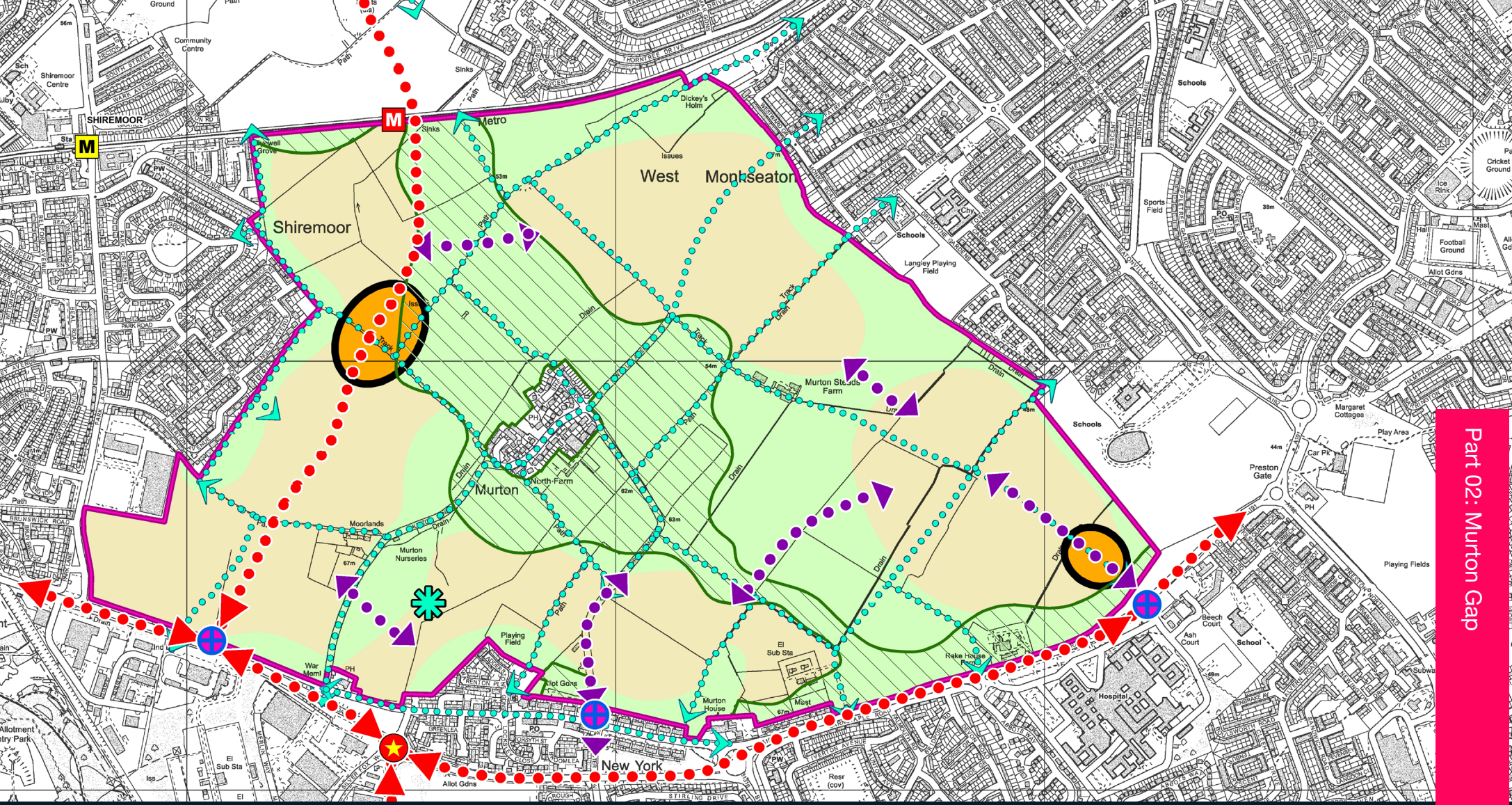


North Tyneside Council

Killingworth Moor and Murton Gap

Outline Development Framework

June 2016

ARUP

North Tyneside Council

Part 02: Murton Gap

Part 02

Part 02

2.1 Overview

This part of the framework outlines the vision, opportunities and constraints, development framework and delivery issues for the Murton Gap site. It seeks to provide advice and guidance in order to progress the planning and design of the site.

2.2 Murton Gap Vision and Opportunities

The vision for the Murton Gap site is described within the emerging Local Plan as:

"walkable, connected village neighbourhoods, within a green, natural environment".

Although the vision statement is the same for both the Murton Gap and Killingworth Moor sites there are distinct differences in the place making approach required in each location.

The vision represents a unique opportunity to provide a series of neighbourhoods within an historical rural setting with a green space in the centre.

The site is currently an undeveloped area between Shiremoor and Monkseaton consisting of agricultural land and clusters of farmsteads. The proposed green buffer around Murton Village will be an important asset to the community and will be designed to provide a mixture of structured and informal green spaces.

The existing Public Rights of Way and Bridleways will be enhanced and provide an opportunity to connect neighbourhoods sustainably.

Supporting the vision the Strategic Concept Framework, that provides a basis for the Framework Plan, proposed a set of high level development principles:

- Integrate the site into a well-connected, wider neighbourhood, whilst maintaining the unique and varied characters and identities of existing areas and settlements whilst maintaining an appropriate level of 'separation' and avoiding the 'merging' of settlements.
- Create sustainable and balanced communities.
- Facilitate and encourage healthy lifestyles and quality of life.
- Create a coherent, unique and distinctive 'place', comprised of a range of character areas, experiences and environments.
- Maximise the integration and benefits/uplift for the wider existing communities, settlements and environments.
- Ensure the provision and access to appropriate education facilities, community facilities and services.
- Create an effective and efficient local transport and highway network.
- Appropriately protect and enhance the natural environment, ecology and biodiversity, whilst balancing this against the need to also achieve the wider objectives.
- Encourage sustainable modes of transport: walking, cycling, Metro and buses.
- Create adequate access to local jobs (new and existing) for new and existing residents and the wider workforce.
- Allow for, and facilitate viable and feasible phased delivery.
- Encourage variety in design responses.

The Concept Plan identifies the following 'fixes':

- The strategic relationships between the two sites.
- Principal highways connections, junctions and indicative key routes.
- Secondary highway junctions and key routes.
- Green infrastructure: The principles of key wildlife/green corridors and the principles of green amenity spaces and 'buffer zones'.
- The location of 'Development Zones' – indicative areas within which development will be located.
- The need for mixed-use hubs.

- The location of schools and associated community facilities.
- The location of new Metro stations.
- Community connections (pedestrian and cycle links) through the sites and to wider areas.

The Concept Plan allows for the following ‘flexes’:

- Actual, precise highway routes.
- Housing numbers, density gradients or the amount of development within the Development Zones.
- Actual uses or content of the mixed-use hubs.
- Site specific locations of any uses.
- Locations of specific housing tenures or accommodation (affordable, extra-care, special needs, accessible, family, executive, self-build).
- Sustainable Drainage Systems.
- Service distribution.

Using the development principles as a framework, this Development Framework Document has identified proposals at Murton Gap which can provide the following opportunities for new residents and adjacent communities.

Murton Gap Site Location Plan (Arup)

View from Norham Road roundabout looking north towards the site (Arup)

View from Murton Lane within the site looking towards the east (Arup)

Integration

- The location of the site, adjacent to Shiremoor, West Monkseaton, New York and Preston Grange provides the opportunity to build on the qualities of existing settlements and preserve the Murton Gap.
- The village of Murton and its setting can be preserved and enhanced by new green spaces.
- Development can be sensitively designed around the existing heritage assets of Rake House Farm and Murton House Farm.

Sustainable and Balanced Communities

- Good transport connectivity via the new north-south link.
- Good public transport connections within North Tyneside, to Newcastle and beyond via the bus and Metro system. The construction of a new Metro station at the site would provide enhanced links to existing neighbourhoods and the proposed residential areas.
- On site community infrastructure, such as primary school provision will reduce the need to travel.
- A mixture of housing tenures and sizes is proposed with the intention of providing a balanced community.

View of typical residential street and housing in the wider site area (Arup)

Healthy Lifestyles and Quality of Life

- Housing next to local facilities and good public transport links promote walking and cycling to work and local facilities.
- Housing set around a central accessible green space with integrated play, activity areas and wider opportunities for cycling and walking promotes active lifestyles.
- Local centres and the primary school on site promote walking to shops and community facilities.

View of typical residential street and housing in the wider site area (Arup)

Distinctive Places

- Enhancing and reusing onsite features provides a link to the history of place and provides the basis for a distinctive development.
- Supporting this strategy is recognising subtle variations within the site to create a series of character areas which have their own development principles.
- High quality green spaces with strong conceptual design can integrate the character areas and create a distinctive sense of place.

Process

- Working closely with stakeholders to utilise local knowledge, recognising and integrating landowner considerations.
- Working with consortia to identify deliverability issues and provide an opportunity to influence the form of the development.

View looking towards open fields and Murton Village from the south west (Arup)

Community Infrastructure

- An opportunity to provide onsite social infrastructure, including a local centre and primary school.

Connections

- A proposed new Metro station on the northern boundary connecting to the centre of Newcastle and the surrounding area.
- Pedestrian connections to surrounding neighbourhoods and green spaces.
- Enhanced bus routes.
- Enhanced highway connections.

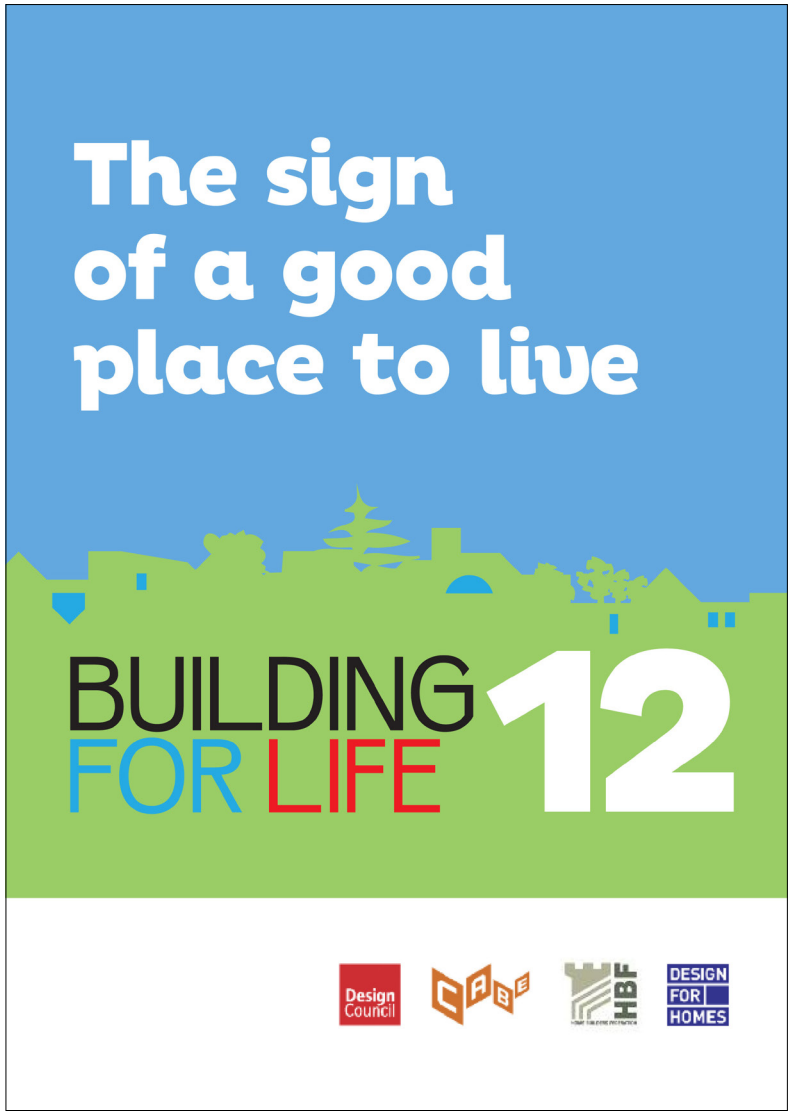
Phasing

- The site has numerous points of highway access which will facilitate phased development and delivery from multiple development parcels.
- Access to high quality green space and play space.

The Robin Hood pub on Murton Lane, Murton Village (Arup)

Design innovation and variety

- Building for Life 12 is the analysis method that North Tyneside Council have elected to use, and this is outlined within the Council's Supplementary Planning Document on Design Quality. The development will be assessed and scored using this method.
- It is also expected that master plans and applications coming forward on this site will benefit from independent external design review.
- The principles set out within this document and other referenced reports are intended to guide development and provide a framework for good design. They are intended to encourage innovative, high quality responses to the site and the brief.



Building for Life 12 Analysis Method (Design Council)

2.3 Opportunities and Constraints

2.3.1 Site and Context

The site is located in the north east part of the Borough and surrounds the village of Murton. It comprises a series of agricultural fields spanning between the neighbourhoods of Shiremoor (west) and Monkseaton (east), New York (south) and Earsdon and South Wellfield (north).

The site is strategically located off the A19 (T) via the A186, A191 and A192 which border the site to the north, south and east respectively.

Murton Gap Site Context Plan (Arup)

The site is open agricultural land with the field pattern still evident and, according to site visits and aerial mapping, is still in use for crops and pasture. The area is commented on in The North Tyneside Landscape and Townscape Character Description (Figure 2, item 12).

'The small village of Murton, although historic in origins has not retained much in terms of historic built fabric. It has, however, retained an isolated, rural setting that provides a buffer between the Village and Shiremoor, Monkseaton and North Shields. This area comprises of a series of agricultural fields, mostly bordered by hedgerows that overall form a space that feels very rural indeed'.

View from Murton Lane, Murton Village (Arup)

The surrounding residential neighbourhoods are mainly low density developments with higher density housing associated with nearby centres such as Monkseaton, and small retail uses on main highway routes.
The residential neighbourhoods contain a mixture of orientations but mainly the houses face towards the estate streets with rear gardens as boundaries to the Murton site. The exception to this are the houses facing Rake Lane (A191) to the south where houses face the main road.

View from the Rake Lane / New York Road / A191 roundabout towards Rake Lane to the east (Arup)

The centre of the site is Murton village, agricultural fields and lanes which are of historical interest and are of high quality. The village contains local facilities including a local pub.

The Murton village perimeter edges have mature hedgerows and strong field enclosures, creating the valued context of Murton village. The area is crossed with a number of Public Rights of Way used for leisure and recreation.

View from south of Murton Village looking towards the east of the site (Arup)

Most surrounding houses have rear garden fences facing the site. These edges will need to be preserved when the new development is created, and incorporated as appropriate into the design to indicate development buffers.

The Metro stations at West Monkseaton and Shiremoor are within walking distance of the northern part of the site. The inclusion of a new station on the northern boundary edge would provide easy access to all of the site.

There are residential streets surrounding the site and there are opportunities to create pedestrian connections through to Millfield Avenue, Fairfiled Drive, Cauldwell Avenue and Murton Lane in addition to the highway access points at the site perimeter.

View towards Park Lane bridge (Shiremoor Metro station) (Arup)

There are opportunities to support local retail areas on the site perimeter including shops on New York Road and Seatonville Road. There are several supermarkets within 10 minutes driving distance. To reduce the need to travel by car for short trips a local centre should be provided within the development.

There are also a number of primary schools in the surrounding neighbourhoods but, given the scale of development on the site a new primary school is required. Access to places within the existing secondary schools is expected, whilst provision of a new secondary school within the Borough will ensure overall availability of sufficient places.

View of Sainsbury's Whitley Bay, located to the north-east of the site (Arup)

The site is located within walking, cycling and short 10 minute drive of employment centres at; Cobalt Business Park, Silverlink Business Park and Orion Business Park.

It is also within walking, cycling and 10 minute driving distance of employment sites at New York, West Chirton and Benton Square.

The site has a strong relationship with the Killingworth Moor site as both sites need to address a number of shared needs including a secondary school and transport impacts upon the A19(T), A191 and Metro.

The Local Plan for North Tyneside sets out the next phase of growth within the Borough and will see the delivery of at least 17,000 new homes between 2011/12 and 2031/32. A key component of this growth will be the development of the Strategic Allocation at Murton Gap (3,000 homes).

The Strategic Allocation covers an area of approximately 242 hectares in the northern part of North Tyneside.

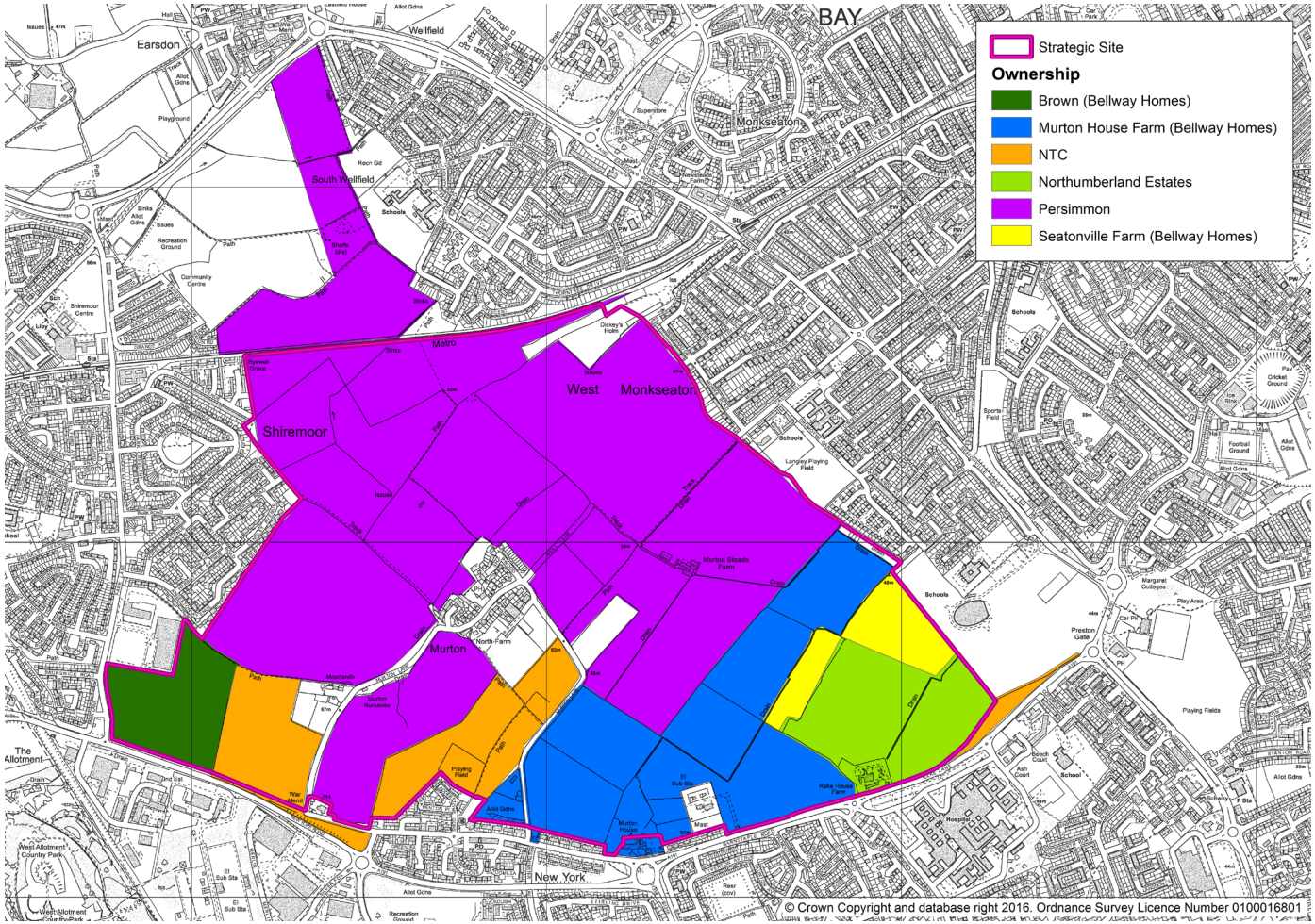
View from A191 New York Road / The Silverlink North roundabout looking south towards the Cobalt Business Park (Arup)

This Development Framework is an important strategic document and will guide all future stages of the planning and design of the Strategic Allocations alongside the Concept Framework and Local Plan policy. It establishes a context for planning applications, ongoing preparation of a proposed Detailed Development Framework and site design guidance.

View from west of Murton Village looking east towards open fields and Murton Village (Arup)

2.3.2 Landownership

Land ownership is primarily divided between Persimmon Homes, Northumberland Estates, North Tyneside Council and Bellway Homes. These landowners form the Murton Gap Consortium. The Consortium have worked with the Council to develop the concept plan and development framework and have provided representations to the Local Plan. Ongoing joint working between the Consortium, Council and key parties is of key importance to the successful delivery of the site and the infrastructure requirements identified.



Landownership Plan (Arup, based on NTC information)

2.3.3 Planning Policy

The Local Plan Submission Draft includes a number of key aims and objectives including:

- Provide an appropriate range and choice of housing to meet current and future needs.
- Diversify, strengthen and grow the local economy, providing excellent job opportunities for all.
- Protect and enhance the natural and built environment.

The Local Plan as a whole will be relevant to development proposals at Murton Gap, with the following policies of particular relevance:

Policy S4.4 (a)

Proposes a Strategic Allocation at Murton (Sites 35 to 41) to secure the delivery of approximately 3,000 homes during the plan period in a mix of housing tenures, types and sizes informed by available evidence of the housing needs of the borough, and convenience retail provision of approximately 1,000sqm.

Policy S4.4 (c)

Applications for Delivery of the Strategic Allocations states that applications for planning permission will be granted where identified criteria are met. Criteria include consistency with a comprehensive master plan, conformity with the principles of the Concept Plans, phasing and delivery strategy, transport strategy. In addition the criteria include a requirement that a landscape and visual amenity impact assessment is provided identifying key features of note on each site, demonstrating an appropriate design response (e.g. the location, orientation, density of development and landscape/planting treatment). Design quality will be secured through the application and use of appropriate design standards agreed as part of the master plans.

Policy DM6.1

Design of Development states that applications will only be permitted where they demonstrate high and consistent design standards. Designs should be specific to the place, based on a clear analysis of the characteristics of the site, its wider context and the surrounding area.

Policy DM5.5

Managing effects on Biodiversity and Geodiversity states that applications should protect the biodiversity and geodiversity value of land, protected and priority species and minimise fragmentation of habitats and wildlife links. They should also maximise opportunities for creation, restoration, enhancement, management and connection of natural habitat and incorporate beneficial biodiversity and geodiversity conservation features providing net gains to biodiversity, unless otherwise shown to be inappropriate.

Policy DM5.7

Wildlife Corridors states that development proposals within a Wildlife Corridor must protect and enhance the quality and connectivity of the Wildlife Corridor. All new developments are required to take account of and incorporate existing wildlife links into their plans at the design stage. Developments should seek to create new links and habitats to reconnect isolated sites and facilitate species movement.

Policy DM7.4

New Development and Transport states that the transport requirements of new development must be proportionate to the scale and type of development including how accessible the development is and existing public transport levels. Car and cycling space provision must be in line with standards set out in the Transport and Highways SPD (LDD12).Opportunities for public transport improvements should be identified. New developments in close proximity to public transport facilities will be required to provide a higher density of development to reflect increased opportunities for sustainable travel. On developments considered appropriate, the Council will require charging points to be provided for electric vehicles.

2.3.4 Transportation

2.3.4.1 Overview

The following key transport requirements have been identified in order to deliver the Murton Gap site:

- Provision of four site access points and links between the site and the existing road network.
- Mitigation of potential adverse effects of development traffic on the local and strategic road network.
- Provision of high quality public transport connections to the Killingworth Moor site, secondary school, employment sites and to existing community facilities.
- Provision of comprehensive cycling and walking networks.
- Creation of walkable neighbourhoods so that everyone lives within walking distance of a viable bus route, Metro station, neighbouring communities and key local amenities.
- Demand management measures are used in order to help achieve a shift from journeys by car to more sustainable transport modes.

View from the A191 New York Road/Silverlink North roundabout. (Arup)

2.3.4.2 Access and Highways Requirements

Access to the Murton Gap site will be provided via the following primary access points:

- A new access roundabout off the A191 between Park Lane and Norham Road (4-arm). This access will have an important relationship to the A191/ Norham Road roundabout (currently a 5 arm roundabout also providing access to New York Village).
- A new access roundabout off the A186 (4-arm).

Secondary access points are proposed at:

- A191 Rake Lane/ Hospital roundabout (4-arm).
- Via the existing Westminster Avenue / New York Road junction. It is proposed that the existing staggered junction at this location is replaced by a simple priority crossroads.

A primary north-south highway will be provided, linking the A186 access to the north and the A191 access to the south. Secondary highways will be provided to connect the main route to the development parcels across the site.

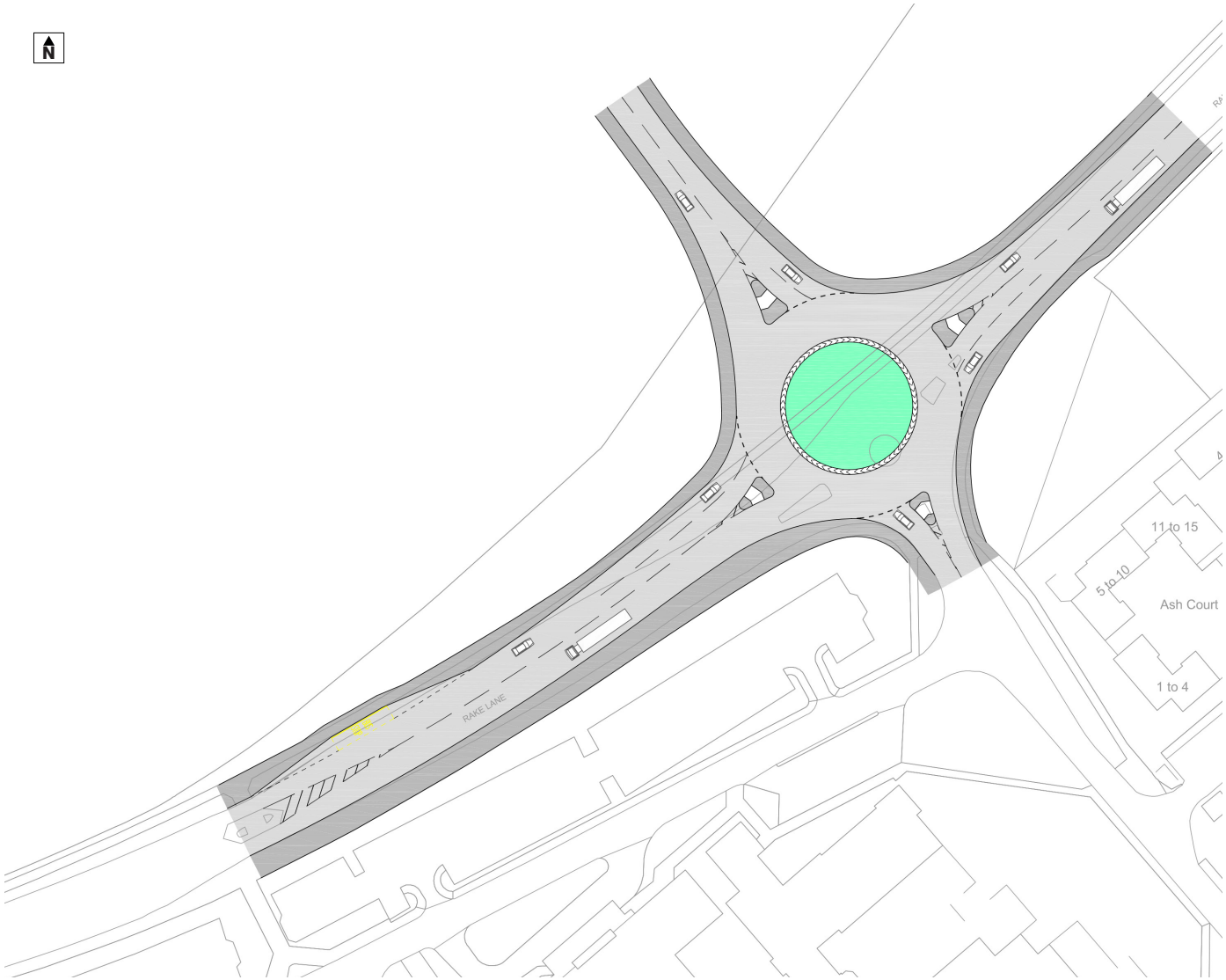
The location of site access points and primary and secondary highways is shown in the Figure opposite.

Location of Site Access Points and Primary and Secondary Highways (Capita, NTC Local Plan, Transport Impacts Report, May 2016)

To identify the proposed highway improvements the Council has undertaken a traffic modelling exercise at a network and junction level. This has identified a range of improvements at the following locations to ensure the highway network operates at an acceptable level. The analysis assumes a reduction in vehicular trip rates, on the basis of excellent access to sustainable transport modes with the introduction of a Metro Station and bus services that will serve the site.

Rake Lane Access Roundabout

A new larger roundabout is proposed at the same location as the current North Tyneside General Hospital access. This will provide adequate deflection for eastbound traffic and allow vehicles to exit the Hospital and the Murton Gap site concurrently; accommodate buses turning into Murton Gap; and retain high standard cyclist crossing facilities.



Rake Lane / Site Access Roundabout Proposed Layout (Capita, NTC Local Plan, Transport Impacts Report, May 2016)

New York Road Access

The New York Road / Murton Lane access is currently proposed to be a simple priority crossroads with priority altered to lead Westminster Avenue directly into the site. However, modelling of the proposed arrangements has shown that operation of the junction is satisfactory for either priority arrangement.

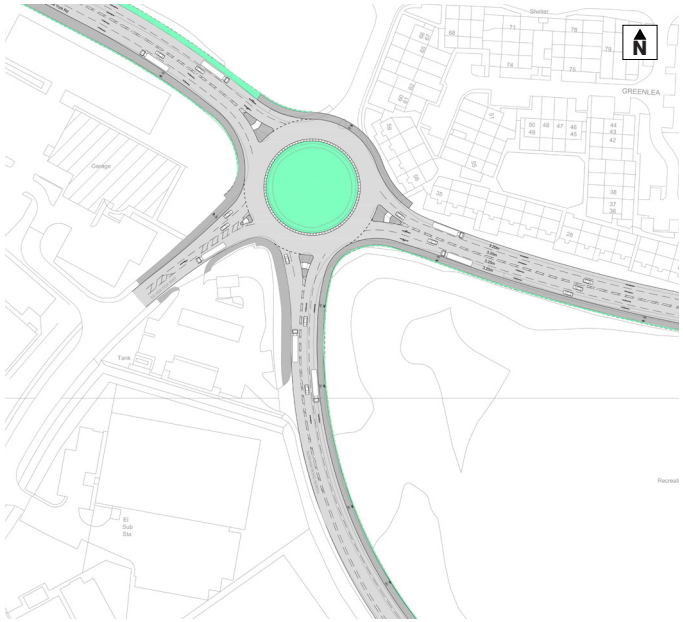
The design will incorporate crossing facilities and widened shared surface footway / cycleway running into the site.

New York Road / Westminster Avenue Proposed Layout (Capita, NTC Local Plan, Transport Impacts Report, May 2016)

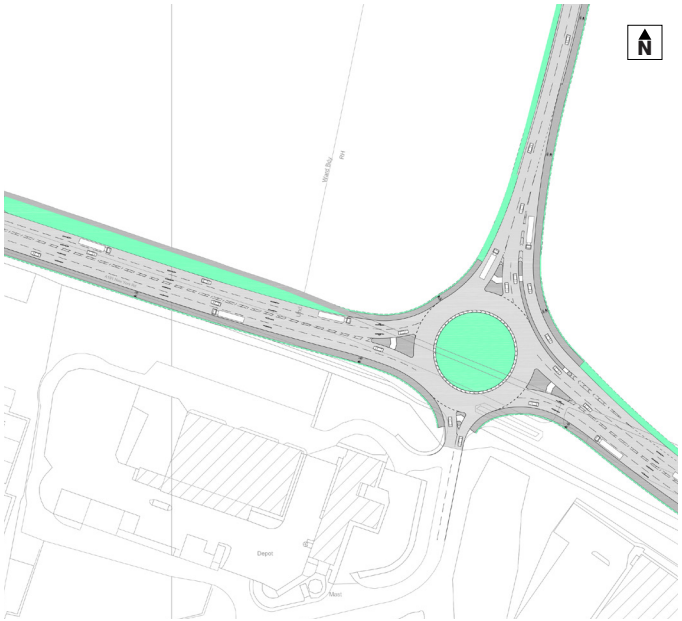
A191 / Norham Road Roundabout and A191 New York Road / Site Access Roundabout

The A191 New York Road access will serve as the main entrance to the Murton Gap site and forms the strategic link to the A186 at the north of the site. As such, the link road needs to provide a high standard highway arrangement to encourage traffic to transfer to the link road from the A192 Seatonville Road and Park Lane routes.

Improvements are required at the A191 / Norham Road roundabout in order to improve operational capacity to accommodate forecast traffic. These include, widening the A191 approaches to the junction to provide two lanes on entry and exit allowing two ahead lanes in both directions.



A191 / Norham Road Roundabout Proposed Layout (Capita, NTC Local Plan, Transport Impacts Report, May 2016)

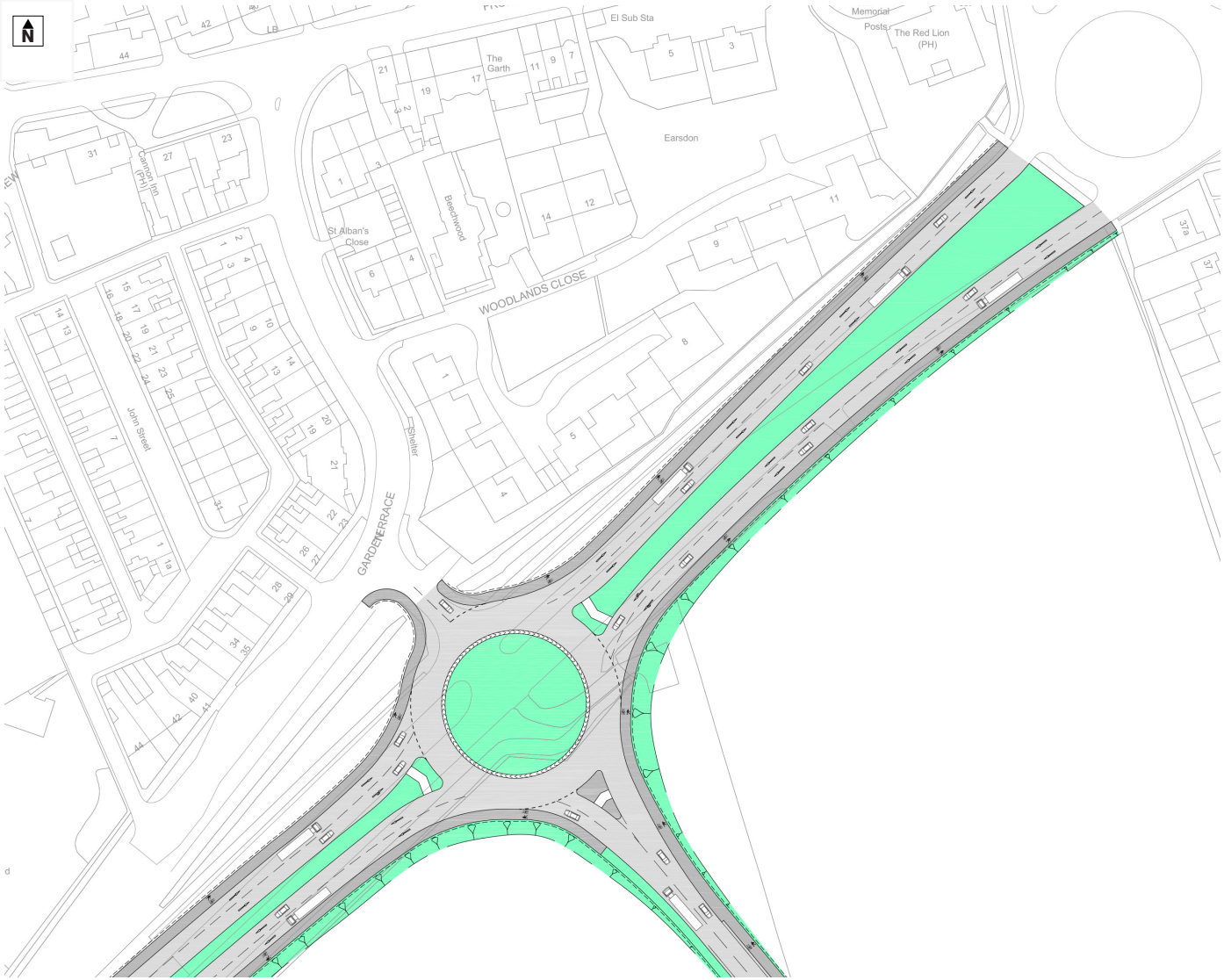


A191 New York Road / Site Access Roundabout Proposed Layout (Capita, NTC Local Plan, Transport Impacts Report, May 2016)

A186 Link Road North Access

The proposed A186 Earsdon Road/Link Road (North) access has been designed to be optimally located to improve the road safety of traffic entering/exiting the site, traffic entering/exiting Earsdon Village, as well as being a sufficient distance away from the existing “Red Lion” roundabout that any queuing would not interact between the two junctions.

The option places the access junction opposite the existing Garden Terrace access into Earsdon. This approach minimises land take and ensures adequate deflection for eastbound A186 traffic. Other potential locations for the access have also been identified by the Murton Consortium and subject to testing, may provide appropriate alternative access arrangements.



A186 / Site Access Roundabout Proposed Layout (Capita, NTC Local Plan, Transport Impacts Report, May 2016)

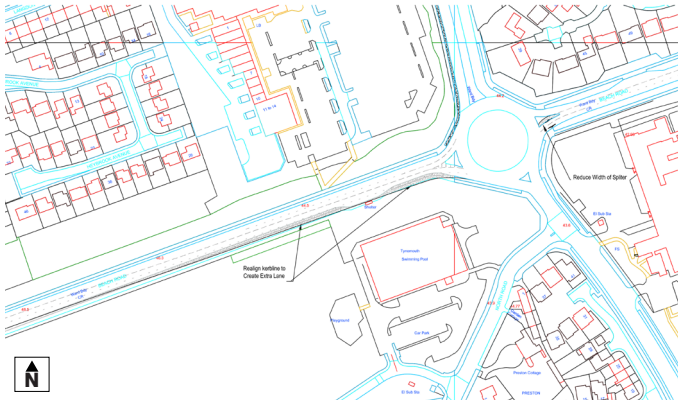
Off Site Improvements

Foxhunters & Tynemouth Pool Roundabouts

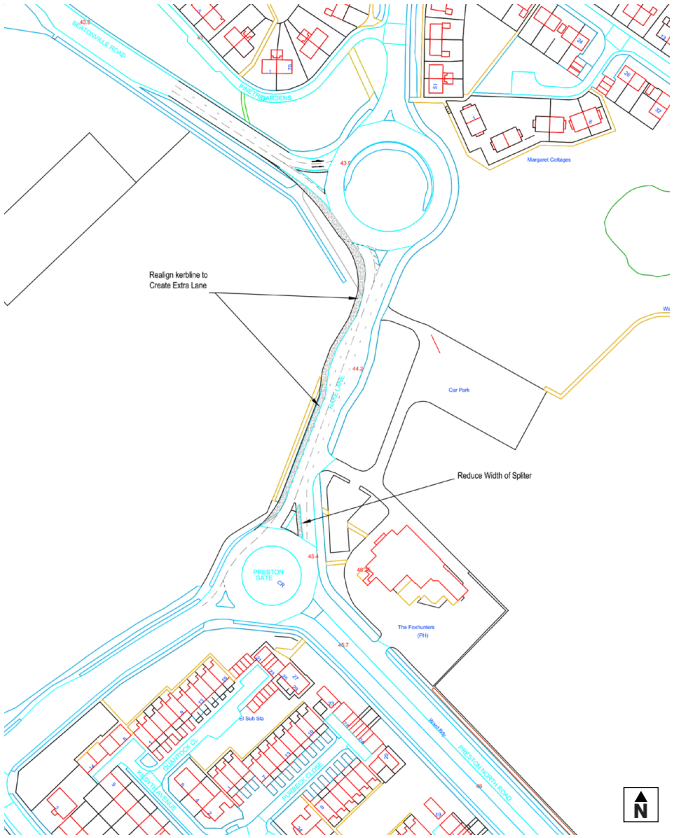
The route is especially sensitive to traffic increase as the Foxhunters roundabouts currently operate over capacity and the Tynemouth Pool roundabout is close to capacity.

Improvements at these junctions may include:

- Localised widening of Beach Road on the westbound exit. This will provide an additional westbound traffic lane to increase capacity.
- Minor alterations to the westbound approach to the roundabout. This involves the reduction of the splitter island.
- Localised widening and traffic signals at the Foxhunters interchange in Whitley Bay, the junction of Rake lane / Hillheads road (A192) and Seatonville road /Preston road (A192).
- It is currently anticipated that the development will need to contribute towards works at Tynemouth Pool but not Foxhunters, this being subject to the number of houses accessible onto Rake Lane (currently limited to 250 units).



Beach Road (Tynemouth Pool) Roundabout Proposed Highway Improvements (Capita, NTC Local Plan, Transport Impacts Report, May 2016)



A191 / A192 (Foxhunters) Roundabouts Proposed Highway Improvements (Capita, NTC Local Plan, Transport Impacts Report, May 2016)

A191 Park Lane / Norham Road

The A191 New York Road between Park Lane and the Norham Road roundabout will require widening to accommodate development traffic and redistributed link road traffic. These works would complement the new A191 New York Site Access.

Norham Road / Westminster Avenue

As a consequence of the Westminster Avenue/ New York Road access, the junction of Norham Road / Westminster Avenue will require minor alterations to provide additional capacity. The improvements proposed are the provision of a right turn pocket into Westminster Avenue and extending the flare length on the Westminster Avenue approach.

Local Highway Network Requirements Conclusion

Modelling results of the improved junctions for the scenario of the full occupation of the site indicate that the impacts of housing growth are effectively mitigated.

2.3.4.3 Strategic Road Network Potential Requirements

In addition to the local network highway improvements, it is expected highway impact will have to be considered on the following SRN junctions:

- A19 Seaton Burn.
- A19 Moor Farm.
- A19 Killingworth Interchange.
- A19 Holystone.
- A19 Silverlink.
- A19 Howdon Interchange.

It is identified that further analysis will need to be undertaken in order to assess the capacity of the majority of these junctions and the appropriateness and timing of proposed mitigation. It is identified that proposed arrangements for the A19 Silverlink Interchange are assumed to accommodate the predicted overall North Tyneside growth.

Strategic Road Network Potential Requirements Conclusions

The strategic road network impacts of the Local Plan only require physical works to be carried out at the A19 Killingworth Interchange (subject to low trip rates being realised). The remaining impacts upon the strategic road network are the operation of the slip roads which will remain the responsibility of Highways England. Highways England have agreed with the outcomes of the modelling and will work with the Council and landowners to agree the delivery of the A19 Killingworth Interchange.

Work remains ongoing in partnership with Highways England regarding future modelling. The primary identified impact arising from development at Murton is upon the Holystone A191 / A19(T) junction. With a major scheme already committed to maximise capacity of this junction, when accompanied by a high level of sustainable transport options, the Murton Gap site does not result in a further need for mitigation associated with SRN junctions.

2.3.4.4 Public Transport

Promotion of sustainable transport refers to the provision of a new bus route and Metro station to service the site. An overview of the proposed bus route and Metro stations is shown in the figure opposite.

Proposed Bus Route and Location of Proposed Metro Stations (Capita, NTC Local Plan, Public Transport Demand Scoping Study, May 2016)

Key employment site

Metro Station

Bus route

Bus

A new high frequency bus route to serve the site is proposed. The bus route will provide access to employment sites at Quorum and Cobalt Business Parks, the Killingworth Moor site and to existing community facilities in the vicinity.

The bus service operational costs will be subsidised by developers until they are financially viable, with appropriate back stop dates agreed.

It is expected that the proposed services will reduce the number of trips when combined with Metro. Additional local services are to be diverted into the site where possible.

Metro

A new Metro station is proposed to be located to the north of the site, between Shiremoor and West Monkseaton Metro stations, featuring pedestrian and cyclist facilities, including secure cycle parking and storage facilities and ramp access to platforms. Pedestrian and cycling links will provide direct and convenient access to the station. Car parking facilities are also proposed to be provided at the station in order to minimise on-street highway parking at the stations.

The proposed new station generates significant demand primarily from commuting trips.

A number of quantifiable benefits related to the development of the new Metro station have been identified as follows:

- Reduced off-site highway impacts -local (borough wide) and regional (arterial routes into Newcastle).
- Health benefits associated with walking / cycling to the Metro station.
- Carbon reduction benefits.

Nexus' research highlights the importance of the timing for delivering new Metro stations on the network. The earlier the provision of a new station is made the larger the mode shift toward this mode. It is easier to convert/persuade users to utilise the Metro if it is there prior to them relocating to the new housing area. The later the Metro is provided the more established existing residents will be in terms of their travel choices/mode.

The practicality of when to deliver a new Metro station at Murton is linked to the proposed/anticipated phasing of the sites. As identified in the previous chapter there are existing Metro stations adjacent to the sites that could part serve the site. If initial phases were within reasonable distance of these existing stations, Shiremoor, West Monkseaton then delivery for the new station could be deferred. In conjunction with this would be the prerequisite for sufficient internal site infrastructure to provide access to the proposed new stations. At Murton this would be linked to the delivery of the main link road.

View of West Monkseaton Metro station (Arup)

Public Transport Conclusions

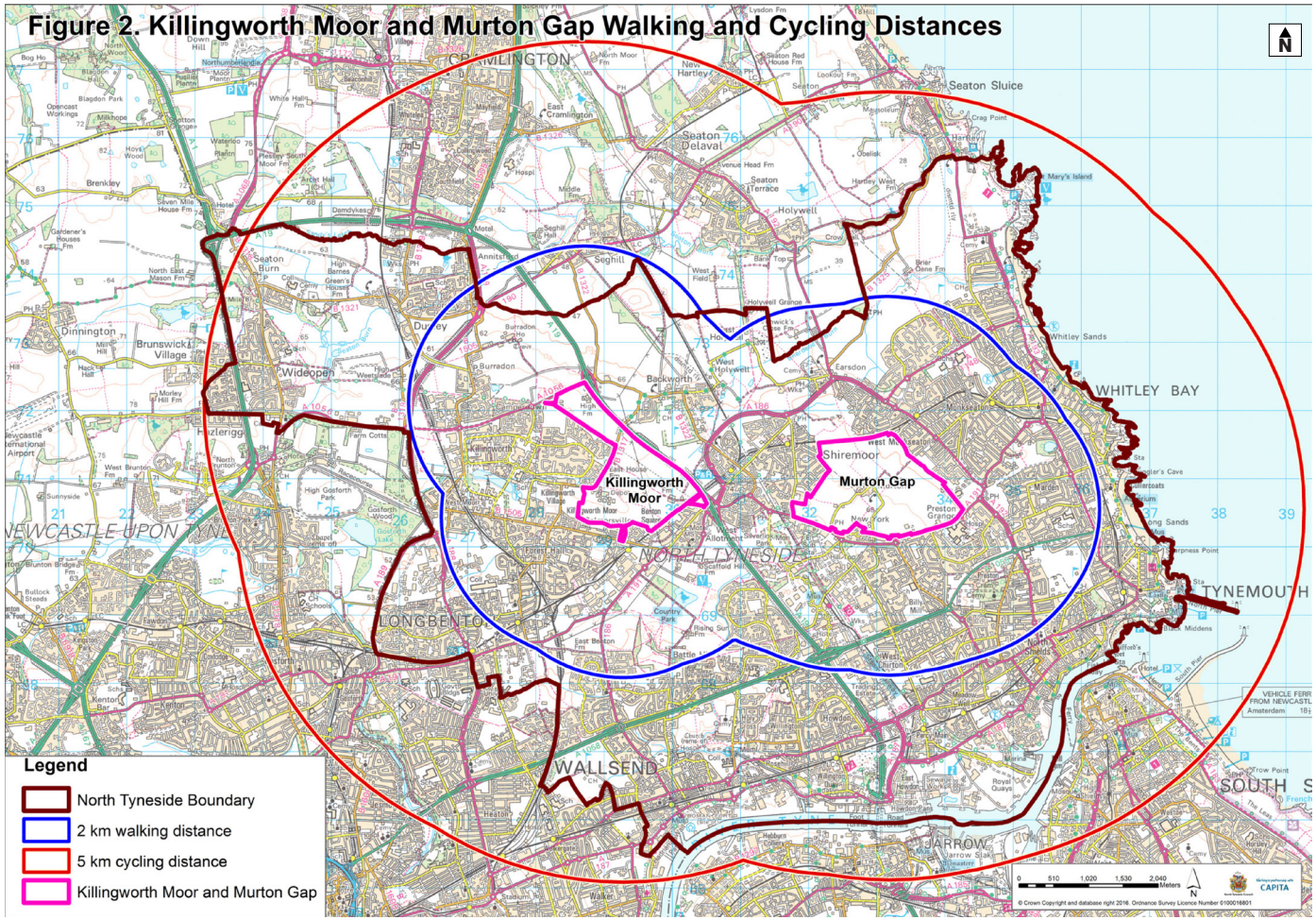
The identified provision that is being sought as part of the proposals and this Development Framework are key to achieving the policy objectives set out in the Local Plan to prioritise sustainable transport modes. They are also identified as essential to enable the reduction in vehicle trip-rates required to ensure the impacts of development upon the local and strategic road network are mitigated by the proposed schemes identified.

2.3.4.5 Cycling and Walking

A comprehensive cycling and walking network will be provided (alongside the public transport strategies) which will include improvements to existing routes and the provision of new facilities and infrastructure. The new cycling and walking network will provide linkages within the site, to the proposed bus stops and Metro station, and will additionally enable direct access to existing communities, the Killingworth Moor site, public transport facilities and key local amenities. The proposed routes will form the missing links in the existing Strategic Cycle Network.

It is proposed that the cycling / walking facilities will be structured in a 3-tier system, as follows:

- 1st tier - Principle Highway - Strategic pedestrian / cycle route adjacent to main highway.
- 2nd tier - Secondary distributor - Secondary pedestrian / cycle routes adjacent to distributor link roads.
- 3rd tier - Residential streets - Shared space treatment with all modes at the same grade connected via direct cycling and walking routes permeating through the site with natural surveillance from residential frontages.



Walking and Cycling Distances (Capita, North Tyneside Local Plan Strategic Sites, Pedestrian / Cycling Study, May 2016)

Cycling and walking conclusions

The proposed network of cycling and walking infrastructure provides a framework upon which high quality connections both within the site and outside can be made. These connections align closely with the wider road and public transport requirements and contribute to the Local Plan policy objectives to promote healthy lifestyles and indicative Concept Plan.

2.3.4.6 Constraints

The key transport constraints are summarised as follows:

- Existing traffic pressures on certain routes and junctions in the wider site area.
- Limited existing walking / cycling access to the site.
- No permeable public transport services through the site.

2.3.4.7 Next Steps

In order to confirm the transport strategy for the site it is proposed that:

- A business case for the proposed Metro station to be undertaken by Nexus.
- Discussions with bus operators/Nexus are undertaken to develop the bus strategy for the site.
- A Transport Assessment and Residential Travel Plan strategy is agreed with the Council and Highways England.

Combining sustainable transport with leisure activities

2.3.5 Geotechnical

The existing evidence for geotechnical conditions of the sites includes the following:

- Geo-Environmental Desk Studies.
- Coal Authority Mine Abandonment Report and Plans.
- Groundsure reports.
- Borehole logs (BH) from the British Geological Society (BGS) and Terraconsult.

The key findings from these documents have been summarised below:

- In general, the development risk associated with coal mining related hazards is high across much of site given the extensive historical mining use of the site.
- Murton Gap is in the likely zone of influence from workings in 5 seams of coal at shallow depth to 160m, the last of which was worked in 1964.
- 18 mine entries are recorded on or within 20m of the site with one having been filled to unknown specification.
- There are a number of coal subcrops underlying the site with the potential for further unrecorded works to be present underlying the site.
- Deep foundations, or ground improvement would be likely to be required on the boundary of opencast mine and possibly within the boundary, dependent on backfill quality.
- The site is within the boundary of a past opencast mine.
- The mine abandonment plans for the Yard seam detail underground mining beneath the majority of the site. The south of the site is labelled as having 'old workings' without any details of worked areas.
- It is unlikely that the recorded historical land uses of the site and surrounding area will have generated significant or widespread geoenvironmental contamination, though localised risks may be present.
- In consideration of the indicated site geology and near-surface ground conditions, it is unlikely that on-site soakaways will be feasible to attenuate surface water drainage.
- An Agricultural Land Classification assessment has also been carried out. This study concluded that a classification of 3b is appropriate for the Murton Gap site. This classifies the site as being of moderate quality agricultural land capable of producing moderate yields of a narrow range of crops or lower yields of a wider range of crops.

2.3.5.1 Development Guidance

- Phase II intrusive investigations are recommended to establish the existing ground conditions and to obtain development-specific geotechnical design parameters.
- A borehole investigation is recommended to determine the presence, depth and extent of shallow coal seams and workings beneath the site.
- Given the cohesive subsoils and in the absence of adequate testing, a low California Bearing Ratio value should be assumed for the design of new road pavement at this stage.
- The investigation strategy should also include an "environmental" investigation designed to interrogate the Phase 1 Conceptual Site Model, establish the status of the identified Source-Pathway-Receptor linkages and thereby reduced uncertainties in the Preliminary Risk Assessment.
- Investigation should be undertaken in line with BS5930 (2015) and BS10175 (2011) with the aim of determining the ground conditions, allowing sampling of soils for geotechnical and environmental testing. Such investigations will determine the need for mitigation against aggressive ground, establish the suitability of materials for re-use and characterise 'Waste' for future disposal.

2.3.5.2 Constraints

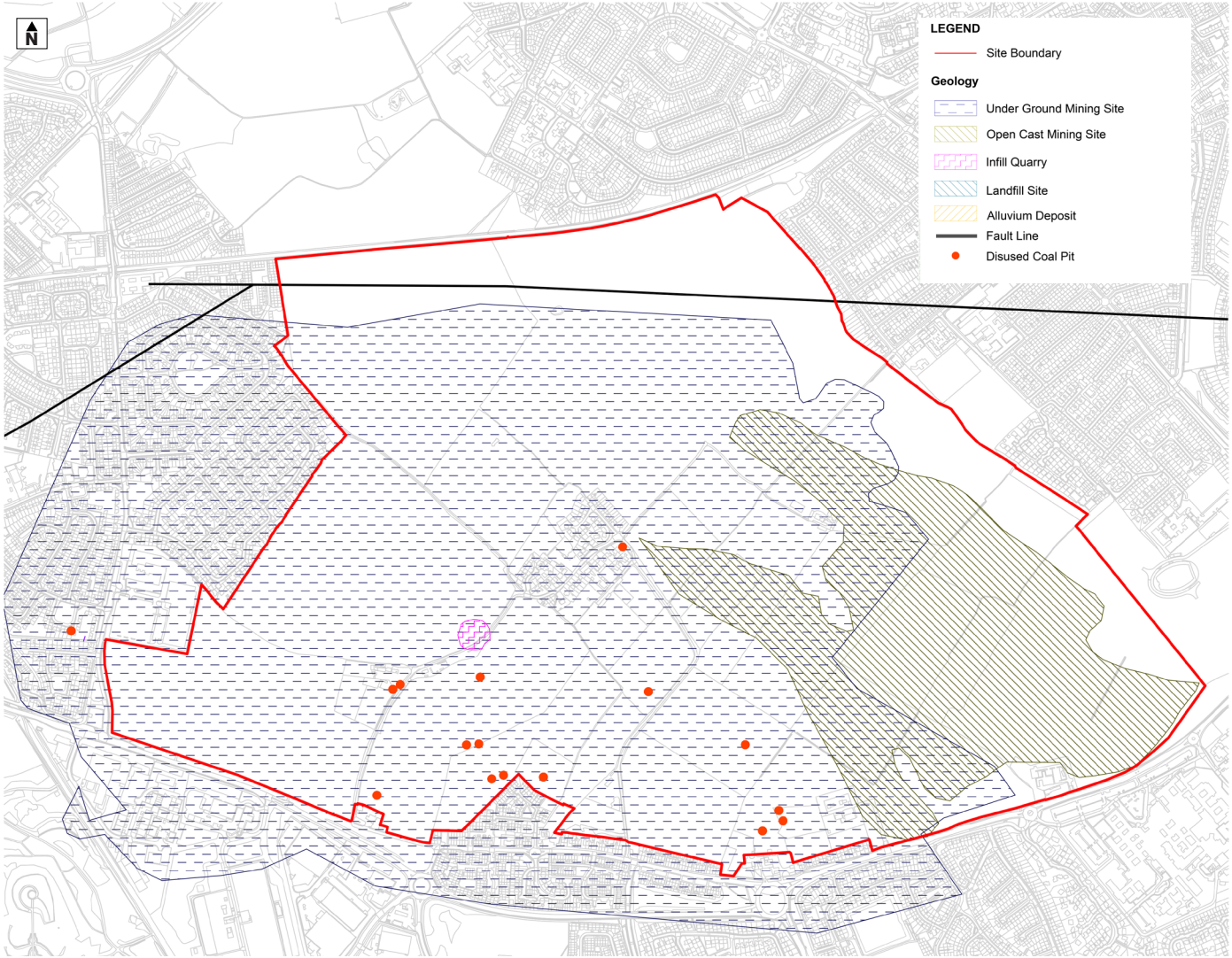
The main geological constraints are shown in the figure opposite.

In summary the key geological constraints are as follows:

- Historical underground mining areas.
- Open cast mining areas.
- Infill quarry area.
- Disused coal pits.
- Geological fault line.

Geotechnical analysis conclusions

Whilst further works and investigations are required to ensure a full understanding of the constraints and ground conditions affecting the site, at this stage the analysis indicates that the existing Geotechnical evidence does not provide a fundamental constraint to housing delivery and the objectives of the Framework Plan for Murton Gap.



Geotechnical Constraints Plan (Arup, based on NTC information)

2.3.6 Drainage and Flood Risk

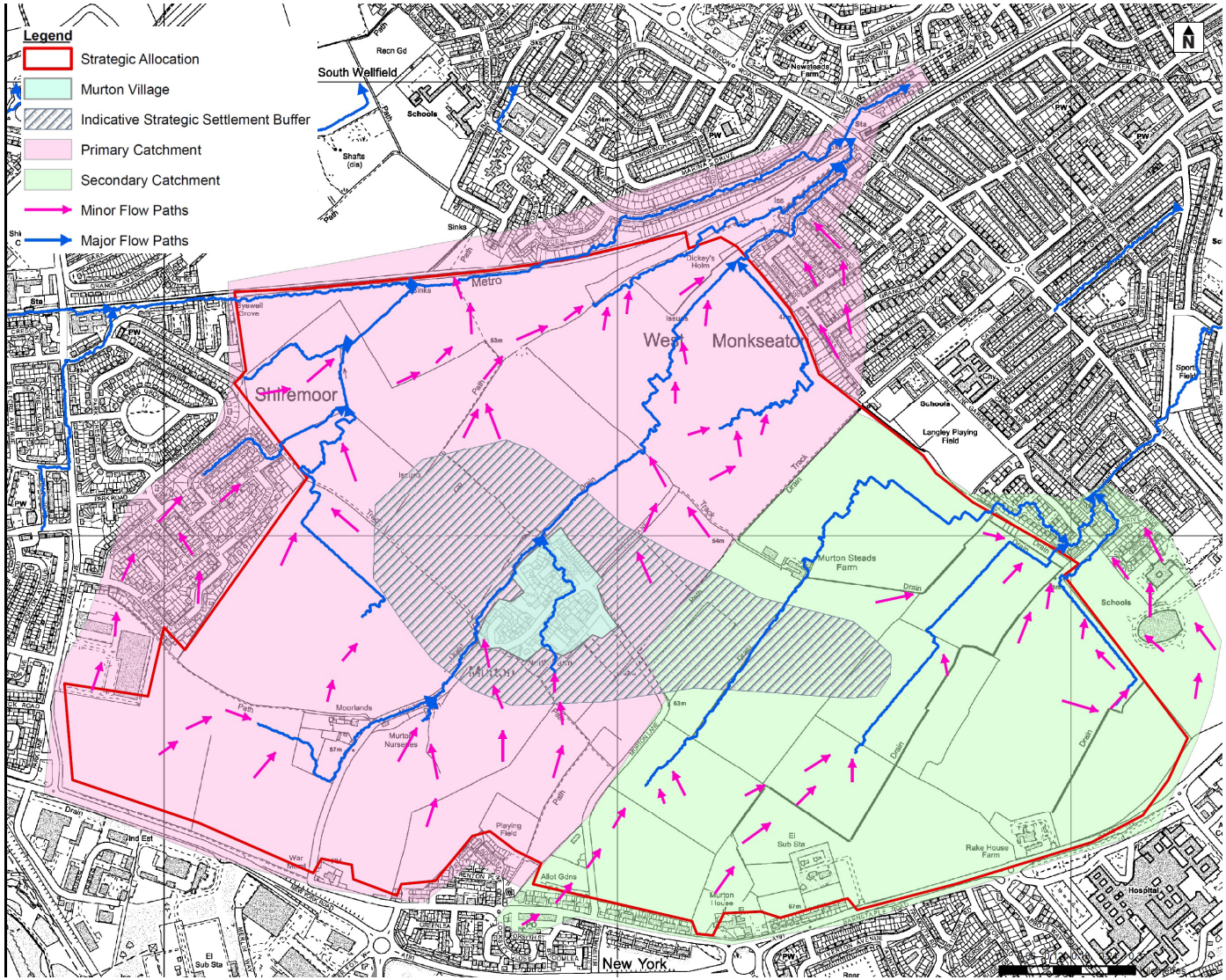
The existing evidence base for drainage and flood risk includes the following documentation:

- Murton Gap & Killingworth Moor - Infrastructure Delivery Plan.
- Murton Gap – Flood Risk Assessment.
- NTC Strategic Flood Risk Assessment (SFRA).
- North Tyneside Surface Water Management Plan (SWMP).
- North Tyneside Local Plan Consultation Draft - Draft Flooding Sequential Test.

Example of SUDS scheme (Arup)

The key findings from these documents have been summarised below.

- Murton Gap generally slopes from 72m AOD in the south west corner to 47m AOD in the north east corner. There are two main catchments areas on the existing site, with five associated primary flow paths.
- The entire Murton site resides within Flood Zone 1 (FZ1) meaning a less than 1 in 1000 year chance of flooding from fluvial or tidal sources.
- The Murton Gap site, whilst not at significant risk of surface water flooding, is upstream of areas of higher risk of flooding which is exacerbated by discharge from the site. Thus an opportunity exists to lower the risk of flooding downstream through management of onsite flows.
- Howdon Sewage Treatment Plant receives a large amount of surface water via combined sewer network currently leaving 7-8 years capacity available without invention of the surface water management status quo. Thus the importance of SUDS driven drainage strategy is emphasised.



Indicative Flow Paths Map-FRA Plan (Capita, Broad Scale FRA and Drainage Strategy)

2.3.6.1 Development Guidance

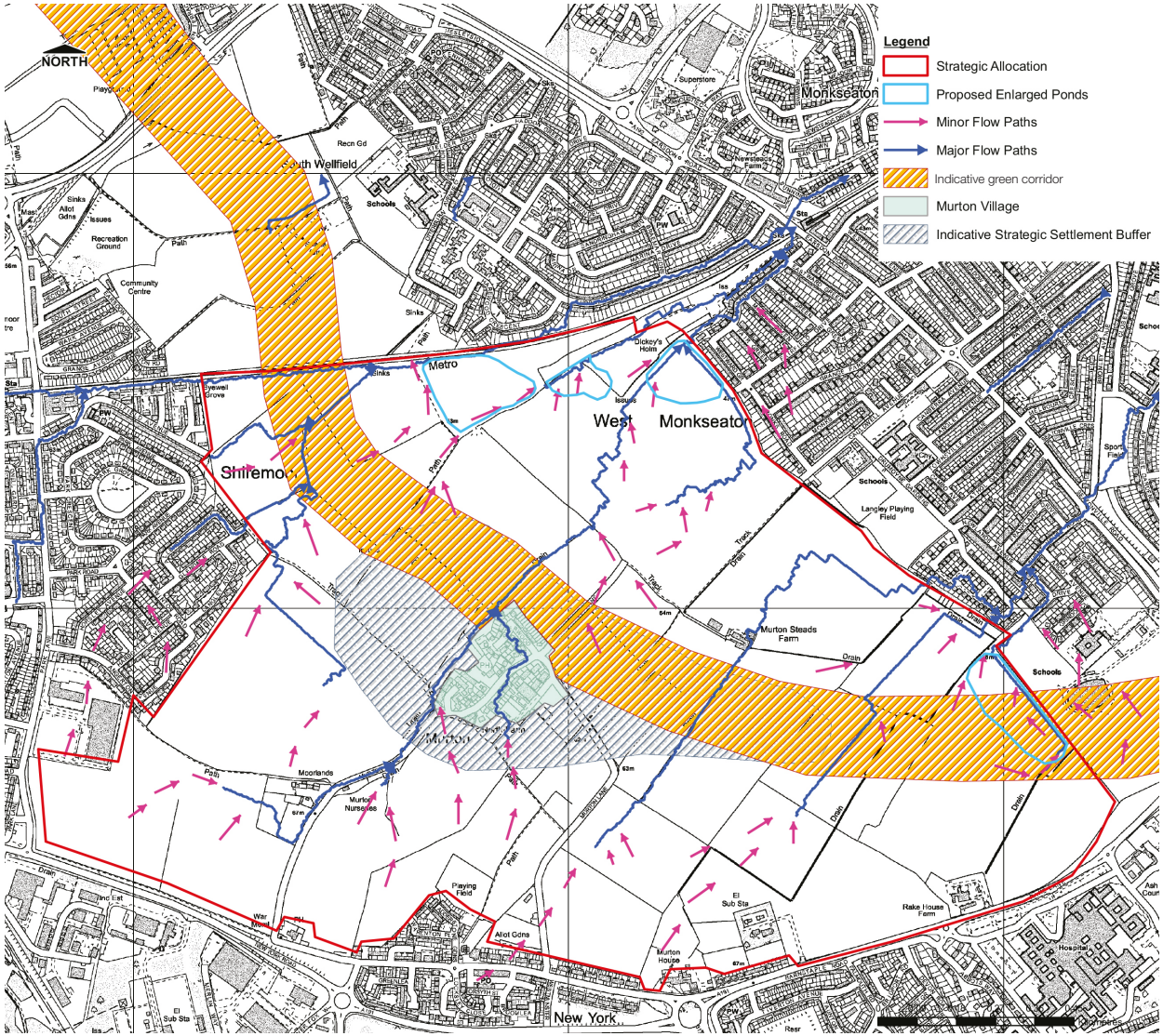
- Surface water from the site may contribute to the wider catchment surface water flooding issues and hence the development at Murton Gap should be SUDS orientated in so far as is reasonably practicable.
- The opportunity for infiltration SUDS should be assessed and areas of high and low permeability established at an early stage.
- The proposed drainage strategy will need to take account for the existing flow routes across the site, and how these would be altered by any proposals.
- Storage requirements are to be based on an allowable discharge of 50% green field run off rates as per the Capita FRA.
- Opportunity should be sought for SUDS schemes to positively benefit biodiversity, landscaping and recreational opportunities.
- The impact of on existing site drainage infrastructure by development of the site should be established and considered as the master planning progresses.
- In proposing a master plan for the site, it is important to demonstrate a sound understanding of the potential flooding mechanisms (fluvial, tidal, surcharge) considering the risks posed by each and mitigating as appropriate.
- In proposing a drainage strategy developers should seek betterment over the existing Greenfield run off discharge and demonstrate an understanding of the wider context in terms of existing and proposed drainage infrastructure, including Howden Sewage Treatment Works and SUDS.
- Understanding of the existing groundwater regime should be demonstrated, including mitigation of issues pertaining to any perched groundwater or a high water table.
- All surface water drainage should be designed in accordance with ‘Sewers for Adoption’ guidance.
- An allowance of 40% for climate change should be accounted for in accordance with the National Planning Policy Framework and supporting guidance, based on an assumed development design life of 100 years.
- All surface water storage, up to and including the 1 in 30 year storm event, should be located below ground.
- Storage for storm events between the 1 in 30 year and the 1 in 100 year should be retained on site either below or above ground. Any above ground storage should be routed to safe and sacrificial areas, away from buildings.

2.3.6.2 Constraints

The constraints for the Murton site are illustrated in the figure opposite. In summary the key issue is the requirement to deliver an integrated SUDS driven strategy, given existing ground conditions and the permitted discharge of 50% Greenfield run-off rates.

Drainage and Flood Risk Conclusions

The range of evidence already available and works underway illustrate that the site presents a complex series of issues regarding surface drainage. The potential to deliver an integrated drainage management strategy for the site can complement the objectives of the Framework Plan, and support delivery of attractive open spaces and areas for biodiversity and recreation.



Indicative SUDS Layout (Capita, Broad Scale FRA and Drainage Strategy)

2.3.7 Existing Utilities

The existing evidence for utilities is provided from the following documents.

- Infrastructure Development Guidelines (Capita).
- Existing Utility Assessment (Capita).

The key findings from these documents are as follows:

- The Murton site identifies a water mains for both supply and distribution and a combined sewer within the site.
- Murton Gap has overhead power distribution lines identified as crossing the site.
- Northern Power Grid have proposed a servicing strategy for the site and advised they will be able to supply the site.
- Northern Gas Network have advised that sufficient capacity exists to support the estimated demand of the development site.
- Virgin Media and BT Openreach are the two broadband providers for North Tyneside. Initial contact with them suggests no issues in providing required connections.

2.3.7.1 Development Guidance

- Due to the prohibitive cost and anticipated lead times it is envisaged the high voltage overhead cabling crossing the site will not be diverted and must remain live at all times
- Access to all existing infrastructure onsite must be provided and the master planning of the site should reflect this need.
- Once master planning and delivery phasing is sufficiently developed, revised load demands should be submitted to the statutory undertakers to confirm their ability to supply the site and establish the cost of any necessary diversions and network reinforcements.
- Easements will be required to be provided to any non-privately owned infrastructure existing within the site boundary.
- Master planning proposals which rely on agreements with Statutory Undertakers
  (for example, potential build over agreements with NWL) should be discussed with the relevant parties at an early stage in the design development.

View from Murton village looking east.

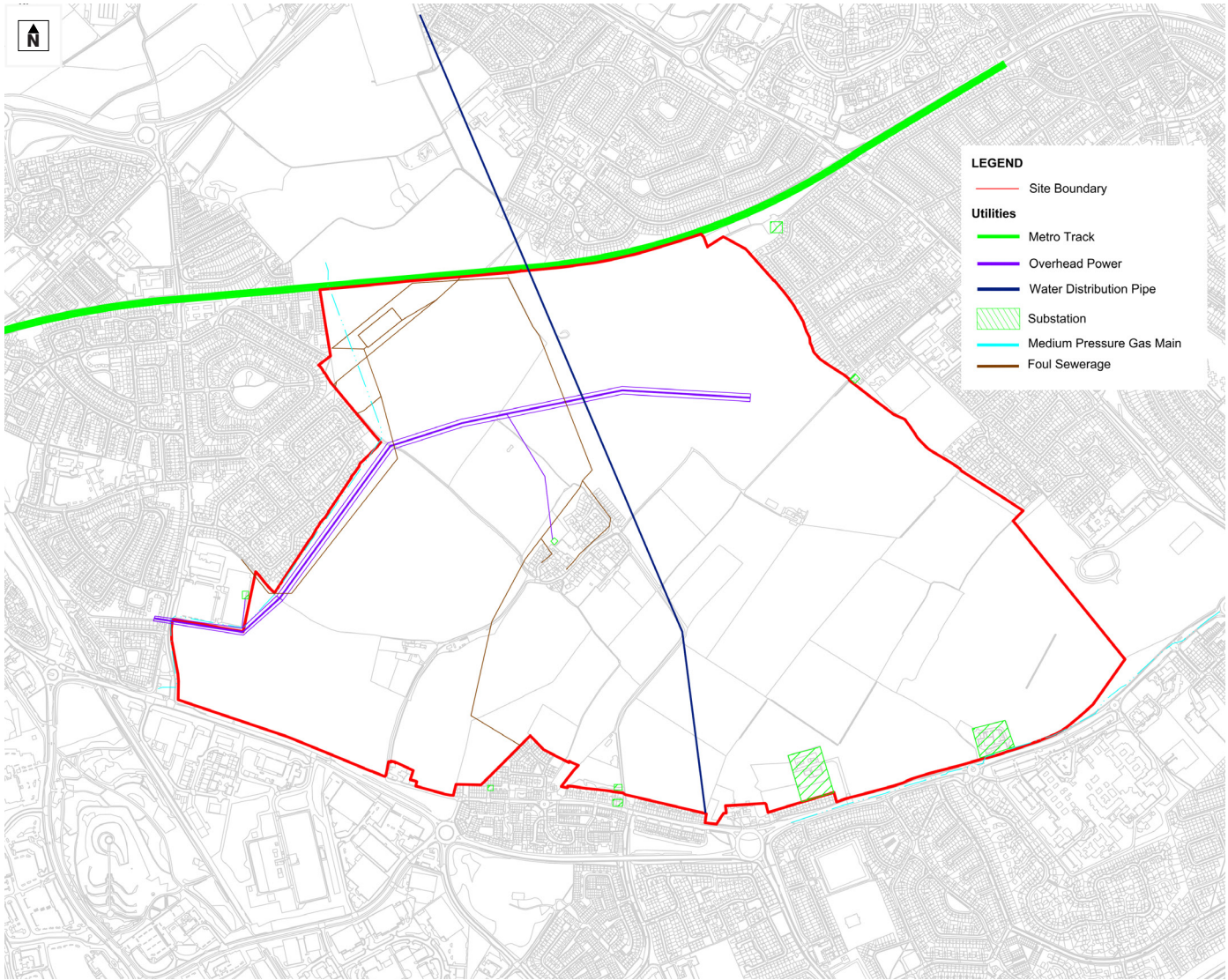
2.3.7.2 Constraints

The constraints for the site are illustrated on the figure opposite. Due to the largely undeveloped nature of the site, limited utilities exist within the Murton Gap site boundary. The overhead power lines are seen as the only major constraint to the development in terms of exiting utilities.

Further constraints exist in the form of buried services, though these are limited and it is expected providing diversions or granting easements will not pose a major constraint to development.

Utilities Conclusions

As stated, existing utilities will not pose a constraint to the deliverability of the site and objectives of the Framework Plan. Further investigation and understanding of the specific infrastructure enhancements necessary to service the site will be required as more detailed proposals are developed but are not expected to pose a significant risk to delivery at the site.



Existing Utilities Constraints Plan (Arup, based on NTC information)

2.3.8 Ecology

The existing evidence on ecology is provided by the 'Murton Gap – Extended Phase 1 Habitat Survey' report, prepared by BSG ecology.

The key findings from this document have been summarised below.

- Four designated sites are within 6km of the site (three Sites of Special Scientific Interest (SSSI) and one Special Protection Area /Ramsar site) and three Local Nature Reserves (LNR) within 3km.
- There are six Local Wildlife Sites (LWS) and seven Sites of Local Conservation Interest (SLCI) located within 2km of the development.
- Habitats are arable farmland, improved grassland, poorly maintained hedgerows, species poor semi-improved grassland and tall ruderal habitats.
- A small copse is located in the northern section.
- No water bodies have been identified.
- No badger setts have been identified but evidence of foraging exists.
- Adverse impacts to bats and breeding birds (protected species such as lapwing or skylark) are likely if hedgerows are removed.
- Murton Stead Farm has bat roost potential.
- No otter or water voles have been found to be present on site.

2.3.8.1 Development Guidance

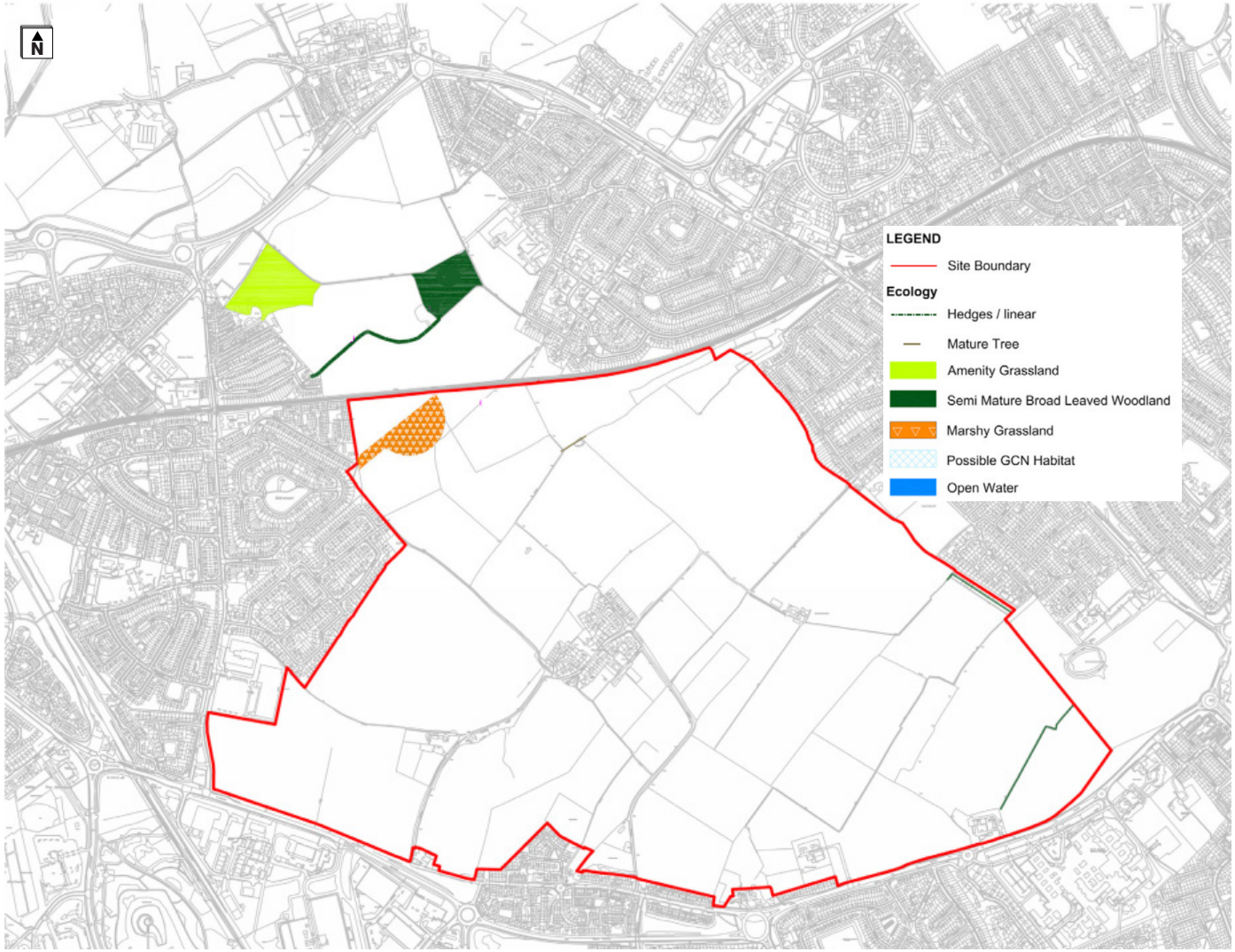
- Where possible, existing pond features and their surrounding habitats should be retained as part of the wider drainage strategy.
- In so far as possible, hedgerows should be maintained and protected during construction and operation of the development. Where hedgerow habitat is lost during development of the site, opportunities should be identified to replace with similar or more species diverse hedgerows adjacent to proposed right-of-ways.
- Any potentially significant impacts on ecology throughout the construction and operation of the development should be identified and a mitigation strategy put in place.
- Opportunities should be identified where landscaping, recreation areas and SUDS ponds can enhance the biodiversity or replace habitats impacted by the development of the site.
- Wildlife corridors should be incorporated across the site to facilitate habitat connectivity and safe movement for notable species through the site.

2.3.8.2 Constraints

The constraints for the site are illustrated on the figure opposite. Within the site, the main existing ecological assets are hedgerows. These provide wildlife and open space corridors, as well as containing individual mature trees.

The main ecology site constraints are summarised as follows:

- Marshland habitat area to the north west boundary just south of the Metro line.
- Badger habitat to the northern boundary near the Metro line.
- Hedgerows to the eastern and southern boundary.
- Identification of an alternative site for ecological mitigation for Golden Plover required as a result of a legal agreement attached to development at Station Road, Wallsend.
- North of the red line boundary two habitats one broadleaf woodland and another amenity grassland.



Ecology Constraints Plan (Arup, based on NTC information)

Ecology conclusions

The existing evidence demonstrates that no designations affect the site. However, proximity to the international designated Special Protection Area at the coast has been identified through the Habitat Regulation Assessment as a potential issue. This identifies increased population within 6km of the SPA and consequently increased visitors and dog walkers as a potential source of disturbance for the coast that would require mitigation. This requirement and the overall assessment of biodiversity value on the site do not pose a significant constraint to delivery of the site, assuming appropriate measures are taken to safeguard and enhance those areas of biodiversity that exist. This would include responding to the proposed Wildlife Corridor through the centre of the site, maintaining connectivity between the countryside to the north and the heart of the North Tyneside urban area to the south.

2.3.9 Archaeology and Heritage

The existing evidence on archaeology and heritage is provided by:

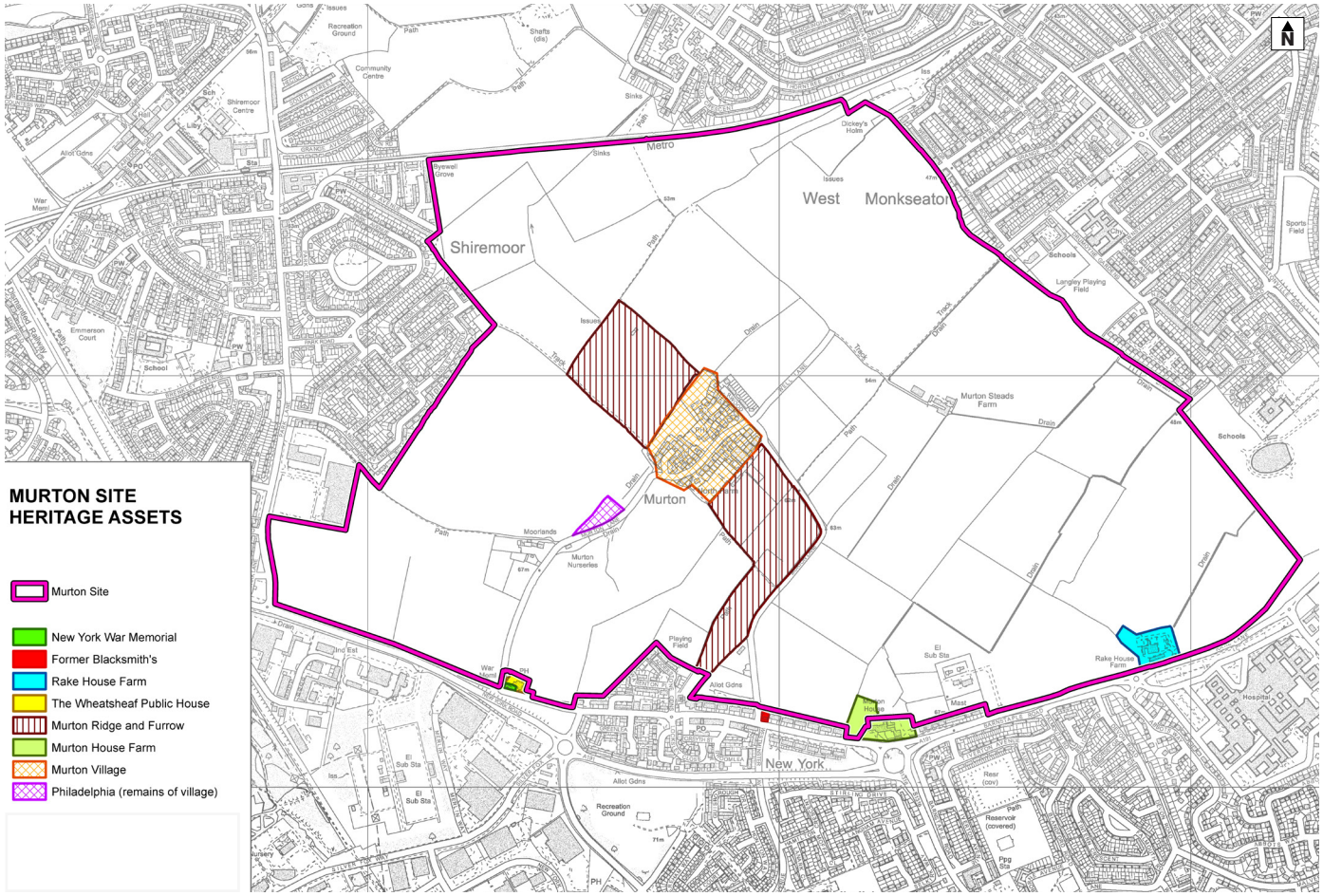
- Murton Gap Archaeological Desk-Based Study (Durham University Archaeological Services).
- Murton Gap Draft Heritage Statement (Capita).

The key findings from the report are summarised below:

- There are no Scheduled Ancient Monuments on or in the near vicinity of the site.
- No archaeological deposits have been identified which require preservation in-situ.
- Rake House Farm is the only protected building on the site; several statutorily protected buildings are present in its vicinity. The structures on site are of 19th and 20th-century date.
- There is a cropmark of a possible Iron Age settlement in the north-east corner of the proposed development area, and further evidence for prehistoric activity in the surrounding area.
- The area includes the medieval village of Murton and its surrounds. It is probable that most of the area was utilised in the medieval and post-medieval periods as agricultural land. Evidence relating to this, in the form of ridge and furrow cultivation and field boundaries, survives in places.
- A large area in the south-east corner of the site was open-cast mined in 1948/9. A smaller area to its west formed the surface works to an underground mine of the 1950s. In addition, an area in the north-west corner of the site has recently been developed for an underground sewerage infrastructure. This recent activity will have removed any former archaeological deposits from these areas.

2.3.9.1 Development Guidance

- Development over the majority of the site has the potential to remove known and unknown archaeological resources through construction activities. In areas of previous open-cast mining activity such resources will have already been removed and it is unlikely further features of importance will exist.
- It is recommended that the extent and significance of any archaeological resources which may exist on the site are evaluated through geophysical survey in those areas that have not been disturbed or developed.
- A topographical survey is recommended of all visible historical earthworks to assess their extent and significance.
- The risks associated with damaging previously undiscovered archaeological assets and heritage features could be mitigated by limiting development to areas identified within the evidence base as of low archaeological or heritage significance.



Heritage Assets Plan (Capita, Murton Gap Strategic Development Site, Heritage Statement, July 2015)

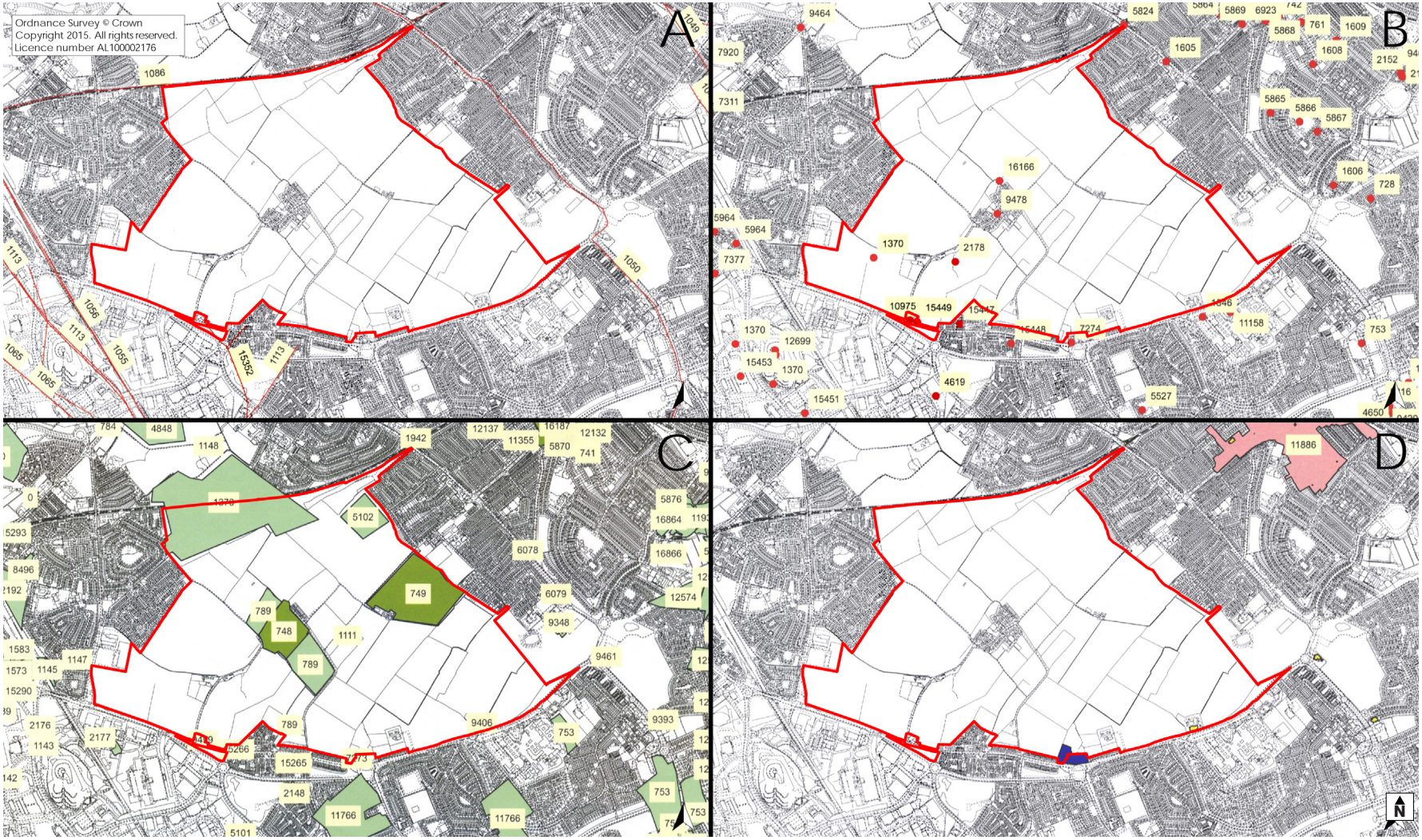
2.3.9.2 Constraints

The constraints for the site are illustrated on the figure opposite. The archaeological and heritage constraints on and around the site are summarised as follows:

- Murton Village and surrounding fields.
- Rake House Farm.
- The setting of Murton Farmhouse.
- The setting of New York War Memorial.
- The setting of the Wheatsheaf Public House.
- Possible remains of Iron Age and Medieval settlements.

Heritage and Archaeology Conclusions

Further work will be required ahead of development, particularly regarding understanding of archaeological constraints. However, overall the Framework Plan can be implemented whilst respecting and gaining value for the development from the heritage assets discussed.



Archaeology and Heritage Constraints Plan (North Tyneside Council)

2.4 Development Framework

2.4.1 Objectives and Concept

The following six objectives underpin the vision in the draft Local Plan for a: *"walkable, connected village neighbourhoods, within a green, natural environment"*.

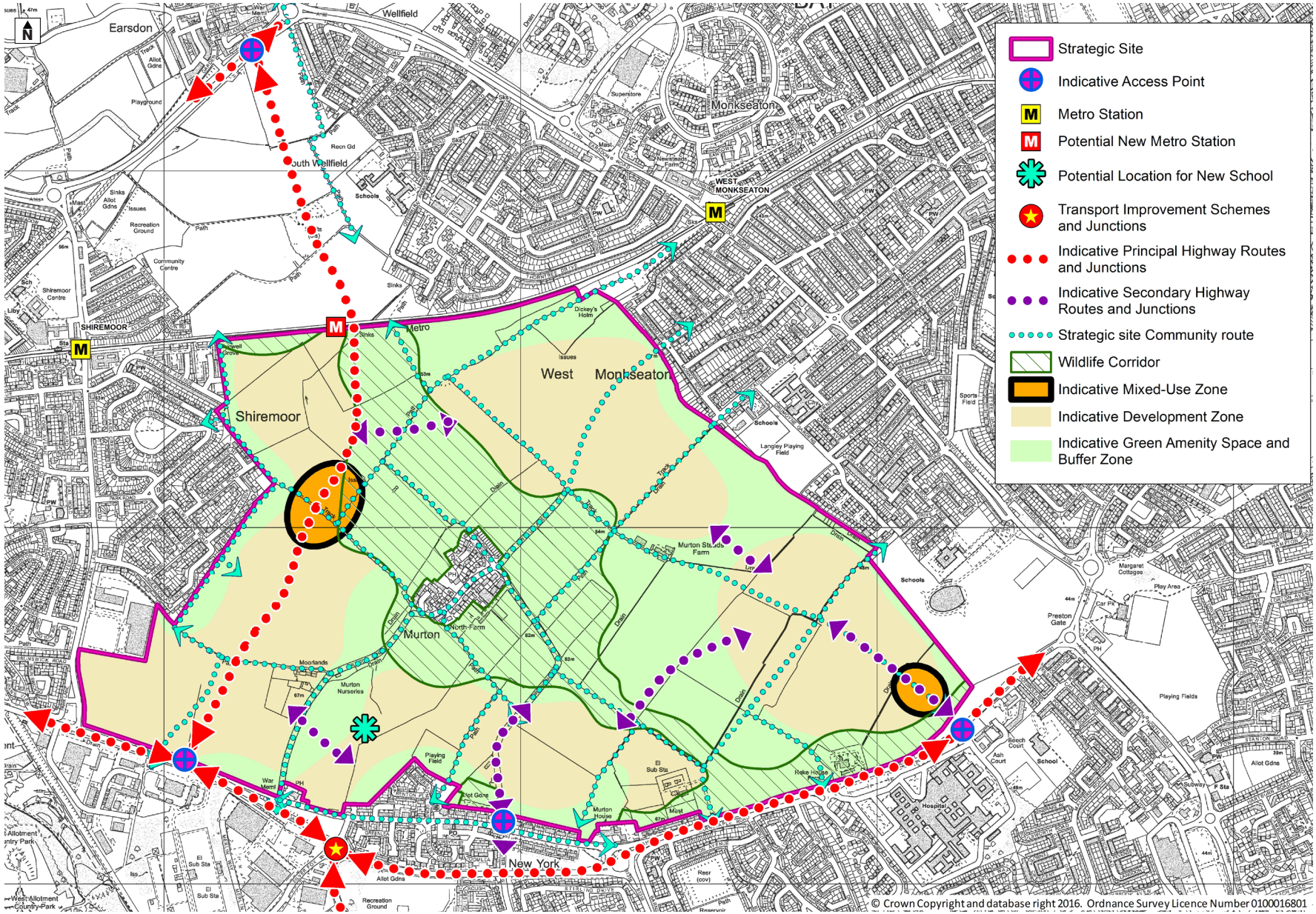
These are the key issues that need to be addressed if the Vision is to be delivered:

- To deliver high quality residential environments that exploit their physical location.
- To connect and integrate the green environment and corridors.
- Increase sustainability and attractiveness of settlements by the delivery of sensitive development, infrastructure and environments.
- Create good strategic highways, connections to promote modal shift.
- Access to existing community facilities and local centres in early phase residential delivery.

The Vision and Objectives are mutually supportive; and provide definition and understanding to enable the development to be planned more confidently.

The Outline Development Framework Plan for the site is shown on the following page. The Plan outlines the high level strategy for development and shows indicative strategies including areas for development, open space, access and infrastructure. The following sections provide further detail on the Framework with regard to land use, character, transport and movement, green infrastructure and precedent models.

Derwenthorpe, York



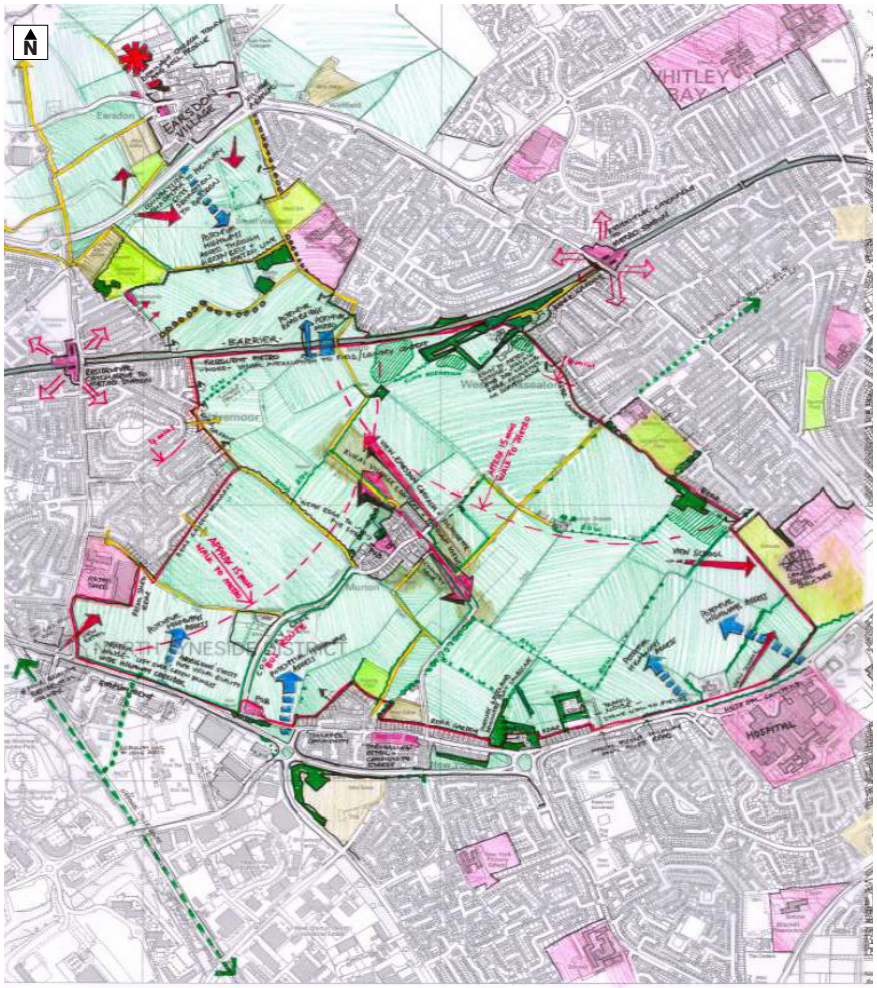
Murton Gap Development Framework Plan (Arup, based on NTC information)

2.4.2 Land uses

The Murton Gap site provides an opportunity to create a new high quality development set within a strong landscape framework. The site can accommodate approximately 3,000 homes with an average household size of 2.4, housing a population of 7,200 new residents of all ages. Consequently the place created through this development needs to be designed to accommodate their needs.

The requirement for additional supporting uses has been identified including:

- Community hubs and connections.
- Retail and community facilities.
- Allotments.
- Primary school.
- Residential Accommodation.



Land Use Plan (Pick Everard, Preparation of a Strategic Concept Framework Plan, Murton Gap & Killingworth Moor, October 2015)

2.4.3 Character

In accordance with Policy DM6.1 Design of Development, planning applications relating to the site will only be permitted where they demonstrate high and consistent design standards. Designs should be specific to the place, based on a clear analysis of the characteristics of the site, its wider context and the surrounding area.

The nature and range of community infrastructure should be sufficient to support the projected population of each character area as it is developed in conjunction with that provided in the wider local area.

Eight “Character zones” are proposed around movement routes such as ‘The Avenue’ based upon the primary link road and ‘Bridleway’ and existing structures such as, ‘The Hall’ and Murton Stead to new neighbourhood names, such as ‘Earsdon View’ where the vista across to Earsdon village is particularly prominent and should be reinforced by the design approach. The setting of the Murton village is protected and sits within its own area of rural character.

The Murton Gap site will derive its character and identity from the land it occupies and the countryside surrounding it, the landscape will play a dominant role in bringing that community to life.

The careful integration of highways, urban form and landscape offer the potential to create ‘statements’ these being distinct ‘places’ that reveal and harness the identity of each particular character zone. The detailed design for each of these zones should exploit the opportunity and reinforce the distinctiveness in context, to add richness, variety, identity and sense of place to the built and natural environments.

Character Zones Plan (Pick Everard, Preparation of a Strategic Concept Framework Plan, Murton Gap & Killingworth Moor, October 2015)

2.4.4 Transport and Movement

A key objective for Murton Gap is to create good strategic and local highways links, good community connections and promote use of sustainable transport modes, encouraging residents and employees to use the Metro, buses, pedestrian routes and cycle ways. The residents will benefit from being able to access a range of sustainable transport choices to get around the development and to key destinations.

The main highway strategy is to be achieved by:

- Creating a new north south link between the A186 and the A191.
- Locations of junctions to minimise impact on Green Belt to the north.
- Locations of junctions to minimise impact on existing Murton Lane to the south.
- Main north south route to support the new residential community, designed as an urban street with cycle lanes and landscaped corridor.
- Bus routes along the primary and secondary highway linking the local centre to the proposed Metro station.

The secondary highway strategy is:

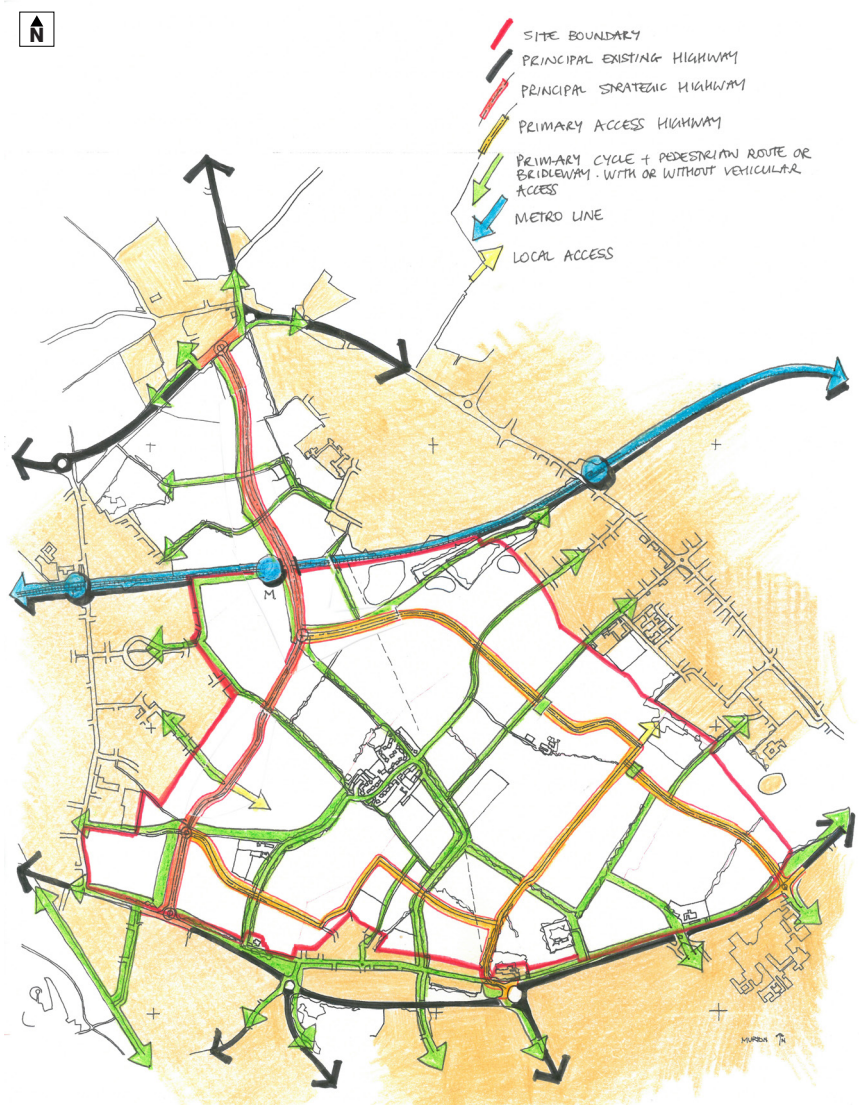
- Capable of phased delivery.
- Connected to the A191 at New York.
- Utilises the existing roundabout location at Rake Lane with bus gates within the site.
- Site entrances to be designed as Gateways.

Cycleways bridleways and pedestrian routes:

- Enhancing existing network of PROW and bridle routes.
- Incorporating routes within the principle character zone.

Metro station:

- Station on the northern boundary edge.
- Linked via adequate parking, cycle, pedestrian links and public transport routes.



Principal Routes and Transport Structure (Pick Everard, Preparation of a Strategic Concept Framework Plan, Murton Gap & Killingworth Moor, October 2015)

2.4.5 Green Infrastructure and Open Space

The Murton Gap Open Space Assessment outlines the quantum and quality of existing open spaces in the area and the amount needed to meet demand created by new development. It provides an assessment of both the quality and quantity of existing open space provision in the locality of the suggested site. The Assessment has informed the scale of open space required for the site.

The Green and Blue Infrastructure Framework seeks to integrate a 'nature-dominant' environment with the proposed development. The overall strategy seeks to preserve, where possible existing landscape features and the site's rural character as well as provide natural connections with the wider setting. The long views in and around Murton village are a part of the distinctive character of the village, and form part of the site's potential key qualities and should be reinforced. Local distinctiveness has been identified as a key factor for shaping the character of the development, providing value for wildlife, local leisure and amenity.

The key elements of the landscape and open space hierarchy are:

- 'Civic' – public or semi-public formal green spaces to encourage active use for sport, leisure, playspace, dog-walking and exercise.
- 'Rural' - informal, natural green spaces. The character of these green spaces is enriched through existing qualities and potential uses. The rural aspects will exploit existing mature woodland blocks and hedgerows to define and establish early place-making, quality and identity, and break down the scale of development to support wildlife.
- 'Other' - at this stage these areas include natural or created incidental space, to support character zones, buffer areas or the provision of green community links.
- SUDS – features and flood alleviation areas to be included within the green infrastructure network.
- Integration with wider environment and green corridor to link the central managed 'natural' landscape with wider habitats, principally the Green Belt to the north, and parkland to the south.

Green and Blue Infrastructure Plan (Pick Everard, Preparation of a Strategic Concept Framework Plan, Murton Gap & Killingworth Moor, October 2015)

2.4.6 Precedent Models

A series of design concepts have been prepared which are intended to guide the detail design of the main spaces in the Framework.

The following are a collection of illustrative precedent models which are arranged under three themes: green infrastructure; highway design; and architectural approach. They are intended to provide inspiration for the subsequent stages of the design process.

The images have been selected from developments in the UK and internationally and are intended to be used as a guide.

Green Infrastructure

- Buffer zones: to the edge of the development adjacent to rear gardens and areas of historical sensitivity. These are intended to provide privacy and preserve wildlife corridors.
- Wildlife corridors: using existing woodland cover and making provision for ecological habitat extension within existing areas of sensitivity.
- Play spaces: within the development in accordance with the Council's Green Space strategy.
- Allotments: productive gardening areas for residents and the neighbouring community.
- Greens: central areas that act as focal points for the community and area suitable for events, play and walking/ cycling. These also provide the important space around Murton village preserving the rural setting.
- Cycle ways: upgrading Public Rights of Way and Bridleways.

Beehives

Highway Design

- Principle routes: the principle routes around the development are to be designed as a pedestrian friendly environment and contain landscape features including street trees.
- Shared surface and home zones: within development parcels a shared surface approach to highway design is promoted which incorporates landscape design and an informal approach to detailing.
- Roads crossing the Murton Gap: to be designed as rural estate roads and lined with trees.
- Parking strategy: a range of parking strategies are expected from a development of this scale depending on the tenure of the houses. These will include on street, on plot, communal and some small courtyards.

Design for Homes Awards- 'The Avenue', Saffron Waldon

Architectural Approach

- Gateways: the entrances of the site need to be marked by architectural and landscape features that signal the start of the new development. They should be of a scale appropriate to the surrounding area and in keeping with the aims and objectives of the framework.
- Architectural features: at the main road junctions and the local centre which provide architectural hierarchy and aid wayfinding in the site. These areas will also have a higher density appropriate to nodal areas.
- Murton Gap edge: the scale and design of the rural edge needs to be sensitive to the rural setting and the design of the houses should front onto the central green spaces with residential streets and/or short private drives.

Example of successful approach to gateway buildings (Fotohaus)

2.5 Delivery

2.5.1 Overview

This section outlines the infrastructure requirements for the development of the site, proposed phasing and viability issues.

2.5.2 Indicative Land use budget

The indicative land use budget set out below identifies how much land within the strategic allocation is likely to be required for the range of land uses identified. This enables a picture of the capability of the site to accommodate all the requirements for the development, infrastructure and open space that have been identified.

Development zones are created within a network of green spaces and form a series of parcels within the site, with the community hub in the heart of the development. The zones create effective green corridors, environments and spaces and reinforce character of the site and wider landscape setting.

The following land use budget has been generated in response to known site constraints, community and social infrastructure requirements, framework design concepts and market testing.

The budget assumes the following:

- All incidental landscape areas, small LAP playspace and residential streets are included within the housing development area.
- Existing farmsteads are included.
- Main primary highways, central greenspace and buffer zones are excluded.
- Educational land use requirement defined in the Education Needs Report 2016 prepared by North Tyneside Council.

Land use description	Area in ha	Comments
Red line boundary	242	
Net Developable Area	85.7	At 30-35 dwellings per hectare
Primary School	2.0	
Open space	58.0	At 50 homes per hectare requires 60ha – less 2ha for primary schools. Informed by existing standards of provision
Metro station	1.0	
Strategic road	3.6	Estimate based on 1.2km length and 30m wide.
Local Centre		
SUDS	5.0	Assumed, but dependent on drainage strategy
Gross site area	155.3	
Remainder for general space, fields, Murton Village etc.	86.7	

Table 2.1: Land Use Description and Areas

2.5.3 Infrastructure Requirements

Outlined below is a summary of the key infrastructure requirements associated with the development of the site. This information is drawn from the Council's Infrastructure Delivery Plan (2016).

Education

The Education Needs Assessment outlines the school infrastructure required to cater for the household and population growth as part of the site's development.

The assessment undertakes an analysis of primary and secondary school pupil yields within North Tyneside in the context of planned development to 2032, identified within the emerging Local Plan. The Assessment also provides growth forecast and projection and has informed the scale of education infrastructure requirements for the site.

The site requires a new primary school to be delivered on the site which would be wholly funded by the developers of the site.

With respect to secondary education a contribution to the Local Authority as part of the S106 requirements will be paid, the details of which are set out in the Education Impact Assessment (April 2016). The costs are based on assumed pupil numbers and are subject to detailed designs being made available.

View of the Monkseaton High School (Arup)

Highways Infrastructure

The following highway improvements are required to deliver the site:

- Link Road.
- A186 Earsdon Rd Roundabout.
- A191 Roundabout Rake Lane.
- A191 Roundabout New York Road.
- New York Road Access.
- Bridge over Metro line.
- Off Site Highways Norham Road/Park Lane.
- Tynemouth Pool junction.
- Off Site Highways Westminster Avenue.

As outlined in the North Tyneside Council Local Plan Highways Contribution Model (S.106 / S.278), the delivery of specific junctions by S.278 will be determined by the Council and prioritised according to those that resolve key local network concerns. Junctions delivered by a single development would be agreed as a S.278 agreement, those with multiple contributors would remain a S.106 obligation.

Recreation

Key requirements include cycling infrastructure, sport, play and open space maintenance. It is assumed that informal play areas are within the general landscaped areas.

Richmond Park, London

Community Facilities

A contribution towards facilities has been identified, however there is no specific site requirement currently defined.

Healthcare

At this time no specific on-site requirement for healthcare provision has been made but adequate contributions towards supporting the capacity of healthcare provision in the surrounding area will be required. Meanwhile, the potential provision of a specific facility within the proposed local centre on the site will remain an option as proposals are advanced.

Retail

The Murton Gap – Killingworth Moor Retail Requirements Assessment highlighted the preferred scale and suggested locations for potential retail provision on the Strategic Allocations of Murton and Killingworth Moor. The Assessment informed the scale of the proposed retail provision for the site.

Funding Sources

Funding sources for the required infrastructure include:

- Local Authority – including via regionally and nationally funded loans and grants.
- Nexus.
- Developer.
- Section 278.
- Section 106.
- Community Infrastructure Levy.

Community Facilities

Phasing

It is envisaged that the Development Framework will be delivered in three phases as set out in Table 2.2.

A full breakdown of the phasing, funding source and criticality rating of infrastructure is set out in the Table 2.3.

Delivery Phase	Phase 1	Phase 2	Phase 3	Total
Anticipated Years	2018 - 2022	2023 - 2027	2028 - 2032	2018 - 2032
Housing Delivery	1,020	726	1,254	3,000

Table 2.2: Proposed Phasing

Item	Phase	Funding Source – Probable Delivery	Essential/ Desirable
Highways Infrastructure			
Off Site Highway Works - Tynemouth Pool	2	Developer - s106	Essential
Link Road	1	Developer –s278	Essential
A186 Earsdon Road Roundabout	1	Developer –s278	Essential
A191 Roundabout Rake Lane	1	Developer –s278	Essential
A191 Roundabout New York Road	1	Developer –s278	Essential
New York Road Access	1	Developer –s278	Essential
Bridge over Metro line	1	Developer –s278	Essential
Off Site Highways Norham Road/ Park lane	1	Developer –s278 / s106	Essential
Off Site Highways Westminster Avenue	1	Developer –s278	Essential
Education			
Primary School	1, 2	Developer - s106	Essential
Secondary Education	1, 2, 3	Developers – s106 (strategic site), CIL contribution	Essential

Table 2.3: Infrastructure, phasing, funding and criticality rating

Item	Phase	Funding Source – Probable Delivery	Essential/ Desirable
Social Infrastructure			
Onsite pedestrian and cycle connections.	1, 2, 3	Developer – on site condition	Essential
Offsite pedestrian and cycle connections	1, 2, 3	Developer – s106	Essential/ Desirable
Sport & Recreation	1, 2, 3	Developer – s106	Desirable
Community Facilities	1, 2, 3	Developer – s106	Desirable
Public Realm	1, 2, 3	Developer – s106	Desirable
Play, parks and green space	1, 2, 3	Developer – s106	Desirable
Health			
Healthcare	2	Developer – s106	Essential
Utilities			
Drainage	1, 2, 3	Developer – s106	Essential
Transport			
Metro Station	1, 2	Developer / Public funding – s106	Essential
Bus Service	1, 2, 3	Developer – s106 agreement	Essential
CIL			
CIL Infrastructure Contribution	1, 2, 3	CIL / Pending Introduction	

2.5.4 Viability Appraisal

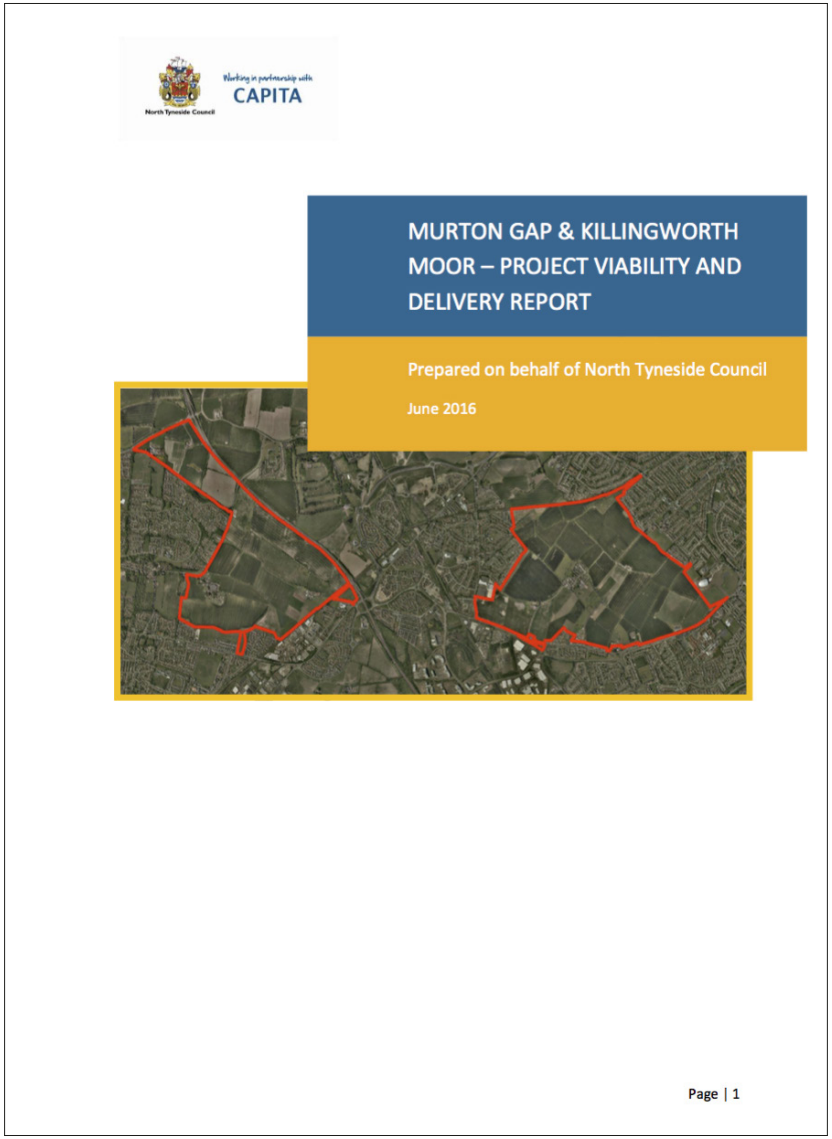
The Project Viability and Delivery Report (June 2016) is a high level report that considers the deliverability of the sites in terms of viability and deliverability. It is based on the methodology set out in 'Viability Testing Local Plans, Advice for planning practitioners' (the Harman Guidance) and the Planning Practice Guidance (PPG).

The purpose of the Viability report is to assess the likelihood of the development generating a residual land value that is sufficient to induce the landowner to sell and which would give the Council the confidence that the sites would be deliverable within the next five years and continue throughout the Local Plan period.

The viability study has been carried out using separate appraisals for the two sites, and has been based upon the HCA Development Appraisal Toolkit (DAT). The DAT models have been populated with data sets gathered from the available strategic infrastructure and mitigation costs; a robust range of commercially facing, evidence based assumptions in terms of values and costs obtained through consultation with land owners, promoters and developers of the sites; the expected rate of development anticipated on the sites and incorporates the Council's existing and emerging policy requirements including affordable housing.

It is inevitable that as planning applications are prepared and the site move towards delivery, the information will be refined. In line with paragraph 2 on page 23 of the Harman Guidance it will be important that the Council continues to work closely with the developers to further understand the viability issues around the site.

In conclusion therefore, the viability study carried out for Murton Gap, has included robust, commercially derived assumptions for costs and values, has set realistic phasing and delivery schedules, incorporates the costs or impact of all the Council's requirements to mitigate the development, and includes for the provision of all necessary infrastructure. The study shows that the residual land value calculated represents a significant uplift over the existing use land value, and therefore should be sufficient for the land owners to be incentivised to sell their land for development. It has therefore been demonstrated that site is deliverable within the Local Plan policy, and that the indicative Framework Plan can be included as a strategic site allocation.



Project Viability and Delivery Report (June 2016)