1. Introduction

The Forth Yards Area presents an exciting opportunity to deliver a landmark gateway into Newcastle upon Tyne, with a vibrant mixture of uses and a linked green infrastructure network at its heart. High quality buildings and spaces will enhance the distinctive characteristics of the Tyne Gorge, with sustainable transport connections to the City Centre, Quayside and wider area.

Forth Yards Location
The Forth Yards area covers 21 hectares. The River Tyne provides its southern boundary and the former Newcastle-Carlisle rail line largely defining the area's northern boundary. The eastern boundary of the Framework area is formed by the King Edward Bridge and alignment of the East Coast Mainline railway, with the western boundary formed by Dunn Street, south of Scotswood Road. Outside this boundary this Framework document also provides guidance on development opportunities for: the Safestore Storage Building on Forth Street/Railway Street junction; the former Cemex Concrete Batching Plant on Pottery Lane (situated east of the King Edward Bridge); 11-12 Skinnerburn Road and Land South of Skinnerburn Road, opposite the junction of Skinnerburn Road and Dunn Street.

The area is identified as an opportunity site for a mixture of residential, office and leisure uses at a major gateway into Newcastle; by road (New Redheugh Bridge/Scotswood Road); rail (King Edward Bridge), Metro (Queen Elizabeth II Bridge) and pedestrian/cyclists (Hadrian’s Way/C2C routes). The area also benefits from having attractive south facing views over the River Tyne, with its wider gorge setting and rich industrial heritage.

Framework Purpose
As set out in paragraph 16.63 of the Core Strategy and Urban Core Plan (CSUCP), this Framework Document’s purpose is to guide the future development of the area, in support of Policy D3. It makes provision for essential infrastructure to allow future developments to come forward in a sustainable form. It will therefore be a material consideration in the assessment of all planning applications covering the Forth Yards area of the city and adjacent sites.

The Framework sets out the historic and landscape context of the Forth Yards area; planning policy covering the area; site analysis of the area and subsequent design principles; then identifying infrastructure required in relation to transportation, green and social infrastructure to allow the area to develop sustainably. The end of the document identifies design and infrastructure interventions for each site, along with area wide infrastructure requirements.

Forth Yards area outlined in blue within Newcastle and Gateshead Urban Core, outlined in red.
2. The Sites

The framework area currently contains several vacant or underused sites, which present major development opportunities. The six main development sites are:

- **Safestore self storage site** on Forth Street/Railway Street;
- **Forth Goods Yard site**, situated between the Redheugh and King Edward bridges;
- **Pottery Lane West site**, situated on the south side of Pottery Lane between the two River Tyne crossing;
- **Former Calder’s site**, (now promoted as ‘Quayside West’) accessed from Redheugh Bridge Road to the east and Tyneside Road to the west;
- **Newcastle Arena site** (Utilita Arena Site) and associated surface car park accessed from Redheugh Bridge Road to the east and Dunn Street to the west; and
- **Newcastle Heliport site**, accessed from Tyneside Road.

In addition, this document also covers the following neighbouring sites:

- **Pottery Lane East**, situated east of the King Edward Bridge on Pottery Lane, which although outside the Forth Yards Framework area has shared infrastructure requirements.
- **Elswick Gas Station**, owned and operated by Northern Gas Networks lies to the east of Dunn Street. This is an operational gas facility.
- **Land owned by Newcastle City Council** under New Redheugh Bridge and operated as a pay and display car park and public open space.
- **Land South of Skinnerburn Road**.
  This site is currently vacant.
- **Land South of junction of Dunn St & Skinnerburn Road**. This site is currently vacant.
- **11/12 Skinnerburn Road** is a partially cleared site west of Forth Banks Tower.
3. Historical Development

The National Planning Policy Framework (NPPF) and policy UC14 of the CSUCP requires development to take account of the desirability of sustaining and enhancing the significance of heritage assets and the desirability of new development making a positive contribution to local character and distinctiveness.

The Forth Yards area has historically accommodated a range of uses that have reflected the economic and social development of Newcastle from the eighteenth to the twentieth century. For this reason, when developing designs for sites it is important to understand the historic development of the area, and in particular the areas industrial and rail legacy and prominence within the wider Tyne Gorge setting. The historic development of the six main sites is set out below:

Heliport
The Newcastle Heliport site was in the early 19th century used as the city’s water storage reservoir. Later it became the site of the city’s town-gas works. Site remediation was undertaken between 1996 and 1998 when the site commenced use as a heliport. The substantial sandstone boundary walls from the sites historic uses remain, notably along Dunn Street and Skinnerburn Road.

Elswick Gas Works
The Low Elswick Gas works was built by the Newcastle-upon-Tyne and Gateshead Gaslight Company, and was brought into use in 1859 when two smaller works at Manors and Sandgate were closed down. The last two remaining gasholders structures were demolished in 2015. Gas pipelines and a pumping station remain operational on site.

Right- 1:500 OS town series (1862) showing Low Elswick Gas Works and the former colliery/ residential area which included a school on the former Calder’s Site

Tyneside Road junction with Skinnerburn Road, Circa 1970’s

Heliport site: historic sandstone walls on Dunn Street/ Skinnerburn Road Junction

1934 view along Tyneside Terrace/ Mitford Street on the former Calder’s Site (Newcastle Libraries)
Former Calder's Metals site

The former Calder’s Metals site was formerly known as Elswick Lead Works, which opened under the name Walkers, Fishwick & Co. in 1779. The site included Low Elswick House, a substantial property sited in the south east corner of the site. In 1797, Elswick Shot Tower was constructed, which at 174 feet tall was a notable feature of the area. Due to shortcomings in construction techniques the tower became known as the ‘leaning tower of Elswick’. Works to the tower recovered its perpendicularity, but was demolished in 1968 when it began to lean again. The western part of the former Calder’s site contained two rows of terraced housing (Mitford Street and Tyneside Terrace) and a School (Mitford Street School). The lead works closed in 2002 and the site was subsequently cleared, leaving only two historic buildings within the escarpment fronting onto Skinnerburn Road.

Newcastle Arena site

A running track was laid out on the southern part of the Arena site in the early 18th century. The site later formed part of the wider Forth Goods Yard shunting yard. A historic two storey railway building and sandstone retaining walls remain along the southern boundary of the Arena with the former Calder’s site. The line of the former Newcastle-Carlisle rail line and associated road bridges remain in operation on the northern boundary of the Arena site, acting as a branch line westwards to Water Street.
Forth Goods Yard Station and Safestore Site

The Forth Goods Yard Station, north of Pottery Lane, was the eastern terminus of the Carlisle to Newcastle Railway when it opened in 1839. The brick viaduct north of Forth Banks Goods Station was constructed in c1847 and formed part of the extended railway to Central Station. The viaduct was later widened on its northern side, and is considered a heritage asset. Stone retaining walls and structures associated with the Goods Yard remain, including the “drops” which are accessed from Pottery Lane through stone curved arches. A large area of the former sidings is now occupied by the Arena, with remnants of stone retaining walls and structures associated with the railway remaining.

Pottery Lane Sites and Bridges

The land south of Pottery Lane has been used for a range of industrial purposes, such as plate-glass works, foundry, pottery and breweries. The area under Redheugh Bridge was the location of the Newcastle Wrestling Ground, which hosted the annual ‘Easter Wrestlings’ which would attract thousands of spectators. The wrestling ground closed in 1876 and by 1894 had become stables.
The Bridges
The Grade II listed King Edward Railway Bridge was built between 1902 and 1906 designed by Charles A. Harrison for the North Eastern Railway. The bridge comprises sandstone ashlar piers and red sandstone approach viaduct with steel girder bridge deck and has 10 tall arches with voussoirs. The arches south of Pottery Lane have recently been opened to present views through the structure from adjoining sites.

The old Redheugh Bridge, accessed from Redheugh Bridge Road, was first opened in 1870 and then replaced in 1901.

The current Redheugh Bridge was designed by Mott, Hay and Anderson, who also designed the Tyne Bridge. It was opened 18 May 1983 by Diana, Princess of Wales. It is a pre-stressed concrete structure set at a higher level and supported on fluted concrete piers.

The old Redheugh bridgeheads are still visible and form part of the open space east of Shot Factory Lane.
4. Existing Planning Permissions

Former Calder’s Site (Quayside West)
The only extant planning permission in the study area covers the former Calder’s site. Outline planning permission was granted in 2002 and the final reserved matters in 2009 (2000/1923/02/RES) for 528 residential units (C3), 550 residential parking spaces, and one unit in Use Class A3, family restaurant/public house. The development consisted of a series of residential apartment blocks accessed from a central distributor road. The site owner has undertaken engineering works to preserve this permission. However no works have taken place on the site for some time.

The Forge
To the East of the Forth Yards Area on the junction of Pottery Lane and Forth Banks is the Forge, granted planning permission in 2015 (2015/0315/01/DET) providing 282 dwellings in three blocks.
5. Development Scenarios

The Forth Yards area has the potential to deliver a significant number of new homes, office, leisure and other associated uses. An infrastructure appraisal and transport modelling has been undertaken to inform the form and type of infrastructure works required to be delivered on each site. The likely development scenarios tested are derived from a combination of the Newcastle City Council Housing and Economic Land Availability Assessment 2018 (HELAA) and sensitivity testing with developer aspirations for the sites coming forward, either through live planning applications or pre-applications discussions.

The HELAA provides an indication of potential development in the study area, based upon indicative information on building heights, uses and site layout. A total of around 1,370 residential units and 40,200sqm of employment land (B1(a)) is envisaged in the HELAA for the area and set out in the adjacent table 1. Using the assumptions in the Planning Obligations SPD (2016) and the split of 1,2 and 3 bed flats as shown in the HELAA (2018) a population of approximately 2,300 persons can be estimated. The transport modelling did not consider the sites on Skinnerburn Road. The HELAA transport modelling did test a potential 580 space public car park on Forth Goods Yard site to serve the area.

The Forth Yards area was identified in the CSUCP as an “Opportunity Site”, acknowledging that the redevelopment of the area will need to take place over a number of years and the mix of uses will vary over time, depending upon demand. Other uses not identified in the CSUCP and this document may therefore also be suitable in the area, subject to assessment against relevant local plan polices.

A sensitivity test has also been carried out, based upon developer aspirations (This is also set out in the adjacent table 1). This identifies the landowners individually identifying sites as having the potential to supply approximately 2,500 dwellings, 15,000 square metres of office accommodation and an approximate 1,000 space public multi-storey car park. No alternative development scenarios have been tested for the Newcastle Arena site.

Table 1: Development Scenario tested for the Development Framework

<table>
<thead>
<tr>
<th>Site</th>
<th>Area (Ha)</th>
<th>Land Use</th>
<th>Units</th>
<th>HELAA 2018</th>
<th>Developer Scenario</th>
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<tbody>
<tr>
<td>Safestore</td>
<td>0.68</td>
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<td>10,200 sq m</td>
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<tr>
<td>Forth Goods Yard</td>
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<td>Residential Dwellings</td>
<td>10,000</td>
<td>5,000 sq m</td>
<td>250</td>
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<td>Pottery Lane East</td>
<td>0.74</td>
<td>Residential Dwellings</td>
<td>95</td>
<td>200 units</td>
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<tr>
<td>Pottery Lane West and NCC Car Park</td>
<td>3.15</td>
<td>Residential Dwellings</td>
<td>20000</td>
<td>500 units</td>
<td></td>
</tr>
<tr>
<td>Former Calder’s, Pigeon Crees &amp; Gasholders (Quayside West)</td>
<td>6.2</td>
<td>Residential Dwellings</td>
<td>700</td>
<td>1100 units</td>
<td></td>
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<tr>
<td>Heliport</td>
<td>2.3</td>
<td>Residential Dwellings</td>
<td>170</td>
<td>280 units</td>
<td></td>
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<tr>
<td>Arena</td>
<td>3.6</td>
<td>Leisure Venue n/a</td>
<td>170</td>
<td>Existing</td>
<td></td>
</tr>
</tbody>
</table>

* Not in HELAA 2018 but tested in transport modelling
There are a number of site constraints across the study area, most notably the physical barrier of the former railway lines, noise from adjacent land uses, ground conditions and changes in levels towards the Tyne.
7. Planning Policy for the Area

The Forth Yards Area’s Local Plan comprises the Core Strategy and Urban Core Plan for Gateshead and Newcastle upon Tyne 2010-2030 (CSUCP). The City’s Development and Allocations Plan, which contains development management policies, is likely to be adopted in 2020. Developments in the Forth Yards area will need to address all the relevant polices set out in these documents.

The site falls within the Discovery Sub-area of the Urban Core under Policy D1.

The following policies are particularly relevant to the area:

**Policy D1 Discovery Sub-Area**

Regenerating the Discovery Sub-Area as a major gateway entrance and extending connections west will be achieved through:

1. Supporting the expansion of Newcastle College to meet their needs for new and improved accommodation.
2. Improving accessibility and connections for pedestrians, cyclists and vehicles by:
   - Undertaking improvements at: Dunn Street, Plummer Street, Tyneside Road, Westmorland Road, Skinnerburn Road and along the route of the former Carlisle Railway Line; and
   - Requiring development to contribute to improvements at: Forth Street, Railway Street, Forth Banks, Pottery Lane, through the former Calder’s site, Shot Factory Lane, George Street, St James Boulevard, Churchill Street, Blandford Square.
3. Enhancing the Urban Green Infrastructure Network and network of public open spaces by providing spaces at:
   - Blandford Square,
   - Former Calder’s Site,
   - Pottery Lane.

Within the Discovery Sub Area, the site has been identified as a Development Opportunity Site. The policy and supporting text states:

**Policy D3 Forth Yards Development Opportunity Site**

Forth Yards is allocated for mixed-use. The principal uses will include Offices (B1), Leisure (D2) and Residential (C3).

1. Development must:
   i. Maintain and improve access to the site and provide clear routes across the site for pedestrians, cyclists and public transport,
   ii. Improve access roads to and through the site,
   iii. Maintain and improve access to the River Tyne creating visual links to the river
   iv. Provide a high quality landmark entrance respecting and responding sensitively to the Tyne Gorge and the scale and setting of the Redheugh and King Edward Bridges, and
   v. Provide a public space in the area between Redheugh Bridge Road and Pottery Lane.

Paragraph 16.65 of the CSUCP states that “Proposals should work with and reinforce the topography, provide links to the river and a gateway to the City Centre respecting heritage assets and existing landmarks. New development should incorporate visual links to the River Tyne by creating framed and unfolding views characteristic of the Tyne Gorge.”

Paragraph 16.66. goes on to state that in the Forth Yards Area “...there is potential to contribute to the Urban Green Infrastructure Network and improve links to the Strategic Green Infrastructure Network. It is anticipated that the Forth Yards area will come forward in the longer term. However, this does not preclude the earlier development of the site.”

Other policies which are particularly relevant to the Forth Yards Development Opportunity Site include:

**Policy UC12 Urban Design**

To deliver higher quality locally distinctive places in terms of architecture and public realm, development will:

1. Be designed to respect and enhance the positive characteristics and context,
2. Provide a co-ordinated approach that reinforces and creates linkages to its surroundings,
3. Provide strong urban frontages and an appropriate urban grain reinforcing continuity and enclosure at a walkable urban block scale,
4. Ensure active frontages along Primary and Secondary Pedestrian Routes, and
5. Incorporate high quality, durable and sustainable materials appropriate to the character of the area and the use envisaged for the site.

**Policy UC13 Respecting and Managing Views Within, From and Into the Urban Core**

To respect important public views there will be a presumption against development proposals that would cause significant harm.

Views that will be respected include those:

1. From or across or into the Tyne Gorge,
2. From defined major movement corridors/ routeways, and
3. Of designated heritage assets, other distinctive landmark buildings and structures.

**Policy UC14 Heritage**

To respect the historical legacy, varied character and appearance of the historic environment development will:

1. Maximise opportunities to sustain and enhance the significance of heritage assets and their setting,
2. Deliver high quality in the design of new buildings and the conversions reflecting the rich historic fabric, and
3. Include opportunities for the contemporary interpretation of heritage assets including Hadrian’s Wall and associated features.
Policy UC15 Urban Green Infrastructure
Development will protect and enhance the Urban Green Infrastructure Network, address gaps and improve linkages to the Strategic Green Infrastructure Network at:

1. Exhibition Park to Redheugh Bridge
2. Gateshead Quays to Saltmeadows Riverside (and River Tyne)

Policy UC16 Public Realm
The network of public open spaces and routes will be enhanced by:

1. Development improving the existing public
spaces and creating new spaces,
2. The provision of spaces which are flexible
and adaptable to a range of uses,
3. Incorporating high quality, durable and sustainable
materials appropriate to the character of the area
and the use envisaged for the site, and
4. The provision for temporary spaces and for events.

Policy UC17 Public Art
To enhance character and local distinctiveness, development of Key Sites and Development Opportunity Sites will include public art.

Policy UC10 Car Parking
The location and supply of safe, secure car parking will be managed by:

1. Minimising car parking for development reflecting
the highly accessible nature of the location,
2. Siting car parks close to the UCDR or
on the edge of the Urban Core,
3. Managing the pricing of new car parks to promote short
stay car parking over long stay car parking, and
4. Restricting the development of temporary car parks.

In addition, CSUCP Policies CS13 (Transportation), CS14 (Wellbeing and Health), CS15 (Place-making), CS16 (Climate Change), CS17(Flood Risk and Water Management), DEL1 (Infrastructure and Developer Contributions) and CS18 (Green Infrastructure and the Natural Environment) will be particularly material for any future developments in the Forth Yards area.

The Development and Allocations Plan, Newcastle upon Tyne 2015-2030 is also a material consideration for development. Policies to highlight for development in the Forth Yards Area include:-

Policy DM6 - Accessible and Adaptable Housing
The design of new build homes will be required to be flexible and adaptable for the future to meet the needs of the population. This will be achieved by requiring new housing developments of 11 dwellings or more to provide 25% of all new homes to be built to Accessible and Adaptable Standard.

Policy DM7 - Space Standards
The design of all new homes will be required to meet the relevant minimum internal floorspace for the type of dwellings, complying with the Nationally Described Space Standards.

Policy DM10 - Pedestrian and Cycle Movement
Development will be required to:

1. Provide safe, convenient, attractive and continuous
pedestrian and cycle links to key local facilities and services.
2. Provide connections through developments both to the
existing and future wider pedestrian and cycle network.
3. Demonstrate that major developments are within acceptable
walking and cycling distances of key local facilities and
services.

In addition, the following DAP Policies will be particularly material for any future development in the Forth Yards Area:
DM11 (Public Transport), DM12 (Parking and servicing), DM14 (Mitigation and Highway Management), DM16 (Conservation and Enhancement of Setting of Heritage Assets), DM17 (Preservation of Archaeological Remains), DM20 (Design) DM23 (Residential Amenity), DM24 (Environmental and Health Impacts of Development), DM26 ( Flood Risk and Water Management), DM27 (Protecting and Enhancing Green Infrastructure), DM28 (Trees and Landscaping), DM29 (Protecting and Enhancing Biodiversity and Habitat), DM30(Provision of Open Space, Sports and Recreation), DM34 (Recycling and refuse storage provision) and DM25 (Telecommunications and Digital Infrastructure)

A number of Council Supplementary Planning Documents will also be materials in the development of the Forth Yards Area, including:

- Archaeology and Development
- Designing for Community Safety
- Maintaining Sustainable Communities
- Planning Obligations
- Tall Buildings;
- Trees, Landscaping and Development; and
- Highways Guidance, such as the "Design and Construction of Roads and Accesses to Adoptable Standards Guide”

In addition, National Design Guidance titled as ‘Protecting Crowded Places: Design and Technical Issues (January 2012)’ will be relevant on Newcastle Arena.
8. Contextual Views and the Tyne Gorge Study

The dramatic topography of the Tyne Gorge is a defining characteristic of the area. Policy UC11 of the CSUCP identifies the Forth Yards area as a gateway into the Urban Core where development will be required to deliver a strong, distinctive entrance and sense of arrival to the city. Policy UC13 and Policy D3 also require development to respect important public views from or across or into the Tyne Gorge and provide a high-quality landmark entrance to the city, respecting and responding sensitively to the Tyne Gorge.

The Urban Landscape Study of the Tyne Gorge (2003) sets out guidance for the redevelopment of sites within the gorge, including the Forth Yards area and on key views that must be tested.

The Forth Yards area falls into three character areas of the Tyne Gorge Study:

- 3a (Skinnerburn),
- 4a (Forth Banks/Stephenson Quarter) and
- 5a (Elswick)

Policies UC13 and D3 also identifies views from defined major movement corridors and routeways, such as:

- all river crossing, including Redheugh Bridge, King Edward Bridge, Scotswood Road;
- from recreational routes along the Quayside and river edge; and
- from and to the City’s historic core, designated heritage assets and other distinctive landmark buildings and structures identified in Policy UC13.

(Above) Highlighting some contextual views around the site. Further view locations are found in the Tyne Gorge Study.

(Left) The Character of the Tyne Gorge around the Framework Area. Extract from the Tyne Gorge Study, p95

(Below) Exaggerated section through the Forth Yards site. Extract from the Tyne Gorge Study, p28
9. Existing Site Features

The study area contains a number of uses, features and heritage assets which should be retained.

Newcastle Arena
The Arena acts as the regions largest indoor concert and event space. This use, together with associated parking and service area, should be retained and protected as long as operationally required, using agent of change principles.

Gas Pumping Station
The gas pumping station building is still in use. NGN is exploring options to adapt the buildings or relocate it within the site, as part of wider redevelopment proposals.

Railway Heritage
The sandstone walls and historic railway buildings should be retained and setting enhanced.

Escarpment Edge
The steeply sloping escarpment edge is predominantly landscaped with tree cover and at its western edge a species rich grasslands. This is an important feature of this part of the Tyne Gorge, providing significant amenity value to the area. Most of the trees on the escarpment edge are protected by a Tree Preservation Order (TPO). Tree retention will prevent remediation works in these areas. For this reason, access will need to be permanently restricted to the area. Where the tree cover is absent the escarpment edges should remain undeveloped.

To view the areas covered by Tree Preservation Orders visit https://community.newcastle.gov.uk/mapping/tpo-map
10. Development Design Principles

The development of the area should follow the principles set out in the Tyne Gorge Study including:

1. Reintroduce an urban grain that is human in scale and can help to attract people back into the area, so increasing density in an area that is close to the city centre.
2. Ensure the layout of any new development maintains a close relationship with topography and visual linkages with the River.
3. In planning any new development, consideration should be given to the strategic views from the Old Redheugh Bridgehead, Windmill Hill’s Town Park, St Michael’s Church Byker, Northumbrian Water information board underneath the Redheugh Bridge, the Tyne and Wear Footpath and Pipewellgate Car Park.

The general principles for the redevelopment of the area are:

4. Buildings should step down appropriately with the topography of the site. Sensitive views from Grainger town area and views of the historic core of the city need to be protected.
5. The scale of development should reflect the character of the surrounding area and its Tyne Gorge setting.
6. The redevelopment of the Safestore site shall allow for pedestrian/cycle access to the Forth Goods Yard site to the south through the railway arches, or, where justified, through selective demolition of railway arches between the two sites.
7. Retain former railway line as pedestrian/cycle link to wider area.
8. The sites should all provide improved direct access to the Quayside recreation routes as part of their open space, amenity and recreation provision.
9. Development should take advantage of views across the Tyne Gorge by providing vistas and a recreational route at the top of the escarpment edge.
10. Development should maintain access to the bridges for maintenance and locate any buildings at appropriate distances from those structures.
11. All developments should incorporate landscape features across their site with the sloping escarpment edge free from development.
12. The former load out facility on the southern boundary of the former Calder’s site should be redeveloped to form a bella vista and include a commercial opportunity.
13. Formation of key areas of public open space on the former Calder’s and Pottery Lane West sites and public art across the area.

Development Design Principles across the Forth Yards area.

Key

- Stone retaining wall
- Existing buildings
- Escarpment edge
- Approaches
- Listed buildings
- Central and Summerhill Conservation areas
- Physical boundary
- Sensitive View from Grainger Street
- Development sloping up the Tyne Gorge and reintroducing a human scale urban grain
11. Tackling Climate Change

In 2019 Newcastle City Council declared a climate change emergency with an ambition to be carbon neutral by 2030. To achieve this, development will be required to contribute to tackling issues arising from climate change through compliance with Policy CS16 of the CSUCP and other best practice in sustainable development.

The Six CS16 Criteria
Policy CS16 of the CSUCP sets out how development is required to demonstrate it is resilient to the effects of climate change by setting six criteria against which it will be assessed to ensure it is sustainable and able to function and address the impacts of climate change. Guidance has been produced to assist in how each of the six criteria should be met.

Criteria 1 of Policy CS16 requires development to use a good standard of building fabric, and to include passive design and landscaping measures to minimise energy demand. Criteria 5 also requires development to reduce its whole life CO2 equivalent emissions impact. These criteria can be achieved through a design which will deliver raised levels of fabric energy efficiency and which reduces the performance gap of a building, in accordance with the Council’s guidance.

Criteria 6 of Policy CS16 requires development to optimise the use of local renewable or low-carbon energy in accordance with a hierarchy, starting with connection to a decentralised energy scheme. In terms of the Forth Yards Area, developments will need to demonstrate how the energy hierarchy has been followed, and that the opportunity for the development to connect to a decentralised energy network either at the first occupation, or at a future date, has been fully tested. To do this applicants are expected to work with a district energy provider. An estimated total annual heat load of between 11.5 GWh and 21.5 GWh has been calculated for a district energy supply. When considering heat generation, initially the most common solution may be gas-fired combined heat and power, as a cost effective enabler to a network. In the long term, the most attractive heat source appears to be a water sourced heat pump, generating heat from the River Tyne. District energy networks are being developed elsewhere in the city by Regenerate Newcastle, a Partnership between Newcastle City Council and Engie. Further information on Regenerate Newcastle can be found to the back of the document.

Other measures required to address Policy CS16 are set out in further detail in the Council’s Sustainability Guidance document. Each application should be accompanied by a Sustainability Statement covering the six criteria above in detail.

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<thead>
<tr>
<th>CS16 Section</th>
<th>Key areas covered</th>
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<tr>
<td>1 Good standard of building fabric</td>
<td>Fabric energy efficiency standard</td>
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<td>Passive design</td>
<td>Passive design techniques</td>
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<td>Landscaping</td>
<td>Role of landscaping</td>
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<td>2 Alternative uses</td>
<td>Lifetime Homes</td>
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<td>Building Regulations 2013 M2 &amp; M3</td>
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<td>Smart homes and modern design</td>
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<td>Possible future conversion</td>
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<td>3 Good level of sustainability</td>
<td>Best practice site management</td>
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<td>Sustainable construction (materials, water and transport)</td>
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<td>Waste reuse and recycling</td>
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<td>4 Climate change mitigation and adaptation</td>
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<td>- Transport</td>
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<td>- Overheating</td>
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<td>Incorporation of renewables</td>
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12. Landscape, Ecology and Green Infrastructure

The study area lies within the city’s Strategic Green Infrastructure Network and is identified as a Green Infrastructure Opportunity Area covered by Policy UC15.(4) Exhibition Park to Redheugh Bridge (see plan opposite) of the CSUCP.

Landscape
The escarpment slope running along the southern edge of the area is largely tree covered, providing significant amenity value to the Tyne Gorge. The Quayside edge also has a linear tree cover along Skinnerburn Road.

The remaining vegetation is largely naturally regenerated scrub, and is of limited visual amenity value although is of wildlife value. The scrub vegetation is unlikely to be considered a constraint in relation to landscape visual amenity.

On the northern boundary of the study area the railway lines provide a significant woodland and scrub vegetation belt which is developing naturally. The visual and wildlife amenity of these areas should be taken into account in relation to outlook and also vegetation/wildlife connectivity. High quality landscape designs will be required to link the Green Infrastructure Network.

Ecology
The area falls within the River Tyne Wildlife Enhancement Corridor. This Wildlife Corridor allows movement of species between islands of habitat, including the adjacent River Tyne Local Wildlife Site. This is particularly important for its tidal mud flats, providing valuable habitat for wading birds. Engagement with the Tyne Estuary Partnership is recommended to explore ecological enhancement opportunities.

Populations of dingy skipper, grayling, small heath butterfly, bats and species rich grassland (including bee orchid) have been recorded in the area. It is therefore likely that these and similar species may be present across the sites. Any development in this area will require appropriate ecological enhancements, mitigation measures and should provide net gains for biodiversity in accordance with Policies CS15 and UC15 of the CSUCP and DAP policies DM27, DM28 and DM29.

Full ecological surveys of this site will be required to be carried out ahead of the submission of planning applications. This should include bat surveys of the existing structures and dingy skipper butterfly surveys (carried out between May and June).
13. Open Space and Active Design

Open Space and Active Design

Development will generate the need for open space, outdoor sports provision and allotment space, in accordance with Council open space standards. The open space will need to be laid out to deliver high-quality local door-step open space on each site and with the main public open space areas laid out on Pottery Lane (primarily around Old Redheugh Bridgehead) and within the former Calder’s Site.

The formation of attractive, accessible and lit recreational route along the top of the escarpment edge and linking to Hadrian’s Way/ the C2C cycling and walking route at Dunn Street, Tyneside Road, Shot Factory Lane will be required. The route will need to link through the King Edward Bridge arches to continue east through to the Pottery Lane sites. Adjoining development will be required to create passive surveillance and overlooking of the route.

All open spaces should have multi-functional benefits, including forming part of the sites sustainable urban drainage network and following ‘Active Design Principles’, in line with Sport England Guidance. The green infrastructure network will be expected to provide opportunities for all people to take part in physical exercise, including through:

- prioritising walking and cycling routes;
- linking multi-functional open spaces in a way that encourages a range of ages, abilities and types of movement;
- co-locating community facilities and within each site providing appropriate infrastructure for sport to take place; and
- responding to the existing quayside public art and the ideas of the Discovery Quarter Art Strategy, creatively engaging to develop diverse public art, which can include waymarkers and features within the landscape.

The former rail viaduct within Forth Goods Yard will serve as a pedestrian/ cycle link between the Arena and Central Station. All sites will need to contribute to enhancing the existing open space around Redheugh Bridge and the Quayside public realm to form a linked multi-functioned recreational resource for the area.

Source: Sport England active design guidance

Existing and proposed priority recreational routes

<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Hadrian’s Way/ C2C cycling and walking (Route 72)</td>
<td></td>
</tr>
<tr>
<td>Keelman’s Way/ C2C cycling and walking (Route 14)</td>
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<tr>
<td>Proposed high level route to central station</td>
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<tr>
<td>Proposed escarpment route</td>
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<tr>
<td>Linking routes</td>
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</tbody>
</table>

Source: Sport England active design guidance
14. Water Infrastructure

Surface and Foul Water Drainage
Each site will need to develop a drainage strategy, in accordance with CSUCP Policy CS17, DAP Policy DM26 and the City’s Strategic Flood Risk Assessment. The drainage strategy should be based on a Sustainable Drainage System (SuDS) which prioritises source control and green conveyance features - such as permeable surfaces and swales - to mitigate peak surface water flows and improve water quality prior to discharge from the site in accordance with the hierarchy of discharge options, and referencing the Water Framework Directive and Northumbria River Basin Management Plan.

The existing foul pumping stations at the junction of Skinnerburn Road and Forth Banks has limited capacity to accommodate all of the flows from proposed developments in the Forth Yards area. For this reason there is a need to provide a new pumping station within the development area to enable foul sewage from the area to be pumped up to the interceptor sewer on Railway Street. The new area wide pumping station facility should come forward as part of the spine road infrastructure works which crosses the former Calder’s site, in a suitable location to serve surrounding sites.

Separately there is an intention to seek to reclassify the existing combined sewer which runs south, down Shot Factory Lane, to a surface water only channel outfalling directly to the River Tyne at PLR NZ24634100. This would form part of a blue-green corridor, providing a recreational route between the development area and the Quayside, as well as a future surface water flood flow route to the Tyne from the city centre, subject to wider city centre flood management plans.

The impacts of any increased flows from outfalls in to the River Tyne will require assessment to prevent poor water quality and ecological harm, especially relating to score protection and suspension of contamination sediments.

The timing & costs for the provision of foul water and surface water infrastructure improvements should be agreed between individual landowners and Northumbrian Water. Early pre-application discussions with the Council’s Flood Management Team and Northumbrian Water are advised. Drainage design should be integrated into the core principles of the emerging masterplan for each site.
15. Social Infrastructure

Education
At present there is likely to be capacity to meet the early years, primary and secondary education needs from residential development in the area at existing schools nearby. There are therefore no additional on site education infrastructure requirements, based upon the development scenarios set out in the Framework. Any off site Primary and Secondary education contributions will be separately secured through the Council’s Community Infrastructure Levy (CIL) and tested as part of the Planning Obligations SPD.

Health
Demand for GP services as a result of the expected population growth can be accommodated at existing facilities, albeit there may be a need to extend existing healthcare premises. The need for additional GP practice capacity will therefore be reviewed on an a case by case basis for a contribution towards extending existing health facilities.

Community Facilities
Development will require space for local community facilities, such as shops and community rooms to service future residents in accordance with DAP Policy DM10. This should be incorporated within individual development sites and phases of development and easily accessible to the wider area.

A cycle hub to promote cycling could be developed as part of the former Calder’s Site (Quayside West) Travel Plan.

16. Utilities Infrastructure

Each site will be responsible to make provision for necessary utility infrastructure to meet the needs of future occupants.

Electricity
There appears to be sufficient capacity in the electricity network to accommodate the envisaged development without the need for major network reinforcements. Records show a substantial amount of electricity cables exist in and around the development site. Accurate positioning of new cables and their depth is necessary to avoid diversions. Each site will need to provide appropriate electricity sub-station capacity. These should be, wherever feasible, incorporated into buildings, avoiding primary frontages and open spaces.

Gas
There appears to be sufficient capacity in the gas network to accommodate the envisaged development without the need for major network reinforcements. A number of gas mains are present around Elswick Gas Station, north of Newcastle Heliport site on Skinnerburn Road. A brick gas pumping station is present on this site which regularly emits a noise that would restrict sensitive land uses on adjacent sites without mitigation.

Telecommunications
Records indicate there is existing underground Openreach apparatus and two distribution points. Alteration works to Openreach apparatus will be necessary to facilitate new development. Similarly alterations works to Virgin Media apparatus will be required. Free fibre will be provided to each site of more than 30 units by telecommunication operators. All new highways infrastructure will need to provide space for both fibre cables and district energy networks to comply with Policies CS16. Development will need to demonstrate connectivity to digital infrastructure in accordance with policy DM35.
17. Transportation Improvements

Policies D1 and D3 of the CSUCP identified transport routes which require improvement to enhance accessibility to the Forth Yards area, particularly for pedestrians and cyclists. This section of the document sets out in more detail the nature of the transportation interventions required to improve accessibility to the area.

Access to Forth Yards area is currently poor, constrained by the historic rail infrastructure, the river and the changes in level. The result is poor pedestrian environments and some strong thresholds to the area. The highway network serving the area is nearing capacity during peak periods. The closure of Redheugh Bridge Road is required to ensure safe pedestrian movement around the arena site.

Detailed traffic modelling has been undertaken, based upon development assumptions for the sites, to predict likely traffic generation arising from future developments. Trip generation scenarios for both AM and PM peaks in 2021 and 2036 have been modelled using reduced vehicle trip rates (on the basis that each development site will deliver high-quality walk and cycle links and accessible public transport). The traffic modelling has demonstrated that without mitigation significantly increased journey times along the highway network around Forth Yards would arise from both background traffic growth and from traffic arising from the developments envisaged in the Forth Yards area. Congestion along Railway Street and Forth Banks would be at levels that would constrain its capacity to accommodate additional development traffic.

To mitigate these impacts a series of highway infrastructure works are proposed across the highway network, with priority given to improved pedestrian and cyclist access to the area, and to provide inclusive access to bus facilities. The measures include enhanced pedestrian and cycle infrastructure, widening Pottery Lane and building a spine road extending Pottery Lane to Dunn Street and also works to improve the Urban Core Distributor Road (UCDR).

External funding may be required to improve major highway infrastructure interventions. All other infrastructure requirements are expected to be funded by the individual development sites either as part of their development or through pooled contributions.
The following transportation improvements will be required to the Forth Yards area:

1. Improvements to the Urban Core Distributor Road (UCDR)

Policy UC9 of the CSUCP requires traffic access in and around the Urban Core to be managed to minimise through traffic and focus traffic onto the Urban Core Distributor Road (UCDR). Policy D1 identifies the need for improvements to Skinnerburn Road and Dunn Street in the form of highway realignment to deliver the UCDR and remove through traffic from passing through the city centre and Forth Yards area. These works would also help facilitate the improved pedestrian and cycle access works on the surrounding road network. To achieve the required visibility splays and road widths at the junction of Dunn Street and Skinnerburn Road localised road widening may be required from adjacent sites, subject to design development. Improved junction capacity at the Dunn St/ Scotswood Road junction can be achieved within the existing highway boundary. The development of sites accessed from Skinnerburn Road will need to ensure that it would not prejudice the operation of the UCDR. Pedestrian and cycle crossing points will be provided at Skinnerburn Road junctions with Shot Factory Lane, Tyneside Road and Dunn Street to facilitate access to the Quayside Recreational Route.

2. Linkages to Central Station and Arena

Newcastle Central Station is situated immediately to the north east of the Forth Yards area. To improve pedestrian and cycle access to the Forth Yards area a new western pedestrian and cycle entrance into the station is proposed, via the Central Stations Western Dock alongside the International Centre for Life.

Following the removal of the branch line on the viaduct north of Forth Goods Yard this route can be converted into a high-level pedestrian/cycle link between Central Station and Forth Yards area, firstly to link to a potential long-stay station car park on the Forth Goods Yard site and with potential to link further west.

The operations of the Arena has resulted in Redheugh Bridge Road being closed to vehicular traffic for reasons of pedestrian safety. In the long-term there is a desire to secure alternative pedestrian access between the Arena site and Central Station via the viaduct to the north. This route will be secured as part of the future redevelopment of both the Forth Goods Yard and Arena sites. The route along the viaduct also has potential to link to Newcastle Business Park.

Redevelopment of the Forth Goods Yard will also need to deliver a north-south route linking Railway Street with Pottery Lane to improve permeability to the wider area.

3. Linkages to Stephenson Quarter, Saint James’ Boulevard, Scotswood Road and Quayside

Enhanced routes both within and outside of the Forth Yards area are required to provide safe and convenient pedestrian, cycle and vehicle access. These will be achieved:-

- to the east by converting a traffic island into a pelican crossing on Forth Banks junction with Pottery Lane to improve access to Stephenson Quarter
- to the north by widening footways and reduced junction radii at the junction of Redheugh Bridge Road and Railway Street and introduction of a pedestrian crossing to the east of this junction to improve access to Scotswood Road and Saint James’ Boulevard; closing Redheugh Bridge Head Road to vehicles south of Times Square MSCP entrance and North of Arena Way access.
- to the west by widening footways along Dunn Street to Scotswood Road and Skinnerburn Road and reducing junction radii on Railway Street junction to the Quayside and Business Park area and Scotswood Road.
- to the south by closing Shot Factory Lane to vehicular traffic and making it a cycle/pedestrian route to the Quayside;
- Improved pedestrian and cycle access to the Quayside from Dunn Street and Tyneside Road;
- removal of redundant rail bridges on Redheugh Bridge Road, Tyneside Road, Dunn Street and Water Street and improvements to any retained rail infrastructure.
- improving pedestrian routes along Railway Street and Redheugh Bridge Road.
- creation of pedestrian (and where feasible cycle link) between the former railway line, through the Arena site, through the former Calder’s site to Tyneside Road and Quayside Recreational Route.

The following transportation improvements will be required to the Forth Yards area:
4. Linkages within the Forth Yards Area and former Calder’s Site Spine Road

To improve accessibility within the Forth Yards area each development will need to provide high quality direct pedestrian/cycle links through to adjacent highways. The general location of these links are set out in the plans in this document. Improvements to public realm within the existing adopted highway will also be required to enhance the pedestrian/cycle environment. These include widening the carriageway of Pottery Lane to 6.75 metres and formation of a junction between Arena Way, Pottery Lane and the spine road through the former Calder’s site. Measures to protect users of the Arena from malicious threats will need to be incorporated into the highway design.

A new east-west spine road is required to link Pottery Lane with Dunn Street, in part across the former Calder’s site. This will allow direct vehicle access to the Heliport and Calder’s site and will improve pedestrian and cycle access, public transport accessibility to the area by acting as the main distributor road for the Forth Yards area. The spine road will allow vehicular traffic from the Forth Yards Area to directly access the Urban Core Distributor Road, in accordance with Policy UC9. It will also reduce traffic on Forth Banks and Railway Street, whilst addressing the conflict with traffic restrictions associated with Newcastle Arena. The spine road will need to be provided in an early phase of the areas development.

Separate recreational routes along the escarpment edge are identified in the Green Infrastructure section.

5. Travel Plans and Rail line reserve

A commitment from developments to support and promote sustainable modes of transport across the area will be required to ensure the low vehicle movement scenario envisaged are realised. This will require each site to develop a detailed travel plan which is measurable and subject to review as the development progresses. The long-term monitoring of travel plans will be secured through a planning obligation.

The delivery of high-quality cycle parking for residents and staff (with associated staff showers/changing rooms for commercial developments) will be required for each building in accordance with DAP Policy DM12. The establishment of a cycle hub to promote cycling within the area should be progressed as part of a travel plan within the Calder’s site.

Bus infrastructure along the Pottery Lane/Calder’s spine road and subsequent delivery of a regular bus service through the area, to provide direct links to the wider Tyneside area, will also need to be provided in accordance with DAP policy DM11.

A long-term aspiration to allow the former Newcastle-Carlisle line to be retained and converted into an urban light rail system serving the west of the city has also identified by Nexus. The alignment of the route will therefore be protected from development. The route could operate alongside its role as a direct pedestrian/cycle link to the area.

6. Parking

Each site will need to provide an on-site parking and servicing strategy, reflecting the areas sustainable location. Sites east of Redheugh Bridge fall within the Urban Core Freight Management Area, as set out in Policy UC8 of the CSUCP, where developments will need to operate in accordance with a consolidated delivery service plan.

Traffic regulation orders and parking management plans to restrict on-street parking will need to be developed for each site.

Forth Goods Yard has been identified as a possible location for a long-stay station car park. Any public parking development provided will need to comply with Policy UC10 and design and environment policies of the CSUCP and DAP. This includes Policy DM24 relating to Environmental and Health Impacts of Development, including air quality improvements.

Road widening at Pottery Lane undertaken by The Foundary development.
18. All Sites: Area Wide Delivery Requirements

Detailed applications on sites in the Forth Yards Area will only be supported where it forms part of an approved site wide masterplan.

Developments will need to provide:

1. whole site masterplans with infrastructure delivery plans and on larger sites investigate pop-up uses during long term phased construction;

2. Affordable Housing provision under Policy CS11 of 15% of the total for residential developments and 20% for Build to Rent accommodation in accordance with the Planning obligations SPD and national planning guidance.

3. A range of housing to achieve a sustainable community, including Accessible and Adaptable Housing provision to meet the future needs of the city, in accordance with Policy DM6 and compliance with Nationally Described Space Standards in accordance with Policy DM7.

4. Climate change measures, including a reduction in the whole life CO2 emissions of the development and connection to a future district energy system and/or renewable energy solutions in accordance with policy CS16;

5. Ecological mitigation and enhancement to comply with Policy CS18 and DM29;

6. Public Open space delivered on site and, where appropriate, off site contributions to enhance public open space areas nearby (Pottery Lane/Riverside Walkway). Spaces to incorporate ‘Active Design’ Principles* and include a minimum 3 metre width inclusive recreation route along the escarpment edge;

7. A range of measures to address the gaps in the Green Infrastructure Network and to enhance, protect and increase the multifunctionally and biodiversity of green infrastructure in the Urban Core. These include:
   - The creation of new green spaces,
   - The temporary greening of vacant medium/long term development sites,
   - Creating or improving connections between green spaces and to the wider Strategic Green Infrastructure Network,
   - Surface water storage and sustainable drainage systems, and
   - Street trees and planting, living roofs and walls.

8. Inclusion of public art to enhance character and local distinctiveness to comply with Policy UC17. See the six rules of the Discovery Quarter Art Strategy;

9. On site highway and accessible infrastructure with high quality public realm;

10. Off site transport infrastructure delivery; including addressing possible malicious thread associated with the Arena site.

11. Demonstration of how digital infrastructure will be supplied to access electronic communications networks, to comply with Policy DM35.


13. Detailed remediation strategy to address land contamination and instability issues associated with the industrial and mining legacy of the area.

* Where on-site active design measures seeking to replace off-site sports provision contributions then a fully costed detailed design and justification will be required.
19. Site by Site Delivery Requirements

Skinnerburn Road Sites

Site specific guidance for plots on Skinnerburn Road is not included in this document. However, the principles set out in this document should be followed in developing these sites.

Land south of Skinnerburn Road and east of Dunn Street is a potential site for a future energy centre.

Former Newcastle Carlisle Railway line

Investigate need to retain line. If no longer operationally required, remove bridges and redundant sections over Tyneside Road/ Water Street/ Dunn Street and part Redheugh Bridge Road. Landscape disused track as wildlife corridor and facilitate improved pedestrian and cycle access to the Arena and wider area from the Central Station. Incorporate surplus land into adjacent site, where appropriate.

Safestore

Uses
Commercial (Offices/ Leisure)/ Residential/Hotel, Self storage (B8)

Access Points
(1) Existing Railway Street/Forth Street access. (2) Pedestrian/ cycle access to viaduct on eastern side of the site.

Constraints
Amenity issues from Time Square MSCP; Forth Goods Yard access across part of site; road traffic noise.

Form of development
To reflect the height of adjacent Times Square MSCP with active frontage to ground floors. Massing to preserve views to and from historic core and landmark buildings.

Infrastructure requirements
• Public realm improvements north of viaduct to allow improved accessibility across the eastern portion of the site to Forth Goods Yard.
• Improve access to the Station across Forth Street.

Forth Goods Yard

Uses
Mixed use- commercial (office/leisure), residential with ancillary uses, and potential public car park.

Access Points
(1) Pedestrian/ cycle access from Railway Street/Forth Street through the eastern edge of the Safestore site and through viaduct and archway.
(2) Vehicle, pedestrian and cycle access from Pottery Lane.

Constraints
Operational railway line on viaduct; Noise from railway line, Redheugh Bridge, King Edward Bridge and Time Square MSCP; requirement to remove track to north to realise raised pedestrian/cycle route link to Central Station and wider area; ground conditions; level changes to Pottery Lane; sensitive views from Central Conservation Area and wider Tyne Gorge; offset development from bridges to allow maintenance; retain established access arrangements for Safestore site off Forth Street.

Form of development
Series of blocks to respond to major movement corridor along Redheugh Bridge; to respect setting of King Edward Bridge, landmark buildings in historic core & wider Tyne Gorge setting; parking and servicing beneath bridges; provide pedestrian/cycle access to Pottery Lane through the site and to the west along route of viaduct.

Infrastructure requirements
• Upgrade of Pottery Lane (public realm, east-west spine road).
• Environmental improvements to Tyneside Road and Redheugh Bridge Road including retained rail bridges.
• Creation of high-level pedestrian/cycle link from Central Station to Arena site.
• Recreation and cycle access linking Pottery Lane and Forth Street.
• Enhance legibility and access through opening up of arches within viaduct and selective removal, if required.
• Pedestrian route along escarpment edge through King Edward Bridge arches to link Pottery Lane sites.
• Green Infrastructure enhancements.
• Public open space.
• Public realm improvements around King Edward Bridge arches.
### Pottery Lane East

**Uses**
Mixed use- residential; commercial (office/leisure/hotel)

**Access Points**
Pottery Lane, widening carriageway to the south to form 6.75 metre wide public transport route plus footways. Site to incorporate recreational route alongside King Edward Bridge and linking to The Foundry development and Cookson’s Lane to the east.

**Constraints**
Noise from King Edward Bridge and maintenance access and setting to bridge; protection of amenity of adjacent residents on Foundry site; tree preservation order on escarpment edge; views east to Stephenson Quarter from King Edward Bridge across the site; wildlife corridor.

**Form of development**
Development block(s) with frontage to gorge edge to respect setting of King Edward Bridge, views of landmark buildings in historic core & wider Tyne Gorge setting protected; linking east/west recreational route to adjacent sites; enhanced landscaped escarpment.

**Infrastructure requirements**
- Upgrade of Pottery Lane (widen road and new public realm).
- Contribution to public realm enhancements under Redheugh Bridge and along Redheugh Bridge Road/Shot Factory Lane/Quayside.
- Pottery Lane/Forth Banks junction improvements.
- Recreation route along escarpment edge through site.
- Green Infrastructure enhancements.

### Pottery Lane West

**Uses**
Mixed Use- residential; commercial (office/leisure/hotel); with ancillary uses.

**Access Points**
Pottery Lane (widening carriageway to the south to form 6.75 metre wide public transport route, plus footways) between King Edward Bridge and Shot Factory Lane. Public access recreational route across the site linking Shot Factory Lane/Redheugh Bridge Road, King Edward Bridge and Pottery Lane.

**Constraints**
Noise from King Edward Bridge, Redheugh Bridge and Arena; maintenance access to bridges, tree preservation order on escarpment edge; ground conditions; wildlife corridor.

**Form of development**
Development block(s) with frontage to gorge edge to respond to major movement corridors; to respect setting of King Edward Bridge, landmark buildings in historic core & wider Tyne Gorge setting; site edge vehicular access and linking east/west recreational route to adjacent sites; enhanced public open space around Redheugh Bridge.

**Infrastructure requirements**
- Upgrade of Pottery Lane (widen road and new public realm)
- Public realm enhancements around Redheugh Bridge and along Redheugh Bridge Road/Shot Factory Lane.
- Pottery Lane/Forth Banks junction improvements.
- Recreation routes through site.
- Green Infrastructure enhancements.
- Public open space.

### Newcastle Arena

**Uses**
Leisure (alternatively Residential/Offices)

**Access Points**
Retain current vehicle access, improve pedestrian/ cycle accessibility to city centre/Central Station along current rail track bed over Redheugh Bridge Road and to Dunn Street, and pedestrian/cycle access from former Calder’s site.

**Constraints**
Closure of Redheugh Bridge Road to vehicles. Poor north-south and east-west pedestrian access. Disused railway line to north of site, historic wall and building to south.

**Form of development**
Arena retained: refurbish existing building or reconfigure on the site.

Arena removed:
Series of blocks accessed from Arena Way. Pedestrian/cycle access link across site between former Calder’s and route along former railway line to north. Retain historic railway building.

**Infrastructure requirements**
- Environmental improvements to Tyneside Road and Redheugh Bridge Road including retained rail bridges.
- Creation of high-level pedestrian/cycle link from Central Station to Arena site.
- Alternative pedestrian/ cycle access to Arena/ former Calder’s site.
- Arena Way maintained as east-west route through site.
- Public open space.
Site by Site Delivery Requirements (3/3)

Former Calder’s site (Quayside West)

**Uses**
Mixed Use: Residential/ Commercial (Office/Leisure/ Hotel) with ancillary uses.

**Access Points**
Public Transport junction to Pottery Lane, with through public transport/main distributor road link to Tyneside Road/Dunn Street; Pedestrian links to riverside walkway and Arena site.

**Constraints**
Congestion around Arena at night; noise from Arena, Redheugh Bridge, Heliport and gas pumping station; ground conditions; accessibility; wooded escarpment edge; pigeon crees on the southern site boundary; ecology; sensitive view from Historic Core and Central Conservation Area.

**Form of development**
Series of blocks with views of Tyne Gorge, stepping up sloping site; landscape setting; central access road linking east and west; commercial uses on northern boundary of site to create noise buffer to Arena; supporting uses (local shops/bar/restaurant); utilised southern boundary building to create bella vista; escarpment edge recreational route for public use; retain wooded southern edge to site; remove crees and landscape space.

**Infrastructure requirements**
- East-west Spine Road.
- Upgrade of Dunn Street footways north of spine road access.
- Closure of Shot Factory lane to vehicular traffic.
- Crossings and junction improvements for Pedestrian/cycle movements across Railway Street/ Redheugh Bridge Road junction.
- Cycle hub to promote cycling in the area.
- Bus infrastructure including bus service support to facilitate new bus services and bus stops.
- Alternative pedestrian access to Arena/ former Calder’s site. (If feasible, cycle access.)
- Pottery Lane/ Redheugh Bridge Road junction improvements.
- Recreation route along escarpment edge through the site and north/south links between Forth Yards sites and Quayside via Shot Factory Lane and Tyneside Road South.
- Green Infrastructure enhancements along escarpment.
- Environmental improvements to Tyneside Road and Redheugh Bridge Road including retained rail bridges.
- Public open space.

Heliport Site

**Uses**
Commercial (Offices/Leisure) and/or residential (only following resolution of noise from gas pumping station and improved accessibility through former Calder’s site delivered).

**Access Points**
Link to new east/ west Spine Road with public transport link access into layout and access to Dunn Street. Pedestrian/ cycle access to Quayside via Tyneside Road and Dunn Street.

**Constraints**
Noise from adjacent industrial sites and from the gas pumping station. Not currently accessible for residential use until link access road from former Calder’s site is delivered; Commercial development linked to Newcastle Business Park can come forward ahead of the east-west spine road and bridge removal. Retain landscaped area along southern and western site edge; escarpment edge; ground conditions; retain historic perimeter wall.

**Form of development**
Series of blocks set in landscape setting, with vehicle access road through centre of site; commercial noise buffer uses on northern boundary of site; create belle vista; escarpment edge footway for public use; retain and enhanced landscaped southern edge to site.

**Infrastructure requirements**
- East-west Spine Road.
- Upgrade of Dunn Street footways south of spine road access.
- Bus infrastructure including bus service support to facilitate new bus services and bus stops.
- Recreation route along escarpment edge through sites linking Tyneside Road and Dunn Street.
- Green Infrastructure enhancements along escarpment.
- Environmental improvements to Tyneside Road and Redheugh Bridge Road including retained rail bridges.
## 20. Forth Yards Infrastructure Interventions

A table of transportation and green infrastructure requirements associated with each development is set out below. Unless otherwise stated, each infrastructure will need to be provided before first occupation of each development. Phased delivery and construction will be appropriate in cases. Works will normally be secured by way of a section 106 legal agreement. Shared infrastructure costs, where defined, will be proportionately shared between sites, as set out in Section 22 - Contributions to Site Wide Infrastructure.

Other infrastructure requirements relating to matters such as education provision, social infrastructure (GP practice, community buildings etc) will be assessed on a site by site basis and contributions sought in accordance with the Council’s Planning Obligations SPD and CIL.

| Scheme | Site Contributions | Explanation | | Scheme | Site Contributions | Explanation |
|--------|-------------------|-------------| |--------|-------------------|-------------|
| 1      | Upgrade of Pottery Lane (widening road and new public realm) for east-west Spine Road | Pottery Lane East (PLE) Pottery Lane West (PLW) Forth Goods Yard (FGY) PL site to include widening north of NCC car park. Carriageway width to be 6.76m; priority junction beneath King Edward Bridge, link to (2) East-West Spine Road. | 13 | Scotswood Road/ Dunn Street widening | UCDR | Capacity improvement required to encourage traffic to use Skinnerburn Road. |
| 2      | East-west Spine Road | Heliport/ Former Calder’s (Quayside West) Required to develop sites as part of first phase. Route through former Calder’s to light control access onto Dunn Street including gas station site and linking to Tyneside Road. | 14 | Skinnerburn Road widening | UCDR | Delivery UCDR will remove traffic from Forth Banks and Railway Street. |
| 3      | Upgrade of Dunn Street footways north of e-w Spine Road | Former Calder’s (Quayside West) Widen and improve footways and crossing and TRO to prevent on-street parking from site access to Scotswood Road. | 15 | Forth Banks/ Skinnerburn Road junction | UCDR | Required to encourage traffic to use Skinnerburn Road. |
| 4      | Upgrade of Dunn Street footways south of e-w Spine Road | Heliport Widen and improve footways and TRO to prevent on-street parking. | 16 | Pottery Lane/Forth Banks junction Road | All sites | Pedestrian crossing at location of current island to facilitate pedestrian/cycle movements east/west alongside Quayside area as part of s278 works. |
| 5      | Public realm under Redheugh Bridge and along Redheugh Bridge Road/Shot Factory Lane | Pottery Lane West Pottery Lane East FGY Enhancements of existing open space, including link to PL site and Shot Factory Lane, lighting, seating and improved footpath network. | 17 | Potterly Lane/ Redheugh Bridge Road junction | Former Calder’s (Quayside West) | Pedestrian/cycle priority junction provided to replace roundabout junction. |
| 6      | Removal of disused rail bridges across Water Street, Dunn Street, Tyneside Road and southern bridge over Redheugh Bridge Road | Network Rail Part of closure of branch line by Network Rail. | 18 | Alternative pedestrian access to Arena/ former Calder’s site | FGY Arena | North/ South Pedestrian/ Cycle Link between the former Railway line, Arena site and Calder’s to be secured as part of these applications. |
| 7      | Environmental improvements across Tyneside Road and Redheugh Bridge Road including retained rail bridges. | Calder’s Heliport FGY Arena Improved environment and public realm including lighting to bridges to provide safe and attractive route for pedestrians /cyclists. | 19 | Bus infrastructure including bus service support to facilitate new bus services and bus stops | Heliport/ Former Calder’s (Quayside West) | Required to encourage access by non-car travel modes across Calder’s site and Heliport Site. |
| 8      | Creation of high-level pedestrian/ cycle link from Central Station to Arena site and access to Forth Goods Yard site | FGY Arena Extension to Arena site to west as part of agreement with Arena/ redevelopment of site. Future management and maintenance secured as part of FGY development. | 20 | Pedestrian route along escarpment edge through sites from Dunn Street to Cocksons Lane and north/south links between Forth Yards sites and Quayside via Shot Factory lane, Tyneside Road and Dunn Street | Heliport/ Former Calder’s (Quayside West) Pottery Lane West FGY Potterley Lane East Recreational route along escarpment edge secured as part of redevelopment of each site, with link under King Edward bridge secured as part of FGY redevelopment. |
| 9      | Junction improvements for pedestrian/cycle movements across Railway Street/ Redheugh Bridge Road junction | Former Calder’s (Quayside West) To improve north/south movement between Forth Yards and Saint James’ Boulevard area. | 21 | Green Infrastructure enhancements along escarpment | Heliport/ Former Calder’s (Quayside West) Potterley Lane East FGY Potterley Lane West Landscaped edge to escarpment retained and enhanced as part of wider green infrastructure network by each development site. |
| 10     | Closure of Shot Factory lane to vehicular traffic | Former Calder’s (Quayside West) Closure to vehicular traffic and alterations to surface treatment for pedestrian/cycle route. | 22 | Public open space | All sites | Each site to provide appropriate levels of public open space to serve development needs. |
| 11     | FGY access to Pottery Lane | FGY Access between Forth Goods Yard and Pottery Lane/ Forth Street/Railway Street to be provided as part of FGY redevelopment. | 23 | Foul water drainage solutions | All sites/ Northumbrian Water Provision of pumping station capacity to redirect foul water flows northwards. |
Key

5 Intervention reference

Widening the Urban Core Distributor Road (UCDR)

Major east-west connection

High-level pedestrian/cycle link from Central Station

Arena route retained

Pedestrian/cycle link between High-level link, Arena and former Calder’s

Public Open space

Development plots stepping down

Infrastructure Interventions reference plan

Forth Yards Development Framework (January 2020)
### 21. Infrastructure Delivery Plan and Contributions

It is important that future developments address wider accessibility needs outside of their individual site to ensure suitable high quality connections are in place for all modes. In summary the following should be addressed on the existing highway to connect the site to the city centre:

- Pedestrians - unobstructed footways, dropped kerbs, adequate width footways, crossing facilities.
- Cyclists - removal of indiscriminate parking.
- Motorists - regularise parking and loading opportunities, amendments to traffic management
- Wayfinding and signage

**On site works:**
- Car parking strategy
- Cycle parking
- Electric vehicle charging
- Servicing and manoeuvring
- Pedestrian, Cycle and public transport movement
- Maintenance and management of highways and landscaping

The works to the urban core distributor road will assist in alleviating the need for through traffic to impact upon the accessibility of the Forth Yards Area. The works include alterations to Forth Banks, Skinnerburn Road, Dunn Street and Scotswood Road. The costs of these works will be secured by a number of means, including external funding and developer contributions.

### Highway and Transport Requirements

Shared infrastructure developer contributions are required to deliver the infrastructure identified in this document. This will primarily relate to improvements to the highway network as set out below:

<table>
<thead>
<tr>
<th>Within the sites (on site)</th>
<th>Adjacent to the Site</th>
<th>Supporting the Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian facilities</td>
<td>Physical highway infrastructure around the site to be addressed</td>
<td></td>
</tr>
<tr>
<td>Cycle parking and facilities</td>
<td>Pedestrian and cycling links and improvements to create attractive routes and join the site to local public transport and services</td>
<td></td>
</tr>
<tr>
<td>Car parking strategy and facilities</td>
<td>Land for Highway purposes (Pottery Lane and possibly Dunn Street)</td>
<td></td>
</tr>
<tr>
<td>Electric vehicle charging</td>
<td>Area wide parking scheme*</td>
<td></td>
</tr>
<tr>
<td>Servicing plan and space for manoeuvring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public transport access and/or connections</td>
<td></td>
<td></td>
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<tr>
<td>Maintenance and management of highways and landscaping</td>
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<tr>
<td>Construction Management Plan</td>
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<tr>
<td>Travel Plan</td>
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<tr>
<td>Refuse and Waste Management</td>
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</tbody>
</table>

* Suitable parking controls need to be in place covering the area; Scotswood Road to the north of the area down to Skinnerburn Road at the south, and from Water Street to the west of the site to Forth Banks to the East. It is important to manage and support existing businesses, future development, address the problem of commuter parking and support sustainable development. Managing the road space will improve the environment for pedestrians and cyclists.
22. Contributions to Site Wide Infrastructure

Each development within the Forth Yards area will be expected to deliver improved transport and green infrastructure. This will be through on-site, as well as by contributing towards off-site infrastructure.

The level of contribution sought for off-site infrastructure will need to fairly and reasonably relate to the scale and kind of development proposed, be necessary to make the development acceptable and directly relate to the proposed development. In all cases, site viability will be taken into considerations. Any viability appraisals must be undertaken in agreement with the Council’s Property Division and in accordance with guidance set out in the national Planning Practice Guidance on Viability. Where necessary and to assist in delivering the essential infrastructure for the area, funding from other external agencies may be sought where there is likely to be any shortfall in funding.

Two main areas of common infrastructure have been identified - Transportation and Open Space and Recreation. All financial contributions will be index linked on an annual basis from the 2020 base figure.

Transportation Common Infrastructure

The delivery of the Urban Core Distributor Road, widening to Pottery Lane and various area wide works within the neighbouring highway will be required to improve the pedestrian and cycle environment for future occupants and allow for safe and convenient access to the area for vehicles.

Urban Core Distributor Road

The works to implement the urban core distributor road (UCDR) along Skinnerburn Road and Dunn Street are required to reduce through traffic from the area and to improve the accessibility of the Forth Yards Area for both pedestrians, cyclists and vehicles. To achieve this the UCDR will require the realignment of the junction of Forth Banks and Skinnerburn Road (estimated cost £1.1 million¹), realignment of Skinnerburn Road (£5.2 million) and works to the junction of Scotswood Road with Dunn Street (£434,000), totalling approximately £6.7 million. Funding for the works will be secured by a combination of development contributions and seeking external gap funding from other agencies. A contribution will be sought from each site identified in this framework document towards these works.

The level of contribution from developments to deliver the UCDR will be £6,700 per 100 square metres for commercial, £1,600 per residential unit and a contribution from other forms of development based upon a daily trip rate of £423 per trip. However, if alternative sources of funding can be secured for the works to improve the junctions onto Forth Banks and Dunn Street from Skinnerburn Road, then the development contribution for the UCDR can be reduced can be reduced to £5,640 per 100 square metres for commercial, £1,347 per residential unit and £356 per vehicle trip for other uses.

Pottery Lane and Spine Road

The widening of Pottery Lane and the creation of a spine road through the former Calder’s site to link to Dunn Street will be a key infrastructure requirement to improve accessibility to the area. The estimated costs for widening Pottery Lane to the south is approximately £1.5 million. The Pottery Lane sites will be expected to undertake these works as part of their section 278 highway works. The section of Pottery Lane within Newcastle City council ownership would cost approximately £360,500. The cost for these works will need to be secured through contribution from adjacent sites or through alternative funding.

The delivery of the spine road through the former Calder’s site and at its western end across land within Elswick Gas station will cost approximately £7.9 million. The delivery of this road will be required as part of an early phase of development on the Calder’s site and prior to development taking place on the Heliport site. The cost for delivery of this route will fall on the owners of these two sites.

Open Space and Recreation Facilities

Each site should seek to comply with local plan policies relating to the delivery of open space and recreation facilities. Where feasible this should be provided on-site. Where this is not possible then a contribution to off-site provision will need to be secured by means of a contribution to the costs of the works and their long-term maintenance. The level of contribution sought is set out in the Council’s Planning Obligations Supplementary Planning Document. Off-site works will include the enhancement of open space around Redheugh Bridge and along the Quayside.

Other Off-Site Contribution

Other infrastructure contributions may be sought where an identified need arising from a development is identified, such as contributions for school places and health facilities.

¹This figure excludes the cost of works to the Northern Power Grid Substation, estimated at £1.9 million

Other Highway Works

Other common infrastructure transportation costs are estimated as approximately £500,000, comprising a range of works to the surrounding highway network, including improved footways, crossing points and public realm environmental enhancements to Tyneside Road, Redheugh Bridge Road, Railway Street and Forth Banks. The costs for these works will be secured through off-site development contributions from each site as they come forward. For this reason, a contribution of £300 per residential dwelling, £1,300 per 100 square metres commercial floor space and £272 per commercial vehicle parking space will be sought.
23. Further Reading

Campbell, Cath and Hodgkinson, Kanthryn, An Arts Strategy for the Discovery Quarter, Department of Creativity and Innovation, 2008

https://www.sportengland.org/facilities-planning/active-design/ [Accessed 13 June 2019]


NECA and Nexus, Metro and Local Rail Strategy, 2016

Newcastle City Council, Newcastle upon Tyne Tree Preservation Orders Map, no date

Newcastle City Council, Newcastle upon Tyne Historic Environment and Conservation Map, no date

Newcastle City Council, Newcastle upon Tyne Local Plan

Newcastle City Council, Newcastle City Council Highways Developer Guidance

Tyne and Wear HER(4114): Elswick, Low Elswick Gas Works - Details

Tyne and Wear HER(16162): Elswick, Water Works - Details

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regenerate.newcastle@engie.com