## hayle harbour :: regeneration South Quay

# Development Proposal for South Quay/Foundry Yard Hayle Harbour

**December 2010** 



Design and Access Statement

APPENDICES









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#### APPENDIX I ASSESSMENT

The current scheme design process has been informed by a site assessment which encompasses a number of different topics and disciplines. Technical baseline site evaluation for environmental factors has been undertaken as part of the Environmental Impact Assessment. Full reports are submitted within the Environmental Statement. The townscape analysis is included here along with summaries of the other assessments which have been undertaken. These have informed the evaluation of the site and the design.

#### Hayle - Background History

The town of Hayle has a remarkable history and the harbour has been at the centre of it. The town grew around what was originally a natural estuary and became a major centre of industry and trade in the nineteenth century. After the First World War and for fifty years ship repair and ship breaking took place in the harbour. Today it has international significance as one of 10 designated areas within the Cornwall and West Devon Mining Landscape World Heritage Site (WHS). This is belied by the harbour's current run-down and neglected appearance, having suffered major neglect over the last quarter of a century. The harbour itself contains 20 Grade II listed structures and, despite the dereliction that has occurred over the past Century, remains a remarkably intact example of an evolved industrial port. Trading by sea-going craft has taken place through the Hayle estuary since Iron Age and Roman times. The estuary has always provided a haven and harbour for visiting trading ships and local fishing fleets.

The present town of Hayle is made up of two settlements each relying on separate accesses through the estuary. On the east the Cornish Copper Company established Coppertown along the River Angarrack and here copper smelting took place and CCCo later built an iron foundry and undertook heavy engineering. Further west along Penpol Creek, a second firm founded by John Harvey established a copper smelting and later an iron foundry business near to the present Foundry Square. Both companies imported early steam engines, coal, timber and other supplies for the mines in the area. Initially they exported finished copper but later copper and other ores to South Wales.

The early centre of the present Hayle was initially dwarfed by a settlement at nearby Angarrack, where a tin smelter was built in 1704 and mills and stamps converted/constructed to process the ore. The role of the port was to serve as a convenient point to land coal from South Wales, which was then taken to Angarrack by mule. In 1710 a copper and tin smelter was built at Milliner Farm on the Mellanear stream which prospered for many years.

The first major development at Hayle was the construction of the first modern quay by John "Merchant" Curnow, in the 1740s, to service the growing mining industry. In 1758 the Cornish Copper Company (CCCo) moved from Camborne and set up a copper smelter at Ventonleague (Copperhouse Creek) and this proved very successful, so much so that a canal was built to bring vessels right up to the works and additional land was purchased on both sides of the creek for industrial use and providing housing for the workers.

The smelting process generated large amounts of waste. The copper slag was cast into large heavy dark bricks or "Scoria Blocks" which were to prove a very useful building material which were used and re-used in the town and can be seen in many buildings. The blocks were sold at 9d (about 3p) for 20 and given free to employees of the CCCo to build their own houses. Sea Lane or Black Road (and Black Bridge) as it is now known was built using these and waste used to fill in the upper reaches of Copperhouse Creek creating Wilson's Pool and dividing it from Copperhouse Pool. Copperhouse Pool was subsequently modified to serve as a tidal reservoir both to allow ships to travel up as far as the dock, (where the Co-op supermarket now stands), and to flush or sluice the channel to keep it clear of sand and silt.

In 1779 John Harvey, a blacksmith from nearby Carnhell Green, established a small foundry and engineering works in the area, now known as Foundry, to supply the local mining industry including importing early Newcomen steam engines and Boulton and Watt engines. The business flourished and by 1800 employed more than 50 people. It went from strength to strength through both professional and family partnerships with a series of great engineers and entrepreneurs, including Richard Trevithick, William West and Arthur Woolf, giving the firm a level of expertise unmatched in Cornwall. The firm of Harvey & Co built South Quay in 1819 for its own business and in 1835 built the extensive Carnsew Pool to ensure access to the sea for its own vessels. The company is probably best remembered for producing Cornish beam engines after 1800. These are considered as some of the finest ever built, which not only served in Cornish mines but were exported worldwide. It also produced a range of products ranging from hand tools, agricultural machinery and architectural fittings to ocean going ships, including the SS Cornubia and the world's first steam-powered rock boring machine.

#### **Application site - Existing use**

The application site is currently significantly under-used. South Quay is largely unmade and there is some informal parking use although this is discouraged by signage. There is some access for small boats moored alongside South Quay and there is a small amount of associated commercial activity related to fishery although none to tourism. There are no buildings on South Quay.

Foundry Yard Car Park is a little used car park adjacent to the town centre. The ground surface is unmade and there is poor pedestrian linkage into the town centre particularly poor for buggies, trolleys or wheelchairs. The car park is bounded to the west by an old stone wall. This structure is not listed but still worthy of retention as a positive visual feature.

Isis Garden is a pleasant green space adjoining the viaduct and Foundry Square. It is under-used owing to poor pedestrian linkage to Foundry Square and the town. Although the existing curved wall surrounding the gardens is an attractive stone structure it contributes to the under-use of the space since it hampers both access and visibility of the gardens beyond.

#### **Application Site - Heritage Assets**

Consideration of the heritage issues surrounding the redevelopment of the site are given in Christopher Pound's report which accompanies the current application. It concludes as follows:

- The site of the proposals is listed Grade II by virtue of the group value of the quays
- The quay was built on reclaimed land building commencing in 1818/19
- The site is within the Hayle Town Conservation Area and the Cornwall and West Devon Mining World Heritage Site
- The listed harbour walls are in a poor state of repair and have collapsed in an area on the east side
- The quay was an industrial site which included shipbuilding, later ship-breaking much of the quay was given over to the export of ore
- All the buildings associated with the industrial activity of the Harvey Company have been demolished and all that is likely to remain underground are the foundations of these buildings



#### **Planning Policy Framework**

The planning application is accompanied by a planning statement prepared by Planning Perspectives LLP which deals fully with matters relating to policy.

Planning policies from national, regional and local policy documents have been taken into consideration in the rationale for development. These policies are identified below.

#### **National Policy**

- PPS1 'Delivering Sustainable Development' (2005)
- PPS3 'Housing' (2010)
- PPS4 'Planning for Sustainable Economic Growth' (2009)
- PPS5 'Planning for the Historic Environment' (2010)
- Planning Circular 07/09: Protection of World Heritage Sites' (2009)
- PPS9 'Biodiversity and Geo-Conservation' (2005)
- PPG13 'Transport' (2001)
- PPG 24 'Planning and Noise' (1994)
- PPS25 'Development and Flood Risk' (2006)

#### **Regional Policy**

• RPG10 – Regional Planning Guidance for the South West – emphasises the need to conserve and enhance environmental assets while promoting good quality design, urban spaces and a mixture of complimentary uses.

#### These are explored specifically in the following:

- Policy SS18: Regeneration and Conservation
- Policy SS21: Coastal Towns as a focal point for development
- Policy VIS2: Supports Mixed-Use and Brownfield Development
- Policy EN1: Protection and Enhancement for nationally and internationally important landscape areas and nature conservation sites
- Policy EN3: Historic Environment
- Policy EN4: Place Shaping
- Policy EC1: Sustainable development should be supported by promoting and encouraging new economic activities
- Policy EC2: Geographical priority should be given to structure economies and regenerate areas of special need
- Policy EC6: Development should lead to regeneration/environmental improvement in town centres
- Policy HO5: Places a priority on the re-use of previously developed land
- Policy HO6: Mix of housing types and densities.

The Cornwall Structure Plan identifies policies specific to Cornwall as a region. The 'saved'policies that are relevant in this instance, include:

- Policy 1: Key principles for Sustainable Development
- Policy 2: Protection and Enhancement of the Built Environment
- Policy 3: Use of Resources
- Policy 4 Maritime Environment
- Policy 8: Housing
- Policy 9: Mix and Affordability of Housing
- Policy 10: Location of Housing Development
- Policy 11: Economic Growth
- Policy 14: Retailing
- Policy 25: Identification of Hayle as an 'other main town'

#### Local Plan

The Penwith Local Plan was adopted in February 2004. The following saved policies have been considered in the context of the proposal:

- Policy GD1:Integration of Development with Surroundings
- Policy GD2:Design and Layout of Development
- Policy CC1: Protection of Landscape Character
- Policy CC2: Interpretation of Landscape Character in Coastal Areas and the Countryside
- Policy CC5: Protection of Areas of Great Landscape Value
- Policy CC6: Protection of Special Areas of Conservation/Special Protection Areas
- Policy CC7: Protection of Sites of Special Scientific Interest
- Policy CC8: Protection of Areas of Great Scientific Value, County Wildlife Sites, County Geological Sites, Ancient Woodland Sites and Local Nature Reserves
- Policy CC14: Protection of the Shoreline and Coastal Waters
- Policy CC18: Reclamation of Derelict Land/Unsightly Land
- Policy H1: Housing Provision
- Policy H18: Housing Design, Layout and Densities
- Policy TV14: Protection of Historic Settlements
- Policy TV15: Re-use of Previously Developed (Potentially Contaminated Land)
- Policy TV17: Control of edge-of-centre/out-of-centre shopping sites
- Policy TVD: Proposal for the development of South Quay, Foundry Yard and South Quay, Hayle
- Policy CS8: Control of Proposals which would affect water courses or the coast.







Of primary interest is the content of Policy TV-D, This states that in considering specific proposals for Hayle Harbour, a number of key objectives have to be met, including:

- The regeneration of derelict sites;
- Effective use of previously developed land;
- The retention and improvement of port facilities;
- The effective integration of retail and other centre uses with the existing Foundry centre; and
- The effective protection of significant, natural and built, environmental assets.

#### The policy text is as follows:

South Quay/Foundry Yard (6.0 hectares), North Quay (7.9 hectares) and East Quay (1.0 hectares) are proposed for redevelopment for uses within Classes A1, A2, A3, B1, B2, B8, C1, C3, D1 and D2 of the Town and Country Planning (Use Classes Order 1987). Proposals for development will be required to:

- Make provision for improved harbour facilities;
- Make provision for the maintenance of the existing level of industrial storage facilities;
- Ensure that town centre uses (A1, A2 and A3) are closely integrated with the adjacent town centre in terms of location, orientation and pedestrian movement;
- Provide for at least 400 dwellings with a target for 25% of provision being "affordable" and meeting the requirements of Policy H-14;
- Be of a scale and design that respects the maritime environment and heritage of those prominent location in the harbour:
- Retain existing buildings and traditional features which contribute to the character of the area;
- Be compatible with their surroundings;
- Include provision for the improvement of the junction between Carnsew Road and Foundry Lane.

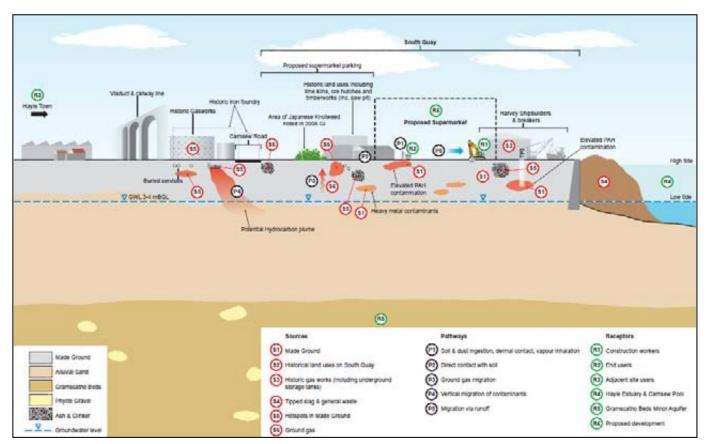
## **APPENDIX I ASSESSMENT**

#### Topography, geology & contamination

The site and surrounding roads have been subject to a topographical survey prepared by Babtie and Nationwide Surveys Ltd which has informed the architectural as well as the infra-structural design of the scheme. A Geo-Environmental Desk Top Study has been undertaken by Buro Happold which concludes the following:

A contamination desk study was also conducted identifying potential hazards due to the history of the site. These include heavy metals associated with the industrial nature of the site and diesel/petroleum based contaminants due to previous site usage.

A bored or driven pile solution into the Gramscatho Beds would be an acceptable approach to achieving the required foundation design. Due to the concentrated nature of the loads being transmitted to the ground it is likely a pile group would be utilised consisting of 3 to 4 piles with a pile cap at each column location. These would be set down from formation level and a ground bearing slab would be cast over to create the ground floor level, designed to take the loads of a small moving vehicle associated with supermarket servicing with an associated load of 10kN/m².



STRUCTURAL AND CONTAMINATION ASSESSMENT DIAGRAM



#### **Arboriculture**

The subject site is largely hardstanding however it contains an area of scrub with some large shrubs. There are no trees and therefore no arboriculture survey has been undertaken.

#### **Ecology**

The site and surroundings have been subject to ecological assessment for the purposes of determining environmental impact as part of the EIA and Environmental Statement which has been undertaken by Buro Happold in accordance with Natural England recommendations. The report forms part of the current application and concludes as follows:

#### Terrestrial Ecology

The terrestrial habitat within the application site is of limited value compared to the surrounding land and development sites in the vicinity of Hayle Harbour. The most important species found at the application site was petalwort, which is fully protected under Schedule 8 of the Wildlife & Countryside Act 19811 and listed in the EC Habitats Directive 6. Only relatively small numbers of the plant are found on South Quay. Mitigation is proposed in the form of translocation of any sizeable colonies of petalwort found on South Quay, as to be agreed with the LPA and Natural England through the production of the Petalwort Translocation and Monitoring Plan. The limited impacts of the proposed development would be experienced during the construction and the operational phase and will affect both species and habitats.

#### **Aquatic Ecology**

The aquatic flora and fauna of the Hayle Estuary complex is restricted due to historical contamination of the sediments and the continued poor water quality due to mining drainage and spoil heaps in the various catchments. The limited amount of work that impacts on the aquatic ecology means that any impacts during the construction and operational phases are minimal. Carnsew Pool has a good level of water quality and this must be protected during all phases of construction through the Construction Environmental Management Plan (CEMP). The impact of vibration and noise on marine mammals will need to be considered within the CEMP but it is not likely to impact on the wider St Ives Bay and has therefore not been considered in any detail.

#### Ornithology

The primary reason for the Hayle Estuary and Carrack Gladden SSSI status of the estuary lies in the populations of waterfowl and shore birds that occur in winter and pass through on spring and autumn migration. Carnsew Pool was identified as being of particular interest with an area of open sea water available over the entire tidal cycle supporting Little Grebe at a regional (possibly national) importance level, and with an area of intertidal habitat exposed over each tide at the western end of the pool supporting feeding and roosting waterfowl. The main focus of potential construction impact is around Carnsew Pool, with some construction activities potentially causing indirect loss of habitat and associated habitat function through disturbance. The CEMP will manage potential construction disturbance impacts and impacts arising from noise, dust and accidental spillages.

#### **Acoustics**

The site has been subject to a Noise Assessment by Sharps Redmore which forms part of the current planning application. It concludes the following:

A noise assessment was carried out to consider the impact of noise from this proposal. A survey of existing ambient noise levels was carried out in August 2009. The assessment was made with reference to appropriate Planning Policy Guidance, British Standards and World Health Organisation Guidelines for Community Noise.

Noise levels have been predicted at the nearest noise sensitive receptors, taking into consideration the attenuation of noise over the distances concerned and the screening effects. Predicted noise levels have been compared to guideline values and noise control limits have been proposed for the plant. Predicted levels have been found to be within guideline levels. The development is predicted to result in a negligible adverse impact.

The proposed development also includes residential use to the north of the site. Noise levels within these dwellings (arising from site activities) are likely to be below the guideline value from PPG 24 at which noise mitigation is necessary.

#### **Air Quality**

The site has been subject to a Air Quality Assessment by Buro Happold which forms part of the current planning application. It concludes the following:

Diffusion tube monitoring data for Hayle shows that the concentrations of NO2 close to busy roads in the area are well within the air quality objectives. At the time of writing, no AQMAs have been declared in the Hayle area.

The potential impacts will be greatest on the residents and businesses along Penpol Terrace and Carnsew Road, as these border the application site.

Any potentially significant adverse impacts from construction dust would be mitigated using good construction site practice as detailed within the Environmental Statement.

During the operational phase of the scheme, the development is expected to bring about small to medium changes in NO2 concentrations and negligible to small changes in PM10 concentrations. the proposed development is expected to have an insignificant effect on air quality. The main potential impacts on local air quality from the following sources were identified and assessed:

- Dust during construction;
- Odour during construction;
- Emissions from increased traffic flows on the local road network;
- Emissions from development car parking; and
- Emissions from a CHP plant at the proposed food store.

However, because these changes do not result in a breech of air quality standards, the residual impact to local air quality is considered to be Minor Negative to Negligible.

#### **Daylighting**

No daylighting or overshadowing analysis has been undertaken with respect to the proposed development because no existing sensitive receptors were identified within the potential impact zone of the proposal. It has not been possible to assess the proposed residential aspect of the scheme since layout and appearance are reserved matters.

#### **Artificial Lighting Impact**

A schematic lighting design is included with the current application which will be subject to design development as the outline parts of the scheme are designed in detail. At that time a full lighting impact assessment can be prepared.







#### **Landscape & Visual Assessment**

A detailed landscape and visual assessment has been prepared by Aspect Landscape as part of the Environmental Statement which covers all the key receptors around the development site. The design of any buildings will take into account the following parameters to ensure that the development meets the objectives set in the outline planning application for Hayle.

The proposed development site lies within one of ten Areas which make up the Cornwall and West Devon Mining Landscape, a UNESCO World Heritage site. Relevant Local Plan policies within the Penwith Local Plan 2004 include a Conservation Area covering the site, 'Open Areas Related to Settlements', and 'Redevelopment Areas in Penzance and Hayle', of which the site is one.

The Cornwall and Scilly Urban Survey report called; 'Historic characterisation for regeneration, Hayle', (The Cornwall and Scilly Urban Survey, 2005) describes the townscape character areas for Hayle. Four distinct character areas have been identified in this study within the historic urban core, and these are Copperhouse, Foundry, the Harbour, and Penpol. The report describes the site and setting in the 'Harbour' area as follows:

'The contribution the quays make to the character of the town cannot be overemphasised. It is not just their extent, but the broad open spaces which have always characterised much of the wharf areas.

Although much of the quay walls and harbour infrastructure itself survives, many of the industrial buildings formerly packed onto the quay sides have gone leaving them empty with a waste ground atmosphere. South Quay and North Quay share this somewhat desolate character'.

The 'Penpol' character area lies directly to the east of South Quay and includes Penpol Terrace that looks across the water to the site. This character area has a close relationship with the harbour, and includes St Elwyn church that has a prominent location on Penpol Quay. The main description of the Penpol character area states:

'The impressive views over the harbour that led to the development of the terraces here still remain an attractive feature of the area. As such, the impact of the harbour redevelopments to this area needs to be carefully considered.

The application site on South Quay falls within the Hayle Harbour townscape area in the Cornwall and Scilly Urban Survey, and will have a likely impact upon the visual landscape of this area, along with Penpol and Foundry townscape areas. Within the wider landscape beyond these identified areas in the Urban Survey, Lelant Towans lies to the western side of the estuary, and West Hayle Valley to the southwest covering the southern estuary and land around. Hayle Towans lies to the north of the harbour.

A number of viewpoints have been assessed using photographs of the site and its setting from publicly accessible viewpoints. From the majority of viewpoints, the site is seen in the context of Hayle's existing urban fabric and surrounding landscape setting. Views are most commonly seen across the estuary. Foundry Square, the railway viaduct, the church at Lelant and Penpol Terrace all form significant landscape features around the site.

The width of the estuary and the shallow tributary valley sides facing down towards the proposed development site leave the site very exposed. While the valley sides to the estuary leave the site highly visible at the foot of a natural amphitheatre, they also provide higher ridgelines preventing the proposed development site from breaking the skyline in many of the surrounding views.

The incorporation of mitigation measures is a key part of the design process, in order that any adverse landscape and visual impacts are anticipated in the formulation of the proposals and designed out where possible. The design objectives for the proposed development are to create a positive sense of identity and draw upon the characteristics of the harbour and its surroundings. The positive building design and landscape treatment has been inherent to the design of the proposed development, and has evolved through previous and on-going consultations with the Council and other statutory bodies, to minimise any potential landscape impacts. The development fully recognises the importance of its townscape setting on the quayside and its visual connections with the town.

## **APPENDIX I ASSESSMENT**

In terms of the existing landscape/ townscape character, the development proposals take into account the existing character and landscape elements on and adjacent to the site, retaining the most valued qualities of South Quay. Proposed development on South Quay would allow important features such as the viaduct, the water, the scale of the buildings in the foundry and the linearity of urban form to remain as key defining elements in the area.



#### **Sustainable Transport and Highways Background**

A full Transport Assessment prepared by Savill Bird Axon accompanies the current application.

#### **Travel by Rail**

The nearest rail halt to South Quay and Foundry Yard is Hayle station, located on Station Hill, approximately 200m to the east of the application site. Hayle is served by First Great Western trains which travel along the Cornish Main Line between Bristol Temple Meads and Penzance. The station has two platforms which provide covered passenger shelters but there is no footbridge to allow access between platforms. Passengers instead have to negotiate the railway tracks at surface level.

There is an approximate daytime frequency of one train per direction every hour on a weekday and Saturday and every ninety minutes on a Sunday. This represents a reasonabe level of public transport provision for Hayle which is considered to be a small coastal town.

#### **Travel by Bus**

The nearest bus stops to the site are located around the Foundry Square roundabout approximately 100m to the south of the site. Three bus stops are located on Foundry Square, Foundry Hill and Penpol Terrace.

The most frequent existing bus services to Hayle link it with St Ives, Penzance, Redruth and Truro. These routes offer a daytime service frequency of one bus every thirty minutes during Monday to Saturday and one bus per hour on a Sunday. This is considered to be a good level of public transport provision for a town the size of Hayle and offers excellent connections not only to local destinations, but also to important regional towns.

#### **Travel by Bicycle**

National Cycle Network route number 3 passes directly alongside the southern edge of the B3301 (Carnsew Road), in between South Quay and The Foundry. Within the vicinity of South Quay and The Foundry, the route is traffic-free and follows the alignment of a disused railway line. The route connects the local area with Penzance in the south and St Austell in the north, from which other route connections can be made.

Cycle parking facilities (Sheffield stands) are currently provided at Foundry Square within the Town Centre and at Hayle Railway Station.

#### **Travel by Foot**

South Quay and Foundry Yard are located directly to the north of Hayle Town Centre and are connected via a footway that extends from Foundry Square along the southern edge of Carnsew Road. Beyond the railway viaduct the footway stops and the footway along the northern edge of Carnsew Road begins. There is however no formal pedestrian crossing or refuge at this location and visibility is limited in both directions due to the slight bend and rise gradient on Carnsew Road. Therefore pedestrian connectivity from South Quay and Foundry Yard to the town centre is incomplete. As part of the development proposals, significant improvements to strengthen this link are proposed.

A signalised pedestrian crossing is located on Carnsew Road to the west of South Quay and The Foundry, just beyond the Jewson's site entrance. There are footways on either side of the road in this location and this crossing facilitates the safe movement of pedestrian and cyclists.

The southern section of Penpol Terrace benefits from footways on either side of the road and a signalised pedestrian crossing just to the south of the bus stop. Beyond the bus stop there is a footway on the western edge of the road only, although there is evidence that pedestrians walk along the grassed western edge. This may be attributed to leisure walkers using the area as a coastal walk.

Foundry Lane is a quietly trafficked road and is a direct walking route from the southern Foundry Hill residential area.

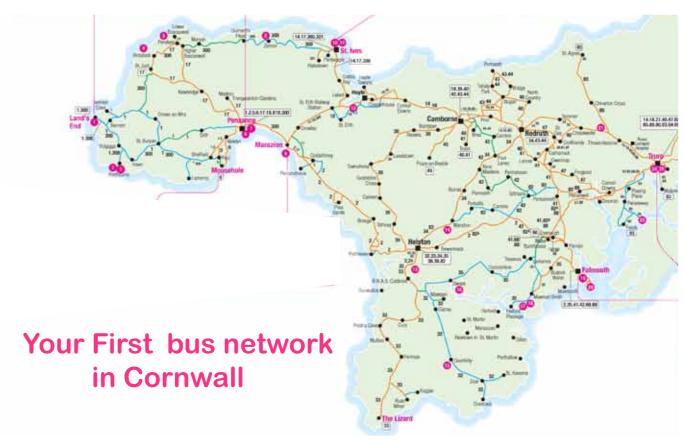
Foundry Hill has footways of varying width on either side of the road and users also benefit from street lighting. The Foundry Square / B3301 mini-roundabout appears to have recently been subject of a public realm improvement scheme and now benefits from numerous uncontrolled pedestrian crossing points, some with tactile paving.

The B3301 provides frontage access to a range of shops, services and facilities, concentrated in the Copperhouse and Foundry Square areas of Hayle; on-street car parking is provided in parallel lay-bys in these areas. Direct access to residential properties fronting the route, is also in evidence along the B3301.

The B3301 forms a roundabout junction with the B3302 at Foundry Square, adjacent to Hayle railway station, and thus forms a pivotal node in traffic movement throughout the town. The B3302 heads southward from this junction, providing access to residential areas on the southern outskirts of Hayle. The B3302 crosses the A30 (T), but does not provide direct access to this strategic carriageway.

The application site falls within the central hub of the Hayle Harbour Masterplan, which currently identifies South Quay for a range of residential and employment development.

The accessibility level of the application site is high, owing to its proximity to existing and committed town centre residential development.



EXTRACT FROM FIRST BUS NETWORK MAP FOR DEVON & CORNWALL





#### Services, easements & site legal constraints

A utilities assessment has been undertaken by Buro Happold and accompanies the current application. This has been prepared using information previously obtained from utility companies and stakeholders and reflects more recent negotiations with South West Water and Western Power Distribution.

Adequate utilities exist or can be made available at this brown-field site close to Hayle Town Centre.

The initial enquiries and assessment undertaken have revealed that it will be possible to supply the proposed food store and subsequent development on South Quay. Further negotiations will need to be undertaken with the utilities companies to ensure the future demand can be supplied.

**Storm water drainage** can be accommodated through discharge into Penpol Creek.

**Foul water drainage** from the proposed development will use the existing infrastructure adjacent to the site and the East Quay Pumping Station. It is likely that new infrastructure in the form of a rising main will be needed for the extension of the development on South Quay that is being considered in outline at this stage.

**Potable water supply** will require further discussion with South West Water regarding the capacity of the existing network, in order to ascertain whether existing infrastructure is able to support the food store element of the development. It is likely that new infrastructure in the form of a rising main will be needed for outline parts of the development.

**Electricity supply** for the development can be provided in several different ways subject to further discussions with Western Power Distribution. The capacity of the overall network is adequate. A single substation is unlikely to be able to supply the whole development and an additional substation will be needed for the outline parts with a specific food store substation to be provided by the developer.

Small scale diversions and protection of utilities will be required to accommodate the proposed changes to the highway associated with the development proposals. These can be undertaken at the same time as any connections needed to provide a supply to the site. Water, Gas and Communications are not considered to be required in loads that exceed available supply, although utility companies may wish to upgrade these as part of any diversion opportunities.

#### **Surface Water Drainage & Flooding**

The Flood Risk Assessment (FRA) prepared by Buro Happold for the development contains details of the impacts associated with flood risk and suitable mitigation.

The main potential source of flooding is tidal, arising from a combination of astronomical and meteorological conditions, which would lead to extreme tidal levels within Hayle Harbour. The Tidal Flood Risk has considered the design life of the proposed development which takes the life of the development to 2111. The predicted 1 in 200 year still water tidal level for 2111 has been considered, to include climate change, giving a level of 5.57m ODN. Climate change impacts have been assessed in accordance with the guidance given in PPS25. A freeboard allowance of 600mm has been included, to account for inherent uncertainties in the method of prediction. This results in a minimum required flood defence level of 6.17m ODN.

It is therefore proposed to set the minimum development threshold at a level of 6.17m AOD.

With respect to surface water runoff, the development delivers a scheme that will provide a suitable surface water drainage system which provides a net improvement over the existing surface water drainage arrangements and does not increase the risk of flooding to neighbouring sites. Due to the nature of the development and its proximity to tidal waters, it is not proposed to limit the rate of runoff to the existing rate where discharge is proposed to the harbour. Water quality improvements will be achieved by the interception of rainwater infiltration into contaminated ground and the introduction of positive drainage and discharge to tidal waters. Where car parking is proposed, the requirements of the EA's PPG3 will be met.

During operation, it will be important to ensure that the design provides for adequate protection of the Harbour, using silt traps and interceptors in the storm water drainage system where required. Details on what will be needed for the provision of foul drainage will be determined following the network capacity modelling work to ensure the current application and the wider development of Hayle Harbour will be accommodated within any improvements considered for the SWW foul drainage network.



#### **Key View Identification**

The following viewpoints were identified by the planning authority as being sensitive in connection with the redevelopment of South Quay. The site & context have been constructed in a virtual model to allow careful consideration of these views throughout the design process and the resulting views showing the proposed development in context are included within the "Design" section of this Statement.



**Visual Assessment Key Viewpoints** 



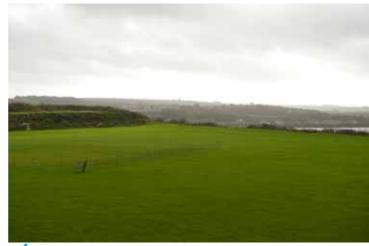
View from Penpol Terrace







View from Cunaide Stone







5 View from St Uny's Chruch



View from train station





#### **Townscape Analysis & Site Context**

The Department of the Environment, Transport and the Regions, in partnership with the Commission for Architecture and the Built Environment, has produced a series of objectives of good urban design to indicate what should be sought to create a successful place. These are put forward in their document 'By Design. Urban Design in the Planning System: Towards Better Practice':



Character and distinctiveness: through the enhancement of the character of the area by respecting its locally distinctive patterns of development, sense of history, culture and traditions.



Continuity and Enclosure: through reinforcing the continuity of street and the enclosure of space by development which clearly defines private and public areas



Quality of the Public Realm: through the quality of the space between buildings by providing spaces and routes that are safe, uncluttered, active and identifiable.



Connectivity and Permeability: through high accessibility and local movement by making places that connect with each other and are easy to move through.



Legibility and identity: through ease of understanding, through development that provides a system of recognisable routes, nodes and features to orient users



Diversity and choice; through a mix of compatible uses that work together to create vital and viable places, and meet a wide range of local needs.



Adaptability and Robustness: through development that can easily respond to changing social, technological, economic and market conditions



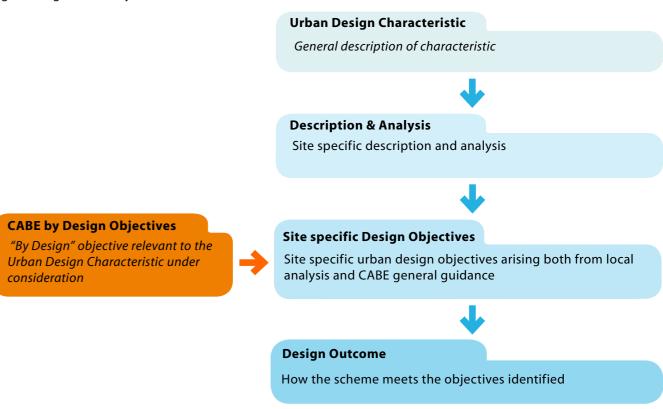
Integration and Efficiency: through sustainable development, which integrates land uses, transport, and the natural environment, promotes walkability and reduces the need to travel.

## **APPENDIX I ASSESSMENT**

In order to meet these objectives an assessment of the existing townscape character and quality of the site has been undertaken in which the following urban design characteristics have been considered:

- Locale
- Urban structure
- Urban Grain
- Density and mix of uses
- Scale of Development
- Building Typology
- Streetscape, Public Realm

Each urban design characteristic is analysed in order to derive site specific design objectives. This process is set out using the diagrammatic system as set out below:



#### Scheme Aspirations ("By Design" Objectives not related by specific Urban Design Characteristics)



Set and achieve the sustainability targets set for the development. (By Design Objective: Integration and Efficiency)



Achieve the accessibility targets set for the development – all non-residential development to be fully accessible. (By Design Objective: Integration and Efficiency)



Adapt the development brief to respond to changing economic and market conditions to create a viable scheme enabling broader regeneration. (By Design Objective: Adaptability and Robustness)







Paul Sherris Funeral Director



residential development off Carnsew Road



Whites Warehouse



The Viaduct



Foundry Square



Jewson



view from Penpol Terrace



Back of Foundry



Penpol Terrace

#### **CABE by Design Objectives**

Character and distinctiveness: through the enhancement of the character of the area by respecting its locally distinctive patterns of development, sense of history, culture and traditions.



East Quay

#### **Urban Design Characteristic**

#### Locale

Locale is the geographic, historic and cultural context of a place which bestows its specificity and identity.

#### **Description & Analysis**

- Built form in the locality is characterised by the use of stone and render with slate roofs. The buildings are generally late Victorian and Edwardian mainly 2-3 storey in the town centre.
- The character of the locale is dominated by the landform and barriers to movement resulting from the quays, viaduct and bodies of water
- Hayle has an interesting and important industrial heritage however it is not obvious to the casual observer why the town should be designated a World Heritage Site
- Hayle Conservation Area covers most of the town centre including the application site which is located in the "Harbour Neighbourhood"
- Hayle harbour contains a number of LGII buildings and structures including South Quay itself connected with industrial activity in Hayle which included copper smelting; iron smelting; ship building; import and export by sea of coal, tin, copper iron and munitions
- Although mostly demolished there is an important history of large scale industrial buildings within Hayle.
- Hayle is full of unusual relationships of form and scale. These bestow upon Hayle a clearly identifiable character.



#### **Site specific Design Objectives**

- The designers should take delight in the unusual juxtapositions of scale and use which characterise Hayle
- It would be consistent with the historical use of the site for a large industrial or warehousing use to be located here.
- Visitors need guidance and interpretation to understand Hayle's historical significance and enhanced pedestrian access in order to experience it.



#### **Design Outcome**

- Materials: the selection of external facing materials has been influenced by industrial as well as traditional materials in the locality.
- Appearance: the design takes cues for scale & form from nautical and industrial references.
- Heritage Assets: The scheme incorporates the repair and maintenance of visible heritage assets.
- The scheme incorporates features to help visitors understand Hayle's history and the site's importance within it.







#### **Urban structure - Hayle**

RAILWAY LINE
COUNTY ROAD NETWORK
WATER

#### **CABE by Design Objectives**

Integration and Efficiency: through sustainable development, which integrates land uses, transport, and the natural environment, promotes walkability and reduces the need to travel.

#### **CABE by Design Objectives**

Continuity and Enclosure: through reinforcing the continuity of street and the enclosure of space by development which clearly defines private and public areas

#### **Urban Structure**

The urban structure is the framework of routes and spaces that link an area with its surroundings and forms the skeleton of an area for the purposes of movement and access.



#### **Description & Analysis**

- Hayle is located between the estuary which constrains development to the northwest and the A30 to the south and east.
- Within Hayle the B3301 is the principal east-west route.
- The railway viaduct is a defining structure within the town which acts as a positive visual and historic feature and brings the railway into the heart of Hayle but it also acts as a barrier to vehicle and pedestrian movement at ground level.
- The quays are important defining structures within Hayle which act as positive character features and allow boats into the heart of the town but they also constrain movement and linkage on land.
- The site occupies an important location on the western approach to the town straddling the main western approach (the B3301 / Carnsew Road) and adjacent to the railway viaduct.



#### **Site specific Design Objectives**

Provide development

- which acknowledge the gateway position that the site occupies along this main approach route into Hayle
- with entrances located along Carnsew Road to strengthen linkage to the town centre
- which creates destination street frontage
- with frontage addressing Penpol Terrace to reintegrate the site into the urban fabric of the town
- which provides linkage to the town centre and Penpol Terrace



#### **Design Outcome**

- the proposed buildings reinforce the continuity of the street by addressing Penpol Terrace.
- the new buildings in conjunction with existing quayside define new public space in the town centre
- Design solutions are offered to Cornwall County Council for consideration for off-site improvements to pedestrian road crossings and public realm improvements



#### **Urban Grain**

The layout of an area is determined by the arrangement of streets, blocks and plots. The concept of "urban grain" gives an indication of the degree to which an area's pattern of blocks and plots' subdivision is respectively small and frequent (fine grain) or large and infrequent (coarse grain).



#### **Description & Analysis**

The diagram gives an indication of the gradation and direction of the urban grain as well as the block structure

- The urban grain of Hayle is highly fractured owing to the unusual landform and manmade constraints.
- There are abrupt transitions between areas of fine grain development and large abandoned industrial sites (with effectively no grain) within the town centre
- These scale shifts and the effects of the landform on the layout of the town are key defining characteristics of Hayle



#### **Site specific Design Objectives**

- Provide new development which takes advantage of the town centre location
- Provide new development which creates finer grain development within a central location in the town
- It would be consistent with Hayle's character to for there to be abrupt changes is scale and grain
- Provide development which is highly permeable to encourage greater use and access to the site.
- Retain moorings for harbour users



#### **Design Outcome**

The proposed development

- incorporates significant elements of public realm and linkage to the town centre
- incorporates heritage assets into the public realm to enable greater
- creates finer urban grain on the site than existing
- creates urban grain which responds to the site context
- incorporates significant retail elements to draw the public into the
- is highly permeable allowing a high degree of public access

#### CABE by Design **Objectives**

Connectivity and Permeability: through high accessibility and local movement by making places that connect with each other and are easy to move through.



**Urban grain - Hayle** 





#### **Density & Mix**

The density of an area is represented by the amount of development on a given piece of land. The mix indicates the respective range of uses. Density influences the intensity of development, and in combination with the mix of uses can affect a place's vitality and viability.



#### Description

- South Quay is located in a central zone within the town with unusual constraints owing to the quayside and adjoining bodies of water.
- Hayle is notable for the variety of adjacent uses and abrupt changes in density and pattern of development without transitional zones
- The subject site is disused and this leaves an unsightly vacant space within the town centre



#### **Site specific Design Objectives**

- Provide a moderate density proposal appropriate for a central site within the town
- Provide an appropriate mix of uses on the site including retail and residential which will contribute both to the vitality of the scheme & more broadly to that of the town centre.





#### **Design Outcome**

- The proposals provide a moderate density of development which is judged to be appropriate for the site's location.
- The uses proposed for the site include small, medium and larger scale food retail.
- The uses include a variety of residential unit types (in outline)
- The uses include public realm and interpretation of heritage assets to increase activity on South Quay
- The proposed uses not only provide for the viability of the scheme but the development would also reinforce the vitality of existing retail in the town centre.



**Density and Mix - Hayle** 

RESIDENTIAL

WATER

OPEN SPACE INCLUDING AGRICULTURE

CABE by Design Objectives

Diversity and choice; through a mix of

compatible uses that work together

to create vital and viable places, and meet a wide range of local needs.

COMMERCIAL INCLUDING RETAIL

SURFACE CAR PARKING OR DERELICT



#### Streetscape, Public Realm

Streetscape, Public Realm describes both the spatial layout of the public realm as well as the palate of materials, street furniture and soft landscaping found within a public space. Streetscape is inextricably linked with the priority attached to different modes of transport within an area.



#### Description

- The appearance of the public realm is dominated by the viaduct and the functional treatment of harbour structures.
- Abrupt changes of scale are particularly noticeable within the public realm for example between small scale Isis Garden and the massive arches of the viaduct.
- Although Penpol Creek is potentially an attractive feature within the town centre it is also a significant barrier to pedestrian linkage.
- At present legibility within the public realm is poor with pedestrians facing unclear and disconnected routes through the town



#### **Site specific Design Objectives**

- Define the public realm surrounding the site through the introduction of active built form, in particular the waterfront edges.
- Create a significant area of public realm around Carnsew Road in order to expand the perceived town centre
- Introduce a comprehensive and integrated landscaping scheme.
- Define a palette of street furniture and hard landscaping materials to bestow identity upon the scheme giving particular consideration to the identity of the historic quayside.
- Consider pedestrians and cyclists as a priority within streetscape design
- Consider external lighting not only as illumination of activity but also as a building and landscape design feature and to assist orientation, wayfinding and heritage asset interpretation.



#### **Design Outcome**

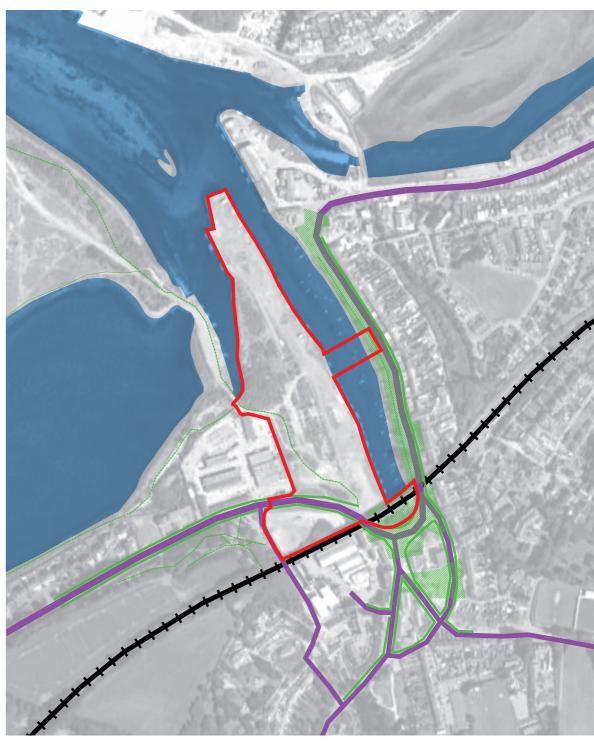
- Significant public realm area created between Foundry and South Quay to extend the town centre
- Significant public realm linkage through Isis Garden and by new footbridge to Penpol Terrace.
- The scheme includes the repair and maintenance of the quay walls
- Palettes of hard landscaping materials differentiate between the lower historic quayside and the upper, newly created development podium.
- A comprehensive hard and soft landscape framework forms part of the scheme
- Clearly identified routes for pedestrians and facilities for cyclists are incorporated within the scheme.





#### **CABE by Design Objectives**

Quality of the Public Realm: through the quality of the space between buildings by providing spaces and routes that are safe, uncluttered, active and identifiable.



#### **Public Realm Streetscape - Hayle**

VEHICULAR ROUTE

INFORMAL / UNMADE FOOTPATH
FOOTPATH (PAVED)

PUBLIC REALM

WATER



## MountfordPigott

## **APPENDIX I ASSESSMENT**



Key Plan



Context View A



Context View C



Context View D



Context View E

#### **CABE by Design Objectives**

Legibility and identity: through ease of understanding, through development that provides a system of recognisable routes, nodes and features to orient users



Context View B



Context View F

#### **Building Typology**

Building typology describes how a building is configured with respect to its functional requirements, access patterns and its relationship to the public realm. The position and configuration of buildings determine the shape and quality of the enclosed public realm and thus typologies have a significant impact on the character and legibility of an area. Similarly they give an indication of whether active frontages and passive street surveillance can be supported.



#### Description

- View A Jewson and Carnsew Road, buildings do not address street front, little activity, no passive surveillance despite pleasant park setting south
- View B Carnsew Pool and residential backs, this area is used informally by pedestrians and there is a Public Right of Way along the Jewson boundary however it addresses residential back gardens and there are no significant destinations for pedestrians.
- View C Jewson and surf shack, although the surf shack addresses the street and has street facing windows it is an insufficient draw for significant levels of pedestrian traffic.
- View D Car park with viaduct beyond, attractive stone walls, pedestrian access along length of carpark
- View E quayside provides visual interest however the level of activity is low
- View F Penpol Terrace small scale retail with residential over, good passive surveillance and potential for activity



#### **Site specific Design Objectives**

Despite the central location the application site environs include very low levels of active frontage and the unusual landform constraints make legibility difficult. Therefore it is particularly important to create active street frontage and legible architectural forms to promote a vibrant street scene



#### **Design Outcome**

- proposed development creates new areas of public realm addressing Penpol Terrace and Foundry
- proposed building presents active and open frontage to Penpol Terrace and Carnsew Road
- passive surveillance opportunities increased through positioning of building and intensification of use



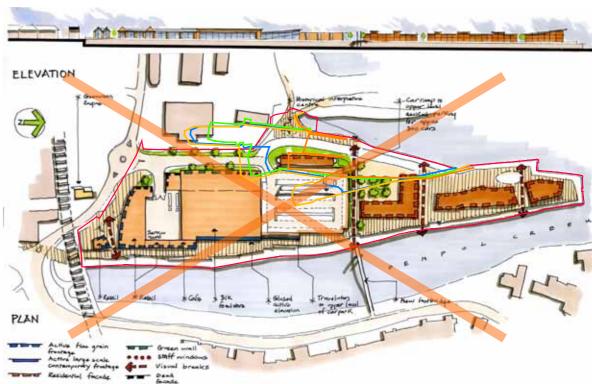
#### **DESIGN DEVELOPMENT MARCH - AUGUST 2010**

The current scheme design has evolved through a series of iterations resulting both from internal design review and through consultation with statutory bodies including the Local Planning Authority, the Environment Agency and English Heritage. There were a number of additional alternatives that were considered and these are included here.



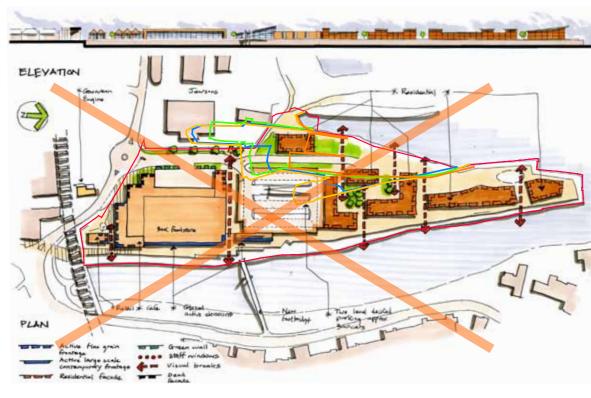
#### Option PGG - 13(left)

Although this option largely avoided disturbing the slipways the arrangement of the food store service yard resulted in a poor use of the site. The foodstore and associated car parking is pushed northwards leaving less site for residential development and a foodstore entrance which is more remote from the town centre.



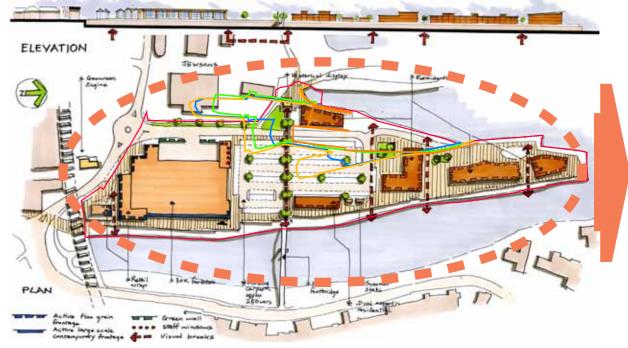
#### Option PGG - 15(above)

This option achieved a greater development area for residential uses by incorporating a decked car park for the retail. However, the service yard arrangement pushes the foodstore entrance northwards into a location more remote from the town centre and the footbridge and link is uncomfortably sandwiched between the decked car park and a residential flank wall. This layout would result in significant disturbance to the slipways and there were also questions over the economic viability of this approach.



#### Option PGG - 16(left)

This option placed the foodstore close to the town centre and retained a substantial area of the site for residential development with an efficient service yard and a decked car park. However this layout would result in significant disturbance to the slipways and there were also questions over the economic viability of this approach.



#### Option PGG - 14(above)

This option achieved a foodstore entrance in the closest position for the town centre as well as a reasonable development area for residential uses. This layout largely avoided disturbing the buried slipways and is the option which it was elected to bring forward for the scheme design.



### MountfordPigott



Concept layout tabled at meeting with Local Authority, Environment Agency and English Heritage April 30, 2010. This layout included the main elements of the scheme for connectivity and pedestrian linkage as well as accommodating distant views through the site.

## **APPENDIX II DESIGN DEVELOPMENT**

The concept illustrated in PGG-14 (see over) was developed to incorporate the design considerations identified through the site assessment which included the key views identification; the identification of heritage assets; the importance attached to Carnsew Road public realm improvements as well as proposals to relocate the Goonvean Engine onto South Quay.

Simultaneously, it was important to retain the principal design features identified through the Outline Planning Consent Design Code and master plan for the redevelopment of South Quay. These included the desirability of improved linkage and connectivity; the need for active frontage addressing Penpol Creek; the proposed mix of uses for South Quay and the raised development podium to overcome flood risk.

This concept was developed into a complete planning application scheme which was due to be submitted towards the end of August 2010. Final pre-application consultation took place with CCC planning officers and other consultees during August and at the beginning of September 2010.



Concept layout tabled at meeting with Local Authority, Environment Agency and English Heritage April 30, 2010.



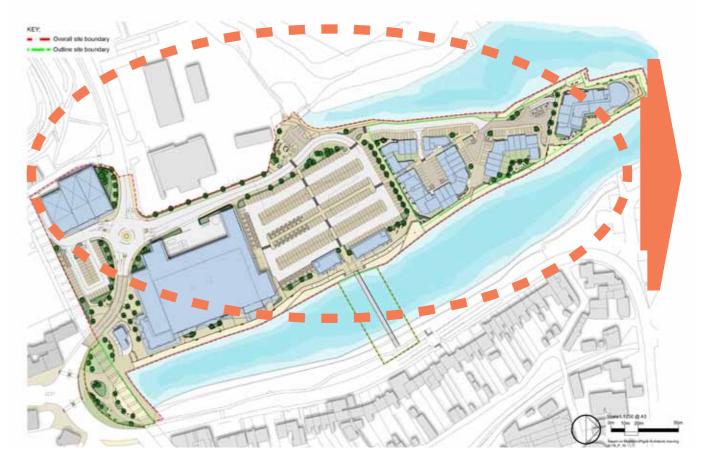
#### **DESIGN DEVELOPMENT SEPTEMBER - NOVEMBER 2010**

By the 3rd of September 2010 a draft planning application had been prepared and was circulated to the Local Authority prior to formal submission. At a meeting on that date between Cornwall County Council planning officers and the applicant's consultants the concerns raised by English Heritage and CABE at earlier pre-application meetings were discussed. It was agreed that these concerns must be addressed and that the fundamental concept of the layout must be more rigorously tested to establish that the approach was the best viable alternative.

On the 18th of October 2010 a meeting was held between Dave Slatter (Major Projects Manager for Cornwall County Council) Peter Edwards (Partner at Planning Perspectives LLP) Alan Gaskell (Partner at Mountford Pigott LLP) Christopher Pound (Heritage Consultant) and Simon Clarke (ING) at the Council Offices in St Austell. The main purpose of the meeting was to discuss major amendments to the masterplan and layout in response to feedback from CABE and English Heritage to the scheme that had been prepared in readiness for submission during September 2010.

Alternative approaches to the site which are included below with observations edged in blue.

Comments on the viability of the sketch proposal by the applicant are included in italics edged in orange.



Site Layout proposal as at September 3rd 2010

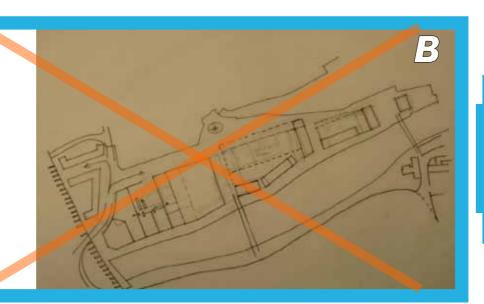
- This option places all retail together into the main block so that servicing arrangements can be shared. Lots of scope to vary roof form height pitch and possibly have commercial office/workspace over some of the units.
- Access via traffic signal junction working as a cross roads
- Shows surface parking but cannot create enough spaces to work.
- Harbourside walkway split level with minimum depth of 10m say 5m on each lovel.



- Servicing for food retail cannot be shared
- Some car parking too remote from store
- Blank foodstore façade facing Penpol Creek
- Foundry Car Park site not ideal for residential



 Effectively this is the same as scheme A but introduces a decked car park for the store behind the middle residential area this may have to occur on 3 levels to get the numbers required.



- Servicing for food retail cannot be shared
- Some car parking too remote from store
- Blank foodstore façade facing Penpol Creek
- Foundry Car Park site not ideal for residential
- Decked parking not a commercial option for food retailing in Hayle

- This variant seeks to arrange the car parking along the pier in a linear form and set the development back.
- The road is realigned to create a T junction which creates a larger site on the Foundry Car Park Side.
- The yellow indicates the existing quay level in this case a minimum of 5m with a further 5m minimum at the raised level.
- Achieving the equivilant number of residential units would only be possible by building above the commercial and I believe its really hard to get mortgages for such properties at the moment



- Altering priority of Carnsew Road could increase traffic congestion, and junction too close to Foundry Square
- Foodstore footprint cannot be accommodated in space shown
- Cannot have highway separating foodstore and car parking
- Some parking too remote from foodstore
- Building over historic slipways

- This introduces a decked car park opposite store. The upper deck would be at grade with store so the lower deck would be set into the existing quay (impacting on any buried archaeology), see v crude cross sections scribbled on plan.
- This one really struggles as there is not really enough width in the site to fit walkway, car park, road and store and the position of the pedestrian link from Penpol Terrace across the site



- Servicing for food retail cannot be shared
- Some car parking too remote from store
- Blank foodstore façade facing Penpol Creek
- Foundry Car Park site not ideal for residential
- Decked parking not a commercial option for food retailing in Hayle

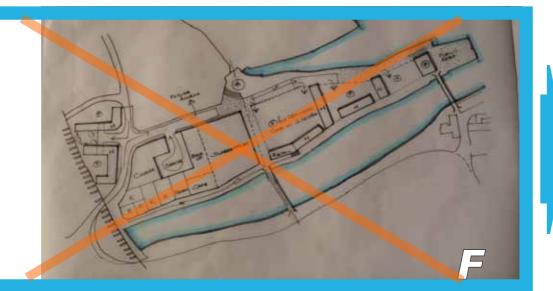


- This variant introduces a roundabout but our highways colleagues are tending towards traffic lights.
- As you can see from the yellow this one proposes that all the car parking occurs
  at the existing quay level. We would need to speak to EA to see if they would
  accept the building at the end of the quay at this level or if it would have to be
  raised on its own plinth



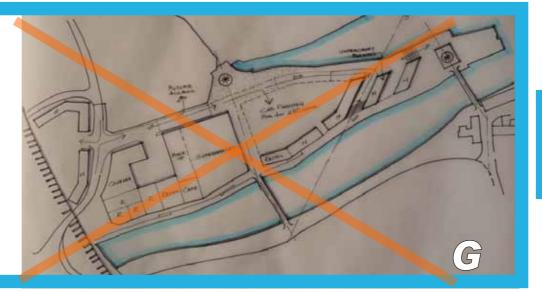
- Roundabout too close to Foundry Square
- Foodstore footprint cannot be accommodated in space shown
- Cannot have highway separating foodstore and car parking
- Some parking too remote from foodstore and cannot be at lower level than store
- Building over historic slipways
- Foundry Car Park site layout unsuitable for large box retailing, and servicing impossible.

Variation of B to introduce decked parking with development to edge



- Servicing for food retail cannot be shared and too small to turn and park up
- Decked parking not a commercial option for food retailing in Hayle
- Blank foodstore façade facing Penpol Creek
- Foundry Car Park site not ideal for residential
- Building over historic slipways

 Variation of B with surface parking only and housing orientated to provide views to church



- Servicing for food retail cannot be shared and too small to turn and park up
- Insufficient parking for all retail, and residential
- Blank foodstore façade facing Penpol Creek
- Foundry Car Park site not ideal for residential
- Building over historic slipways
- View through to St Uny's considered not a requirement

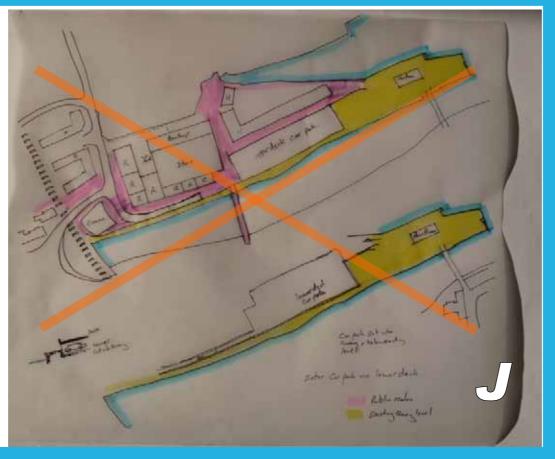


 Variation bringing road closer to Penpol Terrace and re orientating store to step development back. Road creates awkward block adjacent to viaduct.



- Altering priority of Carnsew Road could increase traffic congestion, and junction too close to Foundry Square
- Taking site access alongside Penpol Creek for cars and servicing destroys value of POS along the quay edge
- Foodstore footprint cannot be accommodated in space shown
- Car parking too remote from foodstore
- Servicing cannot be shared and too tight to turn and park
  up
- Building over historic slipways

 This variation looks to sink road into site to access the decked car parking at the lower level to create pedestrian dominated realm on South Quay.
 Service access via separate road point to rear of store. However still has awkward crossings and isolated block.



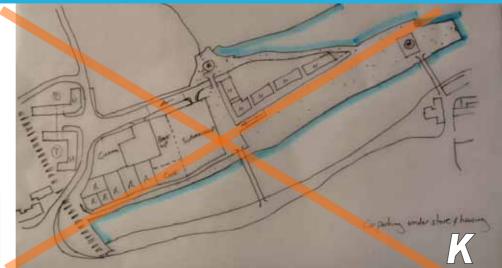
- Altering priority of Carnsew Road could increase traffic congestion, and junction too close to Foundry Square
- Taking site access alongside Penpol Creek for cars and servicing destroys value of POS along the quay edge
- Foodstore footprint cannot be accommodated in space shown
- Car parking too remote from foodstore and decked parking not acceptable to retailer in Hayle
- Servicing cannot be shared and too tight to turn and park up
- Building over historic slipways
- South Quay housing is in secondary location
- Foundry Car Park site not ideal for residential

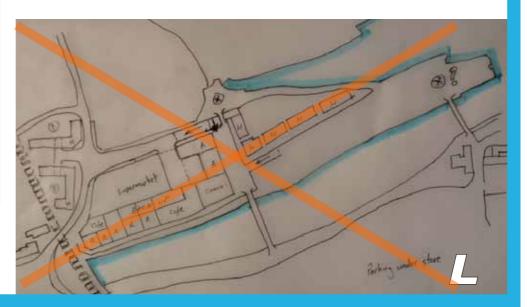


- This variant is a cross over of the two main concepts explored in the earlier sketches bringing the retail to harbour edge but setting the housing back to create the open quayside. It works by putting nearly all the car parking on South Quay under the store and housing.
- Acceptability of this approach would have to be confirmed with EA but I know they are ok with concept in principle subject to design solutions for handling flooding events. It also follows own ING's parking suggestion for their apartments at end of South Quay. It would require excavation into the south Quay itself as a minimum of 3m is needed below supermarket floor level. Expensive solution which might require more intensive development to secure or a reduction in other benefits proposed by ING.



Variation of K but hiding store from Penpol Terrace view The store would still be visible from the town centre and main vehicular entrance. This also allows for varied frontage (heights, uses, typology) to be created along the Penpol Terrace elevation.





Another cross over variant, Parking is probably unacceptable could be increased by using a deck as per F



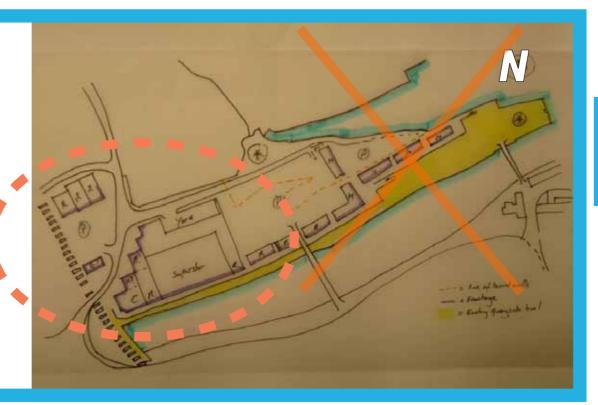
- Blank foodstore façade facing quay (or profile of sales floor will not work if checkouts facing Penpol Creek)
- Cannot place retail parking beneath store as a) it is not acceptable to retailers, b) it will take up most of the space occupied by retail buildings, c) there will be significant levels issues leading to major dig into the quay or lifting the buildings to a higher level which will increase visual impact and cause difficulties in providing good relationship with Foundry Square.
- Servicing cannot be shared and too tight to turn and park up
- Building over historic slipways
- Foundry Car Park site not ideal for residential
- Area of POS is vast not a sensitive usable open space
- Servicing for food retail cannot be shared and too small to turn and park up
- Insufficient parking for all retail, and residential
- Blank foodstore façade facing Penpol Creek
- Foundry Car Park site not ideal for residential
- Building over historic slipways
- View through to St Uny's considered not a requirement

- Servicing for food retail cannot be shared and too small to turn and park up
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- Blank foodstore façade facing Penpol Creek
- Foundry Car Park site not ideal for residential
- Building over historic slipways
  - View through to St Uny's considered not a requirement





- This option places all retail together into the main block so that servicing arrangements can be shared. Lots of scope to vary roof form height pitch and possibly have commercial office/workspace over some of the units.
- Access via traffic signal junction working as a cross roads
- Shows surface parking but cannot create enough spaces to work.
- Harbourside walkway split level with minimum depth of 10m say 5m on each level



- This scheme reflects most closely the alternative option prepared by ING which forms the basis of the planning application
- ING have no wish to provide offices within this part of the development
- The car parking can be made to work
- Preference for retail alongside car park facing Penpol Creek

The meeting on October 18th established conclusively that none of the layouts A-M were really viable.

A further alternative "N" was circulated subsequently. Alternative "N" represents the consensus reached at the meeting of October 18th. The proposed uses intended for the Foundry yard Car Park were agreed as well as the location of the foodstore, servicing and cinema. The outstanding areas for agreement related primarily to the northern part of the site.

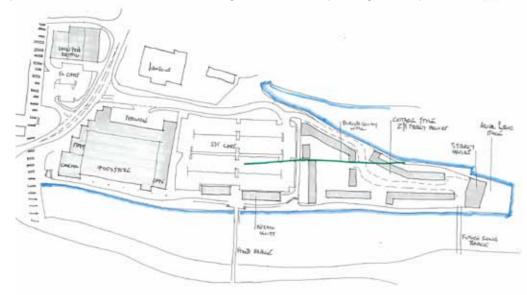


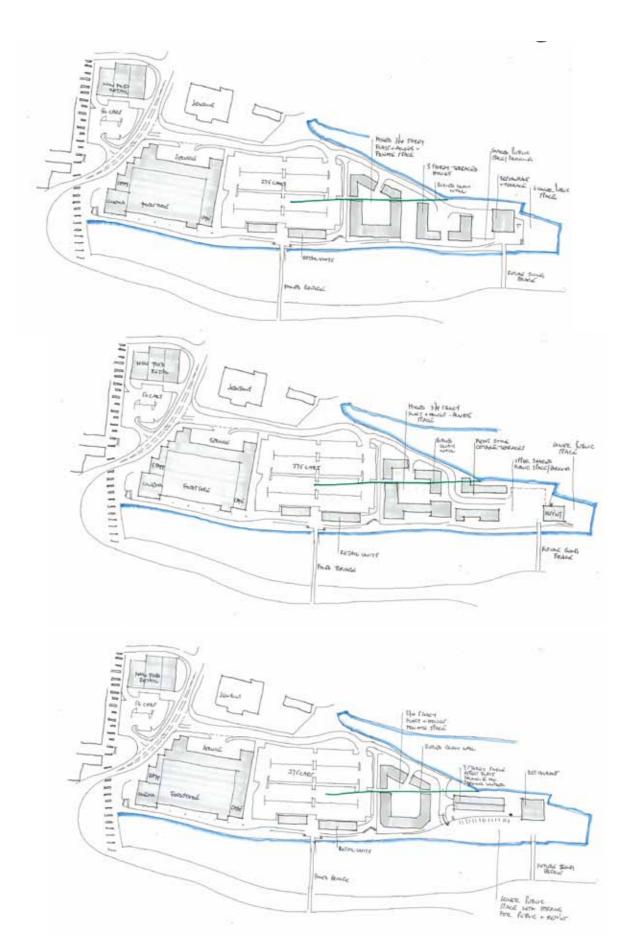
#### DESIGN DEVELOPMENT SEPTEMBER - NOVEMBER 2010 CONT'D

Sketches A-N were the starting point of a subsequent meeting on October 27th between Nicola Stinson (CCC Assistant Head of Planning and Regeneration) Alan Gaskell (Partner at Mountford Pigott LLP) and Mark Pearson (CABE) at the County Hall in Truro. At this meeting alternative layouts prepared by Mountford Pigott were tabled as shown. These formed the basis of a detailed review on the basis that the retail arrangements were accepted and agreed.

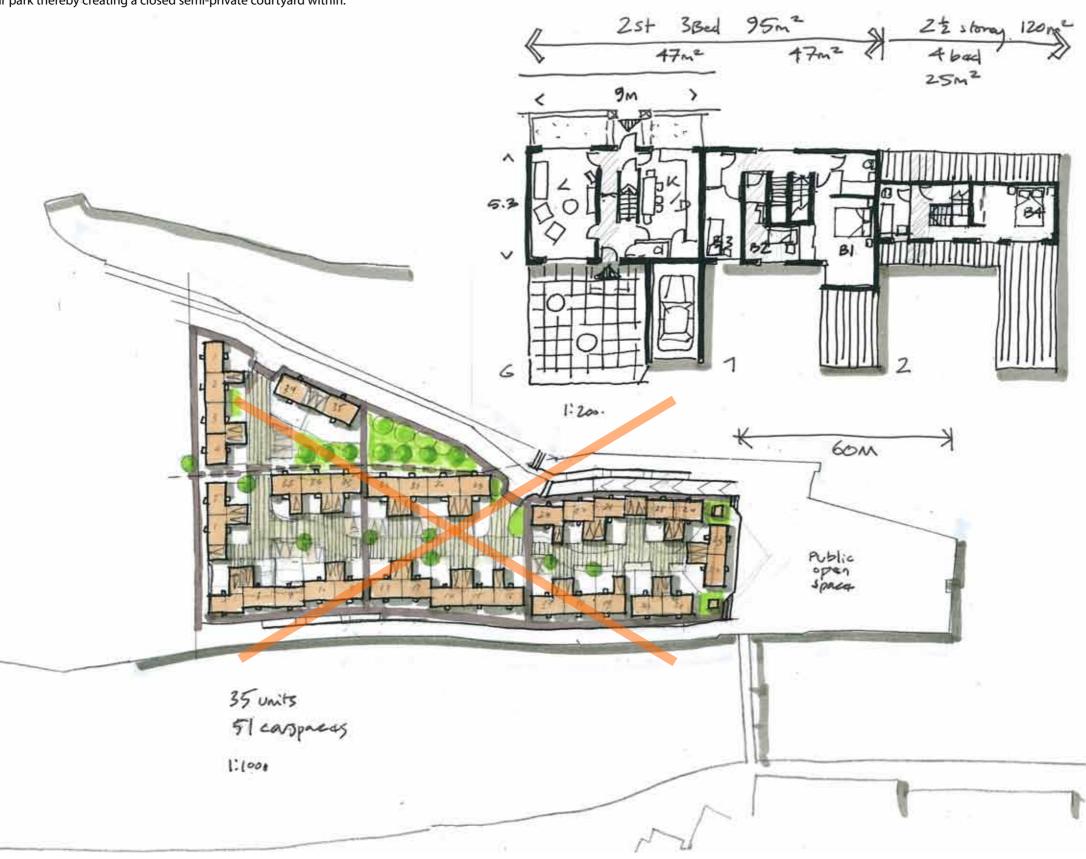
The principle of the multi pitched roof "industrial" appearance for the main retail buildings was accepted. The relationship of the main retail building to Carnsew Road was discussed as important, and the way in which the broken plan form was designed in elevation, how the and how it met with the ground. It was suggested that the building elements that did not fall under the main pitched roofs were treated with a more contemporary style, possibly with references to Cornish materials. This design principle could then be repeated elsewhere.

- It was agreed that a traffic signal controlled junction (not shown on plans below) at the access point onto South Quay is the solution preferred by English Heritage and CABE.
- It was agreed that the Goonvean should not be shown within the application, however if it was to be installed at a later date, it could be sited at the eastern end of the non-food retail car parking.
- The retail units alongside the car park could be increased in length to face up the parking.
- The fixed pedestrian bridge leading from Penpol Terrace to the development must be designed to allow continuous access along the east side of the Quay.
- It was accepted that ramps and steps were an essential part of the public realm to interconnect the upper and lower levels of the quay, however they should be designed so as not to dominate the battered wall running between lower and upper levels. The battered wall should follow the quay edge, maintaining the 4m clear lower width where possible.
- The design of the piazza, upper and lower promenade needed additional clarification, especially with respect to materials, and so that there is a clear standard agreed for design. The width of the lower promenade is generally to be a consistent 4m. Lighting details should be provided, to light both upper and lower areas. The new Carnsew Road piazza should be worked up to take best advantage of the changes in level. Careful thought to the interface between the piazza and lower promenade should be given.
- The residential development should be illustrated sufficient detail to demonstrate that it is deliverable, with a parking strategy and design strategy (using simple linear blocks of no more than 2.5 storeys) which will be used a design brief for any reserved matters application. The appearance should be light in weight.
- If there is to be a commercial use at the northern end of the quay, it should be located leaving a significant public open space to the north, and should be designed as a four aspect signature pavilion.





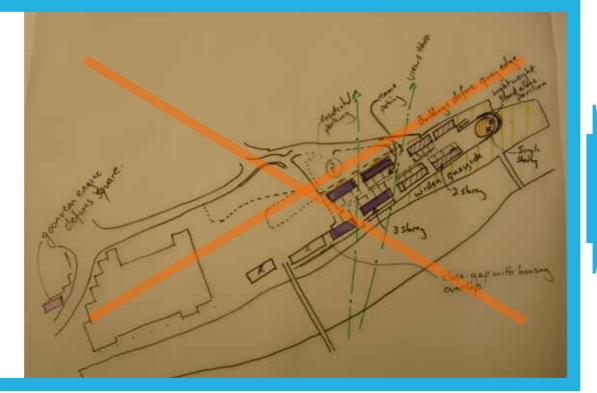
During November 2010 a layout for the residential part of the site was developed employing simple linear blocks and smaller lower house types. The layout sought to create strong frontage both to Penpol Creek and to former quayside to the west. It also presented frontage to the foodstore car park thereby creating a closed semi-private courtyard within.





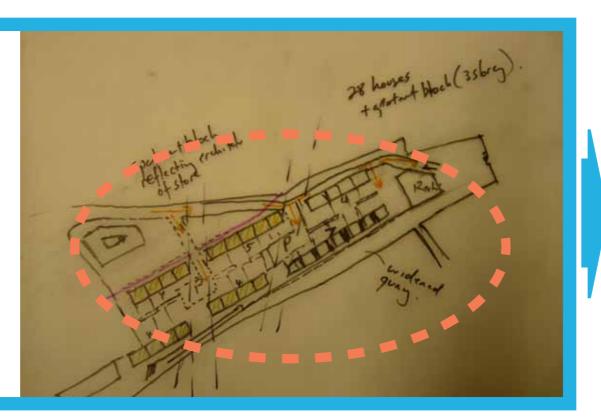
However, this approach was not considered to sufficiently reflect a traditional cornish layout nor the historic layout and alignment of the quays so further alternatives were contemplated which strengthen these aspects of the design.

- Goonvean engine reinstated adjacent to Viaduct
- Quayside widened at its northern end facing Penpol Terrace
- Housing layout to reflect linear form of historic quayside development
- Residential parking located in a centralised "lot"
- Visual permeability through site
- Buildings define quay edge
- Building scale reduces from south to north

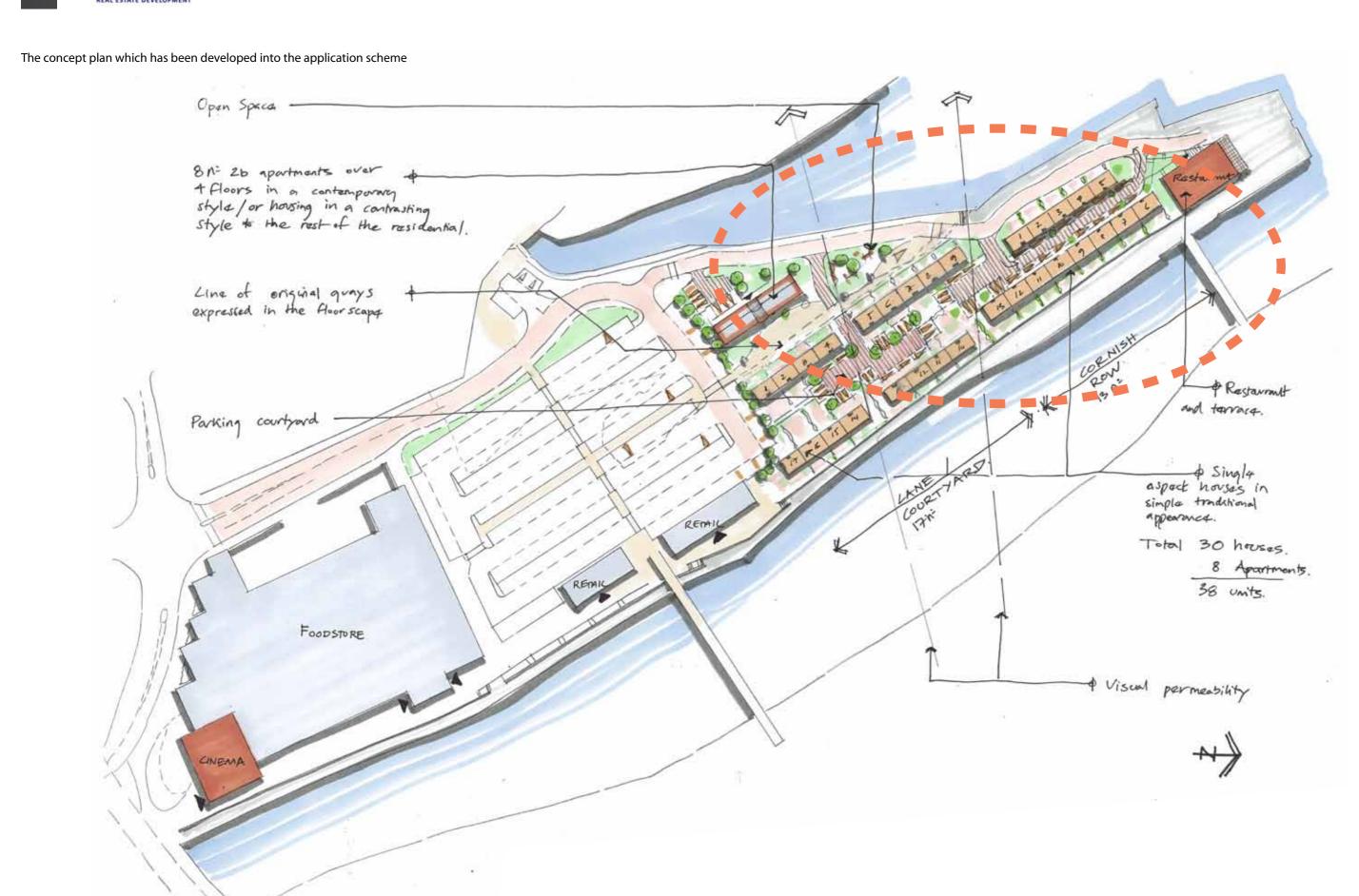


- Grouping all the residential parking in one spot will mean that it will not be able to achieve CSH standards in terms of a short distance from car to home, nor will this provide casual surveillance. This would not meet Secured by Design guidelines.
- With no vehicular access close to the residential, both refuse and fire engine access will be impossible
- There is no vehicular access to the quay side in this layout.
- The proposed restaurant location has no service vehicle
- The restaurant foot print size is about a quarter of a viable size and to enlarge it will mean the widened quayside is lost or even more residential has to be eliminated.
- *In reality the staggered breaks between the blocks provide* very limited visual permeability

- Parking broken up into courts which coincide with the re-instated visual gaps, these could also offer public pedestrian passage between quaysides reintroducing the permeability EH were keen to retain
- the vehicle access to the restaurant and quayside re-instated
- The restaurant is set away from the housing and could be designed as a lightweight pavilion building.
- The desire keep a wider existing level quayside facing Penpol Terrace remains which may only be possible if it is accepted that the residential buildings coming closer together.
- An apartment block is introduced into the reclaimed triangle of the site. There are no physical implications for the buried harbour wall and slip remains. The rationale behind apartments is that this is a new part of the site not part of the historic harbour
- The block should reflect the more modern expression of the store which by overlapping with the housing starts to blur the interface between the two.
- In order to get the right numbers part of the apartment block might need to go up to 4 storey.



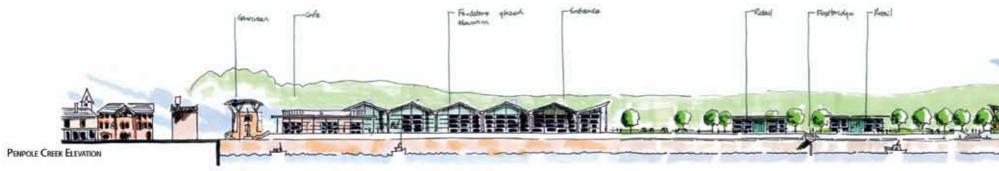
This layout addresses most of the concerns identified in the previous iterations both from heritage and viability perspectives.





#### **DESIGN DEVELOPMENT - APPEARANCE (RETAIL)**

A variety of different design approaches were presented at the meeting of April 30, 2010. The approach entitled "Reflection on the Industrial Past" was selected as the most appropriate design concept for the scheme. However, other approaches were investigated during the early stages of the design process and these are included on the following page.



View from Penpole Creek



**View from Jewsons** 

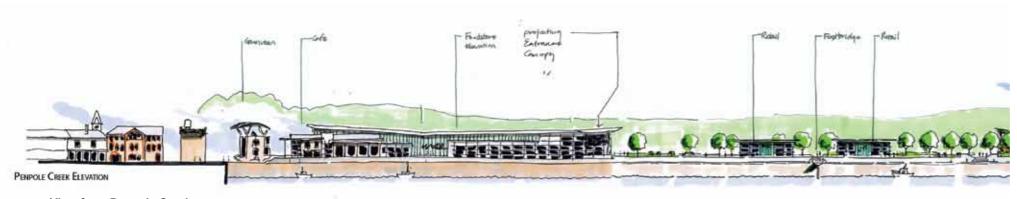
#### Reflections on the industrial past

- Design reminiscent of the smaller scale traditional span pitched roof buildings that existed on the site, but using a modern design approach to the form
- Materials taken from a palette of glass, copper, aluminium / steel standing seam roofing
- Design stretches the main store entrance over the upper boardwalk





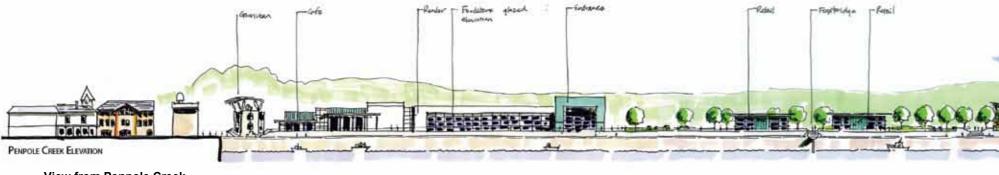




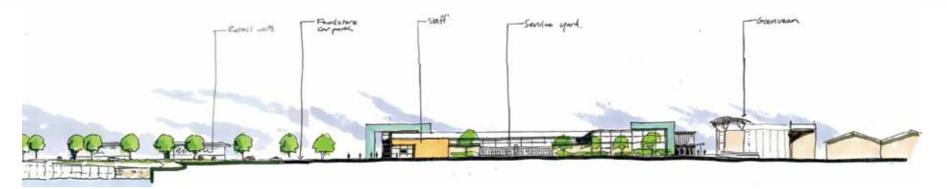
#### View from Penpole Creek



View from Jewsons



View from Penpole Creek



View from Jewsons

#### Dynamic forms embracing the landscape

- Stretched low pitched roofs over large panels of glass and copper
- Smaller scale features near the viaduct to define the finer grain town centre

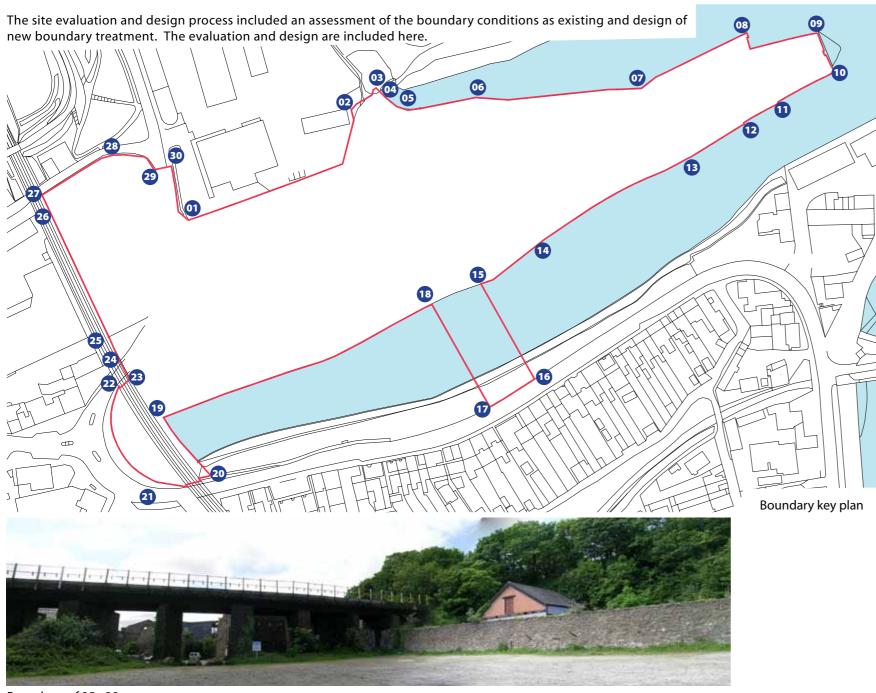


#### Sculpture in the landscape

- Simple bold sculptural statement with abstract forms to contrast with the landscape
- Entrances expressed through scale and simplicity







Boundary ref 25 - 28



Boundary ref 09 - 05



Boundary ref 24 - 21



Boundary ref 22 - 20



Boundary ref 15 - 08



Boundary ref 09 - 06





REF	BOUNDARY LOCATION	DESCRIPTION	CONDITION	ACTION
01-02	Jewsons	Concrete posts and chain link	Fair	Retain
02-03	Jewsons	Concrete posts and chain link	Fair	Retain
03-04	Undefined	Rough ground	n/a	Improve
04-05	Access to Carnsew area	Concrete access bridge over sluice and granite quay wall	Poor-fair	Improve
05-06	Undefined embankment to quay	Rough ground, mostly tipped material over low level granite wall	Poor	Improve
06-07	Undefined embankment to quay	Rough ground, mostly tipped material	Poor	Improve
07-08	Quay wall	Granite wall	Fair-good	Improve
08-09	Quay wall	Granite wall	Fair-Good	Improve
09-10	Quay wall	Granite wall	Fair-Good	Improve
10-11	Quay wall	Granite wall	Fair-Good	Improve
11-12	Quay wall	Granite wall	Poor-Fair	Improve
12-13	Quay wall	Sheet steel piled wall with concrete capping	Fair	Maintenance
13-14	Quay wall	Granite wall	Poor-Fair	Improve
14-15	Breach in quay wall	Rough ground	Poor	Rebuild
15-16	Boundary crosses Penpol Creek	Tidal water to natural bank and municipal garden / grassed park	n/a	n/a
16-17	Penpol Terrace	Grass verge to roadside kerb (no footpath)	n/a	n/a
17-18	Boundary crosses Penpol Creek	Tidal water to natural bank and municipal garden / grassed park	n/a	n/a
18-19	Quay Wall	Granite wall	Fair	Improve
19-20	Penpol Creek end wall	Granite wall	Fair	Improve
20-21	Penpol Terrace under viaduct	West edge of footpath and west face of viaduct pier to soft landscaping	n/a	n/a
21-22	Isis Garden	Stone wall 1m high approx with painted railings over	Fair	n/a
22-23	Carnsew Road under viaduct	East face of viaduct pier to soft landscaping	n/a	n/a
23-24	Carnsew Road adjacent to viaduct	Boundary crosses Carnsew Road along the north face of the viaduct	n/a	n/a
24-25	Derelict land adjacent to viaduct	Granite boulders	n/a	Improve
25-26	Foundry Yard Car Park adjacent to viaduct	Boundary unmarked to informal landscaping /granite boulders	Poor	Improve
26-27	Foundry Yard Car Park adjacent to viaduct	Steps to pedestrian access under viaduct	Poor-fair	Improve
27-28	Foundry Yard Car Park adjacent to Foundry Lane	Stone wall 2m high	Fair	Retain
28-29	Foundry Yard Car Park adjacent to Carnsew Road	Granite wall 450mm - 600mm high incorporating vehicle access point	Fair	Retain
29-30	Boundary crosses Carnsew Road	Boundary crosses Carnsew Road	n/a	n/a
30-01	Jewsons adjacent to Carnsew Road	Back edge of pavement to grass verge	n/a	n/a



Boundary ref 12- 13



Boundary ref 20-18

#### **Existing boundary structures & conditions**

The existing boundary structures and conditions are addressed in the descriptive and photographic schedule which should be read in conjunction with the boundary key plan. Photographic boundary references are given from left to right.



Boundary ref 05 - 04 with 02 - 03 visible beyond



Boundary ref 28 - 29 - 10



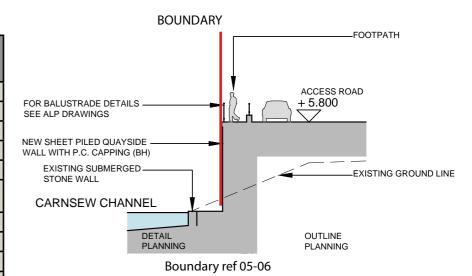
Boundary ref 18-10

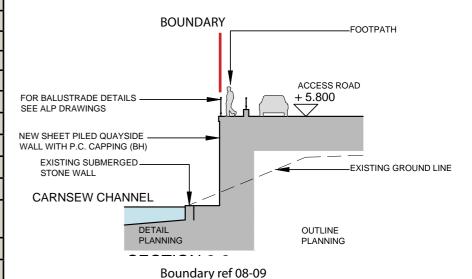


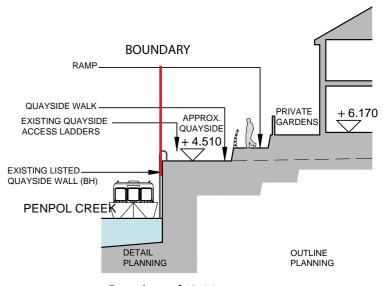
#### **Proposed Boundary Treatment**

01-02       Jewsons         02-03       Jewsons         03-04       Undefined         04-05       Access to Carnsew area	EX-Concrete posts and chain link with new soft landscaping  EX-Concrete posts and chain link with new soft landscaping  Rough ground  *Repairs and improved guarding as Buro Happold Schedule of Works	Existing Existing
03-04 Undefined	Rough ground	Existing
05 04		
Access to Carnsew area	*Repairs and improved quarding as Buro Happold Schedule of Works	Existing
04-03 Necess to earnsew area	1 3 3 11	Existing
<b>05-06</b> Quayside	*New sheet piling with concrete edge protection and timber fenders.	New
<b>06-07</b> Quayside	*New sheet piling with concrete edge protection and timber fenders as Buro Happold Schedule of Works.	New
07-08 Quay wall	*Repairs as Buro Happold Schedule of Works.	Existing
08-09 Quay wall	*Repairs as Buro Happold Schedule of Works.	Existing
09-10 Quay wall	*Repairs as Buro Happold Schedule of Works.	Existing
10-11 Quay wall	*Repairs as Buro Happold Schedule of Works.	Existing
11-12 Quay wall	*Repairs as Buro Happold Schedule of Works.	Existing
12-13 Quay wall	*Repairs as Buro Happold Schedule of Works.	Existing
13-14 Quay wall	*Repairs as Buro Happold Schedule of Works.	Existing
14-15 Breach in quay wall	*Reconstruction as Buro Happold Schedule of Works.	New
15-16 Boundary crosses Penpol Creek	New bridge to Buro Happold design with new steel railings	New
16-17 Penpol Terrace	**New footpath with concrete kerb and steel railings pedestrian guarding as SBAx design.	New
17-18 Boundary crosses Penpol Creek	New bridge to Buro Happold design with new steel railings	New
18-19 Quay Wall	*Repairs as Buro Happold Schedule of Works.	Existing
19-20 Penpol Creek end wall	*Repairs as Buro Happold Schedule of Works.	Existing
20-21 Penpol Terrace under viaduct	EX-West edge of footpath and west face of viaduct pier to soft landscaping	Existing
21-22 Isis Garden	***Existing boundary wall incorporating new pedestrian access to Aspect Landscape design.	Existing modified
22-23 Carnsew Road under viaduct	EX-East face of viaduct pier to soft landscaping	Existing
23-24 Carnsew Road adjacent to viaduct	** New edge of raised table, traffic calming and highways alterations to SBAx design	New
24-25 New public realm adjacent to viaduct		
25-26 Foundry Yard Car Park	New concrete kerb edge to new footpath	New
<b>26-27</b> Foundry Yard Car Park adjacent to viadu	New timber knee rail and new concrete kerb edge to car park	New
27-28 Foundry Yard Car Park adjacent to Found	Iry Lane EX - stone wall 2m high to be retained and supported with new retaining structure where levels reduced adjacent	Existing modified
<b>28-29</b> Foundry Yard Car Park adjacent to Carns	ew Road ***New soft landscaping to Aspect Landscape design to **new concrete kerb back edge of pavement to SBAx design	New
29-30 Boundary crosses Carnsew Road	** New edge of raised table, traffic calming and highways alterations to SBAx design	New
<b>30-01</b> Jewsons adjacent to Carnsew Road	EX - Back edge of pavement to grass verge	Existing

- \* refer to Buro Happold Schedule of Condition, Schedule of Works and Method Statement submitted as part of the Listed Building Application for full details
- \*\* refer to Savell Bird & Axon highways design as contained in drawings and reports submitted as part of the current application for full details
- \*\*\* refer to Aspect Landscape's Landscape Design Statement for full details of landscaping boundary treatment submitted as part of the current application

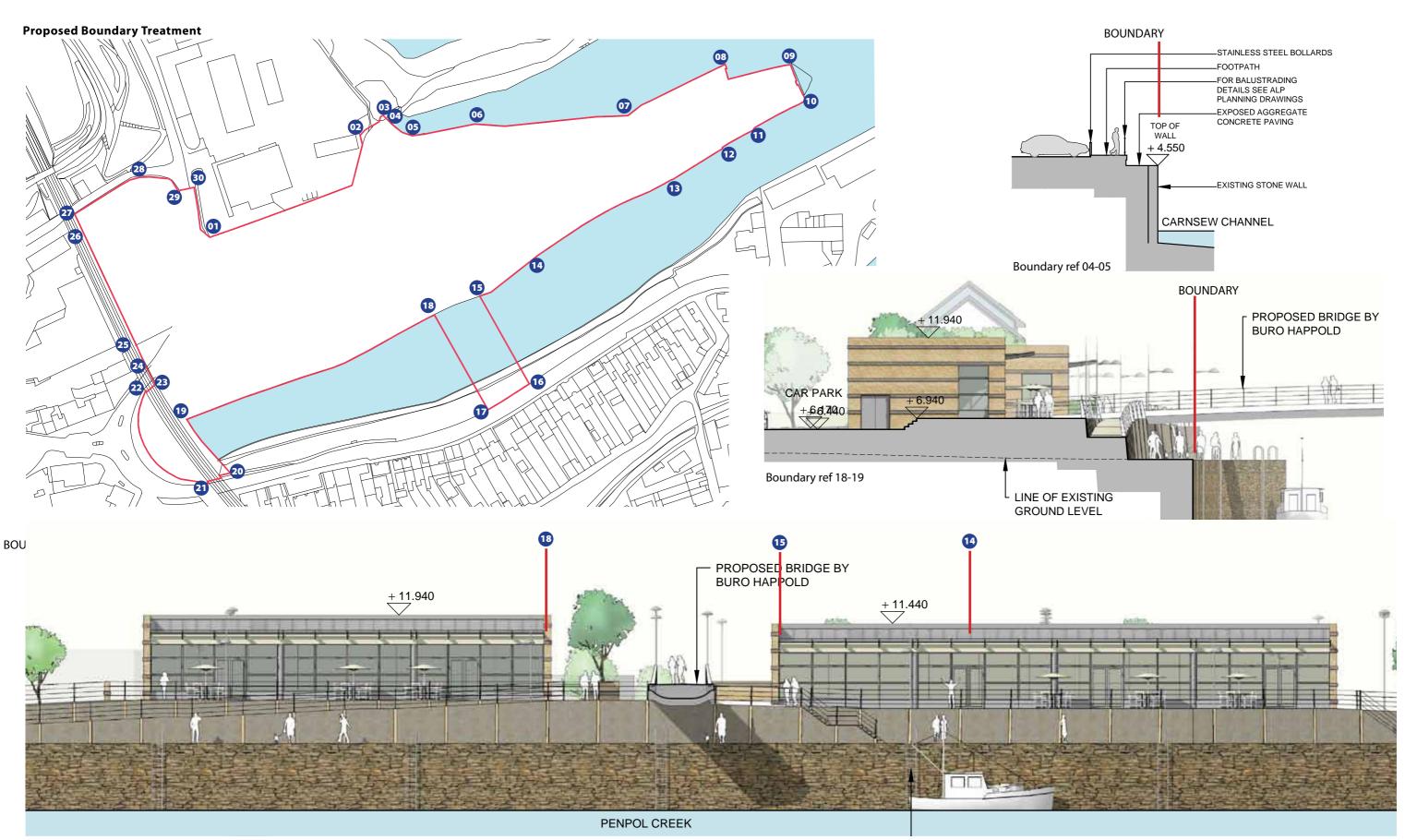










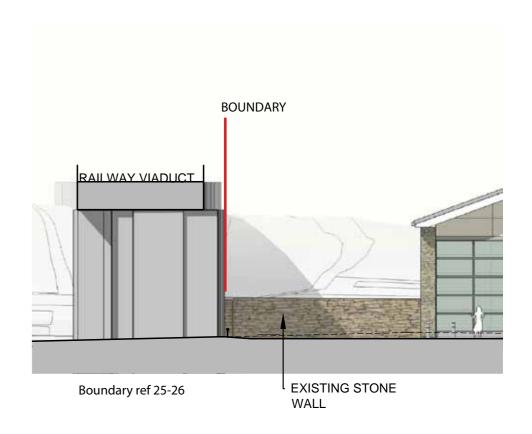


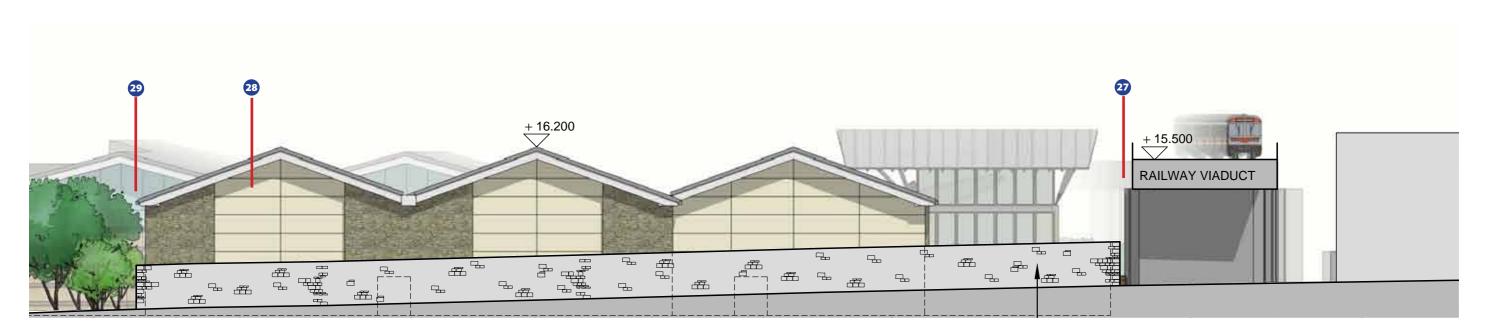
Boundary ref 19-13











Boundary ref 29-27





#### References

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Department for Transport, Local Government and the Regions - By Design: Better Places to Live (2001)

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English Partnerships - Urban Design Compendium (2000)

Halogen - Statement of Community Involvement (2009)

ING - Hayle Harbour Environmental Statement (2007)

ING - Hayle Harbour Environmental Statement (2009)

LDA Design - Design and Access Statement (2008)

Little S - South Quay PPG 15 Statement (2009)

ODPM - Safer Places; The Planning System and Crime Prevention

Planning Perspectives LLP - Planning Statement (2009)







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