Yeang 2005)

- Provide for a varied end users and consider the needs of different commercial markets;
- Provide appropriate flexibility in parking provision; and
- Encourage building design that will be flexible and adaptable so they can either be changed from single occupancy to multi occupancy, extended or change their use.

Management

"Workplaces that are designed to accommodate systematic management and maintenance regimes so that quality and consistency are maintained."

(Better Places to Work, CABE and Llewelyn Davies Yeang 2005)

- Maintain landscaping areas to ensure the landscaped environment is always of a high quality;
- Promote Green Travel Plans and provide to end users along with other strategies that promote sustainable transport; and
- Promote the development in order to maintain building occupancy thereby retaining the site as an important employment destination to Buxton.

5 Design Proposal

Comprehensive Masterplan

A comprehensive Masterplan for Cowdale Quarry has been produced to demonstrate how the employment elements will integrate with and contribute towards the longer term development of the site and the wider urban area. The current planning application does not seek planning permission at this stage for the employment and leisure parcels but shows them as a potential context. However, the design and layout of the Cowdale Quarry must fit in with the future regeneration of Buxton to produce a comprehensive design approach.

The Comprehensive Masterplan shows the pattern of future development parcels based around a strategic water features and landscaped infrastructure.

The Masterplan also retains existing connections to the wider environment whilst creating new connections and creating new routes. One such new route is the planned cycleway to the north of the quarry site that will run from Buxton to Bakewell and beyond. The project managers for the Peak National Park have been approached with regards to the cycle routes and their initial view is that we would link into the southern route out of Buxton via Cowdale or King Sterndale via minor roads into Harpur Hill or minor roads / bridleways into Chelmorton and on to the Street House Farm, the current end of the High Peak Trail. The Masterplan also provides new connections to the existing A6.

The specific design proposals for the areas proposed within the Application Area are discussed in the following sections.

Design Proposals

This section details the design proposals for the site based on the Assessment and Design Objectives outlined in the previous sections. Although the planning application only seeks permission for Phase 1, the following sections refer to Phase 1 & 2 as it is important to look at the comprehensive approach for development.

Landscape design

Successful green spaces can help create more attractive towns and cities, increase land values and provide safer routes. From an environmental perspective they can also increase flood protection and sustainable drainage as well as providing better microclimates and enhancing biodiversity. Green spaces should promote a distinct sense of place, address a range of environmental issues and also be able to accommodate a variety of uses. CABE outline the following 8 qualities of successful open spaces:

- Sustainability;
- Character and distinctiveness;
- Definition and enclosure;
- Connectivity and accessibility;
- Legibility;
- Adaptability and robustness;

- Inclusiveness; and
- Biodiversity

Key landscape design principles for the proposed Science Park are as follows:

- Provide an attractive setting for new development;
- Integrate new development into the surrounding area;
- Reflect and enhance existing landscape character;
- Reflect and, where appropriate, reinforce historic landscape character;
- Provide an attractive and safe working and leisure environment; and
- Provide wildlife habitats.

The following paragraphs set how the above principles will be achieved:

Attractive setting and frontage

A series of new ponds and water features will be provided within the site. The design of the ponds are not yet finalised, but will be detailed to provide an attractive frontage to new development, and an attractive outlook from adjoining employment buildings. These landscape features will be provided with appropriate management in order to maintain water quality.

High quality landscaping, including formal tree and shrub planting on the roads throughout the site, will provide an attractive and appropriate setting for a new employment area for Buxton. The design of planting and choice of species will need to respond to the scale of the buildings. It is intended to use silver birch trees to delineate the access through the site and define their boundaries. Around the ponds, more evergreen planting such as laurels will be utilised to ensure all year round cover for wildlife.

Existing planting and new structural planting to the A6 junction minimises views into the site and strengthens views along the A6.

Integration

Integration of the Science Park with the surrounding area will be achieved both by responding to the existing context and character of the site, by tree planting, and by providing strategic landscaping to soften the appearance of the new development on surrounding areas. The Masterplan has also been designed to incorporate the majority of existing trees and hedgerows.

Indigenous trees and shrubs found within the locality, and tolerant of current ground conditions will be selected to reflect local landscape character and to achieve successful establishment.

Views of the Science Park will be softened by a strong avenue of trees along the adjoining roads, by tree and shrub planting alongside the ponds, and by extensive tree planting within car parking areas.

Enhanced Landscape Character

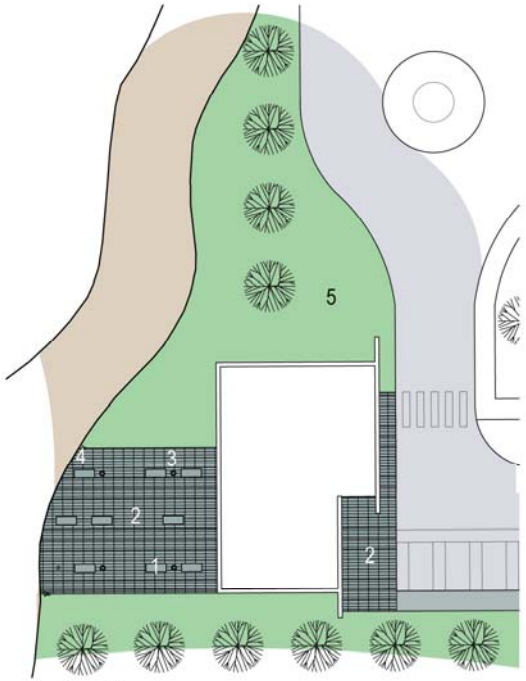
There is little significant existing vegetation on the quarry floor. Wherever practical this significant vegetation will be retained and supplemented with new planting. New indigenous planting, typical of the locality, along access roads and footpaths will enhance the character of the area

Attractive and Safe Working Environment

The main access routes will be lined with silver birch trees, to provide an attractive approach and frontage to buildings. Ponds, which will also provide important natural drainage, will be designed positively as landscape features in order to contribute to the overall amenity of the Science Park.

The ponds within the site will be planted with native species that provide habitat creation. The grass slopes to either side of the ponds will be at a 1 in 3 gradient and be maintained (the gradients of the slopes are subject to change during the detailed design stage). The green spaces and new pond network will create new wildlife habitats and enable natural drainage, whilst providing an attractive environment.

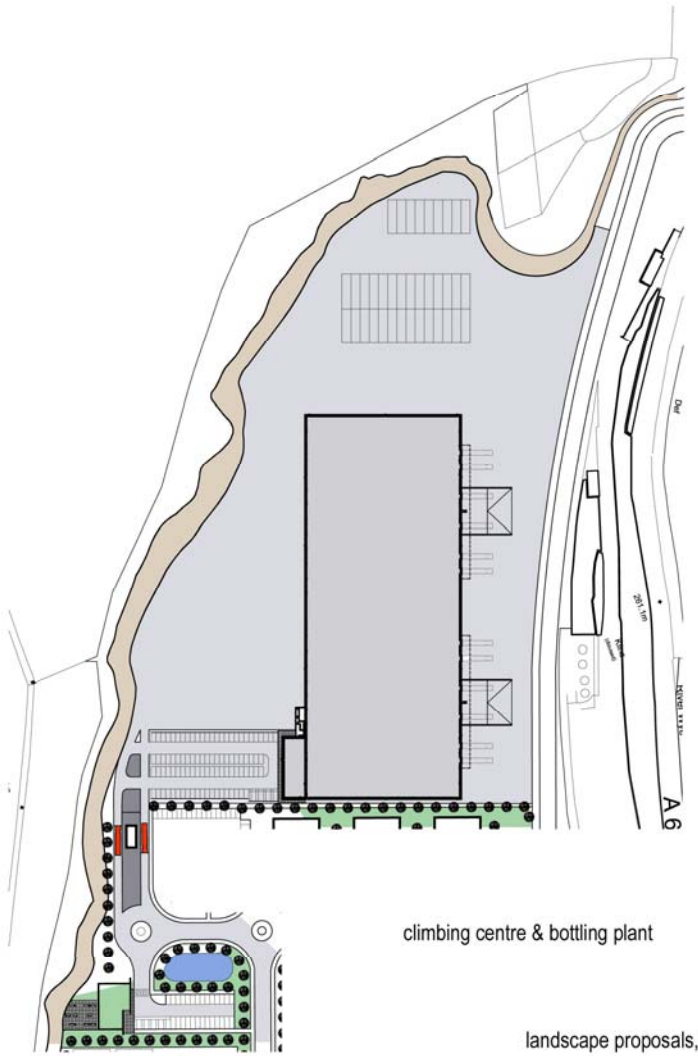
The ponds will incorporate a variety of landscape treatments, ranging from reed beds, species-rich grass banks, close mown margins, clumps of scrub and occasional trees. Access strips for maintenance may also incorporate informal seasonally dry footpaths.



1. external benches
2. concrete block paving
3. lighting columns
4. decorative shielded lighting to rock face
5. grass

climbing centre

N



climbing centre & bottling plant

landscape proposals, sheet 1

climbing centre site, & border of bottling plant

betula pendula (silver birch)

tarmac footpath with concrete kerb edge

example of concrete block paving at climbing centre

landscape proposals, sheet 2

The landscaped park will provide an attractive outlook for adjoining premises, and offer a valuable opportunity for informal recreation and relaxation for Science Park occupants and their visitors.

- The detailed design of paths will ensure access for the disabled, and compliance with the Disability Discrimination Act.
- Good natural surveillance from adjoining buildings and from access roads, together with adequate lighting for use before or after daylight hours, will play an important role in making open space areas, footpaths and cycleway safe to use.

Maintenance

- A management company will be set up to provide for future maintenance of landscape areas within the Science Park.

Appearance

Buildings within Science Park will be contemporary and of high quality design.

The buildings within the Science Park will feature elements of colour, contemporary materials and architectural treatment that create a focal point for people when visiting the site. The elevations will feature a large amount of glazing to maximise outside awareness for the workers.

Steel, concrete, brick, render, metal cladding and glass will be the main materials utilised within the Science Park. The facades will have natural finishes of elements of colour providing focal points for the scheme.

Design Quality and Process

The proposals have been developed to respond to the exciting architectural opportunities that this site represents as well as elevating its status for the future. Design Quality is seen as a key opportunity to achieve this aim.

The client sees this site as a perfect opportunity to reanimate a run down, neglected site and it is hoped that the project will become a benchmark for the future development of the area. It is also acknowledged that, to achieve this, the client and the design team will work in close contact with the Local and Statutory Authorities during the design development.

Detailed Design Principles

Design, Materials and Contribution to Urban Context

The design of the buildings and the site is integrated into the surroundings and creates an imaginative response to the following criteria:

The connection of the buildings to the road links around the site creating a balance between development, public access and the environment.

The legibility of functions within the buildings from the public realm.

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The use of form, detail and materials to create visual interest and scale appropriate to the external spaces that the buildings address.

The creation of environments which are welcoming to pedestrians and create interest at street level.

The provision of security by the use of multi-use occupancy, overlooking, lighting, and the avoidance of uncontrollable spaces.

The use of a consistent palette of materials of high standard throughout the building.

Detailed Design : Bottling Plant

The proposed bottling plant comprises a large, two bay warehouse / production facility with associated offices and welfare facilities attached as a separate pod.

To minimise the impact of such a large building, the roof profiles have been curved to create a less severe edge to the surrounding landscape and the quarry faces against which it will be viewed. The use of half-round, silver cladding also mitigates against the impact that a large building can create. It is intended to utilise splashes of colour as accents on doors and roller shutters to attract the eye.

The building is situated centrally within the site to facilitate vehicular movement around the site and car / lorry parking.

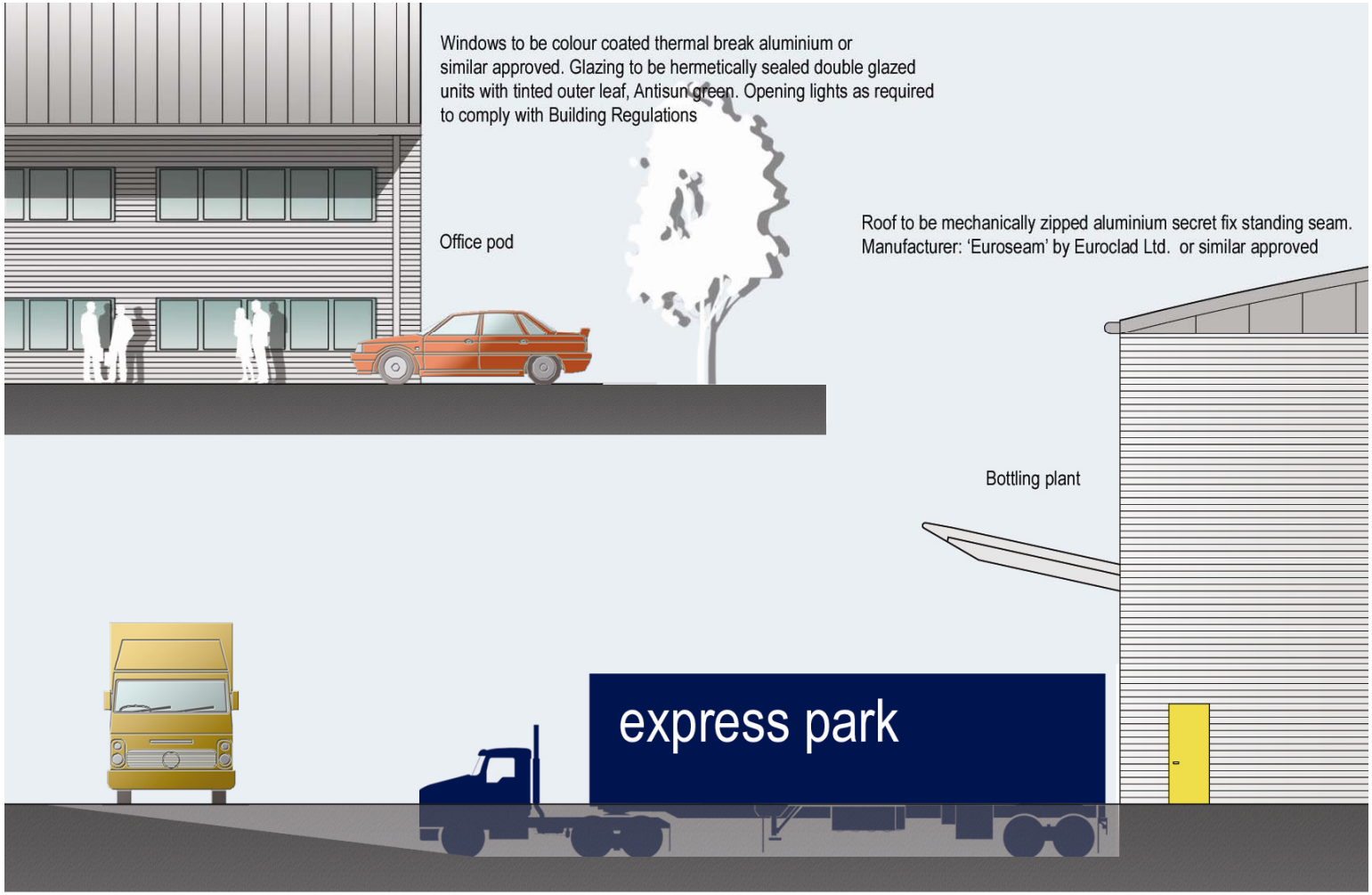
The office / welfare accommodation is accessed from the southern side of the building with separate access for staff and visitors.

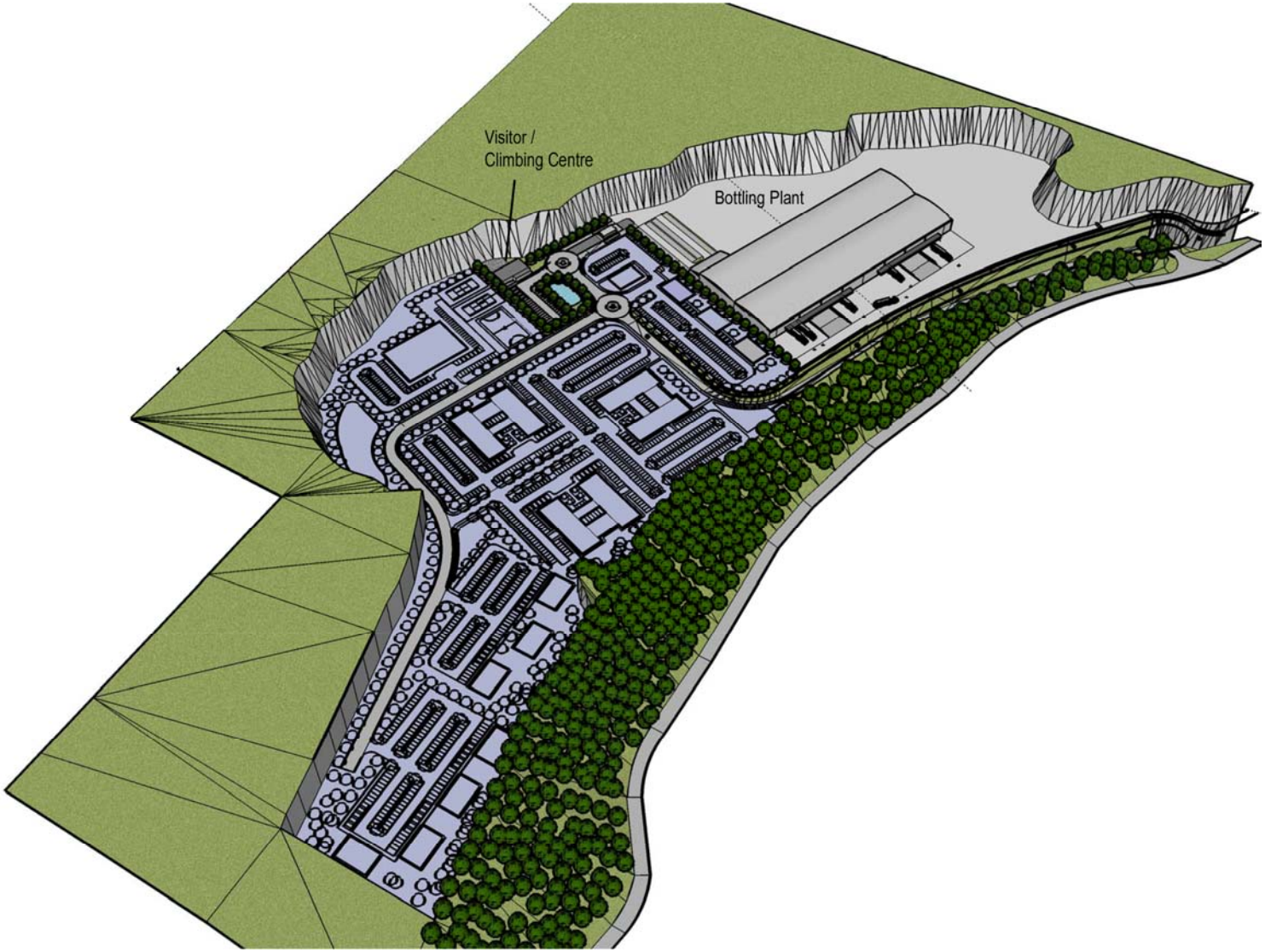
Detailed Design : Visitor / Climbing Centre

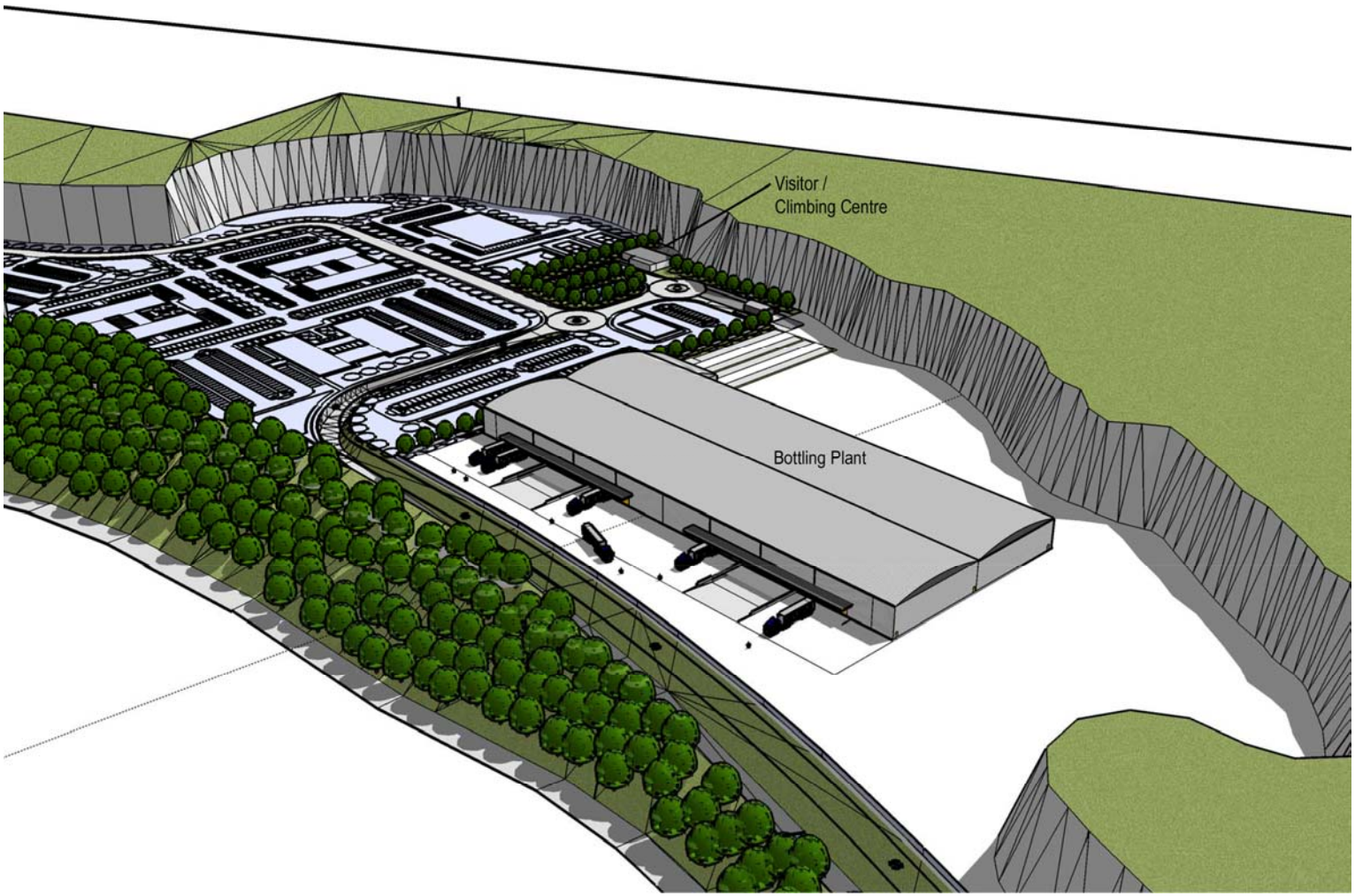
The proposed visitor / climbing centre is intended to encourage leisure usage of the site as a whole by providing welfare facilities for visitors and climbers alike by providing changing rooms and café facilities.

The design of the centre is based on the idea of a quarry wall which reflects its surroundings and purpose. The entrance is forced between two walls so the visitor has an immediate reference to their environs and their purpose.

A flat roof with limestone chippings to the centre again reflects the quarry and enhances the centre's integration into the landscape.


Windows to be colour coated thermal break aluminium or similar approved. Glazing to be hermetically sealed double glazed units with tinted outer leaf, Antisun green. Opening lights as required to comply with Building Regulations
Office pod
Roof to be mechanically zipped aluminium secret fix standing seam. Manufacturer: 'Euroseam' by Euroclad Ltd. or similar approved
Bottling plant
express park
External walls to be flat panel steel external sheeting by Kingspan or similar approved above eaves level. colour : PVf2 / metallic silver.


Visitor /
Climbing Centre
Bottling Plant


Visitor /
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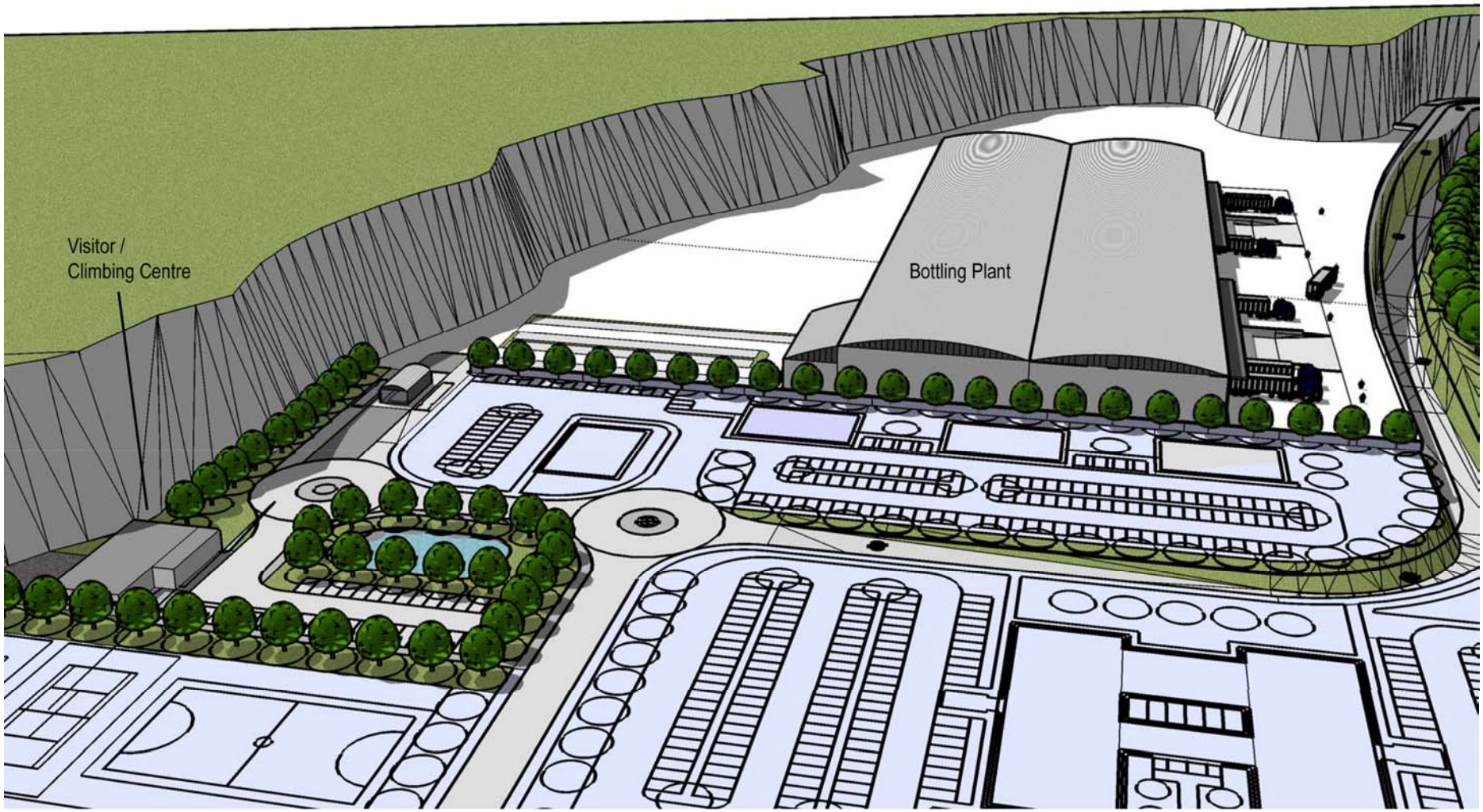
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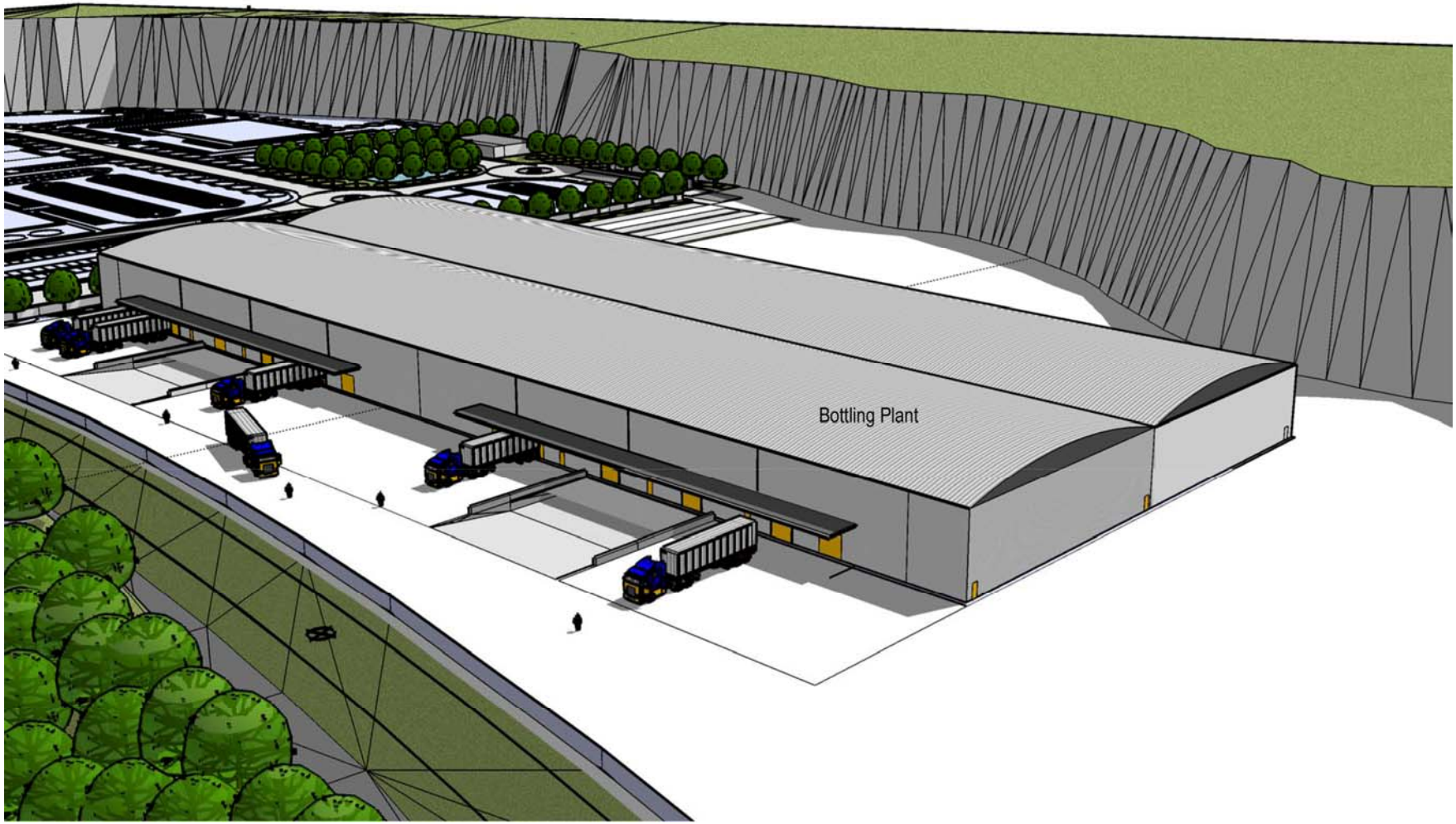
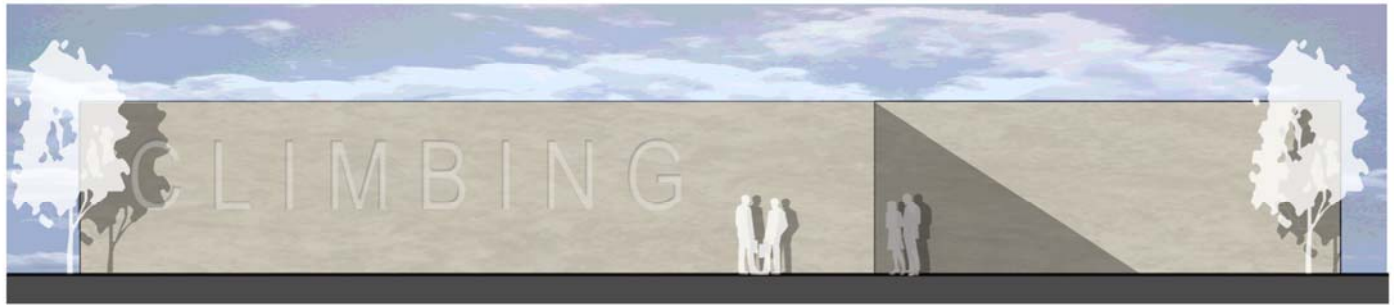
Bottling Plant


Bottling Plant


CLIMBING


Limestone wall
Grey render

Sustainability

The new elements will be required to achieve high standards of environmental design as part of a sustainability agenda for the whole of the site. The design of individual elements is carefully respectful of orientation, materials specification and energy management strategy, in order that they demonstrate responsible environmental design principles.

Sustainability guidance for this scheme works across two levels:

The first, the site level, deals with sustainability issues that relate to wider issues such as walkability, solar access and a sustainable transport approach.

The second tier is more detailed and building specific guidance relating to building performance, water management, energy consumption, and materials selection.

Embodied Energy

The materials have been chosen, wherever possible, to create healthy, comfortable buildings with the lowest possible impact on the environment. It is intended that chosen materials have been assessed in relation to The Green Building Handbook. Measures that will be encouraged are as follows:

Use of materials of low embodied energy and non-oil based products.

Use of materials from sustainable sources including recycled material.

Ability to re-use and recycle materials at the end of the life of the building.

Sourcing of local materials.

Energy Consumption

Energy efficiency is a key factor in sustainable development. Measures adopted in order to achieve the lowest possible energy use and in turn minimise greenhouse gas emissions will include wherever possible:

Maximising natural lighting and optimise or minimise solar gain as appropriate.

The use of mechanical and electrical equipment such as condensing boilers, low energy lighting lamps, heat recovery systems etc to minimise energy use wherever possible.

The use of insulation with high thermal performance.

Water conservation

The project will demonstrate methods employed to achieve reductions in water consumption. These measures will include:

Low water use sanitary appliances, showers and taps.

Minimising surface water run off with use of porous and absorbent materials.

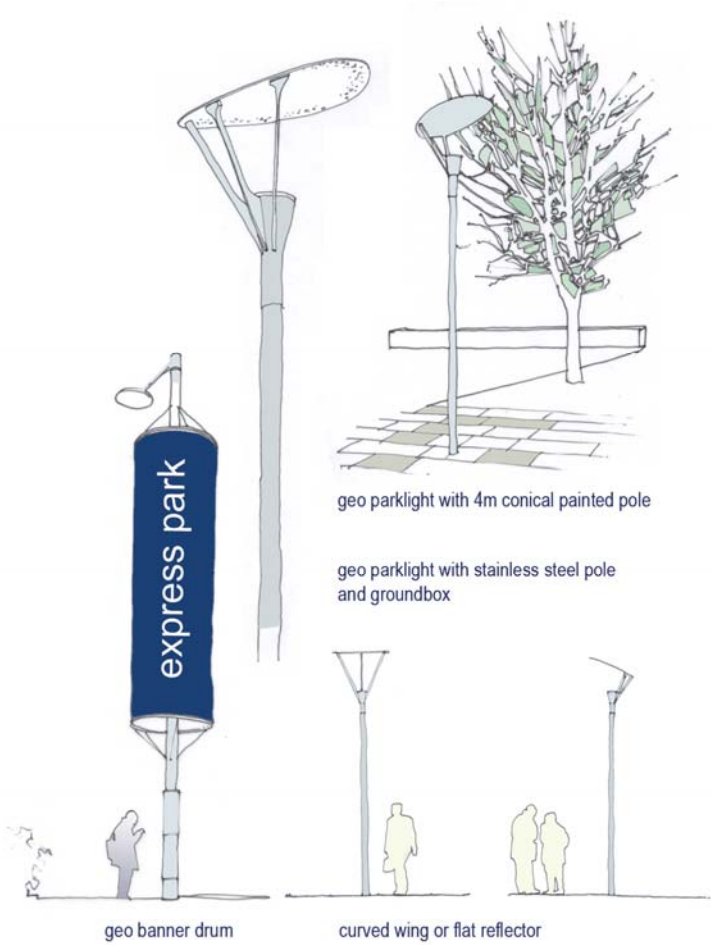
Use of on site disposal methods for surface water where possible in accordance with Environment Agency best practice.

Life time use and flexibility

The long term use of buildings significantly reduces their environmental impact. Design life and flexibility play important roles in extending the life of buildings. To this end, the following criteria has been adopted: Designing buildings to have a 60 year design life and minimise non routine maintenance. The use of lightweight partitioning techniques which assist in conversion to different uses in the future.

Street Furniture

A consistent design approach will also be applied to the lighting, signage and street furniture across the site. High quality products will assist in re-enforcing the desired image for the buildings and landscape strategy across the site as a whole


express park
geo parklight with 4m conical painted pole
geo parklight with stainless steel pole
and groundbox
geo banner drum
curved wing or flat reflector


geo litter bin single with post
geo bench
geo seat with backrest