

Environmental Statement Volume 3 - Non Technical Summary

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First Street North Environmental Statement Non-Technical Summary

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Environmental Statement Non-Technical Summary

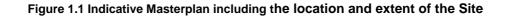
Introduction

- 1.1 An Environmental Statement (ES) has been prepared in support of two planning applications which seek full planning permission for the development of the First Street North site in Manchester City Centre. The planning applications are being submitted by Manchester City Council and Southside Regeneration Limited.
- 1.2 The application proposals represent a critical next phase of development at First Street, which will play a pivotal role in the site's wider regeneration.
- 1.3 The proposed development will embrace the unique characteristics of the wider neighbourhood, increase permeability throughout that neighbourhood, enhance the gateway status of the site and strengthen connectivity with adjoining areas.
- 1.4 The First Street North proposals involve the development of five plots of the wider First Street Masterplan as well as the provision of substantial new areas of high quality public realm (Figure 1.1 below).
- 1.5 The development that is being proposed by Manchester City Council is the creation of a cultural facility, located at Plot 2 of the First Street North site. The proposed building, designed by Mecanoo Architects, will incorporate The Cornerhouse (expanded) and the Library Theatre Company, relocated from their current premises. It will also deliver public realm adjacent to Plot 2, connecting it to First Street itself.
- 1.6 The formal description of the development that is being proposed by Manchester City Council is as follows:

"Full planning permission for the demolition of any on-site structures and redevelopment for a Class D2 cultural facility comprising a theatre, gallery, cinema spaces and back-of-house facilities, together with public realm improvements and other associated works."

- 1.7 The development that is being proposed by Southside Regeneration at Plots 1, 1a, 3 and 3a is to create a 4* hotel, a combined multi-storey car park and hotel, food & beverage and other retailing facilities, together with ancillary works. It will also deliver substantial new, permanent public realm improvements associated with the entire First Street North site. The scheme has been designed by Ian Simpson Architects.
- 1.8 The formal description of development is as follows:

"Full planning permission for the demolition of any on-site structures and redevelopment for a Class C1 hotel; two Class A1/A3/A4 retail units; a combined multi-storey car park, Class C1 hotel and ground floor A1/A3/A4 retail units and management suite; together with a programme of public realm improvements for the wider First Street North site and other associated works."





1.9 Full details of the proposed uses and quantums that form the basis of the planning applications being submitted are set out below.

Table 1.1: First Street North Development Proposals

Plot Number(s)	Proposed Use(s)	Proposed GEA (m²)	No. of Storeys	Applicant	
1	Hotel – 208 bedrooms	11,151m²	11		
1A	Retail (Class A1/A3/A4)	1,766m²	2	_	
3	Multi-Storey Car Park – 701 spaces	20,959m²		Southside Regeneration	
	Hotel – 110 bedrooms	4,277m²	. 12	Limited	
	Retail (Class A1/A3/A4)	1,059m²			
3A	Retail (Class A1/A3/A4)	260m²	2	_	
2	Cultural Building – comprising theatre, gallery, cinema spaces, and associated back-of-house facilities	7,302m²	4	Manchester City Council	

- 1.10 The application proposals are focused on leisure, cultural and ancillary retail uses, which will relate well to other similar activity on Whitworth Street West and around Deansgate Locks, and provide a unique attraction at one of the main entry points in to the First Street site, thus helping to forge the "sense of place" that is required.
- 1.11 The ES sets out the findings of a full Environmental Impact Assessment (EIA) which has been carried out to assess the impacts of the development. This report provides a non-technical summary of the ES.
- 1.12 The full findings of these studies and of the overall ES are presented in a comprehensive set of documents that can be viewed during normal office hours at the Planning Department of Manchester City Council (MCC).

Background

1.13 The entire First Street site has been recently remediated (following its previous use for chemical and gas works) and is ready for redevelopment.

- 1.14 A Development Framework for First Street was first endorsed by Manchester City Council's Executive Committee in 2005. The strategy for the site contained within this Development Framework aimed to respond to the growing demand for Grade A office space within the City Centre at that time.
- 1.15 In order to sustain economic growth and try to secure inward investment opportunities to maintain and enhance Manchester's competitiveness, there was a clear requirement to significantly increase office supply within Manchester, so that it could respond to needs of key growth market sectors, including those occupiers who were seeking large floorplates in price-sensitive locations. The development of a number of priority fringe locations, including First Street, was identified as the most effective solution to meeting the expected demand for offices within the City Centre.
- 1.16 This strategy was also reflected in the updated 2007 Development Framework for First Street, which again placed the primary emphasis on delivering commercial office development.
- 1.17 Whilst the delivery of significant new office development continues to be the core objective for the wider First Street site, it is now clear that office occupiers will only be attracted to the site if the early delivery of complementary leisure, and amenity facilities can be achieved. At the present time, First Street lacks competitiveness partly because of the absence of these types of facilities.
- 1.18 This shift in emphasis is reflected in the latest version of the Development Framework, which was endorsed by the City Council's Executive in March 2011. The primary focus of this Development Framework is on creating the "sense of place" at First Street that is undoubtedly lacking at the current time.
- 1.19 The Development Framework recognises that only by embedding the site firmly within the context of its wider neighbourhood, and by positioning itself as a provider of facilities, services and accommodation for that wider neighbourhood, will First Street unlock its own potential and provide the stimulus for much wider physical regeneration activity in the future.
- 1.20 The planning application proposals that are being submitted by Manchester City Council and Southside Regeneration have been formulated entirely in the context of this background to the site.

The Environmental Impact Assessment

- 1.21 The Environmental Impact Assessment (EIA) process is a procedure used to determine the potential environmental effects of a proposed development. The Environmental Statement (ES) is the document containing the findings of the EIA.
- 1.22 The Proposals were the subject of a scoping exercise to identify the likely significant environmental effects that may potentially arise from the construction and operational phases of development. A Scoping Report was compiled by the Applicant and issued to MCC to assist in the formulation of a Scoping Opinion.
- 1.23 Full results of the EIA process are presented within Volumes 1-2 of the ES.

Planning Context

- 1.24 Throughout the design process and the EIA process, full regard has been had to Government Advice (in the form of Planning Policy Statements and Guidance) and guidance set out in the relevant regional and local planning policy documents. Extensive discussions with Manchester City Council have been held throughout the process.
- 1.25 The proposals have been developed following the endorsement by Manchester City Council's Executive Committee of the First Street Development Framework. This document sets out the overarching aims, principles and vision for the wider First Street area and therefore the First Street North site. During each iteration of the Development Framework (2005, 2007 and 2010) the community and stakeholders have been consulted on the emerging proposals.
- 1.26 A full review of the proposals against planning policy is included in the Planning Statement which accompanies the planning applications and this is summarised within the Environmental Statement. These reviews conclude that the proposals are fully in accordance with adopted and emerging planning policy.

Construction Phasing

- 1.27 The construction programme will span approximately 2 years, with construction expected to commence in mid 2012 and completion anticipated in 3rd Quarter 2014. The project includes seven distinct elements:
 - § Enabling / Infrastructure Works
 - § Plot 1 4 Star Hotel Building
 - § Plot 1a Multi Tenant Retail/Food and Beverage Building
 - § Plot 2 Cultural Facility
 - § Plot 3 Budget Hotel and Multi Storey Car Park
 - § Plot 3a Retail Building/Food and Beverage
 - § Public Realm and infrastructure
- 1.28 Enabling works to prepare the site will include measures such as erection of a perimeter hoarding and the establishment of temporary contractor accommodation (e.g. offices). Infrastructure works will then be required to install new services and complete any service and drainage diversions. Construction of base courses of the new roads will take place at this time and will be used for site haul roads. A full description of these works are included within each application.
- 1.29 During piling and substructure works low noise techniques will be utilised, and it is likely at 3 no. tower cranes will be required to assist with the construction.
- 1.30 A Site Waste Management Plan will be implemented to ensure that construction waste is avoided as much as possible, where unavoidable is minimised and recycled.

- 1.31 Measures will be implemented to ensure that disturbance to residents is kept to a minimum. Measures include:
 - § The majority of construction traffic will access the site from Wilmot Street with only Plot 2 construction traffic using the existing car park entrance on Whitworth Street
 - § Contractor parking on local residential roads will be actively discouraged.
 - § A Construction Liaison Officer will be appointed to liaise with the community and advertise of forthcoming construction activities and progress.
 - § Reasonable construction hours will be agreed with MCC.

Consideration of Alternative Options

- 1.32 Paragraph 2, part 1 of Schedule 4 of the Town & Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2011 required applications to provide an outline of the main alternative approaches to the Proposed Development that have been considered and the reasons for the eventual choice. These are broken down into the following categories and justification is provided for the rejection of each alternative:
 - § The 'do nothing' scenario: is considered unacceptable as the site is currently underutilised, and the do-nothing approach would represent a significant missed opportunity to create a mixed use destination with associated public realm of the highest quality that would have positive impacts on the surrounding neighbourhood and wider community.
 - § Alternative sites: The endorsed First Street Development Framework recognises the site's potential to deliver major regeneration benefits through the delivery of a "Cultural Hub". The uses proposed for First Street North have specific objectives which will help to deliver the new First Street neighbourhood. Dispersing the uses proposed across other city centre sites would not achieve the well defined aims of the First Street Development Framework which has been in place for almost a decade.
 - § The current arrangements for the two cultural organisations to occupy the new cultural facility are inadequate for a number reasons. In principle, the uses could be located at a range of sites, and indeed are in under current arrangements. However, to continue to do so will not allow the organisations to meet their full potential nor would they achieve the environmental, economic, social and regeneration benefits that the proposed development will deliver.
 - § Alternative design: Throughout the design process, different options have been assessed in designing a set of proposals that realise the full regeneration potential of the site and are sustainable and deliverable. The application proposals are considered to form the most suitable design solution to the site's redevelopment.
 - § Alternative use: The proposed mix of uses are deliverable and accord with planning policy advice in relation to creating sustainable communities and will maximise the regeneration benefits for the wider First Street area.

Social and Economic Impacts

- 1.33 The Social and Economic Impact Chapter looks at how the development of First Street North will impact the lives and circumstances of people, their families and the communities of Hulme and the City Centre. It is important to look at these impacts to consider how any positive effects can be enhanced and to work out how any negative impacts can be minimised.
- 1.34 The Chapter firstly looks at how the proposed development fits with planning and economic policy, paying particular attention to potential benefits such as job creation, increasing prosperity and creating improvements for the community. It also examines the current conditions within the Hulme and City Centre areas of which the proposed development will be assessed against, giving details on indicators such as population, well-being, life expectancy, levels of unemployment, educational qualifications and the types of employment.
- 1.35 The impacts of the Proposals are evaluated using two approaches. The first approach attributes 'figures' to the impacts by detailing the expected number of jobs that will be created and the additional spending that will occur as a result of the development. Job numbers during construction are provided, totalling 126 temporary jobs, and once the development has been completed there will be 537 permanent full-time jobs provided by the Proposals.
- 1.36 The Gross Additional Expenditure that will be brought into the local economy as a result of the Proposals is estimated to be £15,127,796 (£12,223,959 Net). This extra money into the Greater Manchester Economy comes from more visitors and employees from the development spending money in the area, where otherwise they would have not.
- 1.37 The second approach looks at the potential impacts that cannot be quantified. This includes considering impacts such as the pressure on existing facilities, the potential impact on crime levels and how the new employees and visitors can potentially contribute to the Hulme and City Centre community through providing potential investment opportunities and supporting local businesses. The effects of the proposed development are generally positive, and in most cases, the beneficial effects will make a considerable improvement to the lives of the people living within the Hulme and City Centre areas.
- 1.38 An assessment has also been undertaken as part of this chapter to identify the potential impact of a foodstore proposed as part of the wider First Street Development Framework Area. This assessment has tested the maximum size of store that could be built at this location and therefore represents a worst case scenario. The proposed foodstore has been assessed against the key planning policy tests of Planning Policy Statement 4: Planning for Sustainable Economic Growth. This assessment demonstrates that First Street is the most preferable location for a new foodstore in the city centre and that the impact of this foodstore will not be significantly detrimental to existing foodstores or local shopping centres in the study area.

Townscape and Visual Impact

- 1.39 This chapter assesses the likely townscape impacts of the Proposals upon the Application Site and surrounding area. This includes impacts on the site itself, and the wider townscape character. The chapter also considers the likely visual effects of the development, using computer-generated photomontages to illustrate the visual effects from a number of selected viewpoints that are considered to represent the principal significant views of the development. Viewpoints are taken from selected viewpoints around the vicinity of the site, and from viewpoint locations that place the proposals within the context of the wider First Street North masterplan proposals. The assessment has considered the impacts arising from both the construction and operational phases of the development, and has identified residual impact for all of the development phases following the implementation of any mitigation measures. This assessment has been carried out with reference to the Guidelines for Landscape & Visual Impact Assessment, 2nd Edition, 2002 (referred to hereafter as "the Guidelines").
- 1.40 The First Street Masterplan area occupies a prominent position, marking the gateway to the City Centre from Manchester airport, and the south. It also has the potential to become the heart and commercial focal point of a distinctive new neighbourhood for the city centre.
- 1.41 First Street has already undergone significant transformation in recent years, appropriate to its location. However, the First Street North site currently lacks a clearly defined character, and lacks elements, features and built form appropriate to its strategically important location within the city. In addition, the southern half of the site, excluding the Parkway Gate scheme, remains visually poor, and retains a distinct brownfield land character. Visual and physical north-south and east-west connections are poor, and this part of the site has a negative visual impact on the approach to the City Centre along Medlock Street.
- 1.42 Assessment of the First Street North proposals indicates they are likely to result in moderate or major improvements to all aspects of the townscape, apart from topography, which will have be subject to no noticeable change. Particular improvements will concern scale and massing and the public realm. The proposals will form a significant positive contribution to the gateway function of the site, and will benefit both the developing First Street neighbourhood and wider city centre context significantly. When assessed in conjunction with the wider First Street Masterplan proposals, the potential beneficial impacts of the proposals on the townscape are likely to be further increased.

- 1.43 The visual effects of the proposals are mostly experienced within close proximity of the site, due to the visually containing effect of the railway viaduct to the north and the elevated Mancunian Way to the south, combined with the dense urban form within the context of the city centre and the majority of the First Street neighbourhood. The vast majority of identified key views of the development will be positively impacted upon as a result of the proposals, with the impact on the remainder of the views having been assessed as 'benign'. The positive assessment on the views results from the proposed high quality of the development and rich landscape/public realm setting, combined with the way that the proposals respond positively to their identified requirement to function as a new gateway and heart to the First Street neighbourhood. In addition, the considered approach to Masterplan development will minimise any potential impact on the extensive built heritage within the city.
- 1.44 The assessment identifies that the key views of First Street North from the south are likely to be further enhanced by future development of the wider First Street Masterplan, through the creation of a more high quality visual setting to the proposals.

Lighting

- 1.45 The Proposed Development has a requirement for new building facade lighting, pedestrian access and safety lighting.
- 1.46 The existing residential properties adjacent to the Site to the North and West are receiving light spill onto their facades from the existing street lighting on Whitworth Street West, Medlock Street and the media screen on Albion Street. The survey indicated that the light spill in these areas exceeds the light trespass levels (for City Centre locations) stated in the ILE Guidance note on the reduction of obtrusive light (2005).
- 1.47 The site survey indicated that the existing lighting within the Site boundary causes no light spill onto the adjacent residential areas surrounding the Site.
- 1.48 The lighting impact arising from the new lighting provisions with consideration to the in-built mitigation measures (such as the position, rotation and type of luminaires used) indicates effective impact management that will generally result in a minor adverse impact on residential buildings adjacent to the site.
- 1.49 The impact arising from new lighting with the in-built mitigation measures will result in no increase to light spill above the current levels experienced to the River Medlock habitat corridor.

Traffic and Transportation

- 1.50 The traffic and transport impacts of First Street North have been assessed alongside the cumulative impacts of the wider First Street Development Framework proposals. The key impacts in terms of transportation are as follows:
 - § The construction traffic associated with the development at First Street North;

- § Increased vehicular movements towards the First Street site and MSCP;
- § Increased parking demand pressures; and
- § An increase in pedestrian and cyclist movements in the immediate vicinity of the First Street site.
- 1.51 The environmental impacts arising from Transport movements associated with the development at First Street North are concluded to be limited. An increase in traffic due to the trips generated by the MSCP will need to be accommodated onto the local road network. However, the impact of this has been modelled and is well within the guideline thresholds which state that environmental impacts can only generally be perceived when there is a 30% increase in traffic flow (IEA). In addition the commitment to a Travel Plan and targets to reduce travel by car will assist in minimising the traffic impact.
- 1.52 It is suggested that the newly created junction at River Street and the existing junction at Hulme Street/Cambridge Street will successfully be able to accommodate the additional First street North traffic. A minor increase in vehicular movements will occur on the immediate road network however the overall impact following mitigation is considered negligible.
- 1.53 In order to reduce the impact of construction traffic, site and traffic management plans will be drawn up along with detailed information on how construction traffic will be managed. The principles of this will be to provide a management strategy for the movement of vehicles ensuring they access the site via major roads minimising the impact on local residents and businesses and provide a wheel washing point to avoid high levels of dirt on the highway.
- 1.54 Green pedestrian and cycle routes are proposed throughout the site with particular emphasis being placed on routes from the site to the City Centre and the Oxford Road Corridor. Cycle facilities and showers/drying areas are provided within the proposed buildings to encourage sustainable transport usage.

Noise and Vibration

- 1.55 The Proposed Development will involve the generation of noise during the construction phase and will also introduce potentially noise generating building services plant and activities.
- 1.56 Existing levels of noise and vibration due to adjacent roads and rail lines will be able to impact on the proposed buildings within the Application Site.
- 1.57 Noise and vibration surveys have been conducted in order to quantify the levels of noise at existing sensitive receptors around the Site and to determine the levels of noise and vibration at the location of the proposed buildings.

- 1.58 The results of the noise surveys have been used to set the allowable levels of noise at existing sensitive receptors at and around the Site in order to avoid noise nuisance due to temporary construction activities and due to permanent building services plant serving the Proposed Development. Allowable external noise levels due to activity noise at the proposed cinema have been established and have allowed the determination of the required sound insulation of the building façade.
- 1.59 The assessment of construction noise shows that mitigation measures will be required to reduce levels of noise at the Hacienda apartments building and at the office building at Number One First Street. These mitigation measures will also assist in reducing construction noise levels at other sensitive receptors around the site.
- 1.60 An assessment of road traffic flows shows that increases in noise levels due to changes in traffic flows will be negligible on all roads, with the exception of Hulme Street to the west of Cambridge Street. Road traffic noise levels are expected to increase on Hulme Street, but the magnitude of the increase is only expected to be of minor significance due to the underlying level of road traffic noise from the Mancunian Way and Cambridge Street.
- 1.61 Compliance with the allowable noise levels given in this Chapter due to permanent installations and activities will be a requirement of the specification documents that will be issued for each of the proposed buildings, to ensure that noise nuisance at sensitive receptors is avoided. As such, the impact of building services plant at and around the Application Site is expected to be negligible.
- 1.62 Compliance with the recommended sound insulation properties of the external envelopes is expected to lead to compliance with British Standard guidelines for the noise sensitive internal areas.
- 1.63 Structureborne vibration levels within the proposed buildings due to train movements on the nearby rail viaduct are not expected to lead to adverse comment due to 'feelable' vibration. In order to achieve appropriate levels of noise within the noise sensitive internal areas of the Cultural Facility, measures to reduce structureborne noise due to train movements have been recommended and subsequently incorporated into the development.

Air Quality

- 1.64 A full assessment of the likely air quality effects of the Proposals upon the Application Site and surrounding area has been carried out. This involved as assessment of the baseline conditions currently existing at the Site and surrounding area; the mitigation measures required to prevent, reduce or offset any significant negative impacts, and the likely residual impacts after these measures have been adopted.
- 1.65 The assessment has examined existing air quality in the vicinity of the proposed development site relating to three pollutants (namely NO2, PM10 and PM2.5) using various data sources. After this the following assessments were carried out:

- 1. A qualitative assessment of impacts due to the construction of the proposals, following the GLA Best Practice Guidance.
- 2. An assessment of the operational air quality impacts using the ADMS-Road atmospheric dispersion model and traffic data provided by the transport consultants for the First Street North proposals.
- 1.66 The following was noted about the current air quality and existing air pollution sources at the site:
- 1.67 An Air Quality Management Area was declared in the city in 2001 and amended in 2004. This area encompasses the site.
- 1.68 Vehicle emissions from various main roads are the likely dominant source of air pollutants in the vicinity of the application site. The main pollutants associated with road traffic are:
 - § Carbon monoxide (CO)
 - § Nitrogen dioxide (NO₂)
 - § Volatile organic compounds (VOCs), especially benzene and 1,3 butadiene
 - § Fine particulate matter (PM_{10}) .
- 1.69 The railway corridor (in particular the Manchester Piccadilly to Wigan route) has been identified as being heavily trafficked by diesel locomotives.
- 1.70 Construction impacts will relate to equipment and vehicle emissions and fugitive dust emissions. The construction assessment concluded that the site is a medium risk site in terms of air quality, based on the site size and proximity to sensitive receptors. As such a series of suitable mitigation measures have been identified relating to site preparation, vehicles (movements, cleaning and covering of loads), excavation, stockpiling, cutting/grinding, chutes/skips and waste disposal (including burning).
- 1.71 In the context of increased traffic resulting from the operational phase of the development, air quality impacts have been assessed to be negligible. Based on this, air quality is judged to be of minor significance in the case of the proposals. Due to this finding, no air quality specific mitigation measures relating to emissions from traffic are proposed.

Ground Conditions

- 1.72 The Application Site has a complex history including extensive industrial use and a detailed remediation scheme to clean-up historic land contamination.
- 1.73 The Baseline Condition of the site therefore reflects the post-remediation state as verified through recent intrusive site investigation.
- 1.74 Generally the ground conditions comprise a sequence of Made Ground (soils imported or deposited by man) overlying a bedrock of Triassic Sandstone. The shallow horizons of sandstone are weathered and therefore relatively weak.

- 1.75 Groundwater typically rests at depths circa 5m below ground level and flows in a general westerly direction. The River Medlock flows through the site in culvert from east to west and groundwater is likely to discharge to the river locally.
- 1.76 Historic contamination was addressed through the site remediation which was approved by the Environment Agency and Manchester City Council. The standard to which the remediation was carried out was for the intended commercial end-use and as such further remediation is considered unnecessary with only residual impacts requiring management during the development.
- 1.77 The "Construction Phase" of the development will disturb the soils across the site and as such has the potential to result in Minor Adverse impacts; however typical mitigation measures can be employed to reduce this impact to Negligible. Such measures include the adoption of rigorous health and safety controls for site personnel, appropriate environmental monitoring for dust and the use of dust suppression techniques (e.g. wheel-wash or mist/spraying during dry periods) to control the potential spread of any contamination across site boundaries
- 1.78 The proposed structures will require piled foundations and an assessment of the risk to the underlying aquifer will be required to ensure appropriate design. It is common practice to use continuous flight auger (CFA) piles in such circumstances as a recognised mitigation measure. Use of such a technique or approved alternative will result in the action having a negligible impact.
- 1.79 The occupation levels of the site (by users of the site) will increase as result of the development however provided contact between the site users and the subsurface soils are contained through the adoption of capping layers/barriers the impact will be negligible.
- 1.80 The Proposed Development is likely to be a stimulus to regeneration of the surrounding areas and as such will be a stimulus to the clean-up of further brownfield sites.
- 1.81 With this is mind, the overall impact of the development is considered Beneficial

Water Resources

- 1.82 The effects on water quality and hydrology that are likely to arise from the construction and operation phases of the proposed development are principally the following:
 - § Effects related to construction adjacent to the River Medlock
 - § Effects related to the controlled discharge of construction site runoff during earth moving and general construction works.
 - **§** Potential disruption of groundwater flows from controlled dewatering of excavations or sump and pump operations.

- § Effects related to the discharge of routine site runoff to existing outfalls into the River Medlock.
- § Potential impacts arising in relation to potable water demand and domestic type foul drainage flows.
- 1.83 A summary of the key impacts and mitigation measures is provided below:
 - § All construction activities will be carried out in accordance with the Environment Agency's Pollution Prevention Guidelines notably PPG6 'Working at Construction and Demolition Sites'. This will reduce the risk of surface water and/or groundwater contamination during construction.
 - § The development has a low water table unlikely to trigger the need for dewatering and/or temporary sump and pump operations for earthworking, drainage installation or general substructure construction.
 - Surface water run off collected in excavations will be treated and discharged as described for the general site drainage. Suitable measures will be incorporated in order to ensure only clean and uncontaminated flows will be discharged from the site.
 - With reference to the Environment Agency maps and those contained within the Strategic Flood Risk Assessment for the City of Manchester the development footprint of the site is Flood Zone 1 which is deemed to be classified as a low risk site.
 - § Overall the residual impact on flood risk is considered to be Negligible.
 - § In accordance with PPS25 an assessment of the surface runoff rates before and after the development of the site has been undertaken which has demonstrated that the development proposals would give rise to an increase in runoff above existing rates hence the inclusion of onsite attenuation based upon a Greenfield equivalent site runoff with an allowance for climate change.
 - § Improvements to the quality surface water runoff from the site post and pre development are anticipated through the silt control suitably located within onsite surface water drainage network.
 - § The foul drainage discharge requirements increase as the occupation of the site rises. The increase is believed to have minimal impact on the existing infrastructure.

Daylight, Sunlight and Overshadowing

1.84 This Chapter of the ES assesses the likely daylight, sunlight and overshadowing impacts of the Proposals upon the Application Site and surrounding area. It also describes the methods used to assess the impacts; the baseline conditions currently existing at the Site and surrounding area; the mitigation measures required to prevent, reduce or offset any significant negative impacts; and the likely residual impacts after these measures have been adopted.

Daylight Overshadowing (Vertical Sky Component)

- 1.85 The majority of residential properties adjacent to the Development are within good practice guidelines with regard to impact magnitude. i.e. they receive more than 27% Vertical Sky Component (VSC). When a conventional window receives 27% VSC or more it is considered that the room will have adequate daylight.
- No mitigation measures are required as the assessment confirms that any impact is not of a scale where the residential buildings will be left with little or no access to sunlight and daylight. Whilst the lowest two apartment windows on the Hacienda building and 23 Whitworth Street West have had the VSC reduced from 32% to 26% which is below the suggested 27% in the BRE 209 guide. The reduction is less than 20% of the original and therefore not considered by the BRE209 guide to be noticeable.

Sunlight Overshadowing (Sunlight Probability)

- 1.87 All of the key receptors tested within the assessment (including residential windows) receive more sunlight than recommended in BRE 209. This is true for both the summer and winter months.
- 1.88 The majority of existing residential properties around the Development have facades that face South. Where a building façade faces South then it has the maximum opportunity to receive direct sunlight both during the winter and summer. The façade of the Ropeworks on the A5103 faces East, which does reduce its opportunity to receive direct sunlight. The results of the assessment of sunlight received by this façade following the completion of the development is above the minimum levels suggested in the BRE 209 guide.

Overshadowing (Green Areas)

- 1.89 The desktop study of the First Street North site, and areas adjacent to it, identified no green areas or gardens which will be impacted upon by the Development.
- 1.90 The desktop study showed that green spaces will be created as part of the wider First Street Masterplan development. This includes new green landscaped squares at First Street Central (Offices) and at First Street South (Anchor Destination). The First Street North Development will not have any significant impact on these new areas of green landscaping as it is located to the north of the proposed spaces and as such Sunlight will not be blocked by buildings.

Wind

1.91 This Chapter of the ES assesses the likely Wind impacts of the Proposals upon the Application Site and the surrounding area

- 1.92 A quantitative wind analysis has been carried out which includes a direct comparison between the baseline conditions and those created by the proposed development for 12 wind directions. The assessment describes the quantitative assessment of the likely wind environment, and the qualitative judgements that are made in order to identify areas of potential concern. The analysis includes an assessment of the relative forms, layouts and massing of the existing site and the proposed development, as well as site landscaping and topography.
- 1.93 This is used to predict the wind speed on site at pedestrian level. The wind speed values are used in conjunction with the Lawson comfort criteria to predict the level of pedestrian comfort.
- 1.94 There assessment concludes that the development results in no significant residual impacts as a result of construction, therefore no mitigation is required. however standard construction mitigation measures will be implemented including standard site hoardings to shelter neighbouring areas.
- 1.95 The residual impacts predicted following completion of the development are negligible and conditions on site tolerable for all activities once mitigation measures are applied.

Telecommunications

1.96 Impact assessments and a baseline reception survey have been undertaken in order to determine the potential impacts to television broadcast services that may arise as a result of the First Street North project. The study has focused on the three television broadcast platforms that could possibly be impacted by the proposed development – analogue terrestrial television, digital terrestrial television and digital satellite television services.

Analogue Terrestrial Television

1.97 Due to the recently completed Digital Television Switchover, it is now not possible for the proposed development to impact analogue terrestrial television reception, as analogue transmissions have been switched off.

Digital Terrestrial Television (DTT)

1.98 From modelling (no viewers are located in any areas where interference could occur) and analysis of current local reception conditions, the proposed development is not expected to have any effect upon the reception of DTT services. DTT is more commonly known as 'Freeview'.

Digital Satellite Television

1.99 Due to the location of the proposed development, the angle of the incoming satellite signals and the locations of local satellite television viewers, the proposed development cannot impact the reception of digital satellite signals. No interference is expected. 1.100 From the findings of the fieldwork and from impact modelling, no adverse impacts have been identified for any television broadcast platform. No interference is expected and the proposed development would have a neutral effect on the reception of television broadcast services for local residents.

Ecology

- 1.101 The assessment of the development proposals on ecology and wildlife was undertaken by Penny Anderson Associates Ltd (PAA) Consultant Ecologists during the spring and early autumn and winter of 2011.
- 1.102 Data requests returned no statutorily protected sites within the vicinity of the proposed development site, however, two non-statutory Sites of Biological Importance (SBIs) are located within 1.5km: Rochdale Canal Stott's Lane Ducie Street Basin and Ashton Canal (West).
- 1.103 Overall the site was predominantly composed of hard surfaces, including car parks and paved areas, and expanses of amenity grassland. Although largely undeveloped, a recently renovated building (Number One First Street) occupies the northern portion of the site, within which various non-native species have been introduced in the form of planted beds and an avenue of young trees (Acer spp.) along the paved pathways and congregation areas.
- 1.104 The culvert of the River Medlock, which runs beneath the site toward the northern site boundary, was confirmed as supporting a summer bat roost in 2008. The 2011 night time activity surveys have confirmed the culvert is a bat roost but with larger numbers of bats (up to 33) indicating it supports a maternity roost of Common pipistrelle bats. No other buildings or structures were observed as being used by roosting bats during the surveys.
- 1.105 Black redstarts were not observed within the application site during any of the surveys carried out. It can therefore be reasonably assumed that black redstarts do not present an ecological constraint to the proposed development. As such they were not considered further within the rest of the Ecological Impact Assessment.
- 1.106 Although black redstart was not recorded on site during the survey visits, 17 other bird species were observed. These included one Red listed and five Amber listed species, of which two are UKBAP priority species, song thrush and hedge accentor. In addition, one non-native species, greater Canada goose, was recorded.
- 1.107 Tables 1.2 and 1.3 (below) present the likely significant impacts of the development on the ecology and wildlife of the application site and in its vicinity, and the proposed mitigation and compensation measures. The predicted residual impacts following the use of mitigation/compensation measures are also presented.

Table 1.2 Summary of the Predicted Impacts on Each Ecological Feature/Receptor during the Demolition and Construction phase.

Ecological Feature/Receptor	Confidence	Reversibility	Magnitude of Impact before Mitigation	Mitigation Measures	Residual Impact after Mitigation
Habitats – amenity grassland, poor semi-improved grassland and scrub	Certain	Permanent	Minor adverse	Retention and creation of new habitat	Minor beneficial
Disturbance by noise and vibration to the maternity roost of bats in the River Medlock culvert	Certain	Temporary	Moderate adverse	Works will be undertaken under an EPS licence and method statement during the least sensitive period possible	Neutral
Loss of bat foraging and connecting habitat across the site	Certain	Permanent	Minor adverse	Retain and enhance habitats on site	Minor beneficial
Disturbance to bats and their habitats from lighting across the majority of the site	Certain	Permanent	Minor adverse	Sensitive lighting design to reduce light spill onto	Neutral

				habitats	
Disturbance to bats from lighting within the River Medlock corridor	Probable	Permanent	Moderate adverse	Sensitive lighting design to reduce light spill onto habitats/roost	Neutral
Removal of small - eaved cotoneaster	Certain	Permanent	Minor positive	Appropriate clearance and disposal from site	Minor Beneficial
Impacts on breeding birds due to loss of scrub habitat	Certain	Permanent	Minor adverse	Timing to avoid breeding season, habitat retention and creation	Neutral

Table 1.3 Summary of the Predicted Impacts on Each Ecological Feature/Receptor during the operational phase. Showing Magnitude of Impact Prior to Mitigation, Outline Mitigation Measures and Residual Impact

Ecological Feature/Receptor	Confidence	Reversibility	Magnitude of Impact before Mitigation	Mitigation Measures	Residual Impact after Mitigation
Disturbance to bats from external lighting across the majority of the site	Certain	Permanent	Minor adverse	Sensitive lighting design to reduce light spill onto habitats	Neutral
Disturbance to bats from external lighting within the River Medlock corridor	Certain	Permanent	Moderate adverse	Sensitive lighting design to reduce light spill onto habitats/roost	Neutral
Impacts on breeding birds due to loss of breeding habitat	Certain	Permanent	Minor Adverse	Habitat retention and creation	Slight beneficial

Environmental Statement Availability

- 1.108 The full Environmental Statement is available for public viewing during normal office hours at Manchester City Council.
- 1.109 Further information and additional copies of this report can be obtained from the following:

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