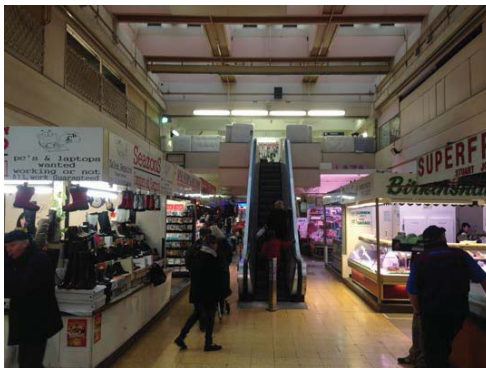




9.0 The Interiors



9.1 The internal environment

The existing Market environment is dated and tired. The building fabric appears to be in reasonable repair although there are areas of some dilapidation and poor condition.

The failings of the interior are multi-faceted. It is affected by the poor access strategy, by the wayfinding strategy (or lack of), by the aging mechanical and electrical installations and by the absence of natural light and connection with the outside.

In spite of this, great colour, interest and variety is provided by the individual market stalls each with their own particular characteristics that give the place an attractive atmosphere.

Addressing these issues without detriment to the essential positive qualities of one of the country's oldest and most established markets is a critical challenge for the proposed development.

Throughout this stage we have identified the positive aspects by talking to a wide range of market users through the consultation process.



9.2 Wayfinding and orientation

Inextricable to the interior design are wayfinding and orientation.

Consultees have told us that it is currently difficult to navigate the markets - to know firstly where to enter and then how to move through and around efficiently without getting lost.

Modern complexes of this typology tend to be organised around atrium spaces. These spaces use natural light (typically from rooflights above) to form legible 'centres' from which all other spaces can be accessed clearly and easily. Vertical circulation (lifts, stairs and escalators) are commonly located within or directly adjacent to these spaces and also make an important contribution.

The existing market already has an atrium but its inherent qualities have been lost through ad hoc extension and modification. Rather than open itself onto the atrium the market currently turns it back to it cutting off much of the natural light offered by the large rooflight. A reorganisation of this will greatly improve the ability of visitors to orientate themselves and perhaps allow for a more efficient layout of the market stalls.

Another clear message from the consultation process has been the difficulty in finding particular stalls or services within the building. This is less of an issue with those who use the markets regularly but can be a deterrent for those who do not.

Wayfinding - the use of signage, colour and manipulation of the architectural spaces - is the commonly used device to overcome these issues.

The existing signage is of low quality and dated. It is also quite institutional - lacking the vibrancy of the market stalls. There are many innovative signage approaches that have been successfully employed in other similar projects and we will be looking at how these can be applied during the next design stages.

In addition, the building also has a municipal colour scheme. It is a generally accepted strategy that colour should predominantly come from the market stalls and their produce. However, the application of a clean, fresh colour scheme is an inexpensive but highly effective means of transforming any building and can also contribute to a coherent, legible wayfinding strategy.

9.3 Design principles

The design of the interiors of the market are an integral part of the project and have been developed in parallel with the wider architectural design during this period.

Our strategy is guided by a number of principles;

Layers of access

The market will be largely a public building. Open access will be provided to the ground and first floors (with specific back of house and serving areas excepted). The interior design must provide a level of coherency to aid wayfinding and make clear distinction between public and private spaces.

Use of Colour

Through the development of a range of colours, both applied colour and natural materials we aim to establish a strong identity for the Market that is unique yet retains the essential characteristics of the best market buildings and allows the produce to shine rather than the building.

It is conceived that there will be a shift of colour to each element of the Market (Entrance Hall, Meat and Fish, Food Hall, main market etc.) which will reflect the very different nature of these spaces and give each their own specific identity.

Application of Colour

All major building components like flooring, stairs, lifts etc. will form the basis of a neutral palette while more transient elements like furniture, blinds, wall finishes will be coloured. In this way the building will not date quickly and those elements that are more prone to changes in fashion can be more readily changed or replaced.

Choice of Materials

All materials will be selected on the following criteria:

- Fit for purpose - in particular hard-wearing
- Low maintenance
- Environmentally friendly and in accordance to BREEAM guidelines
- Value for money



9.4 The Entrance Hall

This space is critical to the success of the project as it sets the initial impression of the new market. The space is intended to say 'hello' and 'welcome' and act as a key wayfinding tool for visitors, as, due to the scale of the space it will be visible from all areas of the market, allowing a visitor to easily locate themselves.

The use of colour in the entrances to each market hall will direct the visitor to the different market spaces, creating a language for each market hall.

Beyond that it is a space that can hold events - indoor farmers markets or showcases of local produce. It is a large space and is capable of facilitating pop-up units - a cafe in a shipping container or a coffee shop in an old van.

We want this space to be light filled and delicate - a similar space in Borough Market in London, due to its success, has been a constant source of reference.





9.5 The Meat and Fish Market

These images describe our ambition for the Meat and Fish Market. In its new location on Cheapside it will have a significant presence to the street for the first time and will no longer be hidden away at the back.

The presence of the market in the location offers the potential for window seats to be built into window reveals for people to consume the food they have purchased - a seafood salad or a cold meat sandwich - should traders expand the range of produce they sell.

The images are consistent in their high levels of natural light, generosity of space and clean lines. They are modern without losing the key characteristic of 'market'.





9.6 The Food Hall

The food hall could become a thriving part of the market. The existing cafés are popular and successful - we want to create a space for these businesses to grow and for others to move in.

The design of this space, like the rest of the market, is based on a principle of 'light touch' This means stripping away unnecessary layers of clutter to reveal the essential qualities of the concrete structure behind. This 'framework' becomes a blank canvas for traders and cafe operators to inhabit and make their own.







9.7 The Market

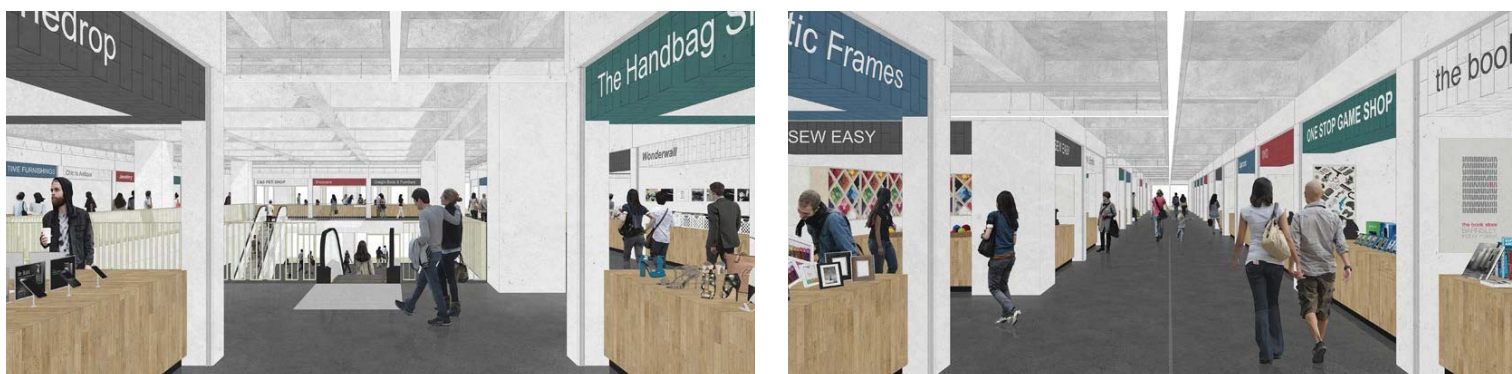
Our 'Light Touch' principle will be most evident in the main market spaces. The traders provide the colour and this is what is attractive for visitors, with the architecture enabling the produce to be the star attraction. The building therefore should be a background for this colour and activity to provide the vibrant 20th Century market the scheme is here to deliver.

The existing downstand beams have led the setting out of the stalls in order to coordinate the most efficient servicing from cable trays above.

The introduction of fascias in brightly coloured ceramic tiles, in which the traders will contribute to the design will give the market a continuity in material yet the individuality to the stalls themselves.

Throughout the materials used to finish both the exterior and interior of the stalls will be hardwearing, easily cleaned and maintained with natural finishes where possible to reduce ongoing maintenance costs.

The adjacent images, whilst very different from each other, nonetheless have a number of common features - light, space, volume and good quality lighting - all features that we want to bring to the design of the main market spaces on both ground and first floors.





9.8 The Undercroft

Perhaps the defining aspect of the existing building, and certainly its most spatially impressive, is the basement undercroft. It is also the most important part of the building as it allows the whole building to be serviced away from the public realm at street level.

We recognise that it is firstly a working space that will be exposed to a great deal of wear and tear during the second phase of its lifespan.

It's design therefore should be led by practical considerations - ensuring there is adequate car parking and vertical circulation routes for traders to access the upper floors with clear access for service vehicles. However, the simple use of paint can aid these aspects, guiding wayfinding and identifying designated cores for each element of the market and retail spaces above.

The use of bold colour as shown in several reference projects can create a vibrant but clearly legible space for the efficient servicing of the Metropolitan Centre and the wider town centre.

Additionally, a the lighting strategy is key to create useable spaces, this is especially true where the designation of areas has changed to a different use, i.e. the Meat & Fish preparation areas.





10.0 Universal access



10.1 Philosophy and Statement of Intent

The initial proposals aim to meet the highest standards of accessibility and inclusion so that all potential users of the market, regardless of disability, age or gender can use them safely and easily.

The proposal aims to promote inclusive access. This is achieved by eliminating barriers, physical, attitudinal and procedural, which may otherwise inhibit the involvement of the whole community, not just disabled people. Inclusive access is about pro-actively reaching out to involve and include groups and individuals who may feel that what you offer is currently 'not for people like them'.

This means that organisations need to consider their approach to all areas of their operations, including employment, policies, buildings and equipment, programming and marketing, and student development.

The ultimate aim of inclusive access is that the design and layout of the market should enable everybody to be able to enter it, use its facilities and leave safely, independently and with ease.

The intention is that the proposals for the refurbishment of the Metropolitan Centre and markets will provide promote inclusive access within the constraints of the existing building and site topography.

10.2 Relevant Legislation

The legislation that is of particular relevance is:

- Disability Discrimination Act (1995)
- Disability Discrimination Act (2005)
- Equality Act (2010) which replaces major parts of the Disability Discrimination Act
- Special Educational Needs Act 2001 (SENDA)
- The Building Regulations, Approved Document M, Access to and use of Buildings 2004
- Town and Country Planning Act 1990

10.3 Other Sources of Guidance

There are numerous regulatory documents that will be consulted throughout the design process to ensure current best practice is met. The documents include, but are not limited to, the following:

- Designing for Accessibility (2004), Published by Centre for Accessible Environments, London.
- BS5588: Part 8:1988, Fire Precautions in the design, construction and use of buildings – Code of Practice for means of escape for disabled people, BSI, 1988
- BS8300: 2009, Design of Buildings and their approaches to meet the needs of disabled people, Code of Practice
- British Standard 9999:2008 (April 2009)
- British Standard 8300:2009 (amended 2010)
- Planning and Access for Disabled People – A good practice guide (ODPM)

10.4 Disability Discrimination Act (DDA) 1995

This Act makes ‘... it unlawful to discriminate against disabled persons in connection with employment, the provision of goods, facilities and services or the disposal or management of premises; to make provision about the employment of disabled persons.’

10.5 Disability Discrimination Act 2005

In addition to the DDA 1995, amendments in 2005 were designed to extend rights and provisions for disabled people. The Act also clarifies the various roles and responsibilities, as well as further clarifying the definition of ‘disability’.

10.6 Equality Act 2010

‘The main purpose of the Equality Act 2010 (EA) is to streamline and strengthen anti-discrimination legislation in Great Britain. It provides the legal framework that protects people, including disabled people, from discrimination. It replaces a range of anti-discrimination legislation, including the Disability Discrimination Act 1995 (DDA) and subsequent amendments.

The EA ensures that the legal framework of equality law is more consistent for all people with protected characteristics, for example, race and gender. By simplifying and consolidating previous equality legislation, the Act is intended to be easier to operate and understand than previous equality legislation.’

Quoted from the Office for Disability Issues website, odi.dwp.gov.uk ‘Equality Act 201 and the Disability Discrimination Act 1995’

10.7 Circulation

Unlike the existing building, it is intended that the new circulation areas will be designed to ensure unobstructed access. Clear lines of sight maximise accessibility throughout the building. This reduces confusion, and dependence on signage.

The design considerations that have been taken into account are:

- All corridors to accommodate a minimum width of 1500mm, with no obstructions such as furniture or fire extinguishers projecting into the clear corridor width which would present a hazard to children, wheelchair users or blind and partially-sighted people.
- Circulation routes should provide splayed or radius corners wherever possible.
- Main corridors to have a minimum width of 1800mm to allow two wheelchairs to pass one another.

Internal doors will maximise accessibility without compromising privacy, safety or security. Each door will provide at least the minimum effective clear door opening appropriate to the width and direction of approach. We propose that all doors will:

- Not project into an access route
- Include manifestations if glazed
- Have at least 300mm alongside the leading edge of all doors to enable wheelchair users to open the door.
- Have a minimum width of 900mm when fully open. Be fitted with vision panels to enable people to see and be seen
- Will be fitted with lever type handles or ‘D’ pull handles at a height appropriate for a wheelchair user (1000mm from floor level)
- Be light enough to be used by disabled people with limited mobility or strength

Lobbies to be designed to accommodate all users and to permit one door to close before the other is opened.

10.8 Stairs

Stairs within the refurbished market will, wherever possible within the constraints of working with an existing building:

- be well-lit

- have a tactile surface to indicate the beginning and end of the flight
- for safety, be designed to be of consistent width have unobstructed landings at the head, foot and between flights with a depth at least equal to the width of the channel of the flight
- have no more than 12 risers and uniform risers and treads in consecutive flights
- have riser heights of between 160 and 170mm, with slip resistant treads of 300mm
- have visually contrasting nosings across the full width of the step

Areas under stairs should either have guarding or be closed off to avoid anyone colliding with the underside

Escape stairs will be designed to the same standard as general access stairs, in order that they are suitable for use by ambulant disabled people and blind / partially-sighted people in an evacuation.

Handrails for stairs will be at a height of at least 900mm (1000mm at landings) on both sides running the entire length to enable those with a weakness on one side to use them.

10.9 Lifts

There are a number of existing lifts within the building, that will likely be replaced in order to increase traffic capacity, speed and efficiency for the assumed increased occupancy of the refurbished building. These will serve all floors and will:

- Be located adjacent to other means of vertical circulation
- Accommodate the expected people flow Have a clear level landing directly in front of the lift of at least 1500mm by 1500mm for manoeuvring and waiting
- Conform to the requirements contained within the BS EN 81 Series

Additional consideration will be given to the material finish of external lifts and how this will be affected by the weather (including consideration of slip resistance, comfort and safety in use).

10.10 Toilets and Showers

Where provided, these spaces will be designed to BS8300: 2009 and the requirements of Part M3 of the Building Regulations.

Fully accessible toilet / showers are designed to address the requirements of people with a variety of impairments. These spaces will be fully equipped for use by disabled people.

The standard dimensions to provide adequate manoeuvring and transfer space for disabled people are:

- Unisex accessible corner WC layout 2200mm x 1500mm min.
- Accessible WC compartment for ambulant disabled people 800mm x 1500mm
- Self-contained shower room for independent use 2200mm x 2000mm Disabled people should be able to find and use suitable toilet accommodation as easily as non-disabled people. The location of the toilet, basin and other accessories in relation to the space required for manoeuvring, is critical in enabling disabled people to use various transfer techniques that allow independent or assisted use of sanitary facilities.

Wheelchair users and other users of an accessible toilet often move more slowly than non-disabled people. Facilities therefore will be provided within a reasonable travel distance from anywhere on a given floor plate to ensure that disabled people have access to the facility via the shortest available direct route.

These spaces will be located together with, and have a similar finish to standard toilet and/or shower provision, and comply with the following requirements:

- Accessible, well-lit and clearly-signed
- Have fixtures and equipment that is operable by people with poor dexterity or limited strength (operable with one hand)
- Have good visual contrast between the main features, equipment and controls inside a cubicle
- Not have timed lighting systems
- Door handles to be easy grip D handles and located on the back of doors
- Have clothes hooks sited at 1050mm and 1400mm high
- Have heating pipes and heating equipment carefully

located and fitted with thermostatic controls.

- Be fitted with an alarm and reset button that is linked to the alarm system

10.11 Signage and Navigation

Signage should be clear, concise and consistent, and suitable for people with visual impairments and learning disabilities, such as dyslexia. We have developed the planning of the building to be simple and intuitive as the ability to navigate independently around a building is dependent upon the basic building layout. We propose that any signage should be grounded in the following:

- Internal signage to be provided in public as well as back of house areas
- Easy to see (visual contrast with surroundings), with low glare, and easy to understand (is written concisely and in plain English)
- Rules for clear print are followed (contrast between text and background colours, large enough text and easy-to-read fonts)
- Simple illustrations or pictograms and symbols should be incorporated whenever possible
- All directional signs to and within the premises incorporate directional arrows
- The height of signage should be carefully considered to accommodate people of varying stature, as well as maintaining visibility should crowds obstruct lower positioned signage.
- Signs are well lit with their own source of light
- Tactile signage to be provided where it will benefit users

BS 8300: 2001 indicates that universally recognised symbols should be used to replace text, as an essential aid for people with learning difficulties. Where other types of pictograms and symbols are used these should be supplemented by text, and not used in isolation. The BS provides some examples. Further information on public information symbols can be found in BS 6034 and the RNIB publication Building Sight.

10.12 Lighting and Décor

Lighting and decor is important for navigation. Visually impaired people rely on being able to distinguish between the walls, floors, ceilings and doors, and between backgrounds and furniture. Specifically :

- We propose exploring the use of glare control measures such as blinds, matt finishes to combat reflection.
- We aim to consider using colour as a means of assisting orientation, for instance, using one colour for the floor surface to denote areas of public circulation
- We aim to consider using changes of floor finish in a similar way as colour
- We aim to provide adequate contrast between doors, walls, floors and ceilings, and between furniture and the background against which it will be viewed
- We aim to develop a strategy to distinguish between trims such as coving, skirting boards, architrave, dado and handrails, door handles, finger and kick plates by use of colour, tonal and textural contrast

It is important to recognise that wheelchair provision is only one aspect of building accessibility, in fact it is the extreme situation. In addition to providing level access, the site wide access solutions will address other impairments including those associated with vision, audible and mobility.

- A combination of natural and artificial lighting to be provided where possible to enhance circulation routes
- To avoid glare, confusing reflections or shadows Transitional lighting to be provided between areas of lighting level changes to allow people's eyes to adapt to the different levels
- Reception, information points, counters around the market to be lit to allow lip reading
- Careful use of down lighters to ensure shadows are not created across people's faces, making lip-reading difficult.
- Up lighters avoided on pedestrian routes.
- 100 lux should be achieved at floor level including stair tread level, ramp level, on landings of stairs and ramps, within corridors and landing spaces in front of lifts

- Visually contrasting non-reflective materials are to be used within areas that could be affected by direct sunlight
- The use of lighting for effect must be balanced with the need to maintain a safe environment, particularly for partially sighted people
- Daylight bulbs to be used within task lighting

10.13 Emergency Egress

Clear signage and wayfinding for people unable to use stairs without assistance, one or more refuge points must be provided on each level offering a place of relative safety until assistance arrives

- A two way communication device will be provided at all refuge points
- The size and number of refuges to be relative to the numbers of expected disabled people within a particular building or facility

10.14 Refuse and Recycling

The refuse and recycling strategy for the market is a complex one and will be the subject of considerable study in the coming months. The initial proposals are to locate dedicated refuse and recycling store, including the bone yard, directly adjacent to the rear entrance. This allows decreet serving and minimised the impact on the shopping experience.

10.15 Fire Tender Access

The proposed design will allow access for all blue light and emergency vehicles directly on the roadway with dry riser access for firefighters (See Appendix 2 for further information).



11.0 Sustainability

11.1 Sustainability

This section identifies the council's aspirations relating to sustainability, reviews the strategic benefits and opportunities of the site and identifies ways in which the scheme could be further developed at the Reserved Matters application stage to respond positively to a range of sustainability issues.

11.2 BMBC Aspirations

BMBC's aspiration for the town centre development is to deliver a high quality scheme that responds positively to the site and to local and national sustainability policy requirements. These will include the need to build sustainable communities, protect and enhance the environment, use resources prudently and ensure sustainable economic benefits.

'Sustainability' is a broad concept and is embedded throughout the proposed scheme. BMBC's approach to sustainability embraces all aspects of sustainability including; social and economic sustainability as well as environmental sustainability.

BMBC recognises that these three aspects are inter-dependant for a successful scheme. For example, meticulous care has been taken to create walkable routes across the site that will facilitate a modal shift and in doing so generate footfall which manifests in a more vibrant and ultimately more valuable development.

11.3 Philosophy

The brief states that Metropolitan Centre should aim to achieve a BREEAM Very Good rating and seek to exceed Part L of the building regulations relating to energy consumption. This will require energy efficient lights, a building log book and separate metering of plant etc.

Whole life costing should be used as part of the evaluation of various methods of maintaining the required environmental considerations.

11.4 BREEAM

At this early stage the current score is now 9.23% with a target of 63.49%.

The sustainability consultants have distributed to the project team all relevant pro forma and outlined succinctly the level of required information for the scheme to hit this target as it progresses throughout the workstages.

11.5 Transport

- Work with transport planners to provide public transport to the site
 - Pursue measures that encourage the use of energy-efficient public and communal transport, together with cycling and walking
 - Discourage unnecessary use of private motor transport with the aim of reducing traffic and parking in the town centre
 - Provide showers, changing rooms, drying room/ facilities and lockers for cyclists and other building users
 - Install secure, covered, lit and conveniently located cycle parking spaces
- Consider sharing resources with other buildings in the town to reduce duplication and encourage neighbourliness.

11.6 Waste

- Reduce construction waste at source
- Consider use of factory cut non-standard sheet sizes where quantities make feasible (save waste and on site labour)
- Oblige contractors to minimise and segregate construction site waste
- Encourage the contractor to sell off any construction waste that can be reused to salvage company or other building contractor
- Consider storage and spillage of hazardous waste
- Provide space for recycling collections
- Reduce space for collections through controlling packaging and supplier deliveries
- Manage biodegradable waste, i.e. green waste and food waste

11.7 Land Use and Ecology

- Establish key ecological features of site and boundaries, and protect and enhance
- Maximise density of development on 'Brownfield' sites to help reduce building upon green field sites
- Guard against unforeseen risks to health resulting from 'Brownfield' development
- Integrate exterior space use with building design, e.g. avoid air intakes near traffic routes, car parks and mechanical plant that may produce allergens
- Landscaping design to incorporate native plants
- Consider ground cover in preference to lawns, to reduce maintenance and water usage
- Consider planting for wildlife e.g. for food (supporting local wildlife species) and for shelter
- Consider erecting houses for wildlife such as birds, bats and insects

11.8 Water

- Conserve water by use of spray taps, low flush WCs and waterless urinals where practical and cost effective
- Meter water usage split between different users

11.9 Materials

- Minimise waste in demolition and site clearance/ re-use materials where viable
- Integrate material considerations into all components of building systems to achieve low-energy design, indoor environmental quality, and optimization of daylighting
- Infiltration/capture of rainwater, operation and maintenance, etc and to limit pollution
- Endeavour to select materials, which have a low environmental impact in terms of extraction, manufacture, use and disposal
- Exercise care in selection of insulation and refrigeration materials so as not to contribute to ozone depletion
- Select locally extracted and manufactured materials where possible
- Select materials non-toxic to humans, such as can be found in carpets, floor sheeting, paints, sealants, fabrics
- Exercise care in selection of laminated or composite timber products, which may have formaldehyde content in adhesives
- Use recyclable materials where possible, e.g. carpets, aluminium, roof membrane, etc
- Select permeable paving materials, where practical
- Oblige the contractor to procure all timber from Forestry Stewardship Council certified sources
- Natural and self finishing materials are used in preference to applied finishes
- Use of alternative low GWP refrigerants i.e. ammonia or hydrocarbons
- Eliminate the use of HFC refrigerants for blowing agents in foam insulation of similar products
- Avoid the use of PVC for floor coverings, cables or other widely used elements of the building
- Work to the local Environmental Health requirements in terms of noise pollution and vibration from the site as a whole
- Consider the pollution emitted from adjacent roads
- Design exterior lighting for energy efficiency and to minimise light pollution to neighbouring natural habitats

- Design surface water drainage to prevent pollution of water courses/drains by vehicle oil and chemical spills, and reduce impact on the water network
- Install a refrigerant leak detection system

11.10 Energy

- Aim to reduce carbon emissions to 15% below the legally required Building Reg Part L2a CECM requirements. The use of dynamic simulation models will be used to help predict building energy usage
- Balance the design of the building envelope to manage external heat gains, internal heat losses and natural daylight
- Consider reducing solar gains by optimising percentage of glazing and the use of solar shading
- Maximise the use of heat recovery where appropriate
- Provide sufficient sub-meters to monitor and manage all major energy loads
- Study the use of on-site renewable energy sources where these are proven to be technically viable, reliable and reasonably cost effective
- All electric motors to be of high efficiency type
- All AHU fans to be of high efficiency type
- Refrigeration to be by borehole cooling to achieve highest possible efficiencies
- Provide full computer control to increase system efficiencies
- Provide ongoing commissioning throughout the first year
- Ensure as much of the building as possible is naturally ventilated
- Design the building to maximise the opportunities for daylighting
- Measure building design against likely long term trends in public buildings
- Zoning strategy to minimise energy use, maximise heat recovery, minimise air change requirement
- Thermal dynamic modelling
- Lighting design modelling
- Energy efficiency lighting design including the use of task lighting and occupancy



12.0 Servicing

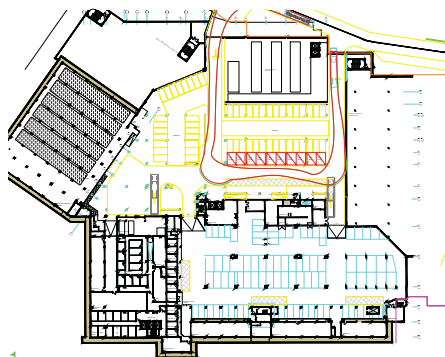
Vehicle	Access	Secure parking	Frequency of use	Location
Bicycles 	40	For traders and staff only. Parking for visitors to the town centre will be provided within the public realm design / CEAG car park	Constant	Basement undercroft for traders and staff. At CEAG car park and the public realm for visitors
Motorcycles 	5	For traders and staff only. Parking for visitors to the town centre will be provided within the public realm design / CEAG car park	Constant	Basement undercroft for traders and staff. At CEAG car park for visitors
Cars 	120	For traders and staff only. Parking for visitors to the town centre will be provided at the CEAG car park	Constant	Basement undercroft for traders and staff. At CEAG car park for visitors
Taxis 	No direct access to the undercroft. Access may be provided to the service road and / or public realm further to consultation with taxi operators and BMBC	None within the building. Provision of designated taxi ranks subject to BMBC Highways proposals as part of the wider town centre Highways scheme	Constant	At locations tbc with BMBC Highways
Delivery van (standard) 	Managed access for general deliveries to Market and retail spaces	Set down / pick up areas within undercroft (access to the space to be centrally controlled and managed)	Daily (managed)	Basement undercroft
Delivery van (Large) 	Managed access for general deliveries to Market and retail spaces	Set down / pick up areas within undercroft (access to the space to be centrally controlled and managed)	Daily (managed)	Basement undercroft
Refuge truck 	Managed access for refuse collection from the Market and retail spaces	Set down / pick up areas within undercroft (access to the space to be centrally controlled and managed)	Daily (managed)	Basement undercroft
Articulated lorry 	Managed access for general deliveries to Market and retail spaces	Set down / pick up areas within undercroft (access to the space to be centrally controlled and managed)	Daily (managed)	Basement undercroft

12.1 Servicing and delivery strategy

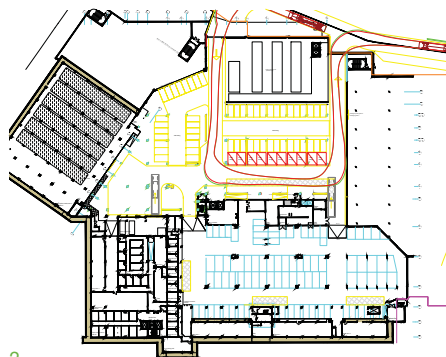
We have premised the servicing of the Met Centre on the construction of the service road adjacent to the railway line as identified in the Outline Planning application. This road ramps down below from the south and provides access to the basement undercroft and will ensure that the proposed public realm is kept free from the visually unattractive actions of refuse collection, delivery and servicing.

The basement is large enough to accommodate the access and egress of the required vehicles but detailed consideration will need to be given to this during the next stages of design development.

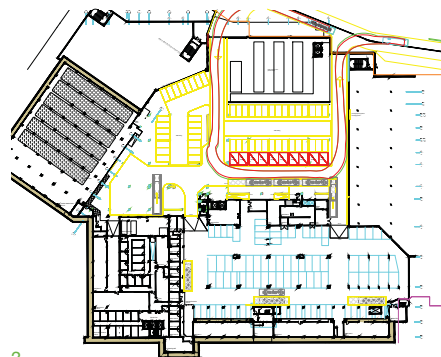
In addition to service access the basement is intended to house a large number of trader and retail parking spaces. Again the detail of this will be resolved in the next stage further to the testing of service vehicle access and egress.



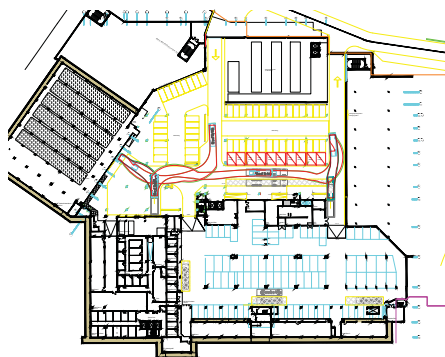
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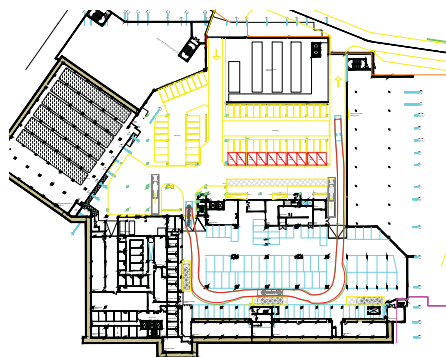
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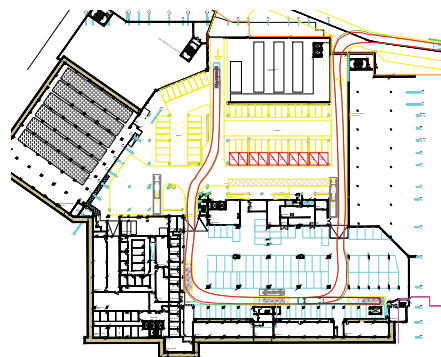
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4



5



6

12.2 Undercroft vehicle tracking

The highways team have undertaken tracking studies for various servicing scenarios illustrated on the adjacent drawings

1. Articulated circulate
2. Articulated circulate 1983
3. HGV circulate loading
4. Compactor vehicle
5. HGV circulation
6. HGV in loading bays



13.0 Technical Summary

13.1 Introduction

This section sets out a summary of the key technical considerations that have informed the proposals. The following reports have also been prepared and are submitted with this application;

- Geotechnical
- Energy / Sustainability Statement
- Environmental Impact Assessment
- Noise assessment
- Ecology Statement
- Flood Risk Assessment
- SUDS / Drainage details
- Transport Statement
- Air Quality Statement
- Fire Strategy
- Access & Maintenance
- Safety & Security
- Daylight & Sunlight analysis
- Management Strategy

13.2 Geotechnical Desk Study

(including Coal Mining Risk Assessment and Contaminated Land Assessment)

A Desk Study has been prepared by Robson Liddle Ltd and accompanies the application. A series of previous site investigations have been prepared for the site and were considered in the preparation of this report. These identified that the former uses of the site including a cattle market, saw mill, foundries, gas works, depots and general works.

Ground conditions comprise a variable depth of Made Ground (typically 3 to 4m thick; max 6m) over Glacial Till over Pennine Middle Coal Measures. The Coal Measures comprise weak to moderately strong mudstone with interbedded siltstone and sandstone. Three coal seams were recorded from 0.3m bgl (beneath market basement) to 32m bgl.

The 2008 report concluded that it is considered that the likelihood of shallow unrecorded abandoned workings being extensive beneath the site is very low and if present would likely be of a very limited nature. The subsequent risk of potential surface subsidence is low. However, given the sensitive nature of the development precautionary measures were recommended where the Winter/Abdy coal is present beneath the development area.

No sources of ground gas were identified on or in the vicinity of the site. Gas monitoring was undertaken as part of the 2008 investigation. It recorded a worse case gas screening value of 0.06l/h and classified the site as a CIRIA Characteristic Situation 2.

The investigations undertaken in 2007 and 2008 confirmed that concentrations of metals, semi-metals and non-metals recorded across the Site were not considered to present a significant possibility of significant harm to long term human health. It also identified visual and olfactory evidence for hydrocarbon contamination at several locations. The extent of any significant contamination was recorded as limited to relatively small and discrete areas. The key areas identified as potentially requiring further assessment and/or remediation included May Day Green (Benzo(a) pyrene) and Markets Basement (TPH).

At the time of the 2008 investigation, the contaminated Made Ground within the May Day Green hotspot was scheduled for removal as part of the redevelopment and therefore was not considered to present a significant

risk to long-term human health. If these materials are to be left insitu as part of the current development a detailed quantitative risk assessment would be required to establish the risk to human health and environmental receptors.

Please see appendix 7.0 for further information.

13.3 Energy / Sustainability Statement

A sustainability statement is included within this statement. It identifies the council's aspirations relating to sustainability, reviews the strategic benefits and opportunities of the site.

Please see appendix 3.0 for further information

BREEAM

The client has appointed Stroma to oversee the BREEAM process with the design required to achieve Very Good (55%). Assessment of the stage 3 design (the design workstage that is prior to a planning application being made) produced a predicted score of 59.7% which comfortably meets the target.

13.4 Environmental Statement

A request for a screening opinion was made on the 17 April 2015 as per The Town and Country Planning (Environmental Impact Assessment) Regulations 2011 Part 2 - regulation 5(1). The Council has adopted a screening opinion that the development is not an EIA development for the purpose of the EIA Regulations and as such an Environmental Statement will not be submitted with this application.

13.5 Noise

General considerations of noise have been made within the design proposals. It has been agreed with BMBC Officers that noise assessments will be prepared as part of any Reserved Matters application for the individual elements.

13.6 Ecology Statement

A Preliminary Ecological Appraisal has been undertaken of the site to determine habitats present and any protected species potential. The site is dominated by areas of hard-standing and buildings. There is also a small area of amenity grassland and a couple of scattered ornamental trees within the outline planning

site boundary which isn't relevant to the May Day Green site. The site offers some opportunities for breeding birds amongst the buildings, for species such as feral pigeons. This considered, and with the limited habitats present on site, the site considered to be of low value with respect to ecology.

For further information please see appendix 4.

13.7 Flood Risk Assessment

The site is situated to the west of the railway and is bounded by Eldon Street and Midland Street to the north, Cheapside to the west and the Alhambra Shopping Centre to the south.

The Environment Agency (EA) flood map identifies the site as being in within Flood Zone 1, which has been assessed as having a flood potential of less than 1 in 1,000 annual probability of river or sea flooding (<0.1%). Consequently there is no need to artificially raise ground floor levels above what is normal good practice for construction, typically 150mm above adjacent external levels.

Across the Better Barnsley scheme, of which the Metropolitan Centre is a part, in order to provide capacity within the existing drainage network the current peak flow of surface water has been assessed and will be reduced by 30%, limiting the proposed discharge rate to a lower figure than currently exists.

13.8 Suds / Foul & Surface Water Drainage

The application of the 'SuDS Manual' CIRIA report C753 for new developments requires that the runoff from sites is not only restricted to meet the Greenfield runoff characteristics but also that SuDS systems are utilised to improve the quality of the runoff prior to outfall to watercourses and premises.

Living or green roofs which can provide improvements to water quality as well as attenuation benefits may be possible to construct on the new buildings to the periphery of the site, however the main element of the development is within the existing market hall where the existing structure will be retained. The application of green roofs in the context of the proposed development is therefore limited and unlikely to provide significant benefits.

The use of basins and ponds can also address water

quality as well as providing attenuation. In addition the features can be presented to provide wildlife habitats and public amenity. However the development is located entirely over a suspended concrete floor slab and such water features are not practical to construct.

The externally paved areas may provide potential to install permeable paving which would capture and store rain water in the sub-base before draining into the central attenuation tanks in the basement area. This will require careful coordination between external paving levels and the internal floor levels of adjacent shops and premises. The use of permeable paving and sub-base materials will improve the quality of surface water discharged to Sough Dyke culvert.

Other SUDs solutions include the provision of storage to attenuate and control discharges and help protect the downstream catchments. The inclusion of 560m³ of attenuation storage will fulfil this function to allow the peak discharge rate from the site to be reduced by 30%.

Foul Drainage

The foul drainage will be collected via a separate systems. The previous buildings on the Met' Centre site were served by foul drainage pipes located under the basement floor slab and these remain in place. The large office complex and market hall site were of a similar or greater scale to the planned developments on the site. Survey plans of the existing pipe network show pipe diameters from 150mm to 300mm. A provisional calculation of foul flows based on estimated DUs in accordance with BS EN 12056-2:2000 indicates that this will be sufficient to service the proposed developments on the site.

Foul water from the Met Centre will be collected internally to service the Food Courts, Toilet and welfare facilities and washing basins and floor gully in the market halls. The connection points will need to be reconfigured to suit the new layout. The foul pipes will be fixed / slung from the underside of the suspended floor slab to connect to existing sewer entry points. Foul water from kitchens and food preparation areas will be directed through fat and grease trap units before discharge to the public sewer network. The existing foul water drainage from the site connects to a 150mm DIA combined public sewer which cuts across the eastern side of the site before running under the railway line.

Please see appendix 5.0 for further information.

13.9 Transport Statement

The premise for the proposed redevelopment of the Barnsley Town Centre has been established by two previous planning permissions, references 2006/1082 and 2011/0714. As is required, with each application a transport assessment was undertaken to assess the implications of the proposals on the highway network and identify any necessary mitigations required to facilitate the development.

The approved outline application (ref: 2015/ 0549) to which this reserved matters application relates, proposes a mixed use development similar in nature to the 2011 application with the important omission of a new multi-storey car park. The approved masterplan identifies a series of development sites which include the demolition of existing poor quality assets (including the existing multi-storey car park), refurbishment and extension of the key markets building, the Metropolitan Centre and the identification of new sites for development.

In support of the outline application, a further Transport Assessment was undertaken by AECOM. This identified specific highway mitigations which were subsequently conditioned in the associated planning approval. The TA looked at the impact of the development once complete and the predicted traffic movements taking account of the significant increase in the leisure and retail offer provided (DS3, 5-7).

However in order to maintain an active Town Centre and to ensure the longevity of the existing markets, it has been necessary to take a phased approach to the development which has in turn required that individual reserved matters applications be submitted for the development sites. The first RM application submitted (ref: 2016/ 0924), related to the construction of the new Library and retail (DS1) at May Day Green, on the site of former retail units. Demolition of the existing buildings is complete with construction scheduled to begin in March 2017.

This reserved matters application relates to the sites MC1-5 (as identified in the outline application), the extension and redevelopment of the Metropolitan Centre. It includes the demolition of the existing multi-storey car park which is required to facilitate the development. Due to the proposed demolition of the MSCP and other elements of the existing building, the completed scheme will not deliver a significant change in gross internal floor



area, although an element of 'leisure use' is introduced.

As design proposals for the remaining sites identified at outline have progressed (DS 2,3,5-7), it has become clear that due to the nature and quantum of proposed development, a new full application for planning approval will be required and therefore no further reserved matters applications will come forward relating to the outline approval ref: 2015/ 0549. Due to this a further full transport assessment will be required to assess the implications of the proposed additional development and to define any mitigations required. This revised TA will include an assessment of the implications of the demolition of the existing multi-storey car park and a capacity study of the existing Town Centre car parking provision. Any interim mitigations identified through these studies can then be implemented until such time as the redevelopment is complete and any permanent mitigations in place.

It is therefore understood that the AECOM TA submitted with outline application 2015/ 0549 and the mitigations identified therein are largely obsolete, when considered solely in relation to the development of the Library and Metropolitan Centre.

It is therefore our belief that the development as proposed in this reserved matters application, can indeed progress within the framework of the original AECOM TA and that due to the nature and scale of development it is not necessary nor effective to progress the mitigations identified in the TA or conditioned within

the outline approval.

13.10 Air Quality

Following early engagement with BMBC's LA Planning Dept (Mr. C. Shields) it was agreed that a full 'Air Quality Impact Assessment' in relation this reserved matters application, the extension and redevelopment of the Metropolitan Centre, was not required and that the following statement in support of the application would suffice.

The implications of a development on air quality is closely linked to its impact on traffic movements and as stated in the Transport Statement (13.10) it is our belief that the impact of this reserved matters application is limited in this respect. Due to the proposed demolition of the MSCP and other elements of the existing building, the completed scheme will not deliver a significant change in gross internal floor area, although an element of 'leisure use' is introduced.

Therefore it is understood that the proposed development of the Metropolitan Centre as defined by this RM application, will not significantly impact vehicle movements within town centre and therefore will not be detrimental to the current air quality. However as described in the Transport Statement (13.10), it is understood that the demolition of the existing multi-storey car park will displace traffic movements around the Town Centre as utilisation of other town centre car parks becomes increased. The impact upon town centre traffic flow and consequently air quality is not anticipated to be significant due to existing capacity. However this will be explored further in the additional TA identified in the Transport Statement (13.10) and any interim mitigations identified can be implemented until the implications of all proposed development is understood and completed. It is also understood that as the development sites which constitute 'new development' are brought forward via a new Full Planning application, their impact on both traffic movements and air quality will require more detailed assessments.

Also the first site to be developed, the former CEAG site as the Market Gate Car Park (Planning ref: 15/0362), provides mitigation in the form of two electric vehicle charging points. The points provide free access to electric charging for car park customers in order to promote the use of electric vehicles within the borough.

It is also our belief that the Market Gate Car Park which is currently underutilised will, following the demolition of the MSCP, see an increase in use.

Air quality in the vicinity of the site has now been monitored for some time as other buildings have been demolished and will continue throughout the demolition and construction phases. Mitigation and the control of dust during all demolition phases will be in accordance with the requirements of the statutory Section 81 Notice.

13.11 Fire Strategy

The proposal has been developed with consideration to Building regulations Part B, and engineered solutions will be developed where necessary.

The leisure and retail buildings means of escape has been developed with consideration of Bs 9999:2008. Fire brigade access has been considered within the outline layouts included in this report and provision for wet and dry risers have been considered.

For further information please see appendix 2.

13.12 Access Maintenance Strategy

On most blocks, windows will be cleaned externally in addition to maintenance to the external fabric which, when needed, will be undertaken by using a long reach spider working platform. Consideration of access and space for this work has been considered within these proposals. However, the external fabric of the proposal will be low maintenance, durable and self finished where possible.

13.13 Safety and Security

We have considered the Government Guidance Document 'Safer Places – the Planning system and Crime Prevention'.

'Safer Places – the Planning system and Crime Prevention' the secure by Design document and 'Design and access statements: how to use them to prevent crime' describe attributes of sustainable communities and crime prevention as follows:

1. Access and movement
2. Structure
3. Surveillance
4. Ownership
5. Physical protection
6. Activity
7. Management and maintenance

These attributes have been considered at the outline stage and will be reviewed at each stage as the design progresses.

Primary routes across the site provide a physical link and visually connect the local area for pedestrians, cyclists and vehicles. Secondary external routes will be overlooked by adjacent leisure and retail units. All external spaces are designed to be well lit at night and

to support a variety of activity. Common parts of the development will be centrally managed to ensure clean and well maintained spaces. Elements such as CCTV and access entry systems to the below ground parking area will be considered further at the detailed planning stage. Access entry systems, CCTV and provision for concierge will also be considered in detail for leisure and retail areas at the detailed planning stage.

13.14 Daylight and Sunlight Studies

Studies have been undertaken to understand the impact of the development on surrounding properties and an appropriate organisation of the masterplan and it's component parts.

The BRE's site layout Planning for Daylight and sunlight, a Guide to Good Practice, second edition (littlefair, 2011) was used for these studies. The guide gives criteria and methods for the assessment of daylight and sunlight to habitable spaces, which have been studied at the outline stage. Most local authorities recognise these guidelines as the most appropriate method for daylight, sunlight and overshadowing assessments. The BRE Guide provides criteria and methods for calculating daylight, sunlight and overshadowing both for new developments and for the effect on existing surrounding properties

13.15 Management Strategy

The management strategy will include the day to day maintenance of the buildings, maintenance of the public realm including external lighting and repair of any damage and implementation of the refuse strategy.

A suitably trained landscape maintenance team will care for planted areas and hard paved landscape areas. Responsibility for maintaining the roads and keeping them free of debris and snow will be undertake to a high standard by the council's maintenance team or through private contracted teams. Further detail on the presence of a maintenance team will be developed at a later stage in the design development as part of any Reserved Matters application.



14.0 Conclusion

14.1 Conclusion

From its inception a consistent theme throughout the project has been that it must serve the needs and meet the aspirations of the people of the town.

The work of the Design Team has been structured in parallel with the consultation strategy to facilitate the essential dialogue required for that to happen. The communication of constructive opinion, comment and most importantly knowledge of the people who work and shop in the markets to the Design team is vital to realising a successful project.

This Reserved Matters application builds on the strong foundations of the approved Outline Planning Approval for the town centre, and Barnsley Metropolitan Borough Council are committed to securing high design standards for the development, working closely with other stakeholders to deliver a comprehensive scheme that is well integrated with its context.

The design process that has culminated in the Reserved Matters application has been based on a multidisciplinary approach and has involved substantial consultation and discussion with interested parties.

Within this context the development proposals are recommended to Barnsley Metropolitan Borough Council and the people of Barnsley as a strong response to the site, founded on strong design principles.

It is Barnsley Metropolitan Borough Council's belief, together with that of its consultant team, that the final proposals contained in the application and explained in this Planning, Design and Access Statement provide an exciting vision for the Metropolitan Centre, derived through a robust and inclusive process. The proposals will provide a modern, fit for purpose building that will make a positive contribution to the town centre and bring a new level of vibrancy and activity to the town.

Barnsley Metropolitan Borough Council and its design team commend the application to all, and as such it is respectfully requested that permission be granted.



15.0 Schedule of Appendices

Appendices:

- 1.0 Public Realm Stage 2 Report
- 2.0 Fire Strategy
- 3.0 Energy Assessment
- 4.0 Ecology Report
- 5.0 Drainage Strategy
- 6.0 Shop Front Design Guide
- 7.0 Ground Investigation
- 8.0 BURDAP Design Review minutes



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