

HUDDERSFIELD TOWN CENTRE DESIGN FRAMEWORK

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HUDDERSFIELD TOWN CENTRE DESIGN FRAMEWORK

APPENDIX 1

Study context and summary of source documents

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STUDY CONTEXT AND SUMMARY OF SOURCE DOCUMENTS

The following pages give a very broad brush overview of previous studies and consultations undertaken to improve Huddersfield Town Centre and the surrounding environment.

Moving forward Huddersfield needs to embrace strategies to implement change to address issues such as traffic, pedestrian and cyclist circulation whilst incorporating powerful and rich designs that reflect Huddersfield’s vibrant history and embrace a future vision of growth and prosperity.

SOURCE DOCUMENTS:

- HUDDERSFIELD URBAN RENAISSANCE; STRATEGIC DEVELOPMENT FRAMEWORK (SDF); A PUBLIC REALM STRATEGY - March 2004
- UNIVERSITY CAMPUS STRATEGY - 2008
- HUDDERSFIELD URBAN DESIGN STRATEGY (UDS) - Consultation Draft Summer 2009
- HUDDERSFIELD AREA ACTION PLAN (AAP) - Consultation 2009
- HUDDERSFIELD’S HISTORIC YARDS—AN URBAN DESIGN STRATEGY - May 2011
- AN INTERIM STRATEGY FOR HUDDERSFIELD TOWN CENTRE - March 2013



Burj Khalifa - Tom Fox



Budapest, Hungary



BEFORE



AFTER

Cork, Ireland

Before and After public realm images, taken from:-

<http://archpaper.com/2015/10/urb-pictures-pedestrians-reclaiming-streets/>

HUDDERSFIELD TOWN CENTRE - STUDY CONTEXT

Government policy at European, national and local level has reinforced the importance of city centres as the focus for social and economic life in urban areas. During the 1980's and early 1990's the large expansion of 'out-of-town' retail centres was threatening the economic vitality of traditional centres.

A key requirement for success will be the provision of a high quality pedestrian environment to support and complement the diverse retail, recreational and tourist attractions in urban centres.

The incorporation of the political commitments to sustainable development into European and Government policy has also been important. As a result, greater emphasis has been placed on city centres, where people can easily be served by public transport and new development incorporating blue/green infrastructure.

Protection of the historic environment has increasingly been seen as an important planning concern since 1947. Fundamental to government policies for environmental stewardship is the statutory requirement that there should be effective protection for all aspects of the historic environment, particularly listed buildings and designated conservation areas.

In March 2004, the Council and Yorkshire Forward published the 'Huddersfield Urban Renaissance – Strategic Development Framework: A Public Realm Strategy'. The strategy was written for the two organisations by David Lock Associates, and funded by Yorkshire Forward in recognition of Huddersfield being identified as one of the six towns in the region being designated a 'Renaissance Town'.

Prior to the strategy being adopted, the Council had already adopted its Northern Quarters Infrastructure Plan 2002-2012. The Strategic Development Framework (SDF) absorbed the Northern Quarters Plan and also covered the rest of the town centre.

The SDF proposed improvements to the public realm for the benefit of local people and to help stimulate the private sector in building projects.

The main focus of investment in the past 10 years has been the Northern Quarters, including improvements to Byram Street, Kirkgate/Westgate, John William Street, Fitzwilliam Street, Northumberland Street and St George's Square. These works have served to achieve a step change to the vitality and vibrancy of both the environment and the economy of the area. The shift of emphasis from car to pedestrian domination, together with the use of appropriate natural surface materials, has delivered an environment of quality that complements the character and heritage of the area and allows a contemporary use of this historic environment.

In summer 2009, a consultation draft document for 'Huddersfield Urban Design Strategy' was prepared. This document proposed fundamental infrastructure changes to the town as a whole. It concluded on a preferred option as "reconfiguring the street network of the town to create a 'Boulevard and Grid' road system, redesigning the roads so that they are friendlier places for cyclists and pedestrians and shaping new development over the coming years so that it addresses and animates the streets and public spaces of the town."

In 2011, a team of students on the Manchester University Urban design course, undertook a study of Huddersfield's Historic Yards which aimed "to restore a neglected feature of townscape to the forefront of public consciousness." The report showed the extent to which the yards can serve as functional spaces offering opportunities for movement, creating richer urban environments and contributing to wider perceptions about Huddersfield as a whole.

Huddersfield Town Centre—characterisation:

Huddersfield's Town Centre is tightly enclosed by the circle of the ring road, which in effect cuts the central area off from the surrounding suburbs. Within this physical boundary, the rest of the townscape plan is characterised by a rigidly defined grid-like street pattern, which is most notably identified within the new town. There are a number of long, straight streets, lined by three and four storey buildings whose breadth and scale provides an essence of grandeur. There is also a strong sense of enclosure which is further reiterated by the continuity and consistency seen within most of the town's developments. In some cases within the town centre, the quality of the townscape is enhanced by the careful consideration of the street layout. The changes in level that are witnessed within the town establish a strong identity. The long and straight streets that are found within the centre give rise to the opportunity of attractive vistas and views in and out of the town centre, in most instances these form a key part of the character of the Conservation Area.



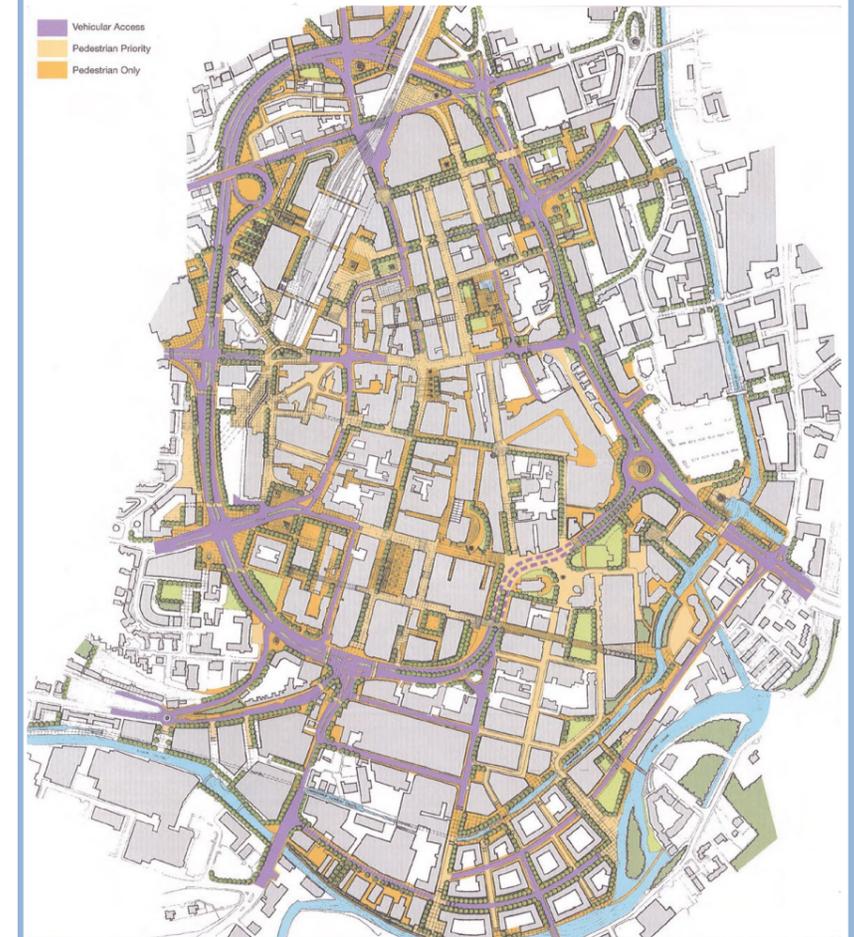
Harold Wilson statue in front of Huddersfield Railway Station, St George's Square

Strategic Development Framework 2004 & Urban Design Strategy

2009

Proposed new road network and remodelling of town centre, Preferred Option —

‘Boulevard and Grid’ - Taken from Huddersfield UDS 2009



This builds on previous ideas for remodelling the ring road—Taken from Huddersfield Urban Renaissance ; Strategic Development Framework (SDF) 2004.

This also highlighted the need to reconnect the town with the university.

‘Boulevard and Grid’

This option incorporates the proposal to create a ‘Horseshoe’ ring road which will reconnect what was the heart of the town and bring the university back into the town centre. ‘The Horse shoe ring road would allow traffic to be diverted away from this section of the road which could then be treated as a shared surface for local traffic only. As part of this, curves on the current road could be turned into ‘T’ junctions, freeing up land.’

It also incorporates some of the grid proposals which is the boldest option to do away with the ring road altogether, rather than channel the traffic onto one high capacity road around the town centre that will always feel hostile, this option creates a network of streets across which the traffic would be dispersed.

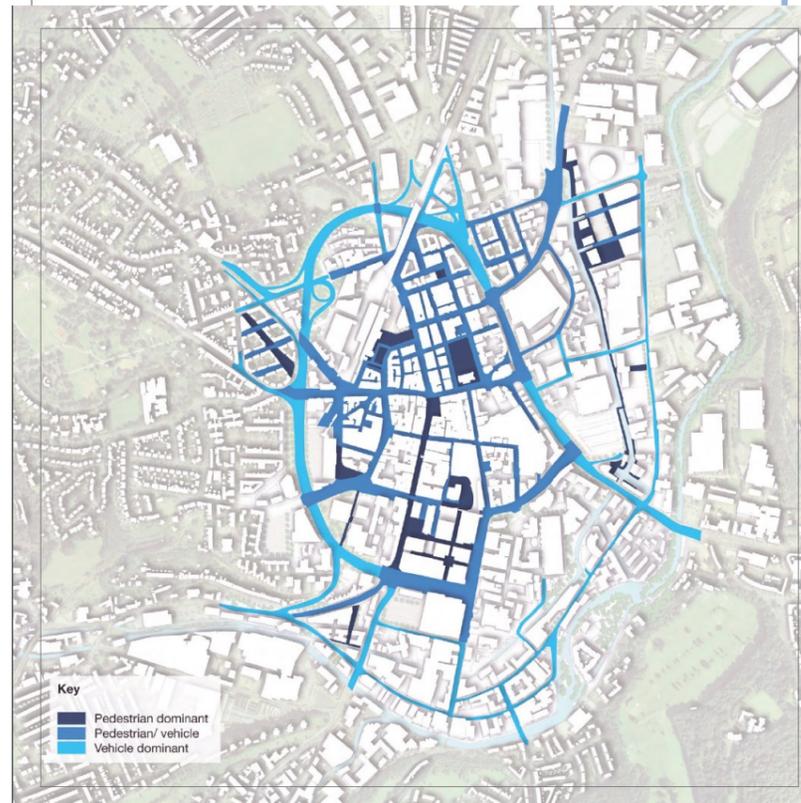
UDS 2009

Preferred Option Boulevard & Grid

Following consultations a preferred option has been developed as a hybrid of options 2 and 3. This is the basis for the illustrative plan to the left and the strategy in the following section.



Page 33

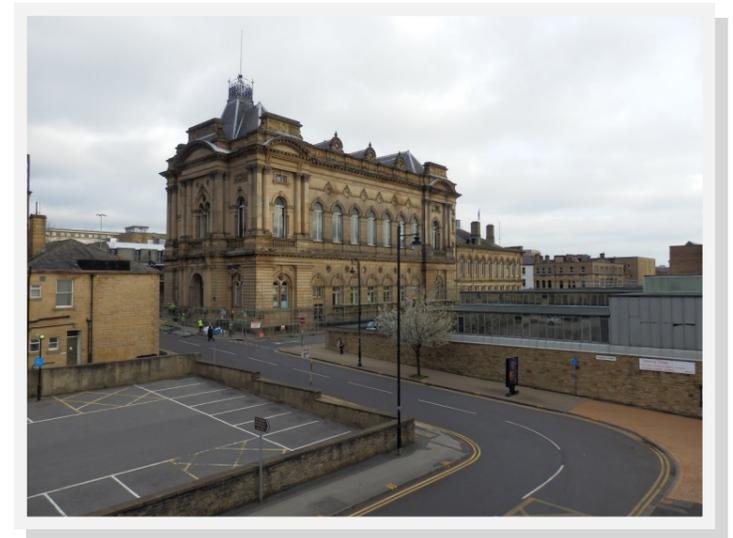


Street Hierarchy for movement/traffic (Taken from Huddersfield UDS)

The Huddersfield Urban Design Strategy illustrated a number of options for reconfiguring the street network. As previously mentioned, the preferred option was the Boulevard and Grid, developed in consultation with Kirklees Highways Engineers.

The illustrative plan to the left shows the consequence of implementing this style of traffic scheme.

Whilst this proposal may not be implemented as presented opposite, the significance of the recommendations are highly relevant and their concept should be acknowledged and possibly interpreted in the final proposals.



Taken from Huddersfield UDS 2009

HUDDERSFIELD TOWN CENTRE DESIGN FRAMEWORK

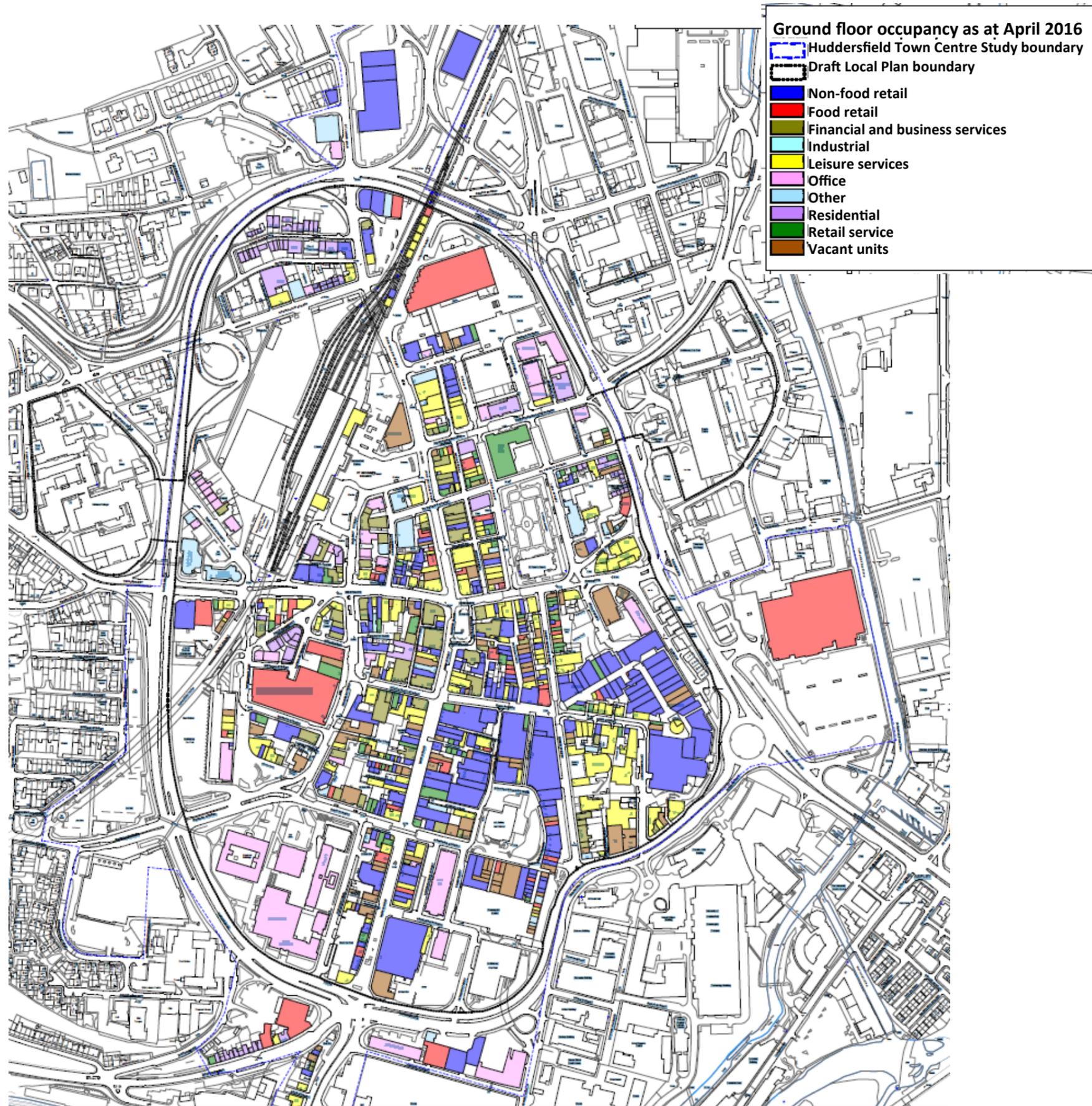
APPENDIX 2

Urban form and land uses

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Urban form and land uses



CURRENT OVERVIEW OF HUDDERSFIELD TOWN CENTRE

RETAIL

Retail hubs eg. Kingsgate, Packhorse Centre, Primark, Wilkinson, Supermarkets and retail parks.

COMMERCIAL / BUSINESS

Banks / finance, solicitors

EDUCATION

Kirklees College, Greenhead College, Huddersfield University

LEISURE

Sports Centre, coffee shops / cafes, public houses / bars, restaurants & fast food outlets

BUILT HERITAGE

Grade 1 railway station, St Georges' Square, St Peter's Church, Town Hall and Library, and various yards, some in use, many not utilised enough. Arcades such as Byram, Market Avenue and Imperial

PUBLIC TRANSPORT HUBS

Train station, bus station

CIVIC

Courts, Town Hall, Art Gallery, Library

PEOPLE / VEHICLE CONFLICT

Various junctions such as Westgate, Kirkgate & Market Place (Near McDonalds).

Castlegate – students from Greenhead College.

Queensgate at University hub

Queensgate, Chapel Road & Manchester Road – Kirklees College

GREENSPACES / TREES

St Peter's Gardens

The Piazza

Trees on ring road and various pockets within town centre.

HUDDERSFIELD TOWN CENTRE DESIGN FRAMEWORK

APPENDIX 3 The Local Plan 2017

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The Local Plan 2017 (Submission version)

Policy PLP 17

Huddersfield Town Centre

Huddersfield Town Centre will be the principal focus for high quality comparison retail goods within the district, supported by a range of leisure, tourism, office (including high quality grade A office space), and other main town centres uses. Huddersfield town centre will also provide high quality educational facilities and opportunities for town centre living.

Proposals for new development within the town centre will be supported where they:

- a. preserve and enhance the towns' cultural and architectural heritage and open spaces, and connections to them;
- b. provide a safe welcoming inclusive destination for people of all ages of the district to visit throughout the day from morning into the evening;
- c. provide space for town centre residential living;
- d. provide opportunities for larger scale individual retail floor plates;
- e. provide, where appropriate, sustainable modes of transport, such as cycle and pedestrian routes, cycle parking and charging points for electric vehicles;
- f. provide space for a range of businesses from small scale start-ups to larger multinational corporations
- g. create opportunities for the economic development and expansion of the town and the district;
- h. retain and regenerate key historic features of the town centre such as pedestrian arcades, yards and historic listed buildings, both within and outside of the Huddersfield Town Centre Conservation Area;
- i. Retain and refurbish traditional shop fronts wherever practicable
- j. facilitate development and continued evolution of the University of Huddersfield and its Queensgate campus, enhancing its connections with the town centre core; and
- k. Provide where appropriate urban green infrastructure such as street trees.

Proposals on the edge of Huddersfield Town Centre which pass the sequential test shall in all instances include enhanced connections to the town centre. Proposals where appropriate shall make them more attractive to pedestrian, cyclists and public transport users, and shall provide appropriate connections and enhancements to convenient pedestrian and cycling routes.

Proposed development schemes along the Leeds Road/St Andrew's Road corridor from the Stadium to the Town Centre shall include enhanced pedestrian and cycling linkages between the Stadium and the Town Centre.

Within the town centre there are two key development site opportunities to support capacity for growth within the town centre over the Local Plan period. The sites form mixed use development opportunities on the outer extent of the town centre, but with linkages to the central core which would be enhanced through development of the sites. The sites are located at the former Kirklees College site on New North Road to the west of the centre, and the former sports centre site on Southgate to the east and provide new large scale mixed use development opportunities.

Other development opportunities exist within the town centre including St George's Warehouse, New North Parade, the site of the former St Peter's Building, St Peter's Street and a number of others. It is also acknowledged that within the proximity of the town centre is the mixed use development site at the Waterfront between Chapel Hill and Manchester Road which has extant planning permission. The development of these sites will be supported, subject to the protection and enhancement of the vitality and viability of the town centre and all other material planning considerations.

There are green infrastructure assets in and around the town centre such as Greenhead Park, St Peter's Square and the canal. Linking these assets by tree lined routes would provide an uninterrupted urban park experience for visitors to the town.

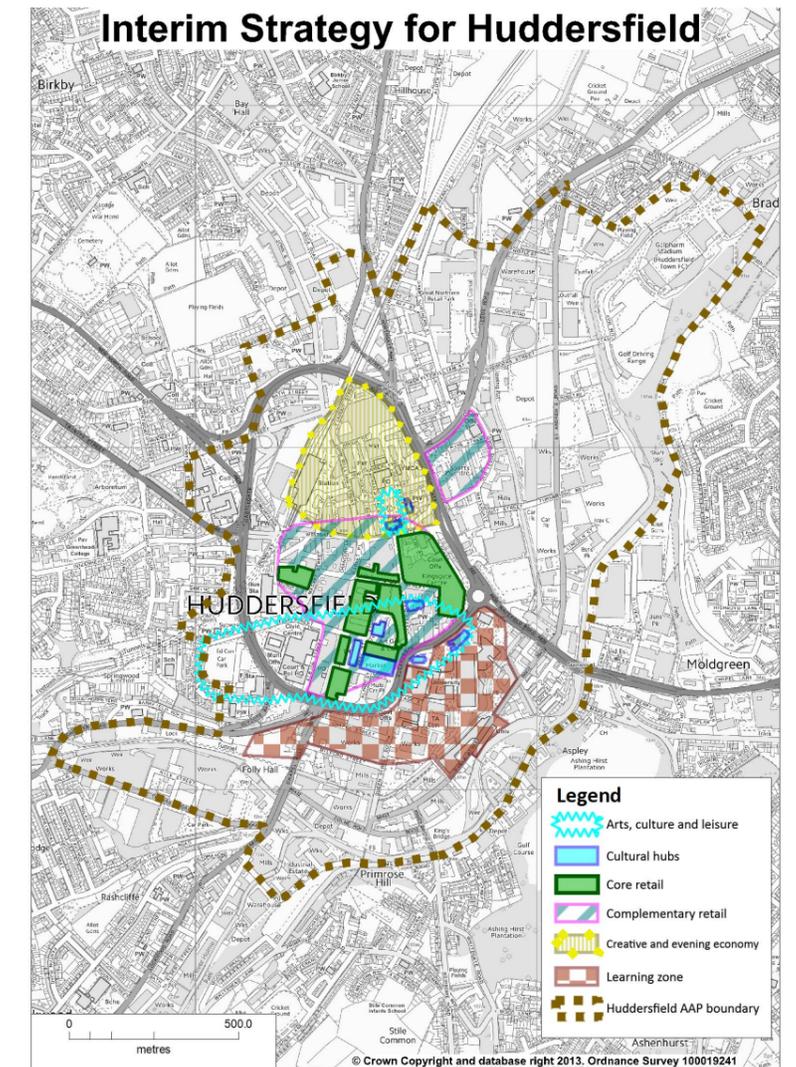
Links with strategic objectives:

- Support the growth and diversification of the economy, including the provision of a high quality communication infrastructure.
- Strengthen the role of town centres, particularly Huddersfield, Dewsbury and Batley, to support their vitality and viability.
- Improve transport links within and between Kirklees towns and with Neighbouring towns and cities, giving priority to public transport, commercial traffic, and to cycling and walking.
- Provide new homes which meet the needs of the community offering a range of size, tenure and affordability, with good access to employment, shops and services.
- Tackle inequality and give all residents the opportunity of a healthy lifestyle, free from crime, to achieve their potential in work & education.
- Protect and enhance the characteristics of the built, natural and historic environment, and local distinctiveness which contribute to the character of Kirklees.
- Promote the use of brownfield land to meet development needs and support the regeneration of areas.

Taken from the retailing and town centres, Huddersfield, Publication Draft Local Plan April 2017 (Submission document)

Huddersfield – the largest town in Kirklees and its town centre is one of the districts largest assets, serving the wider South Kirklees area with its good quality of life, successful university, diverse and talented workforce, distinctive architecture and rich cultural heritage. The town has a broad retail offer, a strategic location with connections between Leeds, Manchester and Sheffield, good cultural and leisure facilities.

This policy DLP 1 will be delivered by developers and investors who propose new developments in Huddersfield Town Centre, or who are looking to propose new large scale main town centre uses. The Council will also deliver the policy through the planning application process via the Development Management and Planning Policy Teams, to support new development and growth in Huddersfield, and by other partner organisations and local business who operate in Huddersfield Town Centre.



Taken from 'AN INTERIM STRATEGY FOR HUDDERSFIELD TOWN CENTRE' 2013

The vision for Huddersfield, expressed through the *Integrated Investment Strategy* recognised the need to:-

1. Stimulate greater investment.
2. Improve health, well being , reducing inequalities & worklessness
3. Provide the appropriate supply of homes and jobs to meet the needs of a growing population
4. Stimulate a higher skilled, higher waged population.
5. Stimulate a more diverse and resilient economy
6. Maintain Huddersfield as a regional centre

The Interim Strategy actions aimed to:- Develop Huddersfield's role as a distinct sub-regional centre of growth. Capitalise on Huddersfield's strategic location at the centre of the major city regions of Leeds, Manchester and Sheffield. Stimulate and develop new generation job accessible to local people. Enabling a sustainable economy resilient to financial and environmental impacts. Following the AAP 2009 issues and options consultation, AAP's are likely to be progressed after the new emerging Local Plan and the Newsome Neighbourhood Plan will also be key, linking closely to the Town Centre.

HUDDERSFIELD TOWN CENTRE DESIGN FRAMEWORK

APPENDIX 4 Green Streets®

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Green Streets®

Inclusion of trees and vegetation within an urban environment is crucial to the success, ambience and use of urban space. They provide towns and cities with environmental, social and economic benefits and are intrinsic to the human visual connection with a particular space.

Tree planting within towns is important because trees provide significant benefits:

Economic benefits of urban trees

- The Commission for Architecture and the Built Environment review showed that properties located in a landscape with trees or close to green space had price range increases up to 30% (CABE (2005) *Does Money Grow on Trees*)
- *Ocean Road, South Shields, South Tyneside completed in March 2014 incorporated 78 long lasting columnar trees maintaining good visibility to shopfronts which line the street. A selection of hornbeams, which can withstand wind and salt spray, was chosen for their columnar crown and became a focal point for enhancing the local distinctiveness of the public realm. Refer to **Trees in Hard Landscape A Guide for Delivery by Trees & Design Action Group** which provides many case studies demonstrating how street tree planting is used to strengthen the visitor and retail economy.*

Environmental benefits of urban trees

- Trees reduce 'urban heat island effect' of localised temperature extremes; create shade, remove dust from the air; reduce wind speed; encourage biodiversity; intercept and slow down precipitation, can help improve polluted ground.
- Trees and amenity planting also help reduce surface water flooding and increase permeability of soil. The implementation of SuDs (Sustainable Urban Drainage) is crucial.

Social Benefits of urban trees

- Trees have a positive impact on people's physical and mental health. (NUFU., 1999), (Mudrak, LY, 1982), (Ulrich, RS et al, 1991).;
- Trees help soften and/ or complement the built environment, encouraging active travel.
- Trees keep us in touch with seasonal changes; encourage wildlife into urban areas; make more comfortable environments, through shade for seating, reduce wind tunnels, and also shelter from rain!
- Trees help create an identity in an area and encourage local pride.
- Trees can act as screening for unpleasant views, but can also frame good views.
- Trees have a positive impact on crime reduction. For example, in Baltimore, a 10% increase in tree cover yielded at least a 12% decrease in crime. (Moore, EO.,1981-82), (Kuo, FE & Sullivan, WC., 2001), (Landscape and Urban Planning, 2012).;
- Public housing residents with nearby trees and natural landscapes report 25% fewer acts of domestic aggression and violence and where there are greater amounts of vegetation around public housing overall crime levels is 52% lower than where there are low amounts of vegetation (Wolf, K. L., 2010).



FIGURE 1 Ocean Road, South Shields, South Tyneside



FIGURE 2 Ramsden Street without trees



FIGURE 3 Ramsden Street with trees

HUDDERSFIELD TOWN CENTRE DESIGN FRAMEWORK

APPENDIX 5 Tree planting

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Tree planting (Future view)

To truly enhance and improve the green infrastructure within and around Huddersfield town centre, a multi-disciplinary collaborative approach is essential. A comprehensive detailed design and specification shall be achieved at the very beginning of the planning stage. Particulars such as form, species, implementation and ongoing maintenance and monitoring need to be ascertained to ensure viability and maintainability for continued support of the vision.

It is well recorded that the presence of trees within the built environment increases property values anywhere from 3-15%, including the proximity of larger or mature individual street trees to good tree cover generally in an area. Trees can improve building performance, give a positive perception and improve health overall.

Consideration should be given to the existing trees of our urban landscape and the fact that it is the larger trees that have the largest visual impact. Urban trees can add beauty and a sense of connection to the natural world, but in a building dominated landscape setting, it is potentially the largest mature specimens which soften the lines of big buildings, expanses of paving, improve air quality, soak up rainwater and combat heat.

Firm design guidance on the inclusion of trees at the start of every project is imperative. It has often been the case for new buildings or in redevelopment schemes that street trees are usually an afterthought. As Brita von Shoenach reiterated “the local tree officer is involved only at a very late stage, by which time the design is decided and the space allocated. And without strong political backing, no one has enough power to get anything changed. So, instead of big trees, you end up with small or narrowly fastigiated varieties with little lasting impact on the landscape.”

Anne Jaluzot, a planning consultant with the advisory Tree and Design Action Group states that the best chance of getting more big trees into the city is to put them to work as part of the urban infrastructure. “There is very little money allocated to the environment, but huge money allocated to services, so the key is to make trees part of how the city functions,” she says.

The key reference is: ‘Trees in Hard Landscapes—A Guide for Delivery’ -Trees and Design Action Group (More information found at: www.tdag.org.uk)

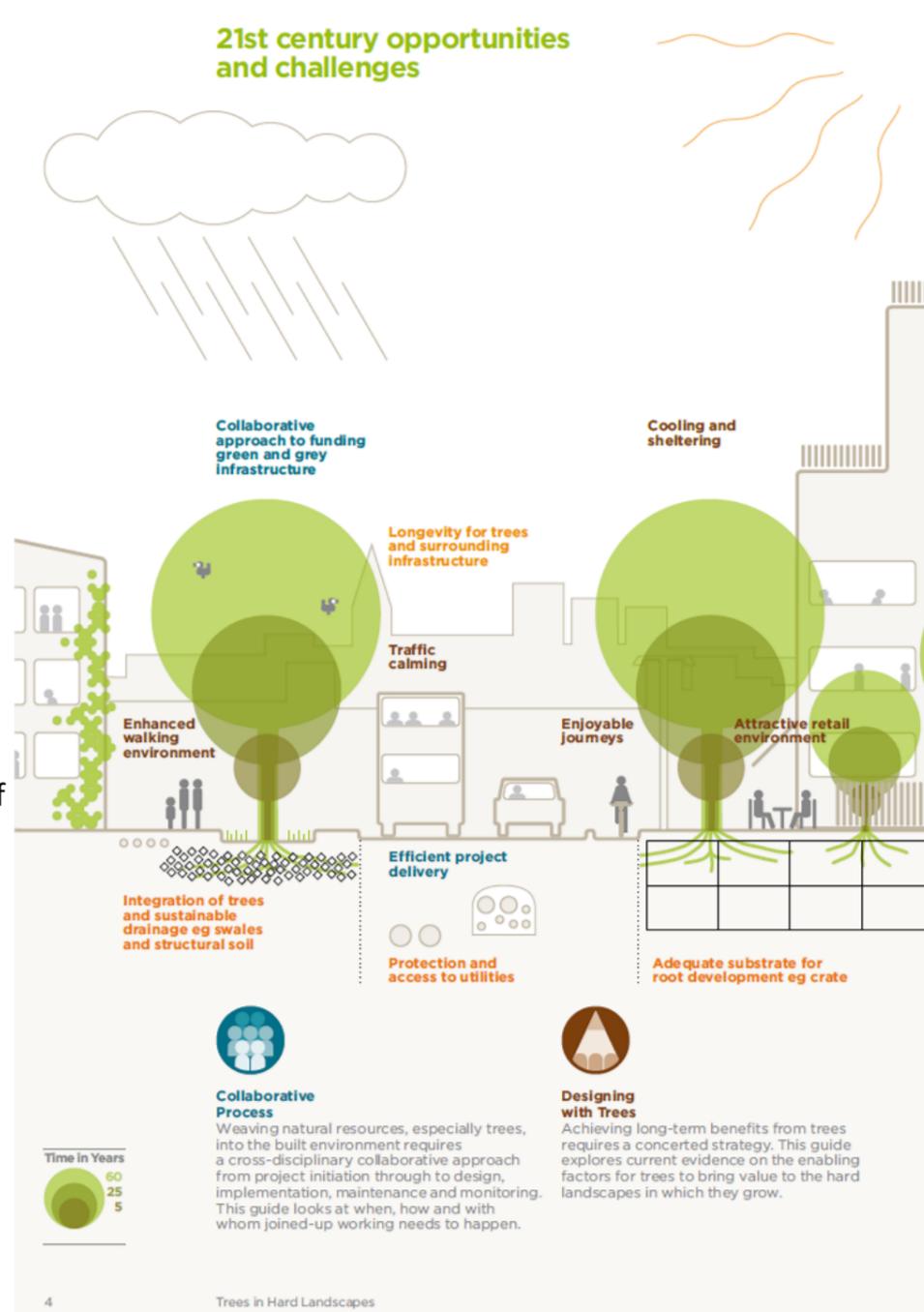


FIGURE 1 : TAKEN FROM ‘TREES IN HARD LANDSCAPES –A GUIDE FOR DELIVERY’ -TDAG



The benefit of trees within public realm. Larger species with a greater spread can be planted within the space.



Proposed tree species

The aim is for designers to refer to Green Streets® principles when designing and planting street trees within the town centre and ring road. And adhere to the standards. It is not advisable to plant just one or two species within the urban environment. The onset of disease or particular environmental conditions could potentially condemn a whole group of species, hence a variety of species provides different habits and forms and work well in a variety of spaces.

The inclusion of trees within a street environment creates a totally different ambience. Selecting the correct species for a particular space can ensure that the form and height can be tolerated by the space, even narrow streets.

The extra dynamic roof gardens can provide, can't be overestimated. Further tiers of urban life, activity and biodiverse structure can be achieved.



Roof gardens

Urban trees need to be planted correctly to ensure healthy growth and longevity. They can successfully be planted in paved areas using bespoke systems that ensure healthy root growth without damaging the surface up above. The tree pit can also ensure conflict with underground services is kept to a minimum by use of bespoke tree pit design using soil cells or similar support modules as illustrated on page 33.

The leaf drop can be reduced by using smaller leaf and evergreen species. For narrow spaces, trees with a limited spread should be used. The ultimate height and spread of tree at maturity must be considered when selecting species.

SUGGESTED TREE SPECIES FOR HUDDERSFIELD

Acer campestre 'Elsrijk' - Field Maple – Hardy dense closed crown, 'streetwise' or 'Queen Elizabeth' is narrower than Elsrijk

Acer platanoides—Norway Maple, cultivar 'columnare' does well in urban situations apart from very wet sites

Acer rubrum 'Scanlon' – Red Maple, compact conical crown, tolerates clay soil, good autumn colour

Aesculus hippocastanum – Horse Chestnut (where space permits)

Betula pendula – Silver Birch, open crown with good autumn colour

Betula utilis jacquemontii – West Himalayan Birch

Carpinus betulus 'fastigiata' - Hornbeam, tightly ascending branching habit, tolerates exposed sites, good autumn colour also 'pyramidalis'

Castanea sativa – Sweet Chestnut (where space permits)

Crataegus monogyna—Hawthorn 'stricta' columnar habit

Fagus sylvatica – Beech – Cultivar 'Dawyck' available, needs well drained soil but green, gold and purple varieties available

Liquidambar styraciflua – Sweet Gum, tolerant of hard surfaces, autumn colour

Liriodendron tulipifera 'Fastigiatum' - Tulip Tree, very narrow habit, upright form, large leaves

Pinus sylvestris 'Fastigiata' - native evergreen forms dense column, stiff upright branches, tolerates most well drained soil, susceptible to damage from snow, ice and strong winds in winter

Platanus x acerifolia, London plane, resistant to pollution (plant where space permits)

Quercus robur 'Fastigiata koster' - Cypress Oak –compact, narrow crowned with firm upright branches, stands up well to hard surfacing

Sorbus Aria Lutescens – Silver Leaved Whitebeam, tolerant of exposed, windy positions, atmospheric pollution and dry urban conditions, not waterlogged ground

Sorbus aucuparia 'Joseph Rock' - Mountain Ash/Chinese Rowan – striking small tree with finely formed foliage, good autumn colour and tolerates most soils

Sorbus torminalis – Wild Service tree, majestic, broadly domed, with edible fruit and jagged palmate leaves, crimson in autumn

Tilia cordata 'Greenspire' – Small Leaved Linden/ Lime Greenspire has good consistently uniform growth often with straight stem & compact, neat habit, good avenue street tree.



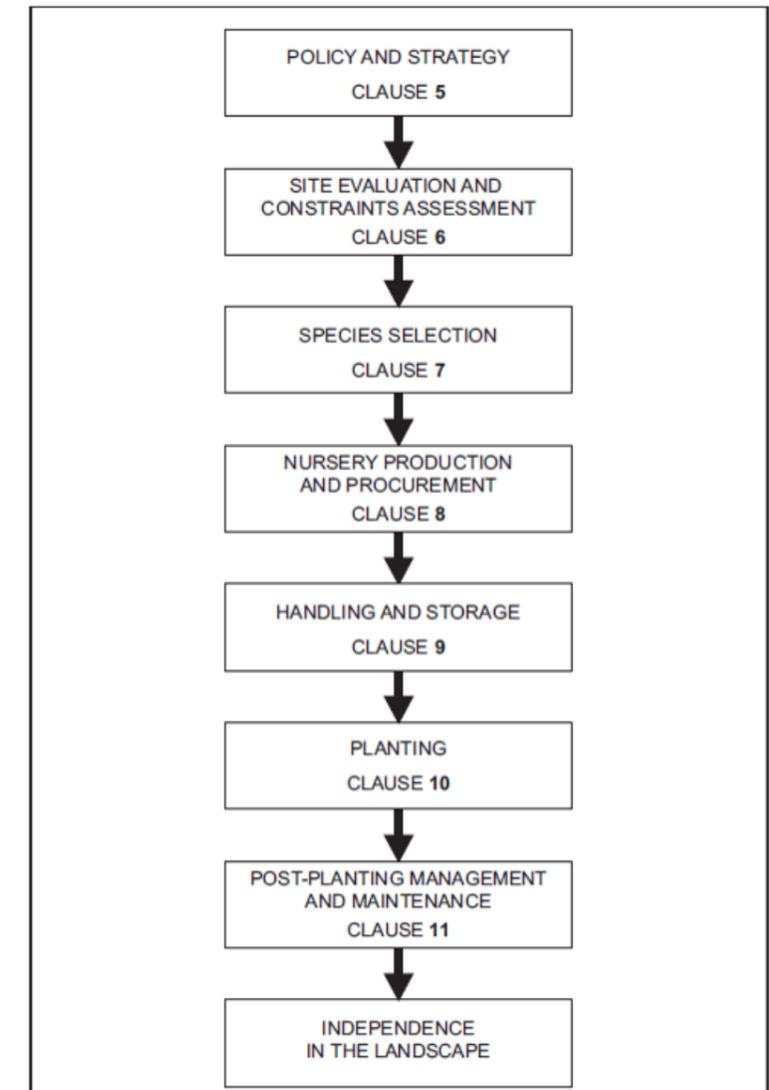
Tree planting even along narrow routes.

General process

For all planting projects, the process shown in Figure 1 should be followed.

NOTE Figure 1 and the flowcharts in the clauses that follow are conceptual diagrams that summarize the principles rather than the detail of each process. Although the flowcharts are presented in linear form, the practical application is likely to involve revisiting, cross-referencing or reviewing different stages of the process.

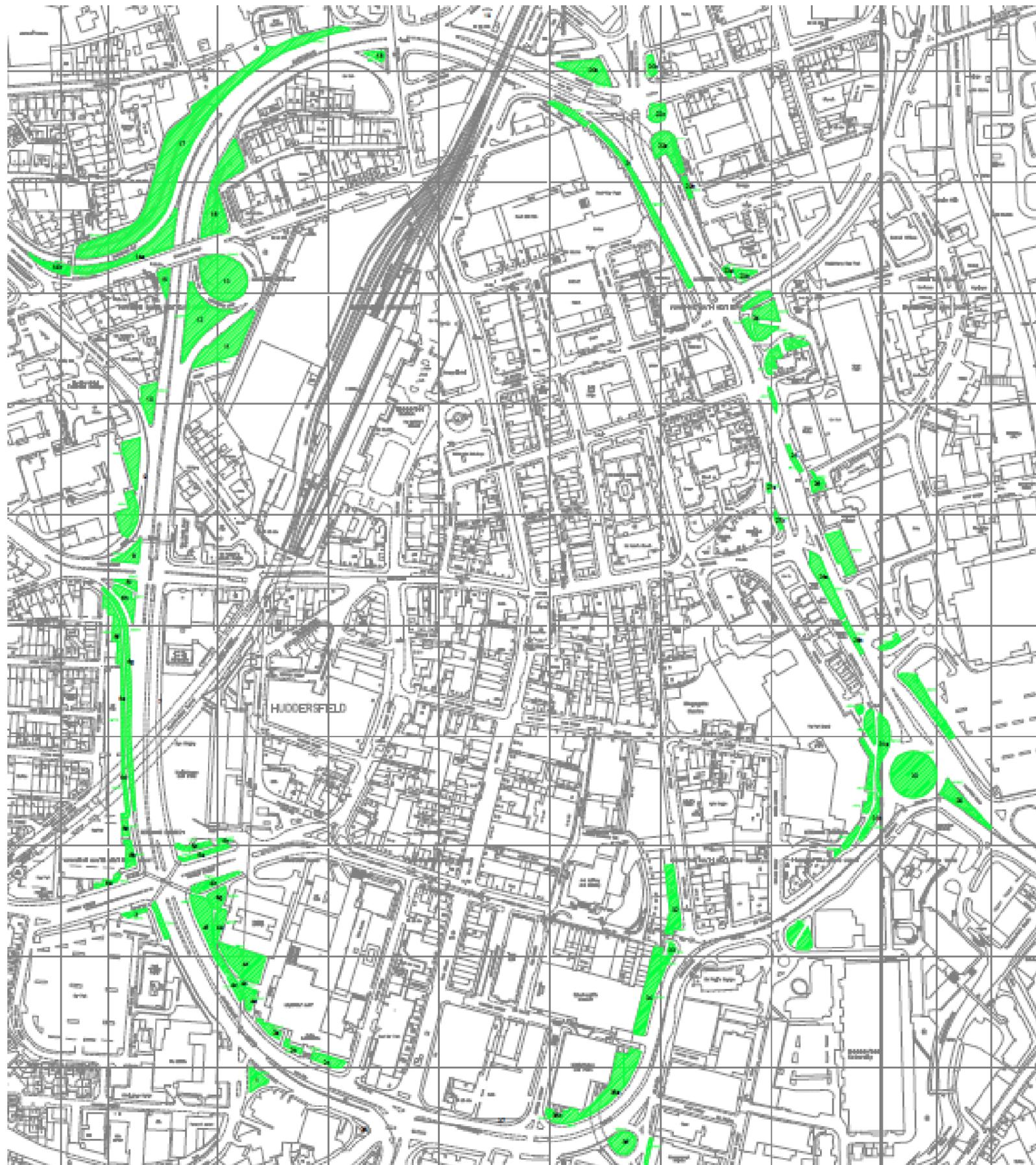
General process for new planting projects



TAKEN FROM BRITISH STANDARD FOR TREE PLANTING BS: 8545 :2014

The pallet of trees available for selection for any given urban location are chosen using clear methodology. Choices are made based on the individual site conditions, space available, leaf size tolerable, shape and ultimate size of the tree and species which will be suitable (for example, some fruiting varieties might not be suitable over seating areas and some trees are less tolerant of salt, wind or pollution). Tree species are selected according to the design of their proposed location either in single species, groups, avenues or as a single majestic specimen.

Tree planting the ring road



Improvement in both green and blue infrastructure is a key target of authorities across the wider Leeds City region. This pilot project looks at the current green infrastructure around Huddersfield Ring Road and seeks to improve both the effectiveness and quantity of tree cover whilst at the same time giving some opportunity to reduce the future maintenance burden on revenue budgets.

The project looks at creating an effective green environment around the ring road which would serve to improve air quality, dissipate urban heat gain, provide shade to strategic areas such as car parks, improve the appearance and attractiveness of the town centre and approaches - whilst at the same time looking to reduce the level of annual maintenance required. In general terms, the aim is to create an “Urban Forest” landscape comprising trees which are known to thrive in the urban environment – maximising air quality improvement – and wherever possible replacing grassed and shrub planted surfaces with low growing ground cover vegetation which can be maintained by way of no more than an annual trim.

This initial project concentrates on areas of existing greenspace within the environs of the Ring Road and immediate spurs, although further opportunity also exists for a project to investigate additional tree planting within existing hard surfaces such as central reservations, around pedestrian areas and on sections of arterial roads linking directly with the Ring Road. One such short section of Bradford Road between Lower Viaduct Street and the junction with the Ring Road/Bradford Road spur opposite the petrol station has been included in this project as it is a section of road continuous with Northgate which does form part of the Ring Road.

This ring road tree planting project aims to link in with the proposed greening of the A62 Leeds Road corridor project, the “Kirkles Smart Corridor”.

Tree planting infrastructure



Urban tree planting usually requires the use of special load bearing underground structures which prevent upheave of pavements and compaction around tree roots. They can also prevent tree root penetration into service pipes.

The images above illustrate some examples of the types of root cells and barriers on the market.

These systems also include systems which aerate the roots and make irrigation of the roots easier.

Critical to the success of street tree planting is the continued maintenance and formative pruning which should be undertaken regularly and form part of the town centre maintenance plan.

Tree planting can be undertaken as part of a larger townscape or transportation improvement scheme or on a tree by tree basis, where it forms part of the larger strategic Green Streets® tree planting strategy for the town centre.

When including any type of tree planting within the urban realm careful consideration and design of the tree infrastructure needs to be included in the overall scheme. Trees can be included in the public realm in places where it would have been considered impossible in the past, due to restrictions underground, such as services, surface uses etc. Any scheme should allow for consultation with a specialist in urban tree planting.



A recent urban tree planting scheme in Heckmondwike, used geogrid structure to enable vehicle loading over the tree roots, these will also prevent roots pushing up the surfacing and encourage the trees to thrive.

The aeration and irrigation system is only visible on the surface with the small vent. Underground guying removes the need for stakes and porous surfacing allows free movement of water to the roots.

HUDDERSFIELD TOWN CENTRE DESIGN FRAMEWORK

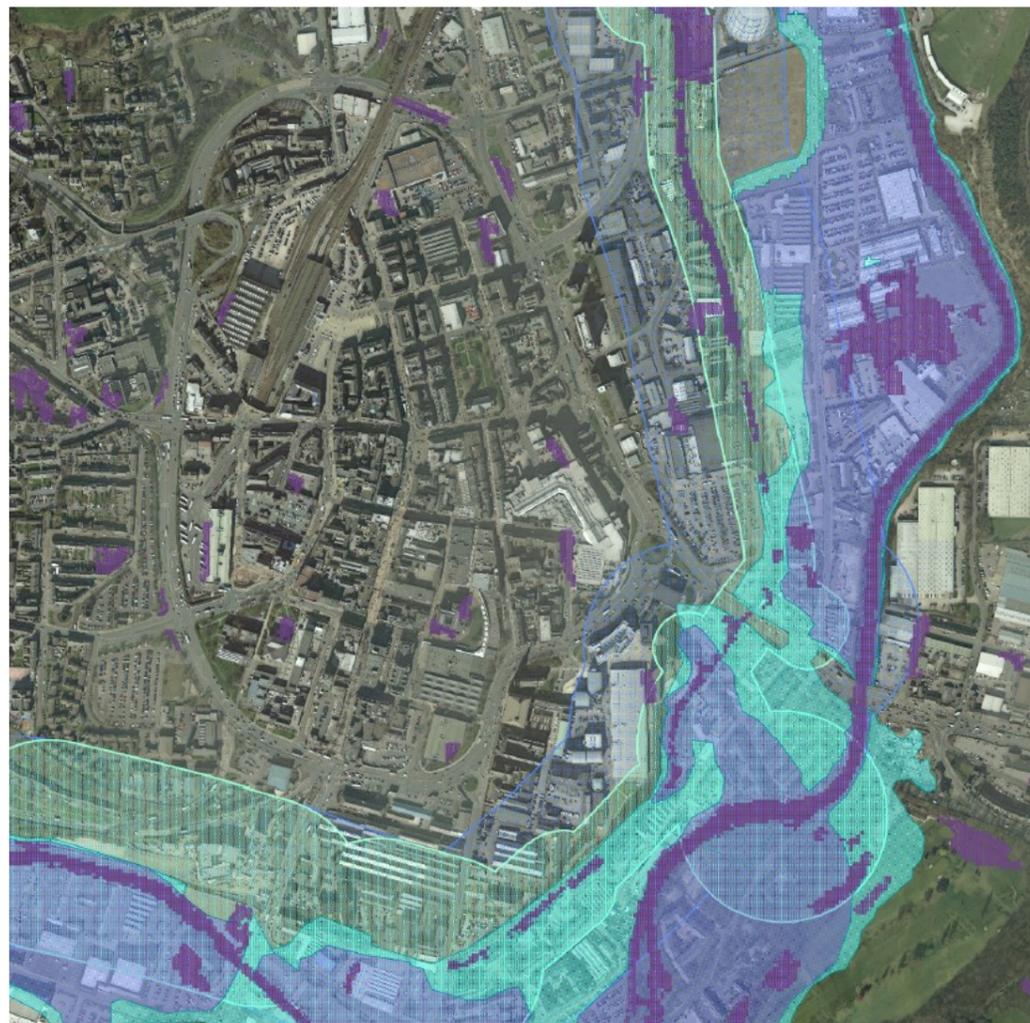
APPENDIX 6 Blue-green infrastructure

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Blue-green infrastructure

Proposals within the town centre should consider greenery and how links can be formed of Green Infrastructure to form corridors of greenery across the town and to the surrounding areas and the incorporation of SUDS (Sustainable urban drainage systems)



Plan indicates areas of flood risk in and around Huddersfield town centre.

- Flood Risk Areas**
- Floods_200yr_Deep EA_Flood_Zone
 - Flood Zone 2
 - Flood Zone 3
 - FloodRisk_SFRA
 - Flood Zone 2
 - Flood Zone 3a
 - Flood Zone 3ai
 - Flood Zone 3b
 - all others

Types of Sustainable Urban drainage (SUDs) approaches that could be incorporated within the town centre and periphery areas



Biorretention areas



PerVIOUS pavements



Green roofs

Through the implementation of Sustainable Urban Drainage Systems (SuDS) it is intended that the hydrological response of a developed area will emulate as close as possible the pre-development natural drainage patterns of the area. These drawbacks must be added to water pollution. The rainwater washes pollutants suspended in the air (known phenomena such as acid rain) and runs along impervious surfaces, which are often contaminated by oils and fuels from vehicles, the remains of industrial activities and other many different toxic substances. In combined drainage networks, high flows make the wastewater treatment plant, in some rainfall events, unable to treat all of the wastewater, resulting in untreated sewage discharging directly to the natural environment .

CHANGE OF APPROACH:

The traditional practice has been to collect rainwater through impervious surfaces such as gutters and pipes to drain it away as quickly as possible via the general sewage and drainage systems. Methods are now beginning to take into account not only the need to evacuate rainwater, but also the need to do so in a rational way, with lower peak flows and adequate implementation of quality systems to achieve a controlled dispersion of excessive rainfall. Then we would define SUDS as elements of the drainage network that will allow us to collect, transport, treat, retain, infiltrate and drain rainwater in a sustainable way.

Gradual development and urbanisation of the town centre has resulted in natural watercourse systems through the town centre being connected into, and replaced by, the public sewer system. Opportunities will become available during redevelopment, maintenance and improvement works to remove some of this surface water from the system and infiltrate it direct to ground by using SuDS techniques.

- Green roofs should be encouraged on redevelopment sites.
- The introduction of trees into the town centre provides opportunities to disconnect road gullies from the public sewer system and reconnect them to tree pits or proprietary watering systems
- Permeable paving should be considered when replacing existing road and footway surfacing
- Where positive drainage systems are specified, close attention should be paid to maintenance requirements, to ensure they work as designed. This is particularly important on concealed drainage systems such as slot drains and recessed block gratings where siltation levels are not obvious/visible.

HUDDERSFIELD TOWN CENTRE DESIGN FRAMEWORK

APPENDIX 7 Highways principles

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Highways principles

In better preparing Huddersfield’s highway network for the future it is important that we produce designs that are sustainable in that they reduce our carbon output and demand on energy resources.

In developing a good highway we must ensure future designs recognise the character of the existing highway and the surrounding built environment. We must remain mindful that our highway asset is our most regularly used by both our existing residents and visitors.

It is important to ensure designs are safe to build, maintain and are safe to use for a wide spectrum of audience for both social and commercial purposes. Our customer base comes in all guises from children to adults and from the more able to the less able. This makes consultation with the public a key part of developing designs to ensuring that they meet customer requirements.

A key theme should be to produce inclusive designs that can support themselves without need of regulation or enforcement.

Sign declutter is a key theme in general but especially within the conservation areas of Huddersfield Town Centre. Any guard-railing, road markings and traffic signing (not legally required) should only be introduced if necessary and where required in proportion .

Considering protective security measures for crowded places should form part of any design features of new build or significant refurbishment projects.

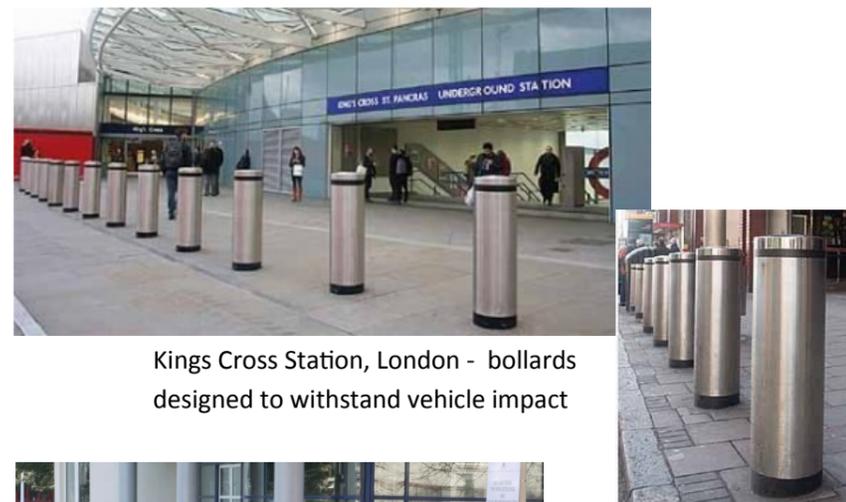


Pedestrian refuge island should have level crossings to avoid the need for wheelchair users having to ramp up and down as they negotiate them



Vehicle dropped crossing details to be made up in small Tegula sett details which allow them to follow the contours of the ground better. This gives a better result

COUNTER-TERRORISM/PROTECTIVE SECURITY MEASURES



Kings Cross Station, London - bollards designed to withstand vehicle impact



PAS 68 compliant planters (Gunwharf Quays, Portsmouth)



PAS 68 Concrete Planters from Marshalls



Solar powered highway bollard



Solar sign lantern



Amsterdam: Same street, 25 yrs apart—a great example of giving space back to people

Paving principles

Proposed paving materials should be matched to the setting, complying with the allocated standard of gold, silver or bronze. The aim is to achieve the best quality materials possible to maintain the character of the town centre.



Do's & Don'ts.

Reuse or combine existing historic surface materials with new in conservation and yard character area. Surfaces should be lifted, re-laid and repointed to create the desired finish.

Quality features, materials and construction methods are important to ensure paving lasts and can be maintained.



Rigid paving construction ensures the longevity and durability of the finished surface, unlike flexible paving systems which sink, move and distort. Street reinstatement works should be carried out in accordance with: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/4382/practicalguidetostreetworks.pdf

Guidance on laying concrete or stone block paving generally can be found in British standard BS7533.

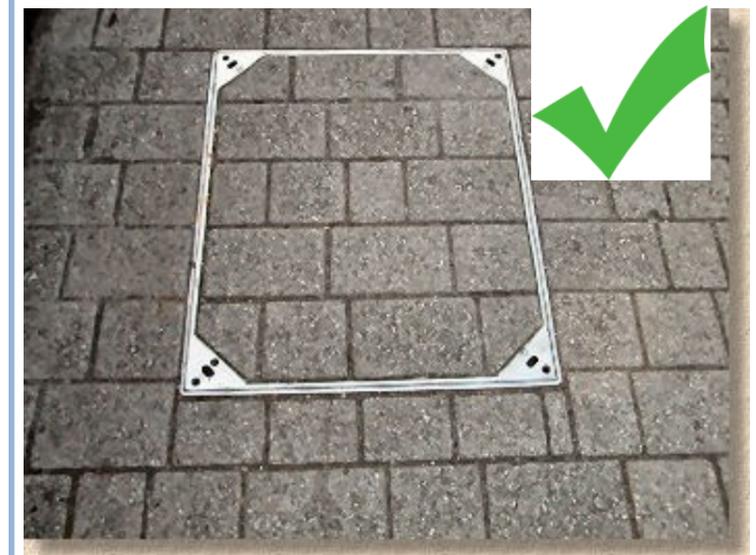
Small sliver of paving is not acceptable, this will become a weak point in the construction



Paving laying methods should be considered carefully at junctions to achieve a larger fill piece. As shown in the two examples to the left.



Paving laying should be orientated to follow the grain when using paving chamber covers.



Surface treatment & DDA compliance

Inclusive Places

All areas of the public realm should be welcoming and accessible and local authorities have a statutory duty to ensure this is provided where possible and improvements must comply with the documents that support the DDA (Disability Discrimination Act). The design of public realm improvements should actively consider the requirements of the elderly, parents with prams, those with mobility needs and visual impairment.

Consultation with local groups throughout the design process should be undertaken to address concerns and importantly balance varying needs and priorities, which can often conflict. Care must be taken to avoid the resulting scheme and facilities being compromised as this process should in fact add value and quality. Additionally it is recommended that guided tours of complete schemes could provide assurance to new users.

In addition to statutory requirements the following good practice principles should be considered in terms of creating an accessible welcoming town centre.

Slope and level changes:

- Where site conditions necessitate changes in level, or stepped access to an existing building is required, ramps not steeper than 1 in 15 should be proposed as an integral feature of design solution.
- Exaggerated cross-falls across paving should be avoided, gradients between 1:30-1:40 is a good benchmark for good practice.

Traditional and shared Surface Streets:

There is national consensus in our urban centres to reduce the dominance of cars and readdress the balance to put people first, creating more civilised streets. CABE (Commission for Architecture and the Built Environment), local authorities design and professionals/stakeholders and access groups are collectively considering how to address this. The debate is ongoing and projects will be monitored vigorously to help develop a new design language that can meet varying needs and transform our town centre into safe, attractive and inspiring places.

Whether new schemes in Huddersfield incorporate more traditional street configurations or shared surfaces, there are a number of design principles that should be considered to help create both attractive and user friendly places.

- Where pedestrian use abuts or converges with vehicular use a clear demarcation is required. The appropriate design solution can vary based on the intensity of traffic and the emphasis of the space, however this can be achieved through use of **strong kerb lines that contrast in colour** and tone with adjacent surfaces and considered use of varying kerb heights from flush to full kerb.
- Flush 'At grade crossings' should be provided in all possible instances. In addition, 'Carriageway' surfaces should contrast in tone and size of paving unit from adjacent pavements.
- Tactile paving is required to denote changes in levels or pedestrian crossings. The layout and materials for areas of tactile paving must fulfil the statutory requirements as a minimum but should also be elegantly designed to fit the design and character of the street in terms of colour, paving cuts and materials.
- The use of contrasting colours and tones in tactile paving is of particular importance to visually impaired users. However poor design can compound the 'patchwork' public realm currently in Huddersfield. In 'Gold' standard areas the use of custom made tactile paving in natural stone materials should be promoted.

DESIRABLE	Min	Max
Cross fall	1:50 (2.0%)	1:40 (2.5%)
Longitudinal fall	1:80	1:20



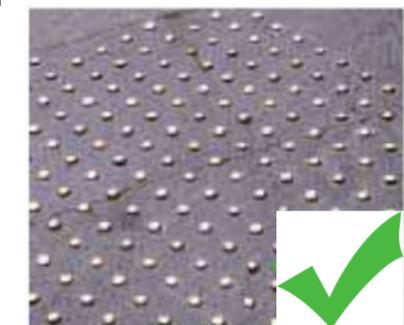
Access ramps should be an integral part of the scheme and should be made into a feature where possible.



The image left shows good use of paving in a pedestrian crossing. Depending on the location and whether gold, silver or bronze standard is required, the tactile paving could be insensitive and a more subtle attractive use of natural stone tactiles or crossed brass studs as seen below would have been more appropriate.



Stud tactile pavers or brass studs are required at pedestrian crossings and corduroy at level changes. These should be designed sensitively and sensibly. Studs should be raised enough to serve their purpose but not overtly proud. Where possible tactile units should be made of matching materials to the surroundings.



HUDDERSFIELD TOWN CENTRE DESIGN FRAMEWORK

APPENDIX 8 Cleansing and future maintenance

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Cleansing and future maintenance

Although the foot of this bench is good for cleaning around, the top with it's deep slats will trap dirt and litter.



This bench with it's open ends would create a trap underneath for litter and dirt.



Furniture which meets the ground
And is easy to clean around with no gap, lip or overhang which traps dirt/litter.



No tree grill or guard
These trap litter and debris such as cigarette butts, and become unsightly.
Planters currently used in Huddersfield trap litter and this design traps dirt around the base.



Styles of furniture is important to easy cleaning as the examples on the left indicate.

The street café culture, helps create a vibrant town centre, but cleansing problems caused by shop keepers not removing furniture, when the street cleansing team are in operation is a problem.

A recommendation would be to provide licenses for street café's with a contract for the shop keeper to clean their outdoor space themselves, and if this is not undertaken, then their licence would be revoked.



This example shows the problem of street café culture and the difficulty faced in cleansing around furniture, also impeded access by furniture left out on the street.



Drainage should be carefully considered, slot drains are aesthetically pleasing within a scheme, but the width of the gap should be considered to avoid trapping debris and cigarette butts, which inhibit the drains function.

Cleansing and future maintenance



Mini Scarab Cleansing vehicle (sweeping)

Clearance requirements

Vehicle Height	2245 mm
Vehicle Width	1650 mm
Vehicle Length	4230 mm

Weight up to 3500kg



Nilfisk Cityranger 3500 Cleansing vehicle (sweeping)

Clearance requirements

Vehicle Height	1990 mm
Vehicle Width	1230 mm
Vehicle Length	3110 mm

Weight up to 3500kg



Hako Cityranger 1200 Cleansing vehicle (washing)

Clearance requirements

Vehicle Height	1995mm
Vehicle Width	1430 mm

Weight up to 2500kg

Before any work is carried out within the public realm it is important that future maintenance and cleansing operations are considered. This is important to maintain the improved appearance of the public realm and keep it looking good for many years to come.

If maintenance/cleansing is considered at the beginning of the design work and made as easy an operation as possible in the proposed scheme. There should be no reason why a place shouldn't stay looking good. A well cared for environment, gives public confidence and in-turn encourages the public to have more respect for their environment and discourages anti social behaviour, such as littering, tagging, graffiti etc.

On the right hand side are the vehicles and dimensions of cleansing vehicles used in Huddersfield town centre and beyond.

The dimensions give an idea of what clearance need to be considered when placing furniture, trees, structures, sculptures, etc in the public realm.

The weight of these cleansing vehicles also should be considered when specifying materials, a potential weight of up to 3500kg should be designed for.

Cleansing and future maintenance



Square Bin

Side opening

No larger than 90L

Slam Lock

Specific for Litter bins

- The litter bin must have covered top
 - The litter bin should have a self emptying ash-tray fitted.
(can be easily emptied into main bin)
 - Must have a side or front opening door
 - Must have a slam type locking system
 - Vandal resistant
 - Fire retardant
 - To be fitted with ground fixing points
 - To have a separate pull-out liner
(galvanised steel with handles)
 - To be free standing
 - To have no sharp edges.
 - Must not be more than 90L capacity
- Square in shape.



Round Bin

Top opening

Larger than 90L

In the interest of future maintenance and creating beautifully design public realm that will stay looking good for many years to come we should be aiming to create spaces that are easy to keep clean, especially in light of government cuts to spending and this is only likely to get worse.

Spaces should be designed to allow for easy cleaning and the use of automated cleansing vehicles should be considered at all times. This means that enough clearance should be maintained around streets, including furniture, trees, signage planters, walls etc.

A few do's and don'ts to follow:

- Clearance should be maintained for cleansing vehicles...a minimum distance of ...should be maintained between objects and building facades
- Furniture should be easy to clean around, so no overhangs or open ended voids that make it impossible to sweep around with machinery.
- Tree pits should be flush with surrounding paving and be a bound material, not loose. No groundcover / shrub planting in tree pits.
- No tree guards or grills.
- Planting areas should have a raised edge to hold in soil/mulch and allow an edge for machines to sweep against.
- New planting areas to be created no wider than reach of a man with a litter picker, to avoid litter pickers having to walk into planting area.

Open fencing to the ground allows litter to pass through, into areas outside the public domain, but still visible. Consider fencing with closed bottom to trap and trap litter against it, and allow easier pick-up.

HUDDERSFIELD TOWN CENTRE DESIGN FRAMEWORK

APPENDIX 9 Street furniture proposals

DRAFT



Street furniture proposals



Too many materials in this area there are 6 different surfacing materials and 2 different types of bollards.



Cluttered streets, too many different elements within the public realm cause obstacles to pedestrian flow, and cleansing and also a visual jar in the landscape.



Some items could be coordinated to have a multi function.



Awkward details which seem overly complicated, instead of helping with movement actually create barriers to movements.



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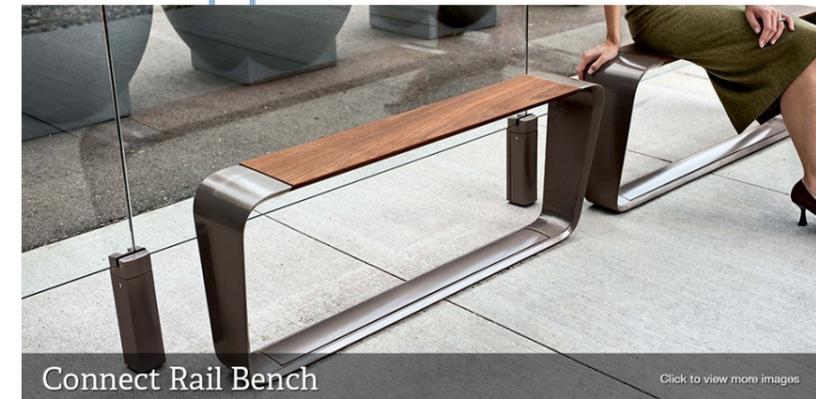
Street furniture proposals



Marshalls 'Loci' range of finger post, bike stand, monolith/signage and litter bin. The colours can be personalised, keeping the grey and incorporating the Kirklees blue into the door would work well, give a modern feel, but still tie-in to the towns identity.



VersaUk, Robust top quality stainless steel bollard with incorporated coloured band, ties in with seating.



Artform Urban range of benches, contemporary and classic in appearance compliment the 'Loci' range by Marshalls, the modern grey colour ties in with the grey of the metal and the 'stone' bench could be also a grey finish to further compliment.



Key points for furniture selection:

- ROBUST
- EASY TO CLEAN AROUND
- LOW MAINTENANCE
- STYLISH
- UNIQUE ITEMS IN CERTAIN AREAS.

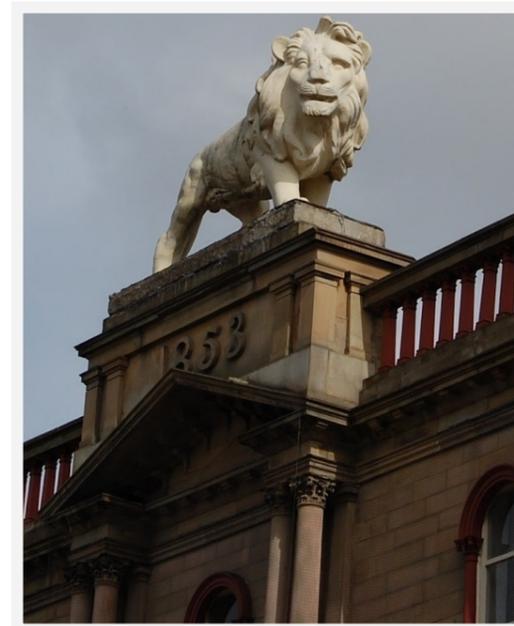
The Broxap simple Harpurhey cube and Timperely bench give further options which still follow the overall style.



HUDDERSFIELD TOWN CENTRE DESIGN FRAMEWORK

APPENDIX 10 The Yards

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The Yards – Silver standard



Most, if not all, of the Yards are within the Conservation Area, and it would be a good idea to reflect this in some way. For example the enhancement/reinforcement of the historic street layout or reusing/retaining the cobbles in the yards spaces.

The use of existing stone cobbles (where possible) is encouraged and combined with areas of natural stone paving/conservation kerbs or high quality concrete pavers.

These spaces also provide an opportunity to experiment with different materials and design ideas and create a varied and expressive public realm. The enclosed nature of the spaces offer the opportunity to create bold but sympathetic design and this should be encouraged.

The emphasis should be on the use of furniture, lighting etc. to give the impression of human/pedestrian scale to spaces. The furniture could be unique to each space and a mixture of traditional and contemporary in it's design and use of materials.

Through careful design some of the yards could be linked and create links through the town, via sequential spaces.

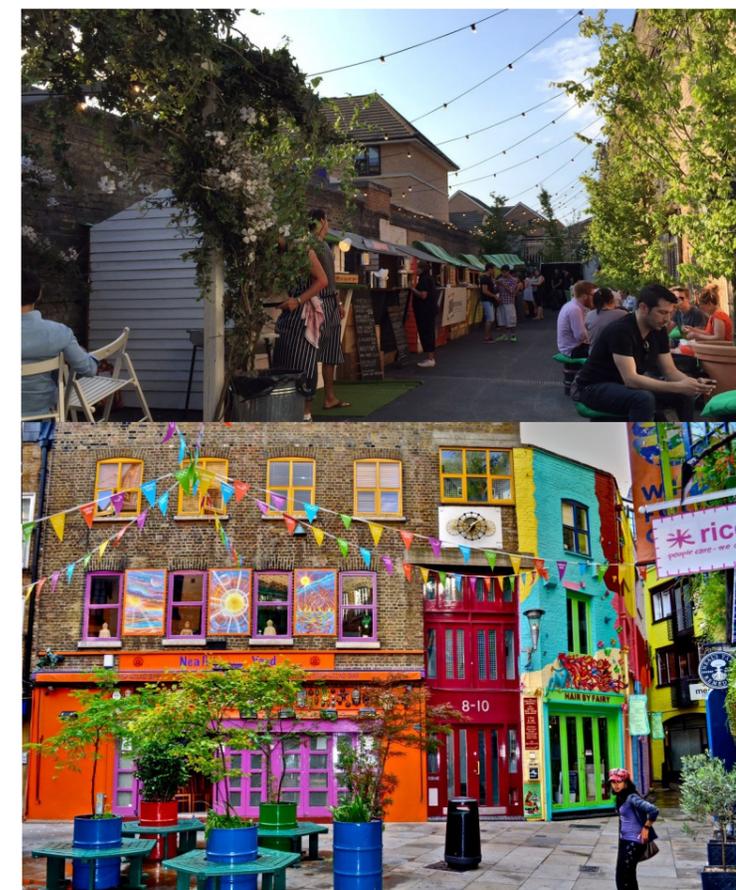
These are the historic pocket spaces within the town centre originally planned as hubs for trade in cloth. They have now become forgotten spaces tucked away behind active frontages and mostly used for car parking and refuse bin storage.

The Yards are full of character and historical precedence and have a unique quality that should be used and referenced in their design.

The quality and character of the spaces require a good quality of treatment in terms of design, materials and workmanship. Careful consideration should be given to the design of the yard to accommodate its inherent character & ensure that the service needs of the adjacent building do not conflict with the special qualities of the spaces.



Example taken from 'Huddersfield's Historic Yards' Report by Manchester University UDT. Darlington Yards



Shepherds Bush yards (middle) and Neal's Yard (Bottom) London.

Historic yard spaces

- Forgotten spaces that the town has turned it's back on, could be brought back into use as linkages across town and places of interest.
- Some interesting historic details which should be retained and sympathetically developed to celebrate the past but also celebrate Huddersfield today, through the use of bespoke contemporary elements.



Existing View looking West towards Queen Tap Yard



Potential View looking West from Hawksby Court onto Queen Tap Yard

- Small light canopy tree planting to bring life to the space, North facing wall planted up with Boston ivy to create living mural.
- Stone cobbles retained where possible, but complimented with Yorkstone slab paving .
- Currently a Costa café backs onto the space. This could be a potential coffee seating area if an active frontage was created with the coffee shop.

- The yards provide an opportunity to promote uniqueness and a programme of artist led projects within the spaces could create interesting one off elements such as a wonderful staircase .
- Arts walks could be developed organised monthly, to link the yards and extend the evening economy.

HUDDERSFIELD TOWN CENTRE DESIGN FRAMEWORK

APPENDIX 11

Night-time and creative economies

DRAFT



Night-time economy

Cities that have a pleasant ambience during the day typically have a pleasant ambience at night, and vice versa (Locum Destination Consulting – Into The Night)

Proposals for new/refurbished nightclubs, public houses, restaurants, cafes, bars and music venues must be accompanied by a statement detailing measures to establish and maintain a safe and secure environment in and around such premises.

To achieve this, the design and layout of all new development within central Huddersfield should follow the police guide ‘Secured by Design’ and working in partnership with the association of town and city management would create a safe, vibrant and well balanced evening and night-time offer. Effective management of a place’s evening and night time economy is quickly becoming a priority in the majority of locations across Europe. People are starting realising that sustainable economic prosperity can only be achieved by taking a holistic approach to the management of a place and understanding our town and city centres don’t have to close at 5pm.

Other night time economies could flourish that do not necessarily involve bars and alcohol. For example, Wakefield’s Art Walk provides an alternative idea for evening entertainment, retail outlets don’t need to close at 6pm and the challenge to encourage a cross section of the population to engage with the town centre after 5pm offers huge benefits.

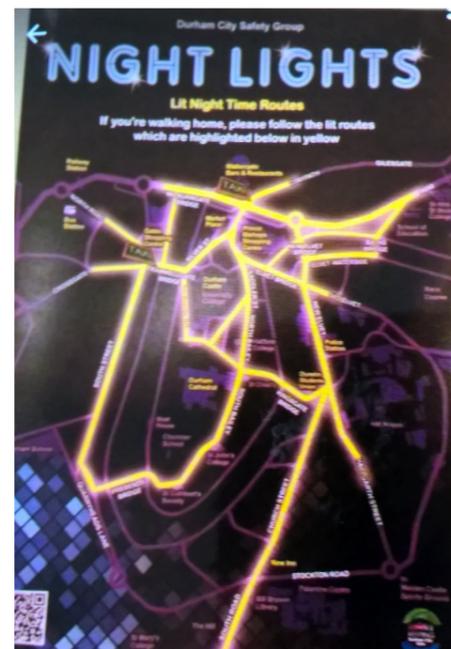
In assessing effects of these proposals, we will have regard to (among other factors):

- ◆ Public safety;
- ◆ Proximity to taxi ranks;
- ◆ Availability of car parking;
- ◆ The potential for saturation of pubs and clubs in one area;
- ◆ Potential for anti-social behaviour and crime; and
- ◆ Future management issues.

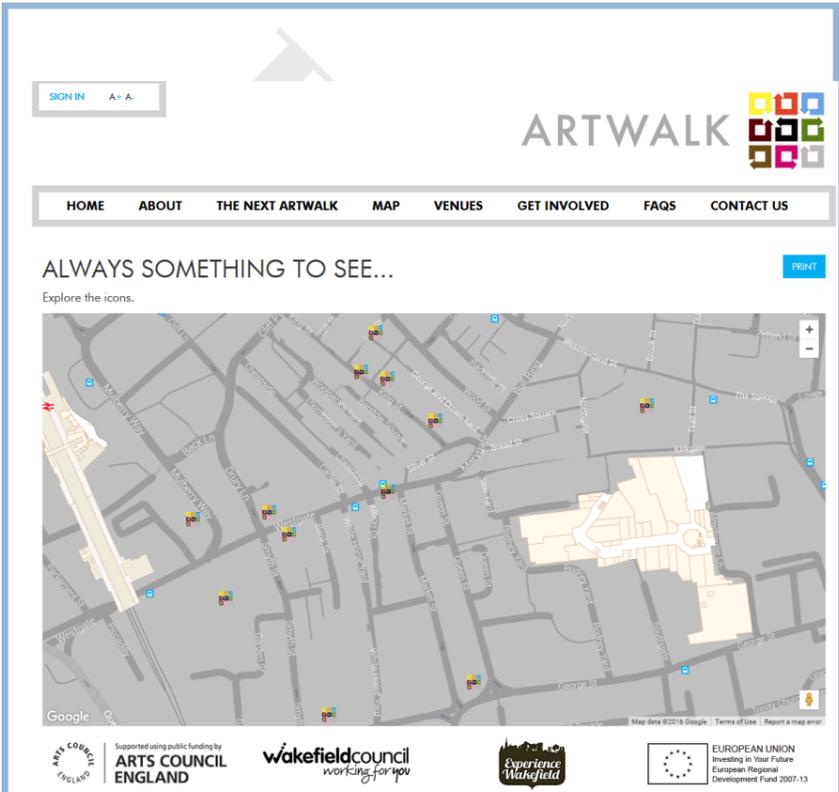
‘The concept of the 24 Hour City needs to recognise and address some of the negative as well the positive aspects of the night-time city if the existing patterns of exclusion are not to be exacerbated. This could happen if the night-time city is seen essentially as an extension in the time of the day-time city of consumption, and therefore only available to those with significant spending power or very clear and powerful group identities. The pleasures of the night, of the bright lights, of cafes, bars, cinemas, theatres, night walks and promenades, are also properly pleasures of the democratic sphere.’

Worpole, K. and Greenhalgh, L. (1999) The Richness of Cities: Urban Policy in a New Landscape — Final Report. Stroud, Comedia/Demos

Developing a ‘spine’ of culture and night time economy running through the town, linking the Railway and University could be achieved by using a combination of similar surfacing materials & street furniture, good lighting and ensuring the presence of a variety of premises for entertainment. Huddersfield’s growing student population could very much drive requests for pop up galleries and theatres, small literary festivals, live music to name but a few and artist groups, theatre companies and the like could all contribute with ideas and events.



Left: Poster displayed by Durham City Safety Group about lit walking routes in the city centre. This could be introduced for Huddersfield.



Above: Wakefield ARTWALK a good example of encouraging alternative night time economy.

“The Artwalk is an established and growing alternative night out. It takes place every two months, always on the last Wednesday of the month, starting from January each year. It exists to showcase local, national and international talent in a whole range of settings.” ... Taken from www.artwalk.org.uk

Other examples of alternative NTE activities could be:

- Exercise, such as night runs, organised activities outdoor fitness (dependent on time of year)
- Cinema visit , comedy clubs , outdoor cinema nights.
- One- off cultural events., such as the festival of light.

Creative economy

Regeneration is not simply about bricks and mortar. It's about the physical, social and economic well being of an area; it's about the quality of life in our neighbourhoods. In relation to the physical, this is as much about the quality of public realm as it is about the buildings themselves (ODPM/CABE, 2001¹¹)

Kirklees has a commitment to a high quality public art practice and aims to integrate artist's ideas and vision into the process of creating new and regenerated places, spaces and buildings. Working with artists offers an opportunity to design schemes which go beyond the purely functional to create places that reflect the life, identity and aspirations of a particular place, space or community.

The outcome of the artists' creative practice can form a part of the infrastructure of the physical built environment, or be a part of a community engagement process of developing or redeveloping an area. It could be a permanent work, temporary space-specific work, or could form part of a series of events or interventions.

In the context of town centre public realm design; artists and the creative processes make an active contribution to establishing a coherent look and feel, and can bring together the story and heritage of place as well as the vision for the future.

Our priority sectors are building on the innovation and heritage of Kirklees and the below highlights key aspects of each priority.

Textiles:

Huddersfield and moreover Kirklees has a strong heritage in textiles. Notably, the precision engineering and innovation in the 18th Century textiles industry forged the way in making Huddersfield world renown in textile production. Above and beyond this, textiles is our architecture from mills and factories; mill owners mansions to mill workers cottages; packhorse bridges and canals. With such an extensive reach whether or not you are employed within or study textiles today, the industry touches everyone who lives and works here. Textiles is woven into the very fabric of our home.

This story continues today with innovation in the industry that keeps pushing the boundaries of textile manufacturing and design.

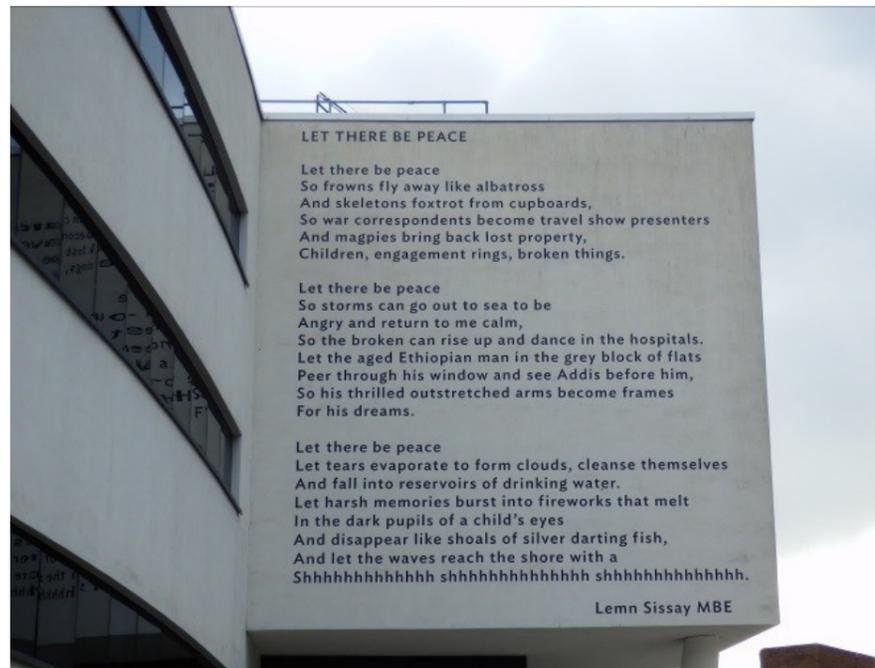
In 2014 there were 3,840 textile manufacturing enterprises in the UK, 420 of these in the Yorkshire and Humber region, supported by the Textile Centre of Excellence a £2 million development located in Huddersfield, the heart of the UK textile sector and is heavily involved in R&D projects to continue to maximise the opportunities within the sector. Supporting the industry leading education and training is delivered through locally based higher education to further education institutes, apprenticeship schemes and ongoing workforce development.

Digital and Design:

From the 2015, Kirklees Creative Economy Report, it was identified that the creative industries contribute over £100m per annum to Kirklees' economy and the digital economy contributes more than 35% of all creative employment (1790 jobs) and 63% of all creative industries GVA in Kirklees. The report clearly identified that the digital sector, including the 292 people employed in the development of computer games, is the largest and most productive part of Kirklees' creative industries.

The report highlighted design is also an area for further research and intelligence, as it is an area identified for accelerated growth. Design here includes product, graphic and fashion and therefore cuts across precision engineering, manufacturing, textiles and digital sub sectors.

The report used the DCMS (Department for Culture, Media & Sport) definition of the Creative Economy, which states it comprises nine sub-sectors: Advertising and Marketing; Architecture; Crafts; Design; Film, TV, video, radio and photography; IT, software and computer services; Publishing, Museums,



Above: Newly installed public art at the University of Huddersfield

Music:

Kirklees has a rich, diverse and innovative heritage built on musical traditions. From Huddersfield Town hall with the 1860 Father Willis Organ, that is still played regularly in the Kirklees Concert Series; to the two local amateur orchestras, Huddersfield Philharmonic, founded c1862 and Slaithwaite Philharmonic, founded c1891; the Huddersfield Choral Society – an internationally famous choral society founded in 1836 that is recognised as one of the leading choir's in the UK; and local Brass bands such as the Marsden Silver Prize Band, Lindley Band, Hepworth Band, Meltham and Meltham Mills Band and Hade Edge Band (to name but a few) all competing at the highest level in the UK . Kirklees continues to champion a strong voluntary music tradition.

Leading the way within new music, the annual Huddersfield Contemporary Music Festival (hcmf//) founded in 1978, brings the very best of international, national and regional composers to the town to perform and showcase the highest quality and innovative talent to a global and local audience. The festival is hosted by the award winning University of Huddersfield, who received *Queen's Anniversary Prize* in 2015 for “world-leading work to promote, produce and present contemporary music to an international audience.

Our area outcomes are to:

- Maximise the district's cultural assets to establish a sense of place
- Build a strong creative economy
- Enable more people to engage in the arts



Huddersfield Town Centre Design Framework

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APPENDIX 12 References



HUDDERSFIELD TOWN CENTRE DESIGN FRAMEWORK

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Photographs: James Taylor ©

