The Harworth & Bircotes Design Guide

Scrooby Road and Colliery Site



Design Principles and Indicative Masterplanning

Prepared by urban forward Itd for Bassetlaw District Council and Harworth Town Council for the Harworth Neighbourhood Plan. March 2014



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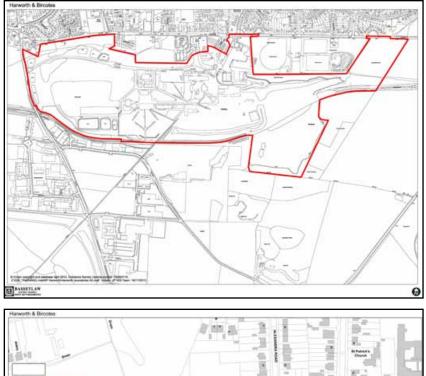
Introduction and Background

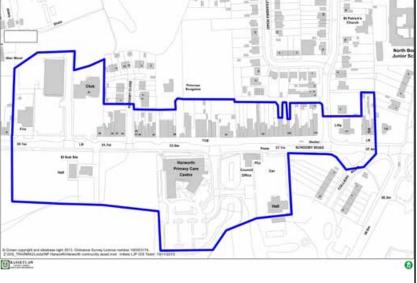
About the Project

This document sets out the principles that any development on the High Street (Scrooby Road) and adjacent Colliery site need to follow. These have been designed to ensure that the town has the best chance of capturing the benefits of new development to help support existing facilities and services as well as benefiting future residents.

There are general design principles that any new development should seek to follow, and these are included in this document for reference. Principles specific to Harworth and Bircotes have been developed and are also included. Both the generic and specific principles should be read together when developing design concepts for the areas covered in this document.

Although the two sites are dealt with separately in this document, any future development should seek to play its part in the wider context. When considering matters of detail, thought should be given to how these two sites can work together and add to the wider quality of the town, including linking to green spaces and green routes, supporting shops, opening up access to the wider countryside and allowing for ease of movement.





Top: Colliery site outline. Bottom: High Street / Scrooby Road site outline.



General Design Principles

General Design Principles

The masterplans for the Colliery site and adjacent Scrooby Road have been developed to deliver on the aspirations of all stakeholders in Harworth and Bircotes including existing and future residents, and any design proposals must accord with accepted urban design best practice.

There are many sources that define the core principles of urban design, each with subtly different emphasis and wording, but all following a similar pattern and all containing approximately the same guidance. For this document, the principles referred to are those contained in:

- Urban Design Compendium (vol 1);
- Successful Places SPD 2013
- National Planning Policy Framework (para 58)
- Manual for Streets 1&2

Successful Places SPD

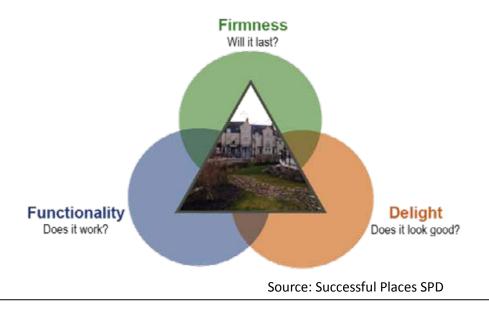
Bassetlaw District Council has adopted the **Successful Places SPD** which has been developed to ensure new development is of a high standard. In it are three design themes:

Firmness: Is it built to last, easily maintained and able to be adapted over time? Essentially, is it durable?

Functionality: Is it useful, fit for purpose and easy to use? Will it contribute to a good quality of life? Essentially, does it work?

Delight: Is it visually pleasing or even beautiful? Does it engender a sense of pride? Essentially, does it look good?

New development should seek to embed these themes and principles into the design.



General Design Principles

Design Approach for future projects

Places for People

For places to be well-used and well-loved, they must be safe, comfortable, varied and attractive. They also need to be distinctive, and offer variety, choice and fun. Vibrant places offer opportunities for meeting people, playing in the street and watching the world go by.

Enrich the Existing

New development should enrich the qualities of existing urban places. This means encouraging a distinctive response that arises from and complements its setting. This applies at every scale - the region, the city, the town, the neigbourhood, and the street.

Make Connections

Places need to be easy to get to and be integrated physically and visually with their surroundings. This requires attention to how to get around by foot, bicycle, public transport and the car - and in that order.

Mix Uses and Forms

Stimulating, enjoyable and convenient places meet a variety of demands from the widest possible range of users, amenities and social groups. They also weave together different building forms, uses, tenures and densities.

Manage the Investment

For projects to be developable and well cared for they must be economically viable, well managed and maintained. This means understanding the market considerations of developers, ensuring long term commitment from the community and the local authority, defining appropriate delivery mechanisms and seeing this as part of the design process.

Work with the Landscape

Places that strike a balance between the natural and man made environment and utilise each site's intrinsic resources - the climate, landform, landscape and ecology - to maximise energy conservation and amenity.





Above: Urban Design Principles in diagrammatic form.



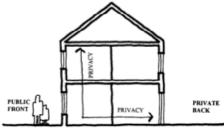
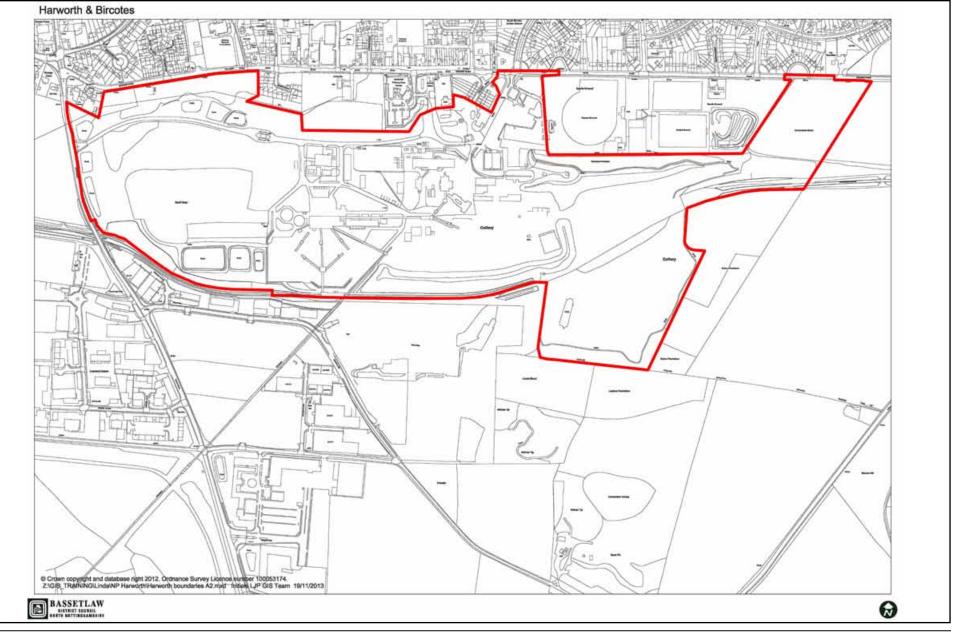


Figure 10.1 The positive privacy gradient

The Colliery Site





Understanding the site



The colliery site is large and complex, with a number of existing features who's future is uncertain due to remediation works. Included in this are the array of existing building, which in all likelihood will be demolished.

The site has a range of existing features that any future redevelopment should seek to incorporate and work 'with' rather than against. However, it should be noted that a comprehensive program of remediation work will need to be undertaken to make parts of the site developable and this will alter fundamental aspects such as topography and areas of significant planting.

Green spaces along the railway, Droverdale Wood and Lords Wood offer excellent opportunities for adding amenity and biodiversity, as do the existing Colliery Ponds. The site of Tip 1 could see extensive remediation leading to the removal of this spoil heap, levelling the area for development. This would involve the loss of the significant area of planting adjacent to the colliery entrance.





When assessing the site's topography, understanding what is likely to remain on site and what is likely to be lost as part of remediation work is difficult.

For the purposes of this masterplan, it has been assumed that a significant amount of leveling will form part of remediation works, making more of the site developable. A gentle slope north-south will likely remain.

Discussions with the site operators reveal that the existing spoil heaps will be totally removed and relocated as part of the works needed to make the site available for development. This will involve the loss of some significant existing trees.

The large-scale movement of soil and spoil does present an opportunity to cut and fill in areas where current levels make development problematic.

Site Photographs







Design Approach

Colliery Site: Specific Design Principles

The design of the colliery site has been shaped by the overarching principle that any new development here should be delivered in a way that enables existing shops and services to be supported by new residents. To do this:

- The new development must make as many direct connections to Scrooby Road as possible to allow new residents easy access to shops and services;

- The layout should enable free and direct movement from the site edges to the homes and other uses within and the routes provided must be legible;

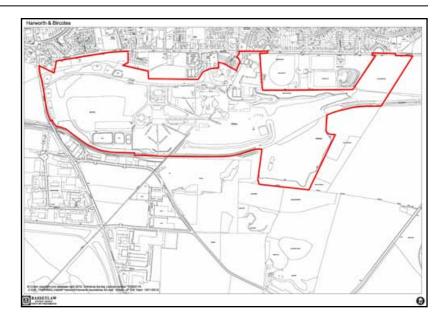
- The route structure should allow for future development in adjacent areas so that the town can grow in an integrated way;

- The character of the streets must reflect their relative importance to either global or local movement to aid legibility;

- The route and block structure should be reflective of the spatial arrangement of the existing town so that a clear relationship between old and new is evident;

- Existing site features including natural and built forms should be used to help shape the layout.;

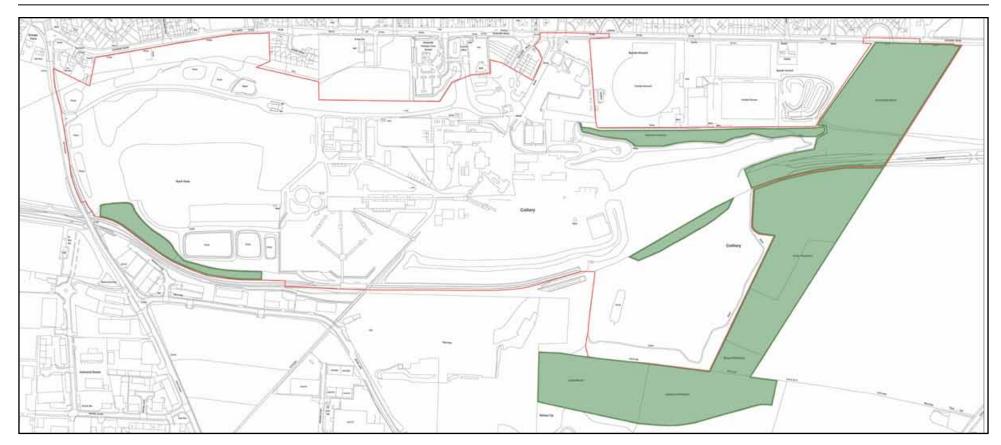
- Traffic speed should be controlled thorough design rather than through management and must be included from the outset.





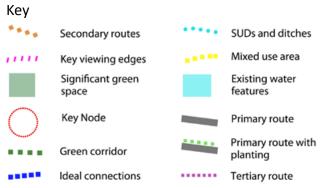
Top: Colliery site outline. Bottom: Existing pit buildings that dominate the skyline for miles.



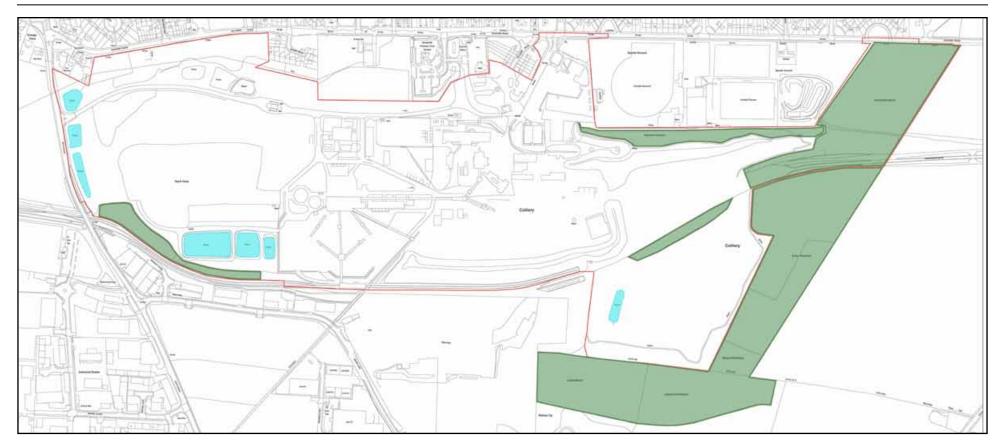


Green Spaces

The plan shows significant green spaces in and around the development site that offer opportunities for integration into any future masterplan.

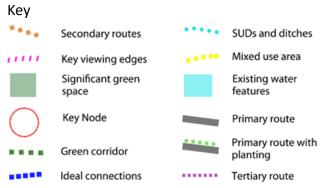




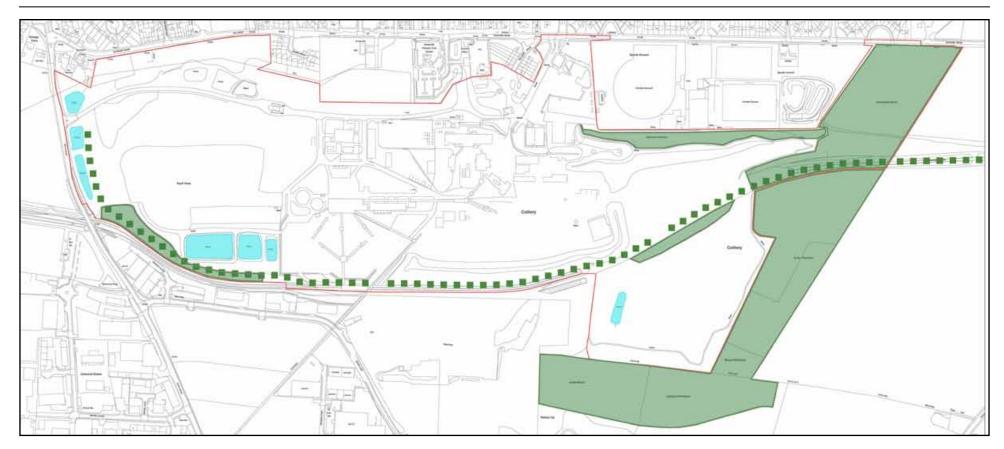


Water

Existing water features on site have the potential to be integrated into any future design, helping to maintain biodiversity and add amenity.





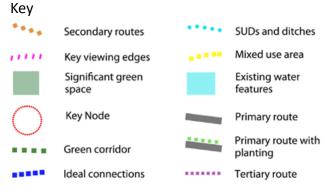


Green Routes

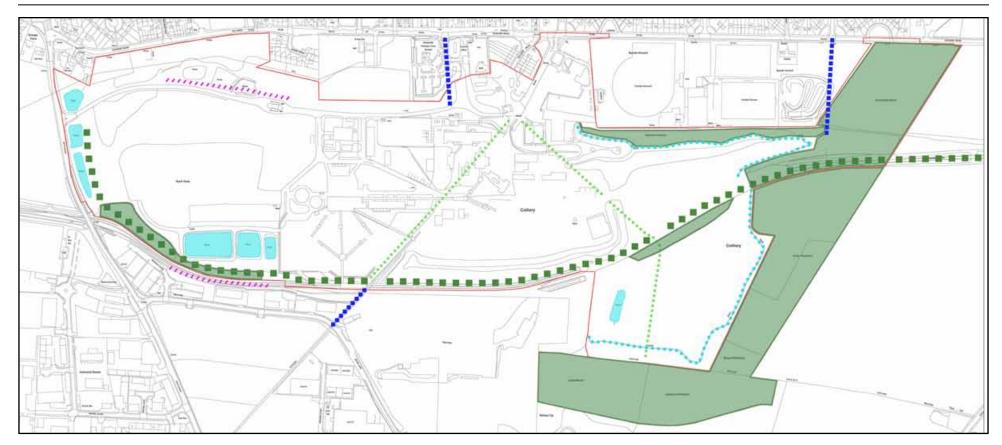
Linking these features together with green and blue corridors should be explored.

Extra planting and greening on key routes to link green spaces and make water features work together should be included at the detailed design phase.

Key views across the town and out to the south need to be considered.



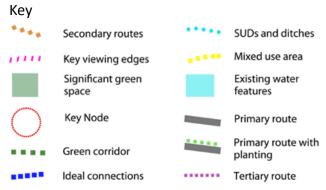


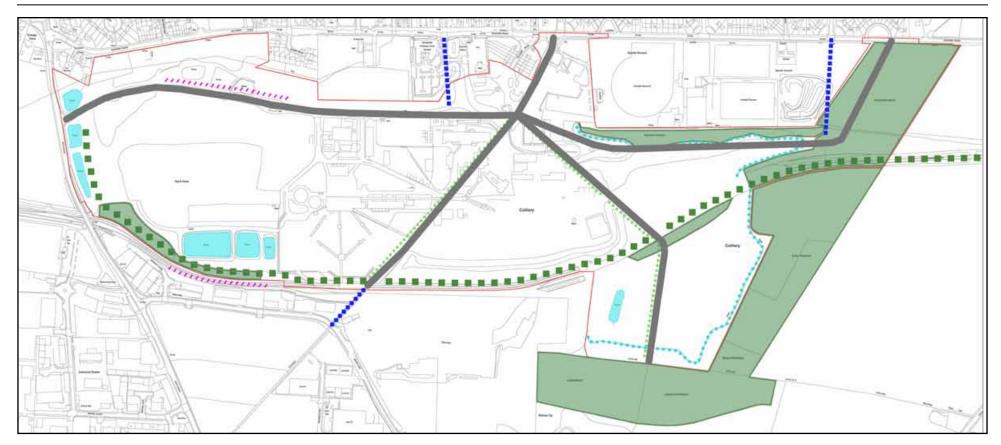


Links and Views

Extra planting and greening on key routes to link green spaces and make water features work together should be included at the detailed design phase.

Key future links (blue) should be allowed for in future detailed design work allowing for future land ownership changes.

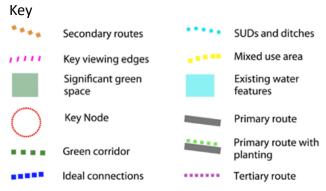


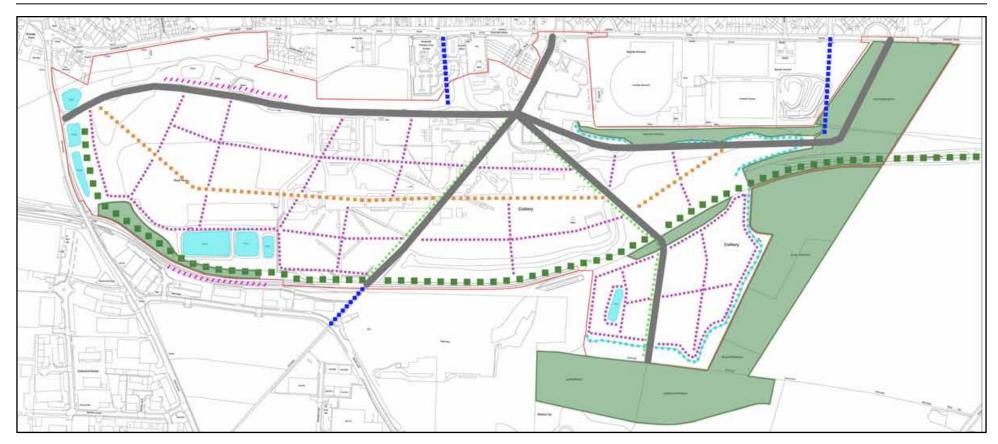


Primary Routes

The primary route structure needs to allow for connections that run edge-to-edge and these should be located to allow for future connections to the south.

A key determiner in locating routes should be focusing movement on the existing retail centre.

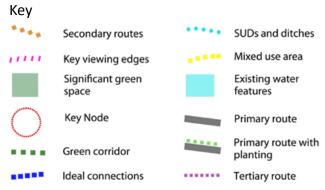


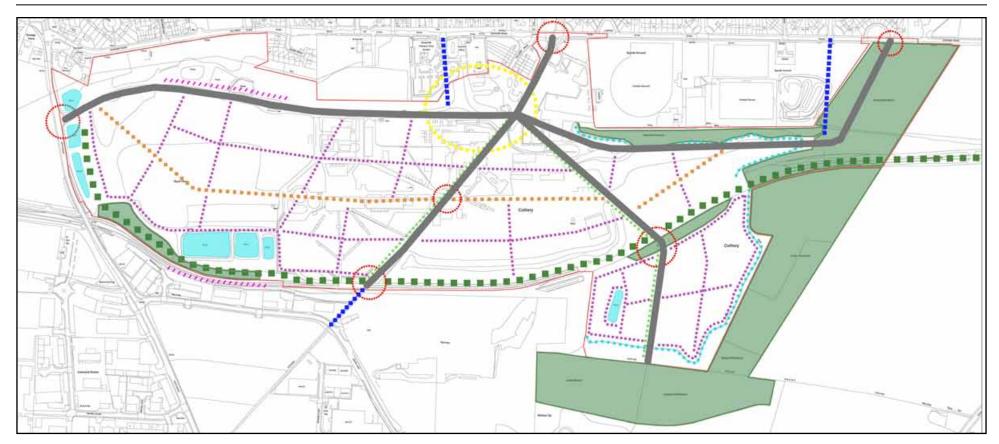


Secondary and Tertiary Routes

The secondary (orange) and tertiary (purple) routes allow for access within the site.

The placement of these routes needs to define development blocks that are around 70m x 110m to allow for a grain that represents the existing settlement whilst retaining walkable neighbourhood dimensions.

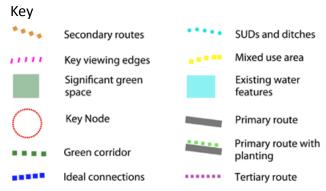




Nodes and Spaces

Key nodes (circled red) are places where 'special' spaces could be created, which could be open space, feature buildings, or key crossings.

If uses other than residential are to be included as part of the redevelopment, then this should be located as near to the existing retail centre as possible to help support existing businesses and services.



Initial Concept



The concept masterplan shows a potential arrangement of streets and development blocks, parks and open spaces.

A key concept feature is a block size that allows for a walkable neighbourhood whilst still allowing for on-plot frontage-accessed parking and decent front and rear gardens.

Feedback from initial consultation revealed the need for a larger area of open space akin to a park rather than a small play area, and a stronger east-west green link to allow for integration into a wider green infrastructure network.

Also, work to regularise block shape is required to remove problematic corners and reduce the number of cross-roads.



The revised concept moves towards a more refined approach to embedding the design principles and responding to the site parameters.

The revised masterplan makes an allowance for the themes raised in initial consultation, and the new design features a large park whose dimensions are modelled in part on existing facilities in town.

A stronger east-west link forming a lower loop as part of a town-wide green infrastructure network has been included, which is around 30m wide and follows the line of the old railway.

A key feature introduced in the revised plan is strengthened planting on key streets to ensure that more urban routes link into wider green networks. Planting has been used to demonstrate street hierarchy, with the routes most important to wider integration the most heavily planted and more local routes featuring lower grade planting treatments.





- 1. Central planting and parking area, echoing similar features on Shewsbury Road.
- 2. Strong link through to Scrooby Road.
- 3. New recreation space and parkland.
- 4. Entrance through Drovers Wood off Scrooby Road.

- 5. Green link along the line of the old railway.
- 6. Strong link to the quarry and woods to the south.
- 7. Future link to the south allowed for.
- 8. Existing water features retained for amenity value and biodiversity



The southern-most development area will feature larger housing with lower development densities.

Care will need to be taken to ensure this part of the site is not isolated from the rest of the development and a key to this will be allowing the GI route to be easily crossable.

1. Even low-grade streets to be continually connected to allow ease of movement and to disperse traffic through the grid.

2. Points that cross the GI route should give priority access to pedestrians and cyclist.

3. Existing pond retained and integrated into amenity space.

4. Low-grade streets will form the edge of the development abutting the woodland.

5. Streets that form part of the local access movement network will feature inherent traffic calming, low design speeds and on-street parking and planting.





The eastern and western entrances of the site will likely be the main way that people access the site from beyond the town and will be different in character.

1. Existing ponds to form the Blyth Road frontage, with GI links running through this area and north into town.

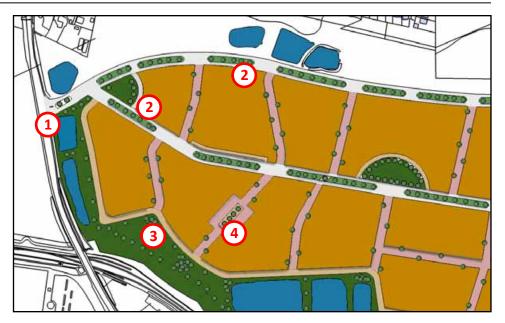
2. Major routes will be denoted by feature central planting and parking, signaling their role in global as well as local movement.

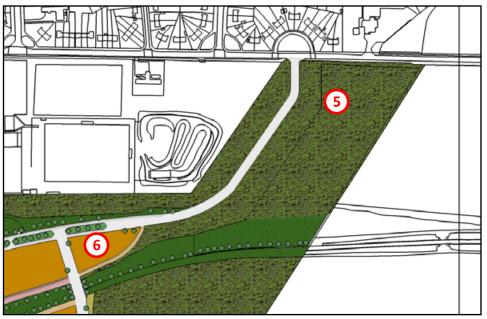
3. Routes that run along the edge of the development fronting the GI route should be low-grade to make this space as pedestrian friendly as possible.

4. Lower grade streets should feature areas of green space, squares, play etc to boost their social amenity.

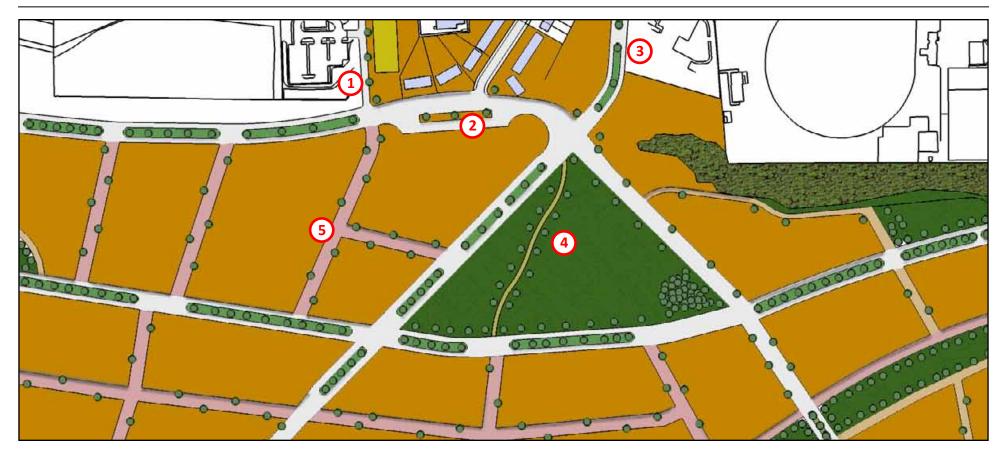
5. The Scrooby Road east entrance will run through Drovers Wood, although the option of 'loading' this street with development could be explored if TPOs allow.

6. Arrival into the development proper will be demarked with the planting and reservation treatment that signals a main street.









The area nearest the town centre will be the most urban in character, featuring higher densities and more formal arrangements.

1. The link from Scrooby Road into the site along the side of the medical centre is possibly the best location for an office or other use.

2. Allowance needs to be made for a bus set-down area that should help increase movement through the site and add activity to the High Street.

3. The main vehicular entrance to the site from the existing town will link with the existing treatment of Shrewsbury Road to create a connection in terms of urban morphology.

4. A new park could be located along one of the main routes to draw people from the town centre to the development.

5. Lower grade routes running north south will focus movement onto the town centre facilities and services.





The central development area will be the core of the residential development part of the site, offering a reasonably dense, urban environment in the centre but keeping a low-grade, less dense edge to the south.

1. The lower main route will serve the heart of the development site and needs to be high grade to reflect its important movement function.

2. Effort should be made to introduce variation along the length of streets in terms of width, edge treatment, planting and buildings to help increase variety.

3. The surface treatment, parking arrangement and planting on lower order streets needs to work together to moderate vehicle speeds and increase the amenity quality for residents and pedestrians.

4. A key node where two main streets cross presents an opportunity for special buildings, green spaces or junction treatments.



Example photographs

The photographs here have been chosen to give a flavour of the 'feel' rather than the exact 'look' of the spaces and streets proposed on the colliery site.

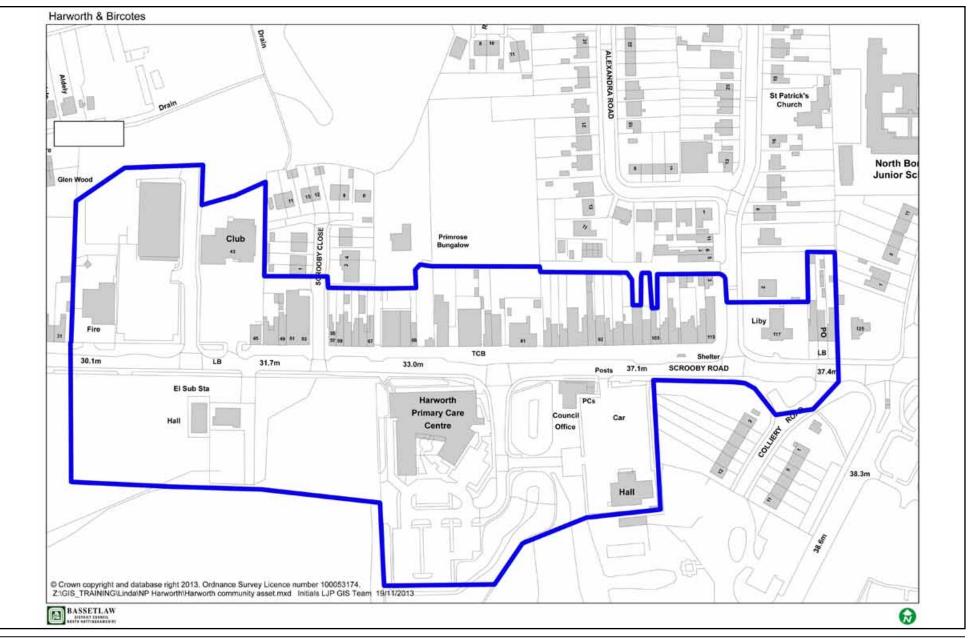
Photos (clockwise top right):

- 1. A low-grade connected street with trees and parking, Upton.
- 2. Planting in the centre of the street, Exeter.
- 3. Continuous green corridor, Northampton.
- 4. Green edge to a development, Oxford.
- 5. Tree-lined streets with parking, Bristol.





Scrooby Road

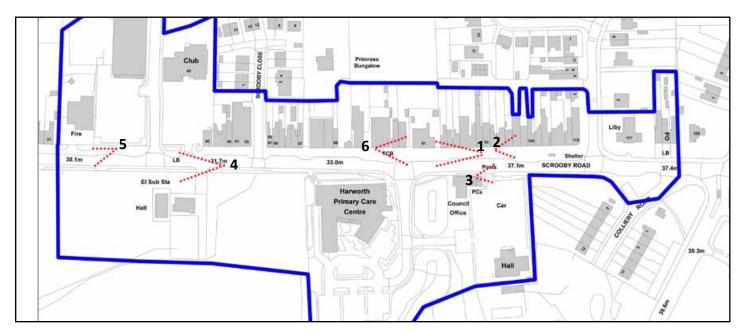




Site photographs

Photos from the site show that the northern edge is performing well, benefits from good public realm and a sunny aspect.

By contrast, the southern edge adds little to the high street.

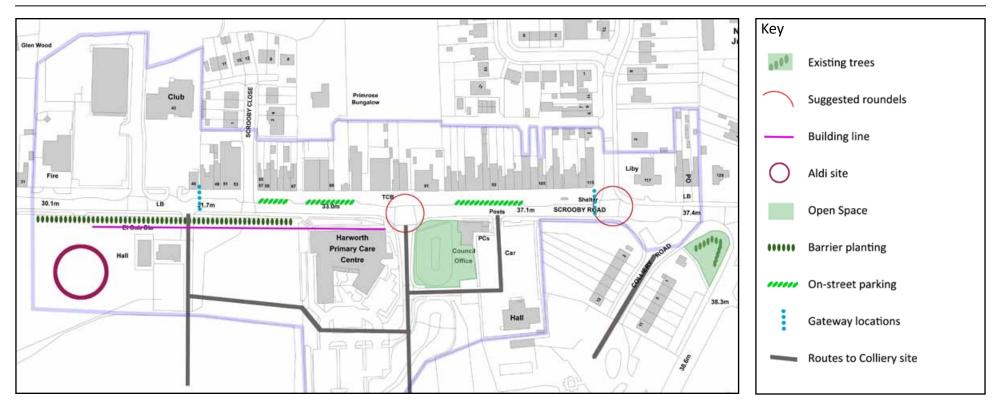








Analysis and parameters



Currently the High Street is 'single loaded', with shops only on one side. With any new development in town there is scope to add another edge to the street to provide more retail in the core.

The existing High Street has many positive features, such as small independent shops and a recent public realm upgrade.

Any redevelopment should work to build on this character.

The current configuration of Scrooby Road, with development on only one site, leads to a very stretched-out retail core which erodes walkability and thus the instances of linked trips.

The southern side of Scrooby Road is dominated by either barrier planting or pavilion buildings that are set far back in their plot, reducing the levels of activity on this side of the street.

Any redevelopment of the street edge should seek to increase how easy the street is to cross and to make sure there is a reason to make the crossing in the first place.

Scrooby Road offers significant opportunities for redevelopment and retreatment, including vacant sites to the southern edge and footpath and carriageway changes.



Scrooby Road / High Street: Specific Design Principles

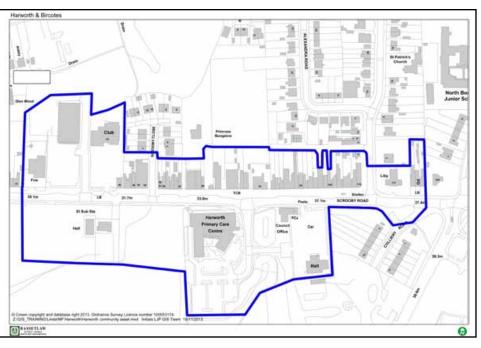
The approach to remodelling the High Street part of the Scrooby Road has been mainly influenced by the need to make this retail core perform better in terms of attracting visitors and providing choice. To help enable this, the following principles must be followed:

- Scrooby Road must be as easy to cross as possible, achieved through moderate traffic speeds controlled through subtle design techniques;

- A southern most edge needs to be developed for the High Street, making a more dense retail core that is more accessible by short walking journeys;

- Sufficient and accessible parking must be provided along the street and in new parking areas to help enable easy access to shops and other facilities;

- Trees and other planting should be introduced to link into surrounding green infrastructure routes.





Top: Scrooby Road site outline. Bottom: Existing High Street, with seating and a southerly aspect.

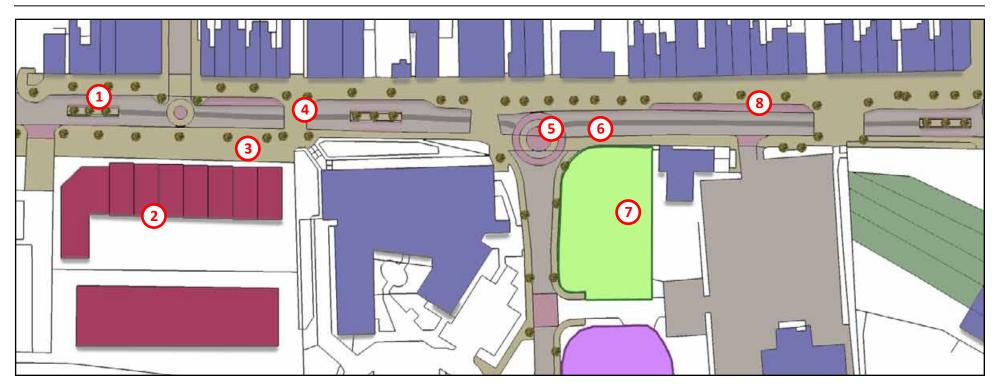


Concept Masterplan

The concept masterplan draws upon the principles of Manual for Streets 1&2, reprioritising the space for pedestrian movement and allowing the design of the street to control traffic speeds.

Shared surface principles underpin the proposed street treatment to allow for easy crossing and high levels of social activity.





1. A narrow gateway announces arrival into the pedestrian priority part of Scrooby Road.

2. New development picking up the building line on the southern edge whilst also echoing the rhythm of the existing store frontages.

3. Wider footpath that retains some planting to be introduced.

4. Courtesy crossings at frequent intervals slow traffic and increase ease of movement.

5. Roundels at key junctions manage traffic without interrupting pedestrian movement.

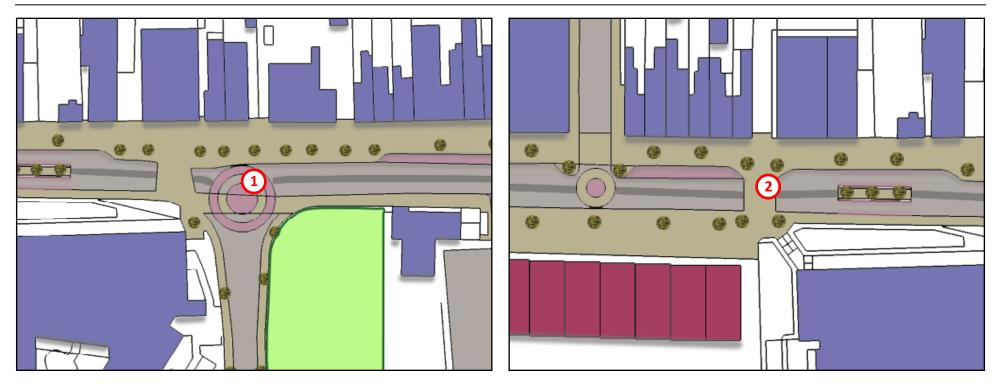
6. Central narrowing of carriageway help to moderate speeds and give pedestrians a waiting space.

7. New frontage to important junction adds retail or office use into the town centre.

8. On-street parking areas should offer convenient access to shop and other facilities.



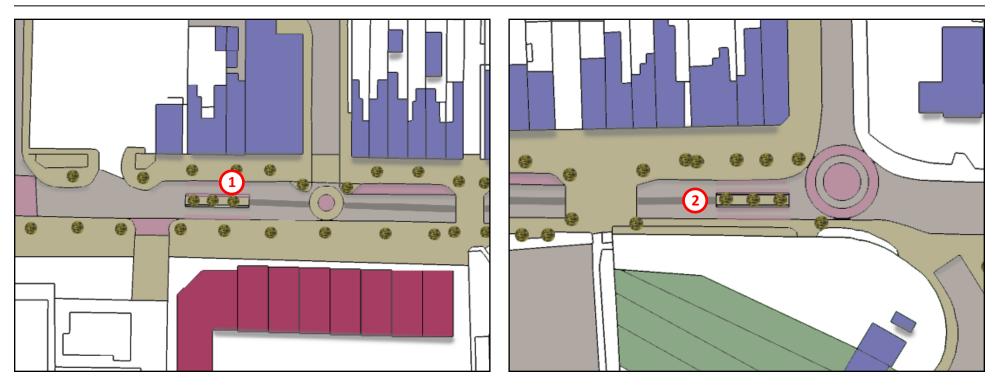
Concept Masterplan



1. Roundels, flush with the surface of the carriageway but demarked similarly to roundabouts, are a good solution to managing junction traffic without reducing pedestrian movement.

2. Courtesy crossings allow for easy movement across the street and rely on vehicle and pedestrian interaction. Forcing cars to cross the pavement rather than the other way around slows traffic.

Concept Masterplan



1. A key feature of the concept masterplan is narrow 'gateways' demarking the pedestrian priority zone of Scrooby road.

These feature a central reservation, edging rumble strips and narrow running lanes to help slow vehicles down as they enter this space.

2. From the gateway on, the carriageway is visually narrowed with edging and central rumble features.

Example photographs

The photographs here are from the redevelopment of Poynton, Cheshire.

This retreatment of an existing town centre is among the most successful public realm regeneration schemes in the UK and gives an example of how the Scrooby Road could be redeveloped.

1. Courtesy crossing showing reprioritised street space, with pedestrians having right of way.

2. Drivers slow down naturally for pedestrians, negating the need for controlled crossing points

3. Near-level surfaces allow for easy crossing, allowing both sides of the street to be active.

4. Narrow running lanes for cars help keep vehicles speeds low, without the need for using block paving across the entire carriage way.



Example photographs

1. Long pinched 'gateways' to announce arrival into a pedestrian priority zone.

2. Side-streets and parking areas accessed across the footway.

3. Pavement crosses street to enforce priority.

4. Rumble strips at crossing points control speed.

5. Surface roundels work like roundabouts at junctions but still allow crossing.



About us

urban forward is a multidisciplinary planning, design and urban design consultancy dedicated to quality outcomes for the built environment. We offer a comprehensive range of services designed to deliver the best possible results for any project, from new developments to policy and research. Our team are leaders in the field, with a wealth of practical experience to help both private and public sector clients as well as with community groups and those in the third sector.