
**AVISON
YOUNG**

**Environmental Statement, Volume 1:
Updated Non-Technical Summary
Red Bank Neighbourhood, Manchester**

July 2023

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Status: Final

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For and on behalf of Avison Young

1. Introduction

- 1.1 Far East Consortium Ltd. (FEC) is seeking to obtain planning permission for a residential-led, mixed-use development for the Red Bank Neighbourhood and part of the New Town Neighbourhood, as per the Victoria North Strategic Regeneration Framework (SRF). This includes, but is not limited to, residential dwellings, commercial / retail uses, cafes, restaurants, community uses, employment uses, and social infrastructure (including a primary school and health centre uses) hereafter referred to as 'the Proposed Development'.
- 1.2 Planning permission will be sought through two planning applications. An Environmental Impact Assessment (EIA) has been undertaken to assess both of these applications and report the findings in a single Environmental Statement (ES). The two applications are referred to as 'Application 4 – Red Bank Neighbourhood Outline' (or simply 'Application 4') and 'Application 5 – Plots NT02-NT04 Full' (or simply 'Application 5'). These applications follow planning permission being granted by Manchester City Council for access, groundworks and utilities infrastructure works funded by the Government's Housing Infrastructure Fund (HIF) which are referred to in this ES as Applications 1, 2 and 3 respectively.
- 1.3 The Site is located within the administrative authority of Manchester City Council (MCC), within the ward of Cheetham, on an area of land to the north-east of Victoria Station on either side of the River Irk. The Site (encompassing the combined application areas of Applications 4 and 5) is located within the Red Bank area and is immediately adjacent to Manchester City Centre and the Green Quarter neighbourhood.
- 1.4 The Site Location Plan for Application 4 is provided at **Figure 1.1** below and the Site Location Plan for Application 5 is provided at **Figure 1.2** below.

Figure 1.1: Application 4 – Site Location Plan

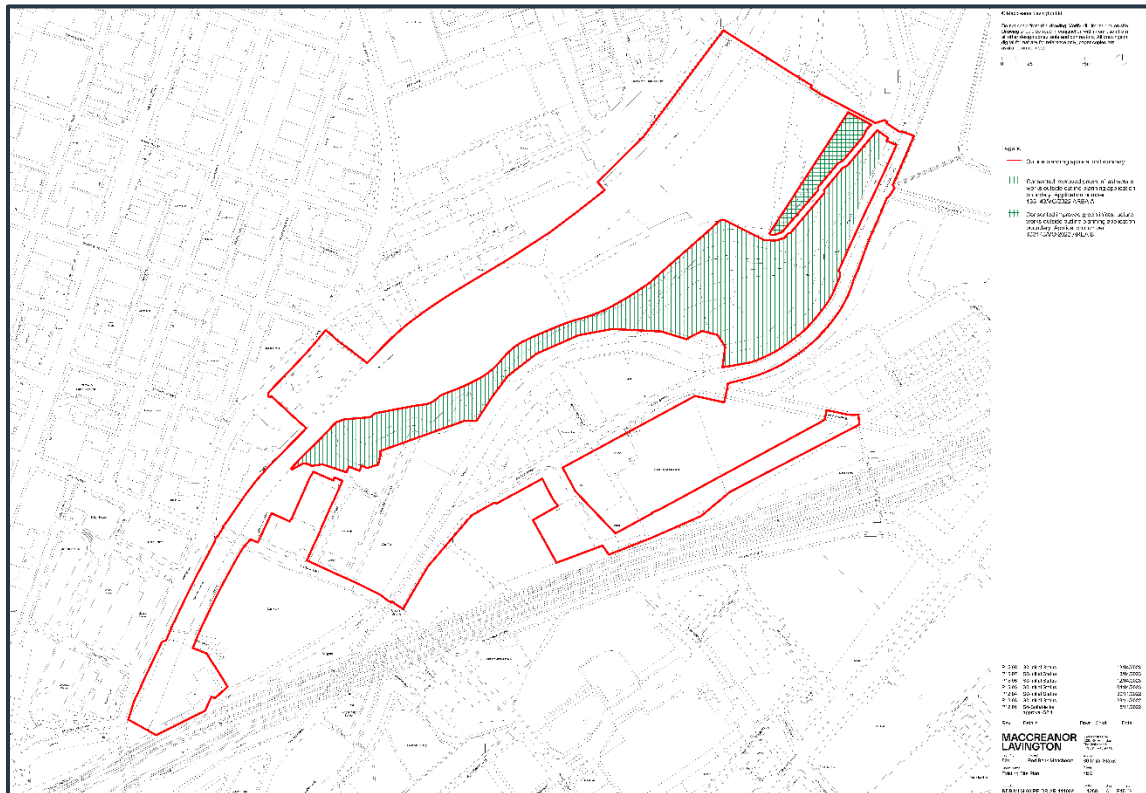
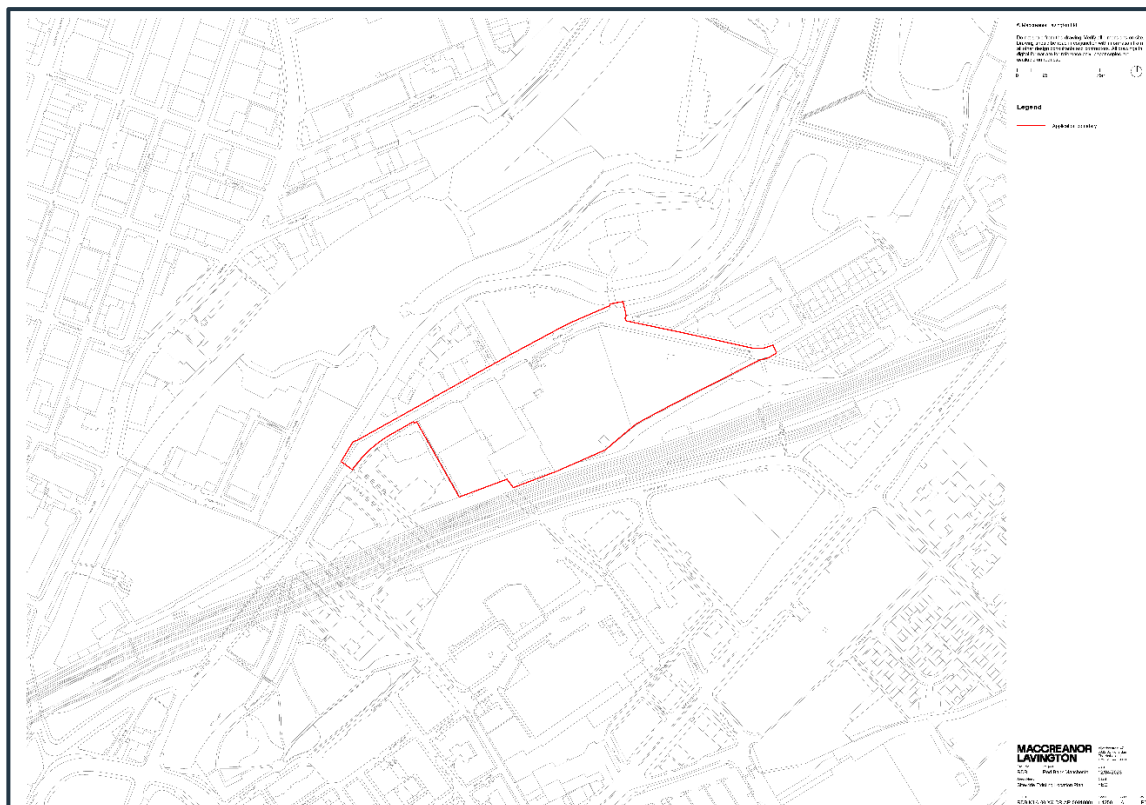


Figure 1.2: Application 5 – Site Location Plan



- 1.5 Avison Young, who are IEMA Registered competent EIA experts, have been commissioned by the Applicant to co-ordinate the Environmental Impact Assessment (EIA) process and produce the ES for the Proposed Development. As such, this ES has been coordinated by Avison Young's Environmental Planning team.

The Site

- 1.6 The Site (comprising of the red line boundary areas of Applications 4 and 5) is irregular in shape and occupies a total area of approximately 14.02 hectares (ha).
- 1.7 The Site and its immediate vicinity have a legacy of more than 150 years of industrial uses and Victorian and pre-Victorian infrastructure, with the Red Bank viaduct being one of the Site's most prominent features.

Application 4 Area

- 1.8 Application 4 covers an area of 11.21 ha. The northern and eastern extent of the Application 4 area of the Site contains a large area of hardstanding and prepared ground that has been cleared as part of the previous HIF works. As part of the Proposed Development, this would be the location of the 'Red Bank Plateau' neighbourhood. At the north-eastern Site boundary are the Lowry footbridge that provides an existing Public Right of Way (PRoW) that links Collyhurst Road to Rayburn Way to the north.
- 1.9 The western extent of the Application 4 area, the 'Red Bank Viaduct' neighbourhood, comprises a railway viaduct (the arches of which are in commercial use), further hardstanding, a car park and a warehouse unit.
- 1.10 The south of the Application 4 area contains an area of hardstanding and vacant commercial premises located along the eastern bank of the canalised River Irk, referred to as 'Travis Island'. A small section of the River Irk is also included within the red line boundary for Application 4, beginning at the northern end of Travis Island and ending at the Union Bridge to the south.
- 1.11 The Application 4 area also includes land south of Dantzic Street to the elevated railway line into Victoria Station and extends to Dalton Street to the east. Application 4 encloses, but excludes, the retained woodland area (St Catherine's Wood) within Red Bank.
- 1.12 To the north, the Application 4 area of the Site is bound by existing commercial and industrial uses with the HMG Paint and P&P complex to the north-east. To the east, the Application 4 area is bound by Collyhurst Road and an area of open greenspace. To the south, it is bound in part by Dantzic Street and the elevated railway line into Victoria Station, and the emerging Victoria Riverside development. To the south-west, it is bound by an area of hardstanding currently in-use as a car park and the Red Bank viaduct. To the west, it is bound by Red Bank (an existing highway), along which is a residential neighbourhood consisting of a number of mid-rise buildings located within the Green Quarter neighbourhood.

Application 5 Area

- 1.13 Application 5 covers an area of 2.81 ha; the extent of its red line boundary is shown in **Figure 1.2** above. The Application 5 area of the Site largely consists of hardstanding and former industrial buildings with large areas of mounded earth and scrub along with prepared ground.
- 1.14 To the north, the Application 5 area of the Site is bound by Dantzic Street and, in part, the River Irk. To the east, the Application 5 area is bound by Dalton Street and a small number of two-storey homes and a mid-rise residential tower building. To the south, the Application 5 area is bound by the elevated railway line into Victoria Station. To the west, the Application 5 area is bound by the emerging Victoria Riverside development.

Overview of the Proposed Development

- 1.15 The full description of development on Application 4's planning application form is:

"Part full planning application proposing the demolition of existing buildings and structures and part outline planning application (with all matters reserved) for the erection of a phased residential led mixed use development across severable plots comprising residential (Use Classes C3 and C2); non-residential floorspace comprising commercial, business, service and community uses (Use Classes E, F and Sui Generis); residents amenity space including within clubhouse buildings; health centre (Use Class E); land for a primary school (Use Class F); the final surface finish of the highway and footpath consented under HIF permission ref: 133143/VO/2022; creation of new public realm and associated landscaping, car parking provision, cycle storage, and other associated works."

- 1.16 The full description of development on Application 5's planning application form is:

"Full planning application proposing the demolition of existing buildings and structures and erection of a phased residential led mixed use development comprising residential (use class C3 and C2), flexible non-residential floorspace comprising commercial, business, service and community uses (Use Classes E, F and Sui Generis); residential amenity space including within a clubhouse building, with associated car and cycle parking, hard and soft landscaping, improvement works to Dantzic Street, drainage infrastructure and associated engineering works."

Environmental Impact Assessment and the Environmental Statement

EIA Context

- 1.17 EIA is a formal procedure that must be followed for certain types and scales of development, where the likely significant environmental effects of a development are systematically assessed and reported. The purpose is to ensure that appropriate information regarding the likely significant effects of the development in question is available for consideration by the relevant Local Planning Authority (LPA), in this case BCC, consultees and the

public, and that the LPA have this information prior to determining the application for development. The EIA process can also identify ways in which the Development can be modified, or likely significant adverse effects mitigated, so to reduce or remove likely significant effects and to create and enhance beneficial effects. The legislation relevant to EIA is the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations, 2017/571 (the 'EIA Regulations').

Table 1.1: *The Project Team*

Discipline	Company
Client	FEC
Project Management	Arcadis
Architects	Maccreehan Lavington and Hawkins Brown
Planning	Avison Young
EIA Co-ordination	Avison Young
Townscape and Visual	Optimised Environments (OPEN)
Ecology and Nature Conservation	The Environment Partnership (TEP)
Cultural Heritage (including archaeology)	WSP
Ground Conditions	WSP
Flood Risk and Drainage	WSP
Transport and Access	WSP
Air Quality and Dust	WSP
Noise and Vibration	WSP
Daylight, Sunlight and Overshadowing	WSP
Wind Microclimate	WSP
Socio-economics	WSP
Health and Wellbeing	WSP
Climate Change	WSP

2. Approach and Environmental Impact Assessment

Methodology

- 2.1 This chapter describes the methodology used to undertake the EIA, beginning with a description of the general approach to assessment and EIA regulatory compliance, including how the planning applications and EIA sit in the context of the wider development project, giving assurance in respect of the approach to ensure the assessment is robust. An overview of the consultation process is provided, which is responsive to the overarching planning and EIA strategy employed. The EIA procedure and methodology is presented before the spatial and temporal scope of the assessment is discussed. Following this, the criteria used for impact prediction, assessing significance and implementing and securing mitigation measures are explained, along with any limitations and assumptions.

EIA Strategy

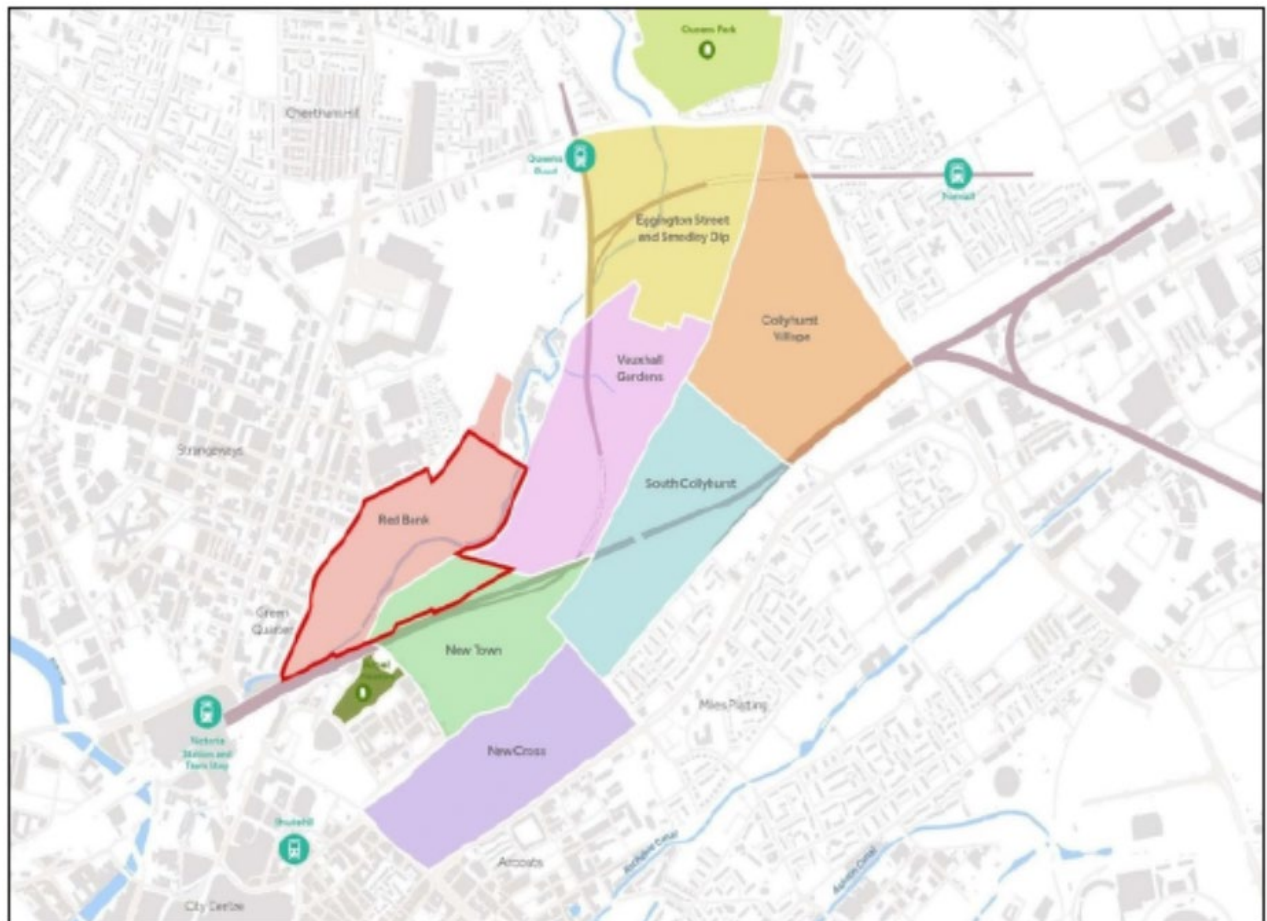
Victoria North and Planning Application Sequencing

- 2.2 The Victoria North initiative (formerly referred to as 'Northern Gateway') is an area of approximately 155 hectares to the north of Manchester City Centre and Victoria Station offering an opportunity to deliver approximately 15,000 new homes over the next 15-20 years, along with a range of employment, social, community, cultural and ancillary uses. Victoria North will establish a series of new, sustainable and integrated residential neighbourhoods, seeking a balanced mix of housing types and tenures, making it a desirable place for a variety of new and existing Manchester residents. Victoria North is one of the largest regeneration projects in the UK as well as being the largest single opportunity for residential redevelopment in Manchester, effectively a new town within the heart of an established, popular and growing city.
- 2.3 In April 2017, MCC appointed the Applicant (FEC) as its Joint Venture (JV) investment and delivery partner, to accelerate the delivery of the Victoria North opportunity. This appointment was the conclusion of an international marketing exercise that commenced in April 2016. Since making this appointment, MCC has endorsed the Northern Gateway Strategic Regeneration Framework (SRF)¹, which provides an updated vision, core objectives and development framework to guide the regeneration of Northern Gateway (now known as Victoria North), with a focus on the provision of housing and supporting infrastructure investment. In February 2019, MCC Executive confirmed the Northern Gateway SRF as a key consideration in the determination of future planning applications in the SRF area.
- 2.4 **Figure 2.1** presents the extent of the Victoria North initiative, inclusive of the seven neighbourhoods identified within the SRF and an 'Initial Development Area'. This Initial Development Area (comprising land owned / controlled

¹ MCC and FEC (2019) Northern Gateway Strategic Regeneration Framework. Available at: <http://northerngatewaymanchester.co.uk/framework/>

by MCC, FEC and third-party landowners) has been identified by the JV as having the potential to deliver an estimated 5,500 residential units across 21 development plots. The Initial Development Area shown is inclusive of the infrastructure enabling works and the subsequent neighbourhood development. FEC and MCC have created a First Phase within the Initial Development Area and within this first phase it is intended to deliver approximately 4,000 dwellings on land controlled / owned by the JV. It is worth noting the Initial Development Area spans two of the Northern Gateway SRF neighbourhood areas, encompassing the majority of the Red Bank area, together with the northernmost part (north of the railway line) of the New Town area.

Figure 2.1: Indication of the Initial Development Area in the context of the Victoria North initiative



- 2.5 The Initial Development Area comprises an area of approximately 20 hectares (ha). It is located within the Lower Irk Valley. The location has a history of more than 150 years of industrial uses and Victorian / pre-Victorian infrastructure. As a result, a comprehensive programme of infrastructure investment is required to facilitate development as works cannot be taken forward on a piecemeal, site by site basis, and are not viable for the private sector to fund in isolation.
- 2.6 To unlock the full potential of the area, MCC has secured £51.6m of Government Funding through the Housing Infrastructure Fund (HIF) to deliver critical infrastructure and enabling works within the Initial Development Area. A key condition of the funding is that the spend availability period runs until March 2024.

- 2.7 Concurrent to the delivery of the infrastructure and enabling works, JV investment focuses on plot development and housing delivery, whilst also addressing challenges / opportunities in adjoining neighbourhoods to ensure the delivery of the wider Victoria North Initiative, in accordance with the aspirations and timescales of the SRF.
- 2.8 The infrastructure and enabling works, and the plot development on land controlled and owned by MCC and FEC at Red Bank (within the Initial Development Area) constitutes the “development project”. Due to the HIF funding and programme requirements, it was necessary to approach the delivery of this development project by a number of separate planning applications. Five planning applications (including the two of which this ES concerns), as shown in **Table 2.1**.

Table 2.1: Overview of Planning Application Submissions for Red Bank

Application	Description of Development	Applicant	Planning Application Ref.	Status	Assessed in this ES?
Application 1: HIF Advance Enabling Works	City Council Development for enabling works including tree and vegetation removal, creation of a temporary haul road and demolition of the Creamline Dairies buildings in association with the future delivery of the new Red Bank Neighbourhood.	MCC	132252/VO/2021	Application approved: December 2021	No – assessed in previous ES and assumed to be in place for the purposes of this ES.
Application 2: HIF Infrastructure Works	City Council Development for the creation of development platforms, including remediation and earthworks, and change in site levels, to allow delivery of future residential-led development at the Red Bank Neighbourhood, together with the construction of a new road and priority junction from Red Bank, new drainage infrastructure, utility and services connections and diversions, preparatory	MCC	133143/VO/2022	Application approved: July 2022	No – except for the ground conditions assessment these are assessed in previous ES and assumed to be in place for the purposes of the assessment of Application 4 in this ES (See Assessment Approach below).

Application	Description of Development	Applicant	Planning Application Ref.	Status	Assessed in this ES?
	tree and shrub clearance, and demolition of certain existing structures, along with the creation of new and improved green infrastructure and landscaping including the improvements of St Catherine's Wood to form part of a City River Park, and other associated works.				
Application 3: HIF Utility Works	City Council Development for utility and services connections and diversions to Dantzic Street, Dalton Street and Collyhurst Road associated with the delivery of future residential-led development at the Red Bank Neighbourhood, Victoria North.	MCC	135190/VO/2022	Application approved: December 2022	No – except for the ground conditions assessment these are assessed in previous ES and assumed to be in place for the purposes of the assessment Application 4 in this ES (see Assessment Approach below).
Application 4: Red Bank Neighbourhood (Outline)	Part full planning application proposing the demolition of existing buildings and structures and part outline planning application (with all matters reserved) for the erection of a phased residential led mixed use development across severable plots comprising residential (Use Classes C3 and C2); non-residential floorspace comprising commercial, business,	FEC	Not yet available	Application yet to be determined	Yes

Application	Description of Development	Applicant	Planning Application Ref.	Status	Assessed in this ES?
	service and community uses (Use Classes E, F and Sui Generis); residents amenity space including within clubhouse buildings; health centre (Use Class E); land for a primary school (Use Class F); the final surface finish of the highway and footpath consented under HIF permission ref: 133143/VO/2022; creation of new public realm and associated landscaping, car parking provision, cycle storage, and other associated works.				
Application 5: Plots NT02 – 04 (Full)	Full planning application proposing the demolition of existing buildings and structures and erection of a phased residential led mixed use development comprising residential (use class C3 and C2), flexible non-residential floorspace comprising commercial, business, service and community uses (Use Classes E, F and Sui Generis); residential amenity space including within a clubhouse building, with associated car and cycle parking, hard and soft landscaping, improvement works to Dantzic Street, drainage infrastructure and	FEC	Not yet available	Application yet to be determined	Yes

Application	Description of Development	Applicant	Planning Application Ref.	Status	Assessed in this ES?
	associated engineering works.				

- 2.9 It is noted that, although the applications are given numbered references, this does not necessarily depict the order in which the applications are to be determined and does not denote a pre-determined sequencing of delivery.
- 2.10 The Site that is the focus of this ES, relates to Application 4 and 5.

EIA Strategy for the Delivery of the Initial Development Area

- 2.11 The EIA Regulations and case law provide the legal framework for the process of EIA and contents of ESs, and this has established that EIA cannot be avoided by breaking down a large development project which is EIA development into a series of smaller phases or developments (so-called "salami slicing"). Indeed identifying "the project" for the purposes of the EIA Regulations is a key component of the assessment process.
- 2.12 A review of applicable case law has been undertaken to identify the appropriate EIA strategy in respect of the five applications for the delivery of the Initial Development Area, as described above. Specifically, the aim of this review has been to identify an approach that ensures a robust assessment approach is undertaken, whilst still allowing for applications to be made and approvals gained to enable the necessary infrastructure and enabling works to be carried out in accordance with the HIF funding timescale and for these works to be followed by the delivery of the Proposed Development.
- 2.13 Each of the planning applications for the HIF Works (Applications 1 – 3, as identified in **Table 2.1** above) have been accompanied by an ES. It has been necessary to prepare separate ESs for the HIF works applications and the Proposed Development as it has been necessary to bring forward Applications 1 – 3 in advance of Applications 4 and 5 in order to meet the necessary timescales to fulfil the requirements of the HIF.

EIA Scoping

- 2.14 An early stage of the EIA process involved undertaking 'Scoping'. The purpose of the scoping process was to identify the likely significant environmental effects that could arise from the Proposed Development and therefore provide the focus of the EIA. Via the EIA scoping process, which included the submission by the Applicant of a Scoping Report, and discussions with MCC, an EIA Scoping Opinion was issued, identifying that the Development would likely give rise to a number of significant environmental effects that would warrant full assessments as part of the EIA process. These were categorised within the key environmental topics listed below:

- Townscape and Visual;
- Ecology and Nature Conservation;
- Cultural Heritage (including archaeology);
- Ground Conditions;
- Flood Risk and Drainage;
- Transport and Access;
- Air Quality and Dust;
- Noise and Vibration;
- Daylight, Sunlight and Overshadowing;
- Wind Microclimate;
- Socioeconomics;
- Health and Wellbeing; and
- Climate Change.

2.15 MCC's Scoping Opinion confirmed that the proposed approach to each assessment was acceptable in principle and several topics were scoped out of the EIA as they had been identified as to not be likely to give rise to impacts that would be significant in EIA terms.

EIA Procedure, Methodology and Assessment Scenarios

Consultation

2.16 Consultation has been and continues to be as a critical part of Applications 4 and 5 and their associated ES, as well as the wider development project. The influence of the consultation exercise upon the design evolution of the Proposed Development is described in further detail in **Section 4**.

Assessment Approach

2.17 The EIA approach is made as robust as possible by the presentation of a series of assessment scenarios to enable the worst case to be identified and assessed. These assessment scenarios are presented by way of an In-Combination Assessment (ICA) in each topic area.

2.18 The structure for the EIA to be presented within the ES for the Proposed Development (i.e. Applications 4 and 5) is that of a 'typical' assessment, that is, for each of the applications individually to be assessed allowing impacts, mitigation and residual effects to be identified for each along with the cumulative effects with other committed

schemes. Committed schemes are schemes with planning permission that are an early stage of their build out, or have not started being built, at this time but which are expected to be built when Applications 4 and 5 are built.

- 2.19 There is then an assessment of the in-combination effects of Applications 4 and 5 together (the 'Proposed Development') and then the effects of both applications in combination with the effects associated with the development of the SRF (the wider 'Development Project'). Given the lack of detailed information for the development of the remainder of the SRF, a qualitative assessment has been undertaken using reasonable assumptions.
- 2.20 The EIA has assumed that the HIF works (Applications 1, 2 and 3) would be substantially complete as to enable Application 4 to be built out in due course as Application 2 establishes the levels on which most of Application 4 will be built (apart from the Travis Island area). Therefore, for the purposes of the Application 4 construction assessments it is generally assumed that the works comprised in Applications 1, 2 and 3 have been completed before the Application 4 development starts. However, the Environment Agency has noted that at the point of submission of Application 4 the ground remediation works required under the HIF works may not have been undertaken and completed and so the Environment Agency has requested the Applicant to include in the Ground Conditions chapter of the ES an assessment which includes a consideration of the potential impacts of the Application 4 works against the baseline of '*existing ground conditions*'. As such, the 'Ground Conditions' sections include assessments on both bases.
- 2.21 The approach of the EIA ensures that:
- The impacts of Application 4 and Application 5 are identified in isolation; and
 - The impacts of the Proposed Development within the wider Development Project (inclusive of all related applications) are identified.
- 2.22 The assessment scenarios are presented in **Table 2.2** below.

Table 2.2: Assessment Scenarios

Assessment	Scenario Reference	Considerations for Scenario
Application 4	Scenario 1a	Demolition, Groundworks, and Construction Effects
	Scenario 1b	Operational Effects
	Scenario 1c	Cumulative Effects with Identified Committed Schemes
	Scenario 1d	Cumulative Effects with Identified Committed Schemes + SRF
Application 5	Scenario 2a	Demolition, Groundworks, and Construction Effects
	Scenario 2b	Operational Effects
	Scenario 2c	Cumulative Effects with Identified Committed Schemes
	Scenario 2d	Cumulative Effects with Identified Committed Schemes + SRF
In-Combination Effects of Applications 4 and 5	Scenario 3a	Demolition, Groundworks, and Construction Effects
	Scenario 3b	Operational Effects
	Scenario 3c	Cumulative Effects with Identified Committed Schemes
In-Combination of Applications 4 and 5 and SRF	Scenario 4a	Demolition, Groundworks, and Construction Effects
	Scenario 4b	Operational Effects
	Scenario 4c	Cumulative Effects with Identified Committed Schemes

Cumulative Assessment

- 2.23 As shown in **Table 2.2**, a Cumulative Effects Assessment (CEA) is also presented for Scenarios 1c, 1d, 2c, 2d, 3c and 4c.
- 2.24 Schemes for consideration in the CEA were identified through a planning application search of MCC'S and Salford City Council's (SCC) planning portals. The Cumulative (Committed) Schemes include for those approved projects within considered as having potential for cumulative impacts with the Proposed Development.
- 2.25 Within the EIA Scoping Report, a total of 38 Cumulative Schemes were initially identified. However, since the submission of the EIA Scoping Report a number of the identified Cumulative Schemes have either:
- Now reached completion; or
 - Are nearing completion as of the writing of the ES, and as such are highly likely to be completed by the time in which the construction works for the Proposed Development are anticipated to begin on-Site (Q4 2023).
- 2.26 Additionally, one Cumulative Scheme identified within the EIA Scoping Report ('Bankside', planning ref.: 21/78474/REM) has now been merged with another Cumulative Scheme ('Cortland at Collier's Yard', planning ref.: 19/74465/HYBEIA) to form a single Cumulative Scheme (see Cumulative Scheme No. 24 in **Table 2.3**) due to 'Bankside' being a Reserved Matters (RM) planning application to 'Cortland at Collier's Yard'. Both applications are considered within the CEA.
- 2.27 In total, 26 Cumulative Schemes have been scoped into the CEA. Aside from the changes noted above, which are seen as reasonable updates, the list of Cumulative Schemes has been agreed with MCC through the EIA Scoping process.
- 2.28 The list of Cumulative Schemes considered as part of the CEA are presented in **Table 2.3**, and a map of the Cumulative Schemes is presented within **Figure 2.2**.

Table 2.3: List of Cumulative Schemes 'Scoped-into' the CEA

Scheme No.	Planning Ref.	Description of the Proposal	Approx. Distance and Direction from the Site	Known Status
Manchester City Council (MCC)				
1	129393/VO/2021	Collyhurst Village City Council Development for the erection of 168, three and four storey dwellinghouses (Use Class C3a) and two, five and six storey apartment	650m north-east	Application approved: 21 June 2021

Scheme No.	Planning Ref.	Description of the Proposal	Approx. Distance and Direction from the Site	Known Status
		buildings to form 76 residential apartments (Use Class C3a) with associated ground floor flexible commercial unit (162 sqm) (Use Class E); and the creation of a new public park; all with associated car and parking, refuse storage, landscaping, public realm and other associated works and infrastructure following demolition of 29 existing residential dwellinghouses, the Collyhurst Village Store and associated car parking		Groundworks started
2	127971/FO/2020	Osborne Yard Erection of a 6 storey building to form 90 residential apartments (Use Class C3a) following demolition of existing structures with associated access, car parking, amenity space, landscaping and other associated works	950m east	Application approved: 07 May 2021 Construction not yet started
3	128248/FO/2020	The Gasworks Erection of 9 buildings ranging from 8 to 34 storeys in height to form 1202 residential apartments (Use Class C3a) and ground floor commercial uses (Use Class E) (192 sqm) together with associated car parking, new vehicular and pedestrian access, public realm, landscaping and other associated works following demolition of existing structures and buildings Land Bound By Gould Street, Williamson Street, Bromley Street And Bilbrook Street Manchester M4 4DD	45m south	Application approved: 03 June 2021 Construction not yet started
4	116366/FO/2017	MeadowSide Erection of four residential buildings (22 storey building, 17 storey building, 40 storey building and part 12, part 9 storey building) to form 756 residential apartments (Use Class C3a) together with ground floor commercial uses (616 sqm) (Use Classes A1, A2, A3, A4, A5, D1 and B1) with associated car parking, landscaping, amenity areas, creation of new public realm following the closure of Aspin Lane, Mincing Street and Irk Street and other associated works following demolition of existing structures Land Bounded By Dantzic Street & Aspin Lane, Land Bounded By Gould Street & Angel Meadows And Land Bounded By Old Mount Street, School Street, Naples Street & Ludgate Street Manchester	90m south	Application approved: 25 August 2017 Three of the Scheme's four buildings are now complete and occupied; the fourth building (the 40-storey 'The Peak') has yet to start construction

Scheme No.	Planning Ref.	Description of the Proposal	Approx. Distance and Direction from the Site	Known Status
5	127537/FO/2020	25 Rochdale Road Erection of a 11 storey 229 bedroom hotel (Use Class C1) with ancillary ground floor bar/restaurant together associated public realm and other associated works 25 Rochdale Road Manchester M4 4HT	340m south	Application approved: 19 October 2020 Construction not yet started
6	124973/FO/2019	2 and 3 Angel Square Erection of an 11 storey building and a 12 storey building with plant rooms above to form a mixed use development comprising 39,184 sq.m (NIA) of Class B1a office use and commercial units of 1,286 sqm (NIA) (Use Classes A1, A2, A3, A4, B1a and D1) along with associated lower ground level car parking, hard and soft landscaping and associated works, including the creation of a new pedestrian route between Angel Street and Miller Street. Land Bounded By Co-op Headquarters Miller Street And Angel Street Manchester	260m south	Application approved: 12 February 2020 Construction not yet started
7	126944/FO/2020	Victoria Riverside Erection of a residential-led mixed use development comprising 3 no. towers (37, 26 and 18 storeys) and podium levels (6 storey) to form 634 residential apartments and townhouse accommodation (Use Class C3) together with commercial accommodation (1222 sqm) (Use Classes A1,A2,A3,A4,A5,B1, D1 and D2)); with associated residential amenity areas, refuse storage, plant (including substation), car parking, cycle storage, landscaping and new public realm including the re-instatement of Bromley Street and other associated works	0m south (adjacent to Site boundary)	Application approved: 24 September 2020 Under construction
8	131708/FO/2021	87 Rochdale Road Erection of a part 11, part 13 storey building to form residential apartments (Use Class C3a) together with the erection of two blocks of 3 storey townhouses (Use Class C3a) to form 237 residential homes in total with associated commercial floor (Use Class E) (132 sqm), basement car parking, landscaping and public realm, and associated engineering and infrastructure works following demolition of existing buildings and structures	200m south	Application approved: 18 February 2022 Construction not yet started

Scheme No.	Planning Ref.	Description of the Proposal	Approx. Distance and Direction from the Site	Known Status
9	128997/FO/2020	40 Swan Street Erection of a ground plus 9-storey building to form 118 no. residential apartments (Use Class C3), including amenity areas, ground floor food and beverage/ commercial units (Sui Generis/ Use Class E), public realm and landscaping, with supporting infrastructure and associated works following demolition of existing building	560m south	Application approved: 22 September 2021 Construction not yet started
10	121380/FO/2018	Swan House Erection of a part 31, part 13, part 5 storey building to form 373 residential apartments (Use Class C3a) and 12 serviced apartments (Use Class C1) together with a ground floor commercial unit (408 sqm) (Use Class A1, A2 or A3) with associated car parking, public realm and other associated works following demolition of existing buildings	510m south	Application approved: 24 October 2019 Under construction
11	124888/FO/2019	New Cross Central Erection of a 6-9 storey residential building (Use Class C3) comprising 80 no. dwellings including 9 no. townhouses and 71 no. apartments with residents lounge, refuse, plant, new substation, cycle storage, an internal landscaped courtyard and improvements to the adjacent footways	665m south	Application approved: 16 January 2020 Under construction
12	121375/FO/2018	20 – 36 High Street Construction of a 22 storey building comprising 361 residential apartments (122 x 1 bed 2 person, 119 x 2 bed 3 person, 94 x 2 bed 4 person, 21 x 3 bed 5 person and 5 x 3 bed 6 person (34% 1 bed, 59% 2 bed and 7% 3 bed) ground floor commercial floorspace (Use Classes A1 (Shop), A3 (Restaurant and Cafe), A4 (Drinking Establishment) and A5 (Hot Food Take-away) associated landscaping, including new public realm and pedestrian route, together with servicing, cycle parking, access and other associated works following demolition of buildings at 20-22 and 24-26 High Street and 5 market stalls to Church Street.	720m south	Application approved: 02 October 2020 Construction not yet started
13	125678/FO/2019	Peeler's Yard Erection of 8-storey residential building (Use Class C3) comprising 73 residential units, with ground floor commercial use (Classes A1, A2, A3, B1 and D1	480m south	Application approved: 18 December 2020

Scheme No.	Planning Ref.	Description of the Proposal	Approx. Distance and Direction from the Site	Known Status
		(excluding Places of Worship)) (205 sqm); alterations to the retained perimeter wall and chimney including the introduction of a light box; disabled car parking, highways, landscaping and other associated works		Site secured, construction not yet started
14	132416/FO/2021	Great Ducie Street Erection of two buildings part 27, 20, 17 storeys and part 11 and 10 storeys to form a mixed use development comprising of 461 residential apartments (Use Class C3a) and ground floor commercial uses (Use Class E) (718 sqm) together with public realm including courtyard pocket park, landscaping, car parking and other associated works	390m south-east	Application approved: 30 June 2022 Construction not yet started
15	122280/FO/2019	Mirabel Street Erection of new mixed-use development to comprise of one 10 storey building fronting Mirabel Street to accommodate 45 no. Use Class C3 residential apartments (9 no. 1-bed studios, 27 no. 2-bed 3 person apartments and 9 no. 2-bed 4 person apartments) and 7 no. residential car parking spaces at ground level and one part 10, part 14 storey building fronting Great Ducie Street to accommodate 84 no. Use Class C3 residential apartments (31 no. 1-bed 2 person apartments, 26 no. 2-bed 3 person apartments, 18 no. 2-bed 4 person apartments and 9 no. 3-bed 5 person apartments) and 345 sq. m of commercial floor space at ground level (flexible use Use Class A1 shop, Use Class A2 financial and professional services and Use Class A3 cafe/restaurant) together with creation of roof terrace amenity space, cycle parking, access, servicing and associated works following demolition of existing building Land Bounded By Great Ducie Street And Mirabel Street Manchester M3 1PJ	450m south-east	Application approved: 17 December 2020 Construction not yet started
16	127901/FO/2020	Manchester Arena Expansion Expansion of Manchester Arena from 21,000 seats to 24,000, making it Europe's largest indoor arena. Improvement of access from Hunt's Bank and Victoria station.	290m south-east	Application approved: 16 April 2021 Construction not yet started
17	131314/FO/2021	39 Deansgate (Speaker's House) Erection of a 17 storey building comprising office use (Use Class E(g)(i)) and flexible ground floor	820m south-east	Application approved: 21 January 2022

Scheme No.	Planning Ref.	Description of the Proposal	Approx. Distance and Direction from the Site	Known Status
		commercial units (Use Classes E(a),(b),(c) and sui generis 'drinking establishment'), new electricity sub-station, basement cycle parking and rooftop plant enclosure, together with access, servicing and associated works following demolition of the existing building		Construction not yet started
18	130553/FO/2021	Island, John Dalton Street Demolition of the existing buildings and structures and the erection of a 10-storey plus basement office building (Use Class E(g)), with flexible ground floor and basement uses (Use Class E) and rooftop amenity space, works to facilitate the pedestrianisation of the southern part of Ridgefield and other associated works.	1.1km south-east	Application approved: 27 September 2021 Construction started
19	130354/FO/2021	Eliza Yard Erection of an 8 storey building to form 118 residential apartments (Use Class C3) and ground floor commercial floorspace (Use Class E (a),(c),(g)(i)) (583 sqm) together with amenity space, car and cycle parking provision, hard and soft landscaping, access, servicing and other associated works	870m south-east	Application approved: 30 July 2021 Construction not yet started
20	130627/FO/2021	Ancoats Mobility Hub Erection of an 8 storey building to form Mobility Hub including ground floor commercial unit (Use Class E(b)) (221 sqm), delivery hub, 150 cycle spaces and 408 car parking spaces with associated landscaping, access and other associated works following demolition of existing structures	770m south-east	Application approved: 30 July 2021 Groundworks started, currently in the early stages of construction
21	113914/FO/2016	1 Lord Street Erection of a 16 storey building to form 192 residential apartments (Use Class C3a) together with ground floor commercial unit (172 sqm) (Use Class A1, A2, A3 or B1) with associated vehicular access from Fernie Street, car parking and hard and soft landscaping following demolition of existing buildings	140m west	Application approved: 21 November 2016 Construction not yet started
Salford City Council (SCC)				

Scheme No.	Planning Ref.	Description of the Proposal	Approx. Distance and Direction from the Site	Known Status
22	18/71330/FUL	Uptown Erection of three residential blocks, comprising of a total of 156 apartments, together with car parking and landscaping	850m south-west	Application approved: 01 October 2018 Under construction
23	20/76134/FUL	Maldron Hotel, Chapel Street Erection of 16-storey building plus plant comprising a hotel (Use Class C1) with ancillary bar and restaurant uses, access, servicing, landscaping and other associated works	1km south-west	Application approved: 28 July 2021 Under construction
24	19/74465/HYBEIA	Cortland at Collier's Yard / Bankside Hybrid planning application for demolition of existing buildings on the site and comprehensive redevelopment to create between 1,407 and 1,521 dwellings, comprising of: (a) Phase 1 (submitted in full with no matters reserved) for development of a 50-storey residential building; commercial floor-space (Use Classes A1, A2, A3, A4, A5, B1, D1 and D2); new public park; highways and public realm improvements and other associated works; and, (b) Phases 2 and 3 (submitted in outline with all matters reserved) for the development of two residential buildings up to 42 storeys in height; commercial floor-space (Use Classes A1, A2, A3, A4, A5, B1, D1 and D2); new highways; a public square; public realm improvements and other associated works. (EIA development, accompanied by Environmental Statement) Land Bound By Greengate, Collier Street, Queen And King Street And Gravel Lane M3 7BN	960m south-west	Application approved: 27 March 2020 Under construction
	21/78474/REM	Application for approval of Reserved Matters (Access, Appearance, Landscaping, Layout and Scale) pursuant to Outline Planning Permission 21/78473/HYBEIA for Plot C, comprising the demolition of existing buildings and a residential-led development of a 42-storey (plus ground) building containing 444 apartments together with associated residents' amenities, ground floor commercial floorspace, basement parking, public realm improvements including the delivery of Boulevard West, Collier Square and Collier Street, and other associated infrastructure works. (EIA Development Application accompanied by an Environmental Statement Addendum) Land Bound By Greengate And Trinity Way And Collier	960m south-west	Application approved: 02 March 2022 Under construction

Scheme No.	Planning Ref.	Description of the Proposal	Approx. Distance and Direction from the Site	Known Status
		Street And Intersected By Boond Street And Caygill Street M3 7BN		
25	15/66806/FUL	Embankment Exchange Demolition of existing factory walls and river walk way to provide mixed use development comprising of 2 blocks ranging from 15 to 34 storeys in height total of 300 residential units with associated off street parking , together two commercial units comprising of 474sqm of floor space (A1, A2, A3 and B1) at ground floor level.	640m south-west	Application approved: 03 December 2015 Under construction
26	19/74205/FULEIA	Waterloo Place Erection of a mixed use development comprising a single building with two blocks (14 and 55 storeys) to include: 542 residential apartments, associated residents' facilities and basement parking; and 3 no. commercial units (use classes A1, A2, A3, B1 & D1) with associated landscaping and public realm works.	620m south-west	Application approved: 23 January 2020 Site secured, construction not yet started

Figure 2.2: Map of Cumulative Schemes 'Scoped-into' the CEA



- 2.29 The Victoria Riverside scheme (application ref. 126944/FO/2020) has been identified as a Cumulative Scheme for EIA purposes because in simple terms it will add to the existing environment in due course along with the Proposed Development. However, it is anticipated that Victoria Riverside will be completed and occupied while the Application 5 development moves towards completion and while construction works are underway on Application 4. It will therefore form part of the future baseline and as it is located adjacent to the Proposed Development it has been treated as a sensitive receptor within the EIA.

Assessment Methodology

- 2.30 In each of **ES Volume 2, Chapters 6 to Chapter 18**, a description of the assessment methodology has been provided together with a description of the existing environmental aspects of the Site and surrounding area. This is followed by an assessment, in the context of the assessment scenarios outlined in **Table 2.2**, of the likely significant effects of the Development (both beneficial and adverse) and any additional measures that should be adopted to reduce or offset any significant adverse effects identified during the assessment. Such additional measures would be related to elements of the Development's design that were not already incorporated into the Development or additional environmental management controls that would be required via legislation or standard means, irrespective of the need for EIA.

- 2.31 This non-technical document aims to provide a summary of the key mitigation measures and significant effects arising relating **to ES Volume 2, Chapters 6 to 18.**
- 2.32 **ES Volume 1, Chapter 2: Approach** provides additional information on the methodology used to undertake the EIA (assumptions, limitations, consistency, spatial and temporal scope, impact prediction and significance criteria).

3. Site Description

Application 4 (Red Bank Neighbourhood - Outline)

- 3.1 Application 4 covers an area of 11.21 ha; the extent of its red line boundary is shown in **Figure 1.1**.
- 3.2 The northern and eastern extent of the Application 4 area of the Site contains a large area of hardstanding and prepared ground that has been cleared as part of the previous Housing Infrastructure Fund (HIF) works. As part of the Proposed Development, this would be the location of the 'Red Bank Plateau' neighbourhood, as shown on **Figure 3.1** below. At the north-eastern Site boundary are the 'Lowry Steps' a footbridge that provides an existing Public Right of Way (PRoW) that links Collyhurst Road to Rayburn Way to the north.
- 3.3 The south of the Application 4 area contains an area of hardstanding and vacant commercial premises located along the eastern bank of the canalised River Irk, referred to as 'Travis Island'. A small section of the River Irk is also included within the red line boundary for Application 4, beginning at the northern end of Travis Island and ending at the Union Bridge to the south.
- 3.4 The western extent of the Application 4 area, what would be the 'Red Bank Viaduct' neighbourhood comprises of a railway viaduct (the arches of which are in commercial use), further hardstanding, a car park and a warehouse unit.
- 3.5 The Application 4 area also includes an area of land south of Dantzic Street to the elevated railway line into Victoria Station and extends to Dalton Street to the east. Application 4 encloses, but excludes, the retained woodland area (St Catherine's Wood) within Red Bank. Permitted through Application 2, the St Catherine's Wood area is currently undergoing extensive landscaping and infrastructure works in order to deliver the initial phase of the City River Park which will form a part of the future baseline as these works form part of the HIF Works.
- 3.6 To the north, the Application 4 area of the Site is bound by existing commercial and industrial uses, as well as the Fairholme Caravan Site on Collingham Street. To the north-east, the HMG Paint and P&P complex bounds the Application 4 area. To the east, it is bound by Collyhurst Road and an area of open greenspace. To the south, it is bound in part by Dantzic Street and the elevated railway line into Victoria Station, and the emerging Victoria Riverside development. To the south-west, it is bound by an area of hardstanding currently in-use as a car park and the Red Bank viaduct. To the west, it is bound by Red Bank (an existing highway), along which is a residential neighbourhood consisting of a number of mid-rise buildings located within the Green Quarter neighbourhood.

Figure 3.1: Areas within the Red Bank Neighbourhood (N.B. the 'New Town' area also includes the Victoria Riverside scheme that is currently under construction which does not form part of Applications 4 or 5)



Application 5 (NT02-04 - Full)

- 3.7 Application 5 covers an area of 2.81 ha; the extent of its red line boundary is shown in **Figure 1.2**.
- 3.8 The Application 5 area of the Site is located within the proposed 'New Town' neighbourhood and largely consists of hardstanding and former industrial buildings with large areas of mounded earth and scrub along with prepared ground. A warehouse is present in south-west corner of the Application 5 area that currently functions as a meanwhile use.
- 3.9 To the north, the Application 5 area of the Site is bound by Dantzic Street and, in part, by the River Irk. To the east, the Application 5 area is bound by Dalton Street and a small number of two-storey homes and a mid-rise residential tower building. To the south, the Application 5 area is bound by the elevated railway line into Victoria Station. To the west, the Application 5 area is bound by the emerging Victoria Riverside development.

Site History

- 3.10 The Site and its immediate vicinity are affected by the legacy of more than 150 years of industrial uses and Victorian / pre-Victorian infrastructure. Historically the area was used as railway sidings, following the route of the former

Prestwich Branch of the Lancashire and Yorkshire Railway which started at Victoria Station to the south-west before heading north-west. This is now disused and forms a plateau above the River Irk valley to the south-east.

Environmental Context

3.11 The main environmental characteristics of the Site are as follows:

- The Site is not located in close proximity to any statutory ecological designations;
- The Site is located in Flood Zones 1, 2 and 3a;
- There are localised areas of low, medium and high risk of surface water flooding;
- There are no designated heritage assets located within the Site boundary and 36 Listed Buildings within 500m of the Site;
- The Site is located in a highly accessible location within Manchester City Centre;
- The Site is not located within the Greater Manchester AQMA. However, it does lie immediately adjacent to the AQMA; and
- The noise climate on-Site is primarily attributed to transport-related noise from the surrounding road network as well as train lines associated with nearby Victoria Station.

3.12 These identified constraints have been taken into account in the development of the proposals to ensure a thorough iterative design process and through the identification of appropriate mitigation measures outlined in **Section 5**.

4. Alternatives and Design Evolution

- 4.1 The statutory planning framework for development in this area is currently provided through the Manchester Local Plan², the Core Strategy of which was adopted in 2012. The Northern Gateway SRF is also a material consideration for the planning applications.
- 4.2 An alternative site has not been considered for the Proposed Development for the following reasons:
- The Site is already under the control of the Applicant.
 - The Site is identified within the Northern Gateway SRF (a material consideration for any planning applications on the Site) and as such, the Proposed Development has been specifically designed to meet the aspirations and vision as set out in the SRF.
 - A series of infrastructure works (Applications 1 – 3) to facilitate the delivery of new homes proposed in Application 4 & 5 are now permitted.
- 4.3 In the absence of the SRF the Proposed Development (including the HIF Works) would not come forward. In this scenario the baseline environment is not anticipated to change from the existing conditions as the Site would remain in use for a range of industrial, and temporary uses with large areas of vacant land with a generally poor-quality environment. This is considered further below. However, the Site is identified within the Northern Gateway SRF, and as such, it is highly likely that the Site will be developed regardless of whether the current proposal was implemented, such that the ‘no development’ scenario is unlikely. Indeed, with the permitted HIF Works implemented it is more likely that the Site will be subject to further development whether that is through Applications 4 and 5 or another application in the future.
- 4.4 Notwithstanding this, should the Proposed Development (including the HIF Works) not be implemented, it would be expected that the existing site conditions which were existing before the commencement of the HIF Works would remain until another proposal is permitted.
- 4.5 The evolution of the design of the Proposed Development (including the HIF Works) has been guided by feedback gathered through:
- **Pre-Application Consultation with the LPA and Statutory Consultees** – The Applicant and the design team for Applications 4 and 5 have regularly liaised with MCC during a series of pre-application meetings and correspondence in order to ensure that the evolving design meets the aspirations for the Site. This engagement has covered use, amount, layout, hard and soft landscaping, sustainability and wellbeing, car parking and transportation, all of which has been considered during the continuous design evolution of the Proposed Development.

² https://www.manchester.gov.uk/info/200074/planning/6572/local_plan

- **Community and Stakeholder Consultation** – A total of four public consultation events have been held to gather feedback on the early design ideas and detailed proposals for the Proposed Development. A range of key issues and considerations were highlighted through the public consultation, such as biodiversity, sustainability, active travel, public transportation, parking, community facilities and infrastructure, crime and safety, flood risk and contamination land & the need for high quality designs and diverse architectural styles.
- **Design Review Panels** – A total of three Design Review Panels (DRP) have been held for the Proposed Development (two DRPs for Application 4 and one DRP for Application 5). In response to Panel's feedback the amount of open space between Plots RB16 and RB17 has been increased; additionally, Application 4 now places greater emphasis on stepping heights toward City River Park where the building datum remains at 5-6 storeys, to support a human-scale character along the park and to help define its edges. The continuity of this datum also helps accentuate the level changes across the valley.

5. The Proposed Development

- 5.1 The information presented in this chapter, alongside the documents submitted for approval listed below define the Proposed Development that has been assessed through the EIA process and provides the level of detail required to enable the assessment of environmental effects in line with the 2017 EIA Regulations.

Application 4 Documents

- Parameter Plans (see **Volume 3: Appendices, Appendix 5.1**);
- The following sections of the Supporting Planning Statement (SPS):
 - Development Specification; and
 - Blue & Green Infrastructure Statement.
- Lighting Strategy (for approval) provided within the Design and Access Statement (DAS) (not for approval).
- Local Labour Agreement; and
- Drainage Strategy (see **Volume 3: Appendices, Appendix 10.1**).

Application 5 Documents

- Detailed Planning Drawings (see **Volume 3: Appendices, Appendix 5.2**);
- The following sections of the SPS:
 - Development Specification; and
 - Blue and Green Infrastructure Statement.
- The following sections of the DAS:
 - External Lighting Strategy; and
 - Waste Management.
- Drainage Strategy (see **Volume 3: Appendices, Appendix 10.1**); and
- Environmental Standards Statement.

Application 4 and 5 Documents

- Anticipated Phasing Delivery Plan (see **Figure 5.9**); and
- Demolition Plan.

- 5.2 This chapter and the accompanying figures define the application area, the proposed land uses, the quantum of development proposed, the means of access proposals and describes the Proposed Development in line with

Schedule 4 of the EIA Regulations. A description of the broad construction methods and processes is presented towards the end of this chapter.

Description of the Development

The Planning Applications

- 5.3 The Proposed Development, the Red Bank Neighbourhood Masterplan, would be delivered through two planning applications – Application 4 (Red Bank Neighbourhood – Outline) and Application 5 (Plots NT02 – 04 – Full).

Application 4

- 5.4 The outline Application 4 seeks to establish the principles of its respective elements of the Proposed Development. Full details of layout, access, scale, appearance and landscaping would be submitted for approval at the detailed planning application stage whether this is delivered through the making of reserved applications pursuant to the Outline Planning Permission or through the submission of detailed "drop-in" planning applications (hereafter referred to as the 'detailed planning applications').
- 5.5 A series of parameters have therefore been devised which set the context for subsequent detailed design. These take the form of a series of spatial Parameter Plans which detail the use and amount of development which Application 4 seeks to secure across its 13 Development Plots (RB01, RB02, RB03, RB04, RM05A, RB05B, RB05C, RB06, RB07, RB10, RB12B, RB16 and RB17). It is intended that the details of the development, which would be the subject to future detailed planning applications, would be contained within the parameters laid down by the outline planning application and upon which the Environmental Impact Assessment (EIA) has been based.
- 5.6 The Parameter Plans are provided in full in **Volume 3: Appendices Appendix 5.1** and comprise:
- Parameter Plan P1 – Development Plot and Public Realm (drawing reference: RDB-MLM-00-00-DR-AR-211417);
 - Parameter Plan P2 – Movement (drawing reference: RDB-MLM-00-00-DR-AR-211418);
 - Parameter Plan P3 – Use (drawing reference: RDB-MLM-00-ZZ-DR-AR-211419);
 - Parameter Plan P4 – Building Heights (drawing reference: RDB-MLM-00-RF-DR-AR-211420) and
 - Parameter Plan P5 – Site Levels (drawing reference: RDB-MLM-00-00-DR-AR-211421).

Application 5

- 5.7 Application 5 seeks approval for the detailed design elements of the Proposed Development through a series of drawings and documents. A full list of the Application 5 drawings is provided in **Volume 3: Appendices, Appendix**

5.2. These drawings include matters in regard to layout, access, scale, appearance and landscaping across its three Development Plots (NT02-04).

Quantum of Development

Applications 4 and 5

5.8 A breakdown of the proposed floorspace and residential unit numbers for Applications 4 and 5 is provided in **Table 5.1** below.

Table 5.1: Proposed Floorspace and Residential Unit Numbers

Application	Land Use and Classes	Gross Internal Area (GIA) (sqm)	Number of Residential Units	Residential Mix
Application 4	Residential (C2 and C3)	N/A	Up to 3,250	1 Bedroom = 24.5% 2 Bedroom = 63.3% 3 Bedroom = 12.1%
	Clubhouse residential amenity (Sui Generis)	Up to 3,250	N/A	N/A
	Non-residential (E, F and Sui Generis)	Up to 6,300		
	Health centre uses (E)	Up to 3,250		
	Primary school (F1(a))*	Up to 2,750		
Application 5	Residential (C3)	N/A	1,551	1 Bedroom = 25% 2 Bedroom = 63% 3 Bedroom = 12%
	Clubhouse – Residential amenity (Sui Generis)	1,804	N/A	N/A
	Clubhouse – Non-residential (E, F, Sui Generis)	434		

Application	Land Use and Classes	Gross Internal Area (GIA) (sqm)	Number of Residential Units	Residential Mix
	Non-residential (E, F and Sui Generis)	2,283		
Applications 4 and 5 Total			Up to 4,800	1 Bedroom = 30% 2 Bedroom = 60% 3 Bedroom = 10%

* Within the Parameter Plans, Application 4's Plot RB05B is intended to be either for Primary school (E) or Residential (C2 and C3) use.

Use, Layout and Arrangement

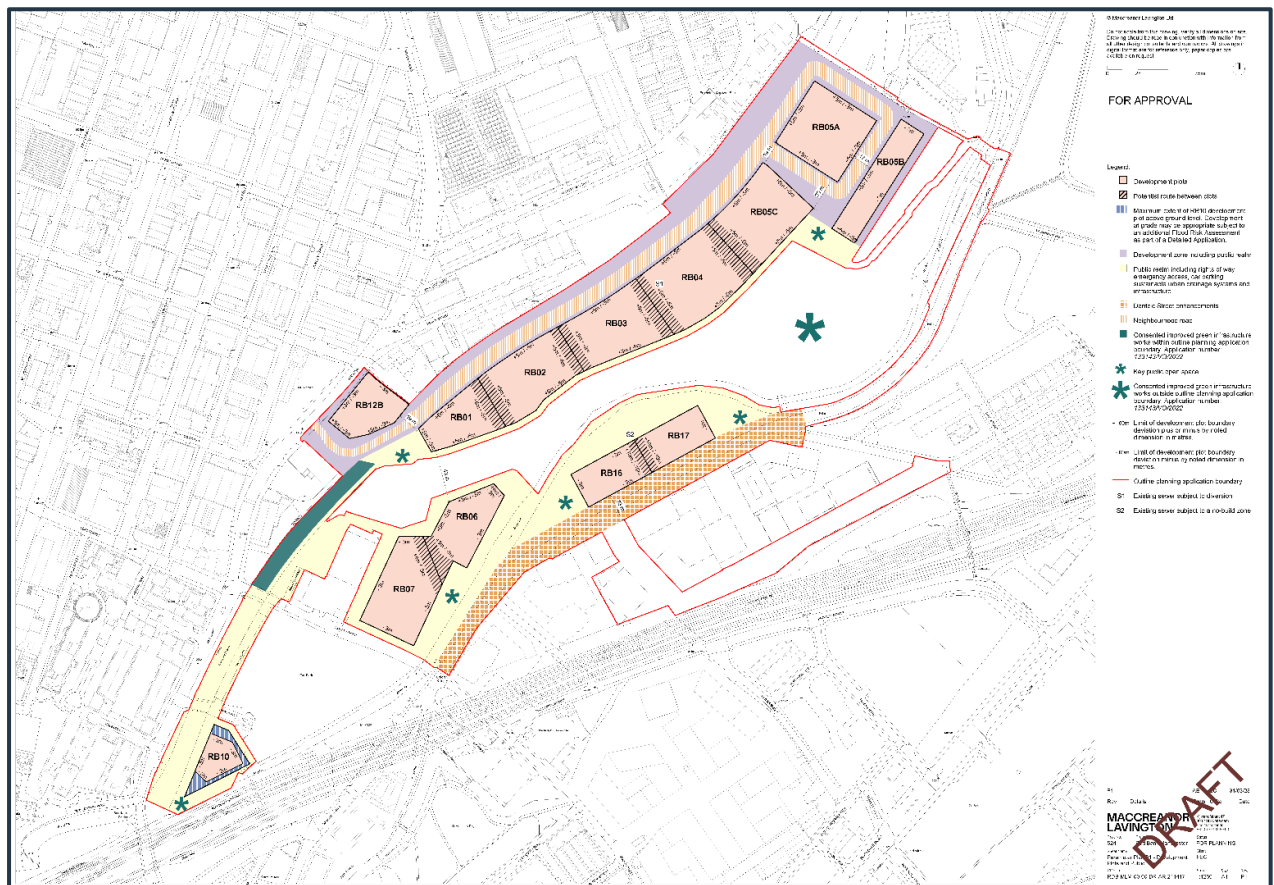
Application 4

- 5.9 The outline planning application is seeking approval for up to 3,250 residential units (Use Classes C3 and C2) across the Site.
- 5.10 Parameter Plan P3 provides detail of the Use Classes applied for under this application. The plan, and its supporting key, illustrates that all but one of the development plots will comprise predominantly Use Class C3 or C2. The aspiration is that the majority of the residential will be within Use Class C3 however the Parameter Plan provides flexibility for development within Use Class C2 to be delivered to provide residential accommodation for the elderly and for people in need of care. A flexible land use plot is proposed at development Plot RB05C. It is proposed that Plot RB05C could be either a primary school or a residential development. The specific details of the quantum of residential development proposed for each plot will be defined at the detailed planning application stage.
- 5.11 Parameter Plan P1 provides the location of each Development Plot within Application 4 and the maximum extent to which each individual Plot could be built out.
- 5.12 The Application 4 area of the Site contains the following areas, which in themselves comprise a number of Development Plots:
- **Red Bank Plateau** – comprising Plots RB01, RB02, RB03, RB04, RB05A, RB05B, RB05C and RB12B;
 - **Red Bank Viaduct** – comprising Plots RB06, RB07 and RB10; and
 - **New Town** – comprising Plots RB16 and RB17.
- 5.13 The lower lying areas of New Town and Red Bank Viaduct are the locations of the proposed taller buildings. The Plots on the Red Bank Plateau are laid out in a line with Plots RB01 to RB05C being contiguous (with routes between them to be determined through subsequent applications) and Plots RB05A and RB05B, being separate Plots, allow

for the formation of a highway circulation route at the northern end of the Red Bank Plateau area around RB05A and allowing Plot RB05B to back onto the retained woodland area.

- 5.14 The New Town area provides two Plots (RB16 and RB17) which will be separated by a service corridor and the Red Bank Viaduct area provides two contiguous Plots (RB6 and RB07) with the single RB10 Plot located at the south-western extent of the Site.
- 5.15 The Plots are located within areas of public realm including rights of way, emergency access, car parking, sustainable urban drainage systems and infrastructure servicing the Plots. This public realm area includes six key public open spaces identified on the parameter plan (see **Figure 5.1**). Two of these key public open spaces are to be located within each of the Red Bank Plateau, Red Bank Viaduct and New Town areas identified. The two within the Red Bank Plateau area would be located near the entrance to the Site and adjacent to the retained woodland to the south of the plateau area. The two within the Travis Island area would be located to the west and east of the Plots between Dantzic Street and the River Irk. The two within the Red Bank Viaduct area would be located in the southwestern part of this area adjacent to Plot RB10 and between Plots RB06 and RB07 and the River Irk.

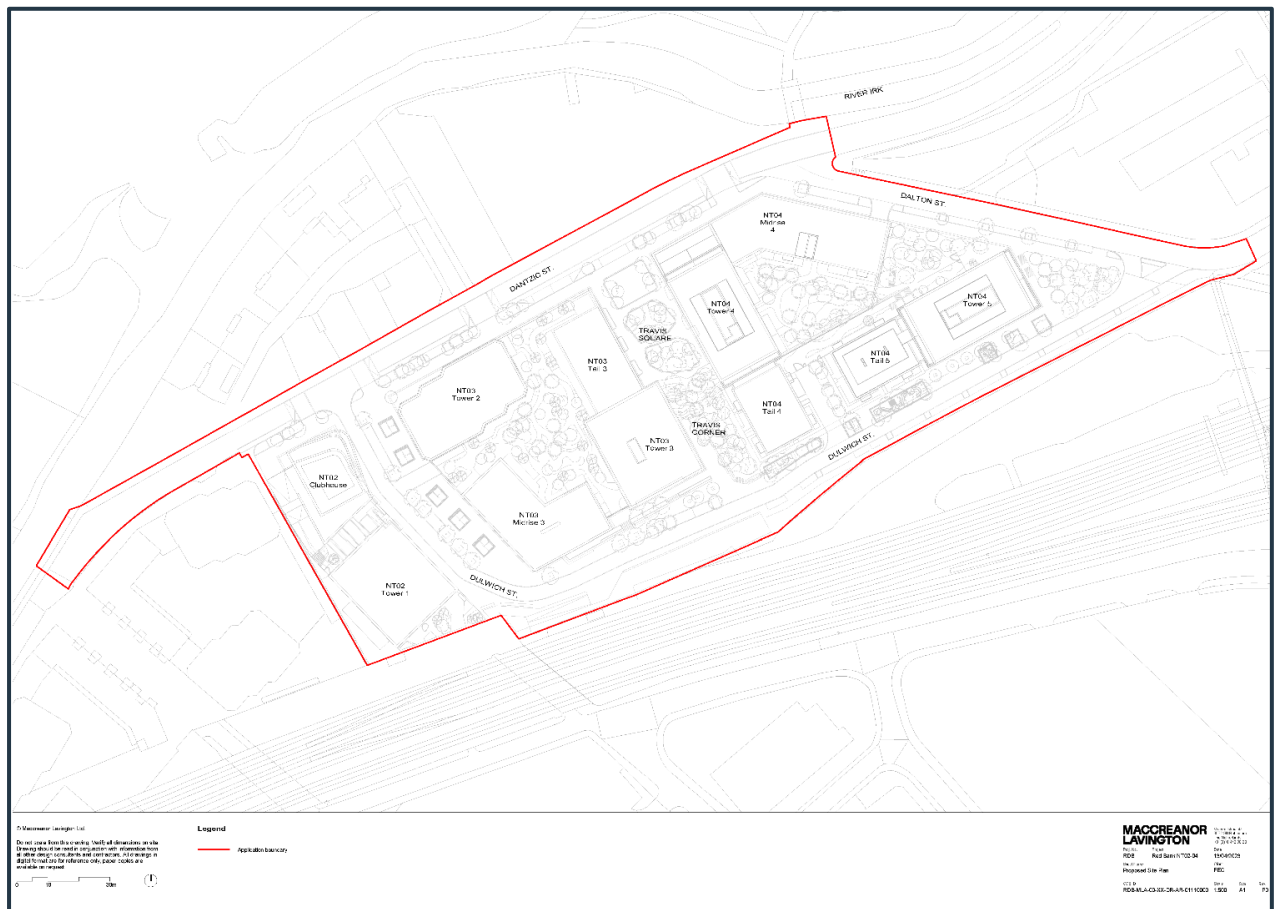
Figure 5.1: Application 4 – Proposed Public Realm



Application 5

- 5.16 The Proposed Site Plan for Application 5 is shown at **Figure 5.2** (or in full at **Volume 3: Appendices Appendix 5.2**).
- 5.17 The buildings across NT02-04 have been arranged to define the street edges of the existing Dantzic Street and Dalton Street and the new Dulwich Street and the Travis Square. The buildings situated on Plot NT03 and NT04 would form an enclosed courtyard space with openings positioned to benefit from sunlight, views and level access and to link the green infrastructure of the space to the wider ecological network in Red Bank.

Figure 5.2: Application 5 – Proposed Site Plan



Building Heights

Application 4

- 5.18 Maximum heights within the Red Bank Plateau area would vary between up to 73m AOD (up to 8 storeys) and up to 123m AOD (up to 24 storeys). Building heights in this area of the Site are generally below those of the other areas of the Site. Maximum building heights in the Red Bank Viaduct area would vary between up to 124m AOD (up to 27 storeys) and up to 211m AOD (up to 55 storeys). Building heights in the Travis Island area would be

between 95m AOD and 155m AOD. Therefore, the taller buildings on the Site would be located on the less elevated areas of the Site adjacent to the river.

Application 5

- 5.19 The tallest building within Application 5, located on Plot NT02, would have a maximum height of 34 storeys and would step down to 6 storeys at its interface with Dantzic Street. The proposed buildings on Plot NT03 would have a maximum height of 31 storeys along the viaduct, before stepping down to 20 storeys along Dantzic Street, set within mid-rise blocks of at 8-9 storeys along Dulwich Street and Travis Square. Plot NT04 includes a 27-storey and a 24-storey building each with a connecting 10-storey shoulder and a separate mid-rise block of 8 storeys along Dantzic Street.
- 5.20 **Figure 5.3** shows the variation in building height across Application 5 (NT02-04), with the building labelled “VR” being the Victoria Riverside scheme that is already permitted (planning ref: 126944/FO/2020) and is currently under construction. Landscaping shown is illustrative only.

Figure 5.3: Building Heights Across Application 5 (NT02-04)



Appearance, Materials and Colour

Application 4

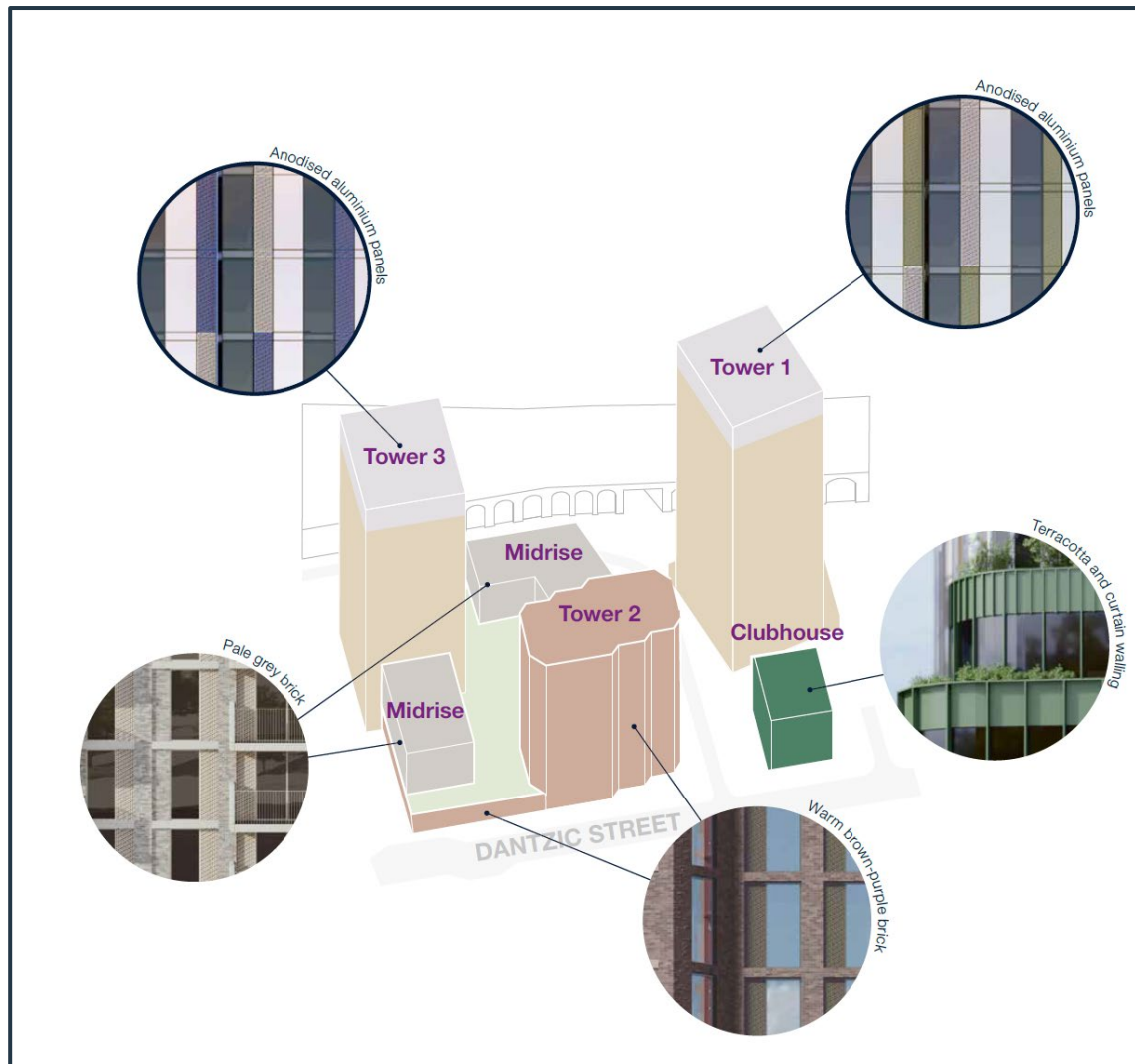
- 5.21 For the outline Application 4, details regarding the materiality and colour palette of the built structures within the Application 4 area are not provided for planning approval, and as such are not assessed within the EIA. Information regarding this aspect of the Proposed Development will become available at subsequent applications.

Application 5

Plots NT02 and NT03

- 5.22 The primary material for the two tallest towers (shown as Tower 1 and Tower 3 on **Figure 5.4** below) would be anodised aluminium in a range of panel types, with the addition of colour, texture and fins to express verticality and provide visual variety through the 30+ storeys. The upper levels of the anodised towers would be finished with a subtle 'crown' detail where the colour drops back to provide a lighter variation of the base material. Tower 2 would use a warm brown-purple brick in contrast with the taller towers.
- 5.23 The mid-rise buildings would use a primary palette of pale grey brick. The Clubhouse, a six-storey amenity building set amongst residential buildings, would contrast in its material make-up. The primary elevations of the Clubhouse would mainly consist of green, textured, terracotta panels, and "baguette" terracotta fins affixed to glass curtain walling. The storeys step back at the upper levels to provide planted green terraces.
- 5.24 Active frontage is prioritised throughout the ground floor, to promote a lively and engaging street environment. Large, glazed openings would provide a unified streetscape, housing commercial units and residential lobbies.

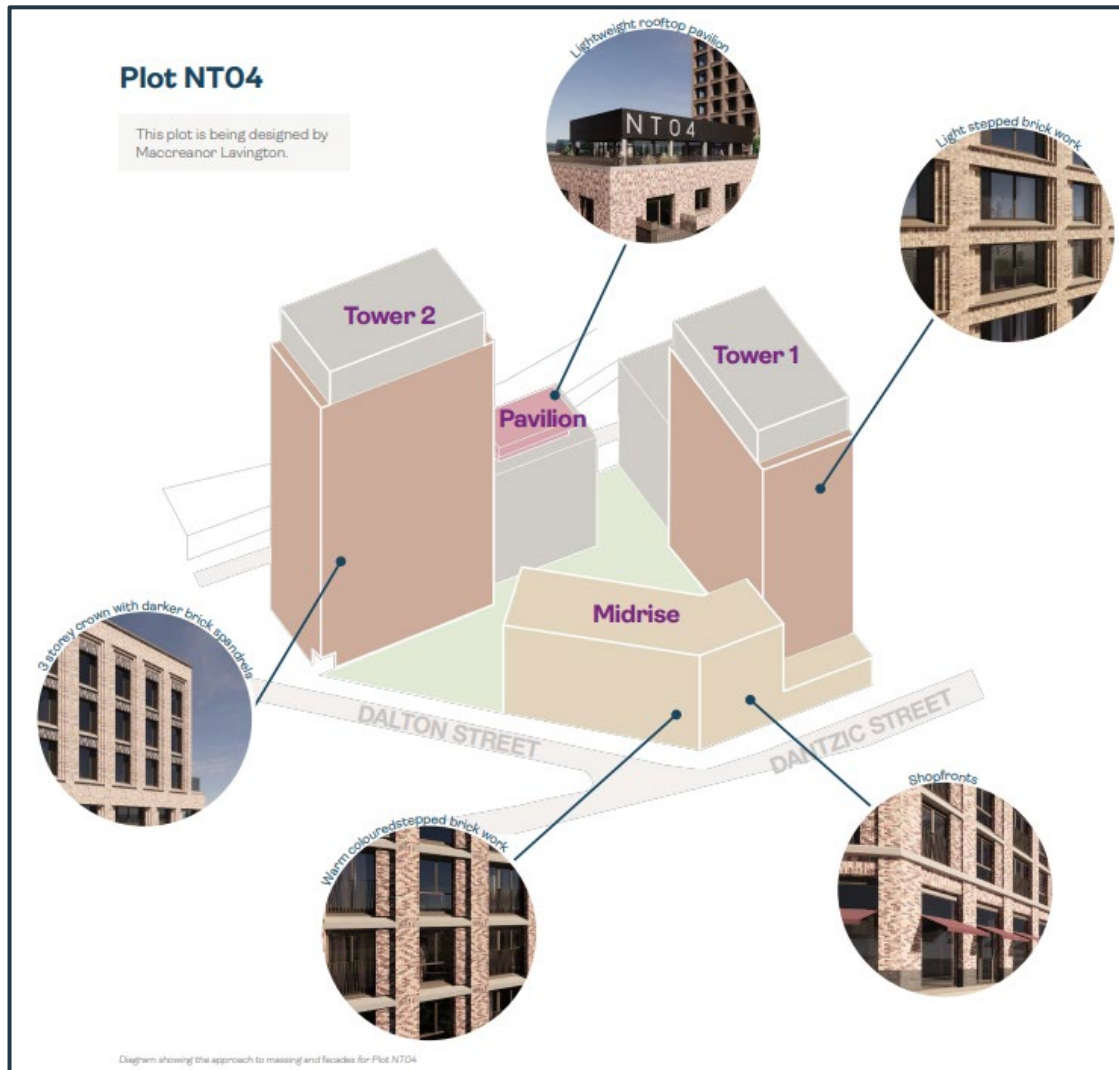
Figure 5.4: NT02 and NT03 – Building Material and Colour Choice



Plot NT04

- 5.25 The primary material for all of the facades within NT04 would be brickwork – with the primary palette consisting of two brick tones, a light yellow / buff brick mix and a contrasting yellow / red brick mix. The tower volumes would utilise the lighter of the two mixes, with the mid-rise elements utilising the darker mix. In addition to the primary materials, a limited palette of accent materials is proposed. This consists of two darker brickwork tones for contrasting elements in the plinths and tops of the buildings, precast concrete elements for cills, and dark bronze coloured metalwork.

Figure 5.5: NT04 – Building Material and Colour Choice



Landscaping, Green Infrastructure and Public Realm

Application 2

- 5.26 It should be noted that the Housing Infrastructure Fund (HIF) works permitted through Application 2 provides the proposed enhancement of the adjacent St Catherine's Wood to provide a host of improvements in relation to biodiversity and opportunities for leisure, play and enjoyment of the local landscape and wildlife. For the purposes of this EIA, it has been assumed that these works will form a part of the future baseline scenario and will have been completed before the delivery of Application 4.

Application 4

- 5.27 **Volume 3: Appendices, Appendix 5.1** presents Parameter Plan P1 – Development Plots and Public Realm which sets out the maximum developable zone for each plot within Application 4 as well as the location of a number of areas of public realm space which would include for rights of way, emergency access, car parking, sustainable

urban drainage system (SuDS) components and infrastructure. Visible on Parameter Plan P1 are the locations of six key public spaces, along with a number of areas for 'public realm' that form an uninterrupted band of open / green space. Large areas of designated open / green space are present across Application 4, including a linear band along the Red Bank Plateau area that extends down into the Red Bank Viaduct area and connects into St. Catherine's Wood and to the Travis Island / New Town area situated along Dantzic Street.

- 5.28 The detailed design of the landscaping, green infrastructure and public realm within Application 4 will be determined through subsequent applications. While not being sought for approval, the 'illustrative scheme' section of the Design and Access Statement (DAS) does provide the reader with an overview of how the landscaping, green infrastructure and public realm across Application 4 may be realised, however for the purposes of the EIA, the 'illustrative scheme' has not been assessed.

Application 5

- 5.29 The General Arrangement Site Wide Public Realm plan for Application 5 is provided at **Figure 5.6** below.

Figure 5.6: Application 5 – General Arrangement Site Wide Public Realm



- 5.30 The main elements of the Landscape Masterplan are summarised below:
- Improvements to quality of public realm along Dantzic Street and Dalton Street; including the narrowing of the existing Dantzic Street carriageway to 6.5 metres, implementation of paved footways and pedestrian crossings, rain gardens and planting and integrated cycle routes;

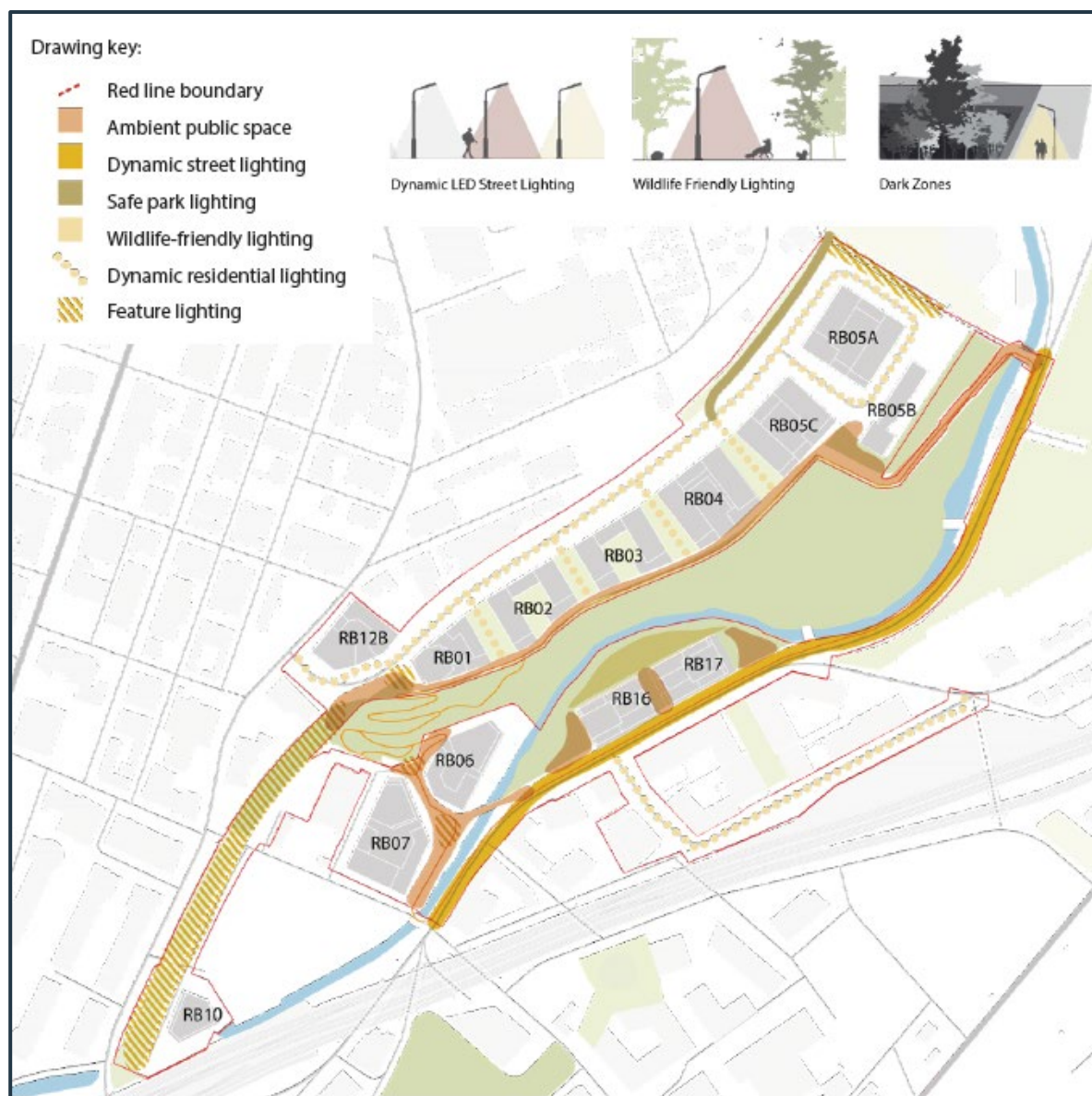
- The creation of 'Dulwich Street', a pedestrian-friendly fully accessible (1:21) street which would allow for vehicle access for residents, deliveries and servicing;
- The creation of private external amenity for NT02 and private courtyards at NT03 and NT04 which are designed as enclosed green spaces with views framed out to the surrounding streetscape and Irk River Valley; and
- The creation of Travis Square, a green ecological corridor which would include significant areas of new planting, integrated seating, informal play spaces and wildlife habitats;
- The placement of extensive green roofs, intensive green roof and brown roofs across the roofs of NT02-04. The extensive green roofs would be inaccessible and low maintenance, sown with a native wildflower mix to be attractive to invertebrates and foraging birds and bats. The extensive green roof would be accessible to Site users and would include herbaceous perennial and shrub planting. The brown roofs would be located on the highest roofs of NT02-04 and would comprise a low-nutrient substrate left to self-vegetate via wind-blown or bird dispersal creating a natural habitat.
- The public realm of NT02-04 would comprise of a number of 'Launch Pads' which are approximately 25m² areas equivalent to that of two car parking spaces that are designed to reduce the number of on-street car parking while providing space for one of three types of uses: commercial, recreational and ecological. The Launch Pads would be situated along the proposed Dulwich Street.

Lighting

Application 4

- 5.31 An Outline Lighting Strategy for the Application 4 has been prepared and is provided at **Figure 5.7** below. The plot developments shown are illustrative to aid the understanding of the application of the strategy.
- 5.32 Measures within the Outline Lighting Strategy to reduce the impact upon wildlife, while maintaining a safely lit environment for Site users would include dynamic LED street lighting to provide variation in colour, temperature and intensity to pre-programmed time and seasonal settings, and the use of a reduced spectrum of light and 'dark zones' within and along St Catherine's Wood to provide areas of complete darkness where nocturnal animals would be able to seek refuge and forage undisturbed.

Figure 5.7: Outline Lighting Strategy for Application 4



Application 5

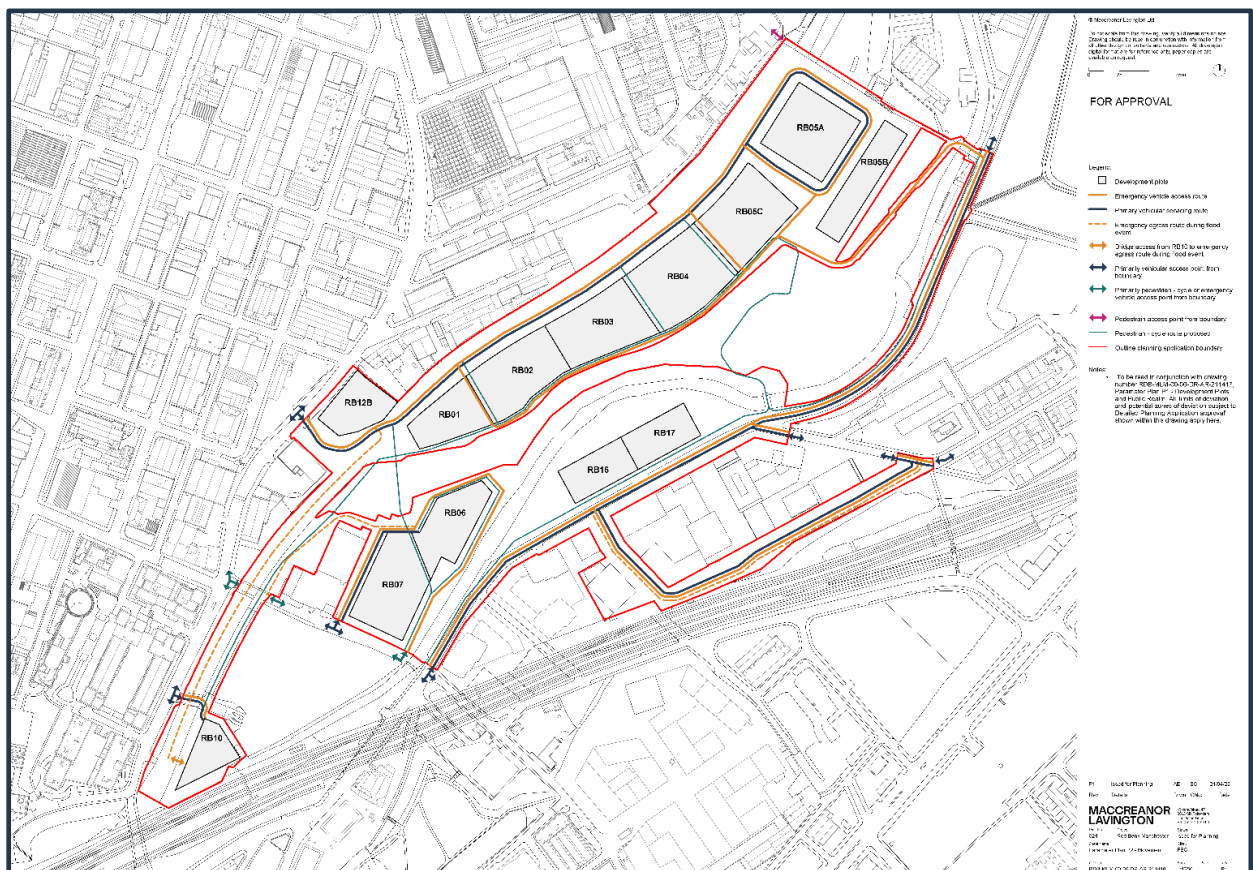
- 5.33 Dantzig Street and Dalton Street will be lit with column lightings (specification to be agreed with Manchester City Council). Smaller scale lighting columns will provide lighting to Dulwich Street. Overhead catenary lights are proposed between the buildings either side of Travis Square. Within the courtyards, paths will be lit by low level bollard lighting. Additional feature lighting including uplighters and strip lighting will be incorporated to light furniture, signage and trees in key locations.

Movement, Circulation and Access

Applications 4 and 5

- 5.34 Vehicular access to the Plots RB12B, RB01, RB02, RB03, RB05C, RB05A and RB05B would be from Red Bank; access to Plots RB07 and RB06 would be from Roger Street; and access to plots RB16, RB17 and NT02, NT03 and NT04 would be from Dantzic Street.
- 5.35 Parameter Plan – Movement defines the location of routes, their function and the location of access points across the area in which Application 4 applies.
- 5.36 **Figure 5.8** below presents the vehicle movement plan for plots NT02-04, to which Application 5 applies.

Figure 5.8: Application 5 – Vehicle Movement Plan



Parking

Car Parking

- 5.37 As part of Application 4, the following amount of car parking space would be provided:
- Up to 325 car parking spaces for residents of the residential development proposed by Application 4 (10% car parking ratio);

- Up to 25 car parking spaces for users of the non-residential development proposed by Application 4; and
- 52 car parking spaces for residents of the residential development proposed by Application 5.

5.38 As part of Application 5, the following amount of car parking space would be provided (see **Table 5.2** below). A total of 104 spaces are proposed on-site, as set out in the Development Specification and below. These are either within building podiums or on-street along Dulwich Street. All these spaces will be for the use of residents only. The balance of the requirement (i.e. a further 52 spaces) will be provided off-site at a location within the outline planning application area. Initially, this offsite car parking provision will be provided in a temporary location within the outline planning application area until a more permanent solution is delivered as part of the residential led mixed use development proposed by the separate but interrelated outline planning application. The exact location will be chosen based on proximity to the NT02-04 development and the ease and suitability of the walking route.

Table 5.2: Car Parking Provision for Application 5

Plot	Podium (Residents only)		Dulwich Street (Private estate – Residents only)		Total Residential Car Parking Spaces (%)	Dulwich Street (Private estate – Visitors)		Dantzic & Dalton St. (Adopted highways – Visitors)		Total Visitor Spaces
	Standard	Accessible	Standard On-Street	Accessible On-Street		Standard On-Street	Accessible On-Street	Standard On-Street	Accessible On-Street	
NT02	0	0	0	0	0 (0%)	0	1	0	0	1
NT03	37	3	0	0	40 (7%)	0	1	0	1	2
NT04	41	2	16	5	64 (10%)	0	0	9	1	10
Total	78	5	16	5	104 (7%)	0	2	9	2	13

Cycle Parking

- 5.39 As part of Application 4, up to 3,250 cycle parking spaces would be provided, equating to 1 secure cycle space per residential property.
- 5.40 As part of Application 5, a total of 1,551 cycle parking spaces would be provided. The per-plot split would equal:
- NT02 = 316 cycle parking spaces;
 - NT03 = 579 cycle parking spaces; and
 - NT04 = 656 cycle parking spaces.

Utilities, Infrastructure and Sewerage

- 5.41 The Proposed Development will require abandonment, diversion and new electric, gas, water (portable and foul) and telecommunications part of which would be delivered through the permitted Application 2, with the remainder delivered as part of Application 5 and the detailed development phases of Application 4.
- 5.42 A 'no-build zone' has been incorporated into Plots RB16 and RB17 after a United Utilities (UU) combined public sewer was identified to be present beneath Warford Street.

Drainage Strategy

Application 2

- 5.43 As part of the primary infrastructure works to be carried out by Application 2 in preparation for the Proposed Development adoptable foul and surface water drainage systems will be implemented across the Site.

Application 4

- 5.44 The Drainage Strategy has been developed on a worst-case basis of assuming a 100% hard surface with below ground attenuation sized accordingly and discharge at 'green field' runoff rates into the Site-wide infrastructure provided through Application 2.

Application 5

- 5.45 All the plots that sit within Application 5 will ultimately drain to the River Irk. A new adoptable surface water carrier drain will be installed in Dalton Street and Dantzic Street which will discharge to the River Irk via a proposed new outfall on Dantzic Street to the west of Plot RB16.

Highways

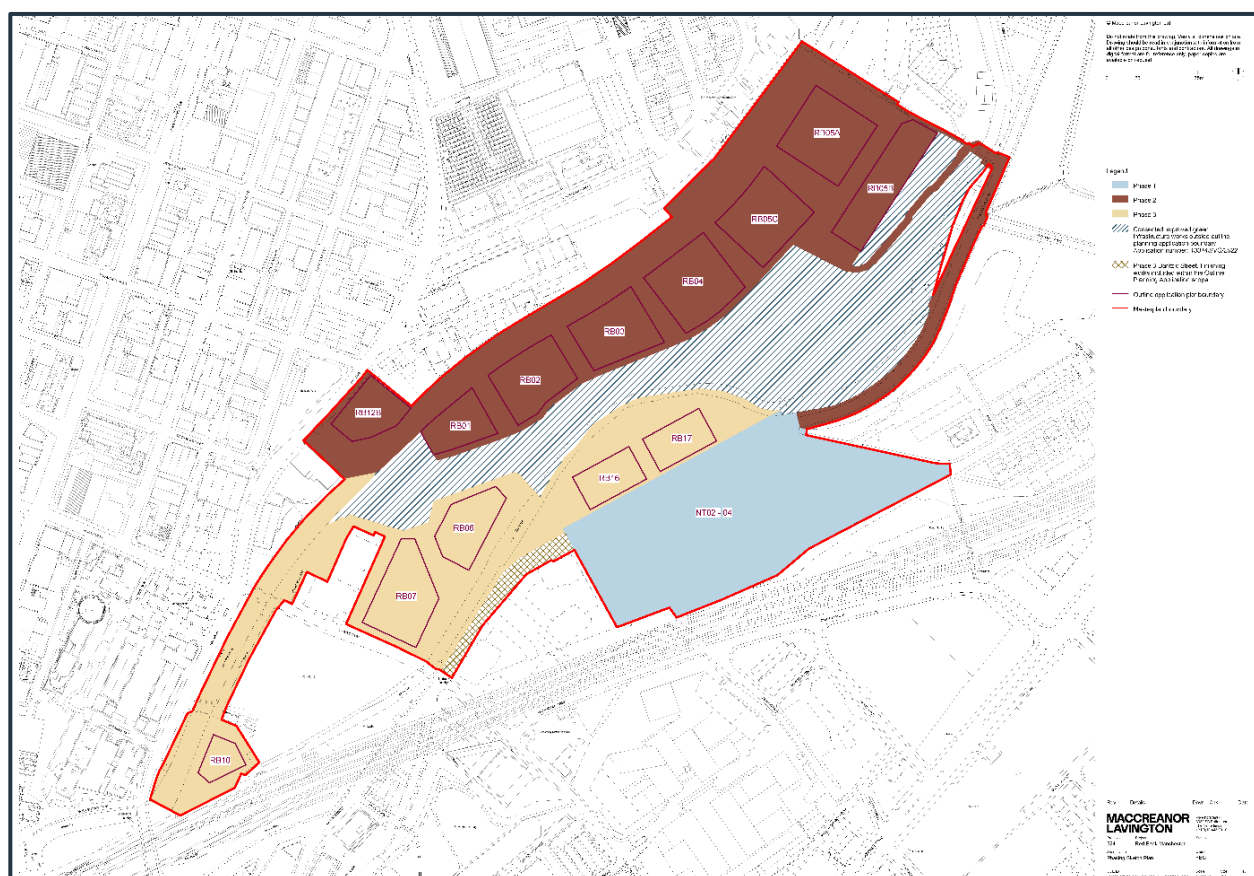
- 5.46 As part of the additional mitigation measures recommended by **Volume 2: Main Text, Chapter 11: Transport and Access**, the following off-Site junction mitigation measures would be necessary in relation to Application 4:
- Amendments to signal timings at Cheetham Hill Rd / Lord St junction including addition of a right turn arrow turning right into Lord St. Physical works would be limited to changing the traffic signal heads and potential road marking changes, there would be no kerblines changes or works outside the adopted highway; and
 - Minor amendments to kerblines at the Redbank / Lord St junction. All works are within adopted highway.

Demolition and Construction Works

Construction Programme

- 5.47 An Anticipated Phasing Delivery Plan has been produced (shown in **Figure 5.9** below) to indicate the sequence in which the various plots of the Proposed Development (grouped by area into three phases) are anticipated to be built out.

Figure 5.9: Anticipated Phasing Delivery Plan



- 5.48 Phase 1 of the construction works would see Plots NT02-04 (included within Application 5) across multiple sub-phases, the precise details of which are expected to be conditioned. Phase 1 is anticipated to begin in Q4 2023, and to be completed by Q4 2029.
- 5.49 Phase 2 which would see Plots RB01-05 and RB12B built out (included within Application 4), is anticipated to begin in Q1 2025 and finish by Q4 2029.
- 5.50 Phase 3 would also see Plots RB16, RB17, RB06, RB07 and RB10 built out (included within Application 4) and is anticipated to begin in Q3 2027 and finish by Q4 2032.

- 5.51 There would be a degree of overlap of the HIF works (Applications 1 – 3) with the construction works for NT02-04 works (Application 5) due to ground works being scheduled for completion in 2024.

Hours and Days of Work

- 5.52 Working hours will be subject to agreement with MCC. However, it has been assumed that standard working hours would be followed. These are presented below:

- Monday – Friday: 07:30 - 18:00;
- Saturday: 08:30 - 14:00; and
- No working on Sundays or Bank Holidays.

- 5.53 Exceptions may arise, for example when abnormal loads are delivered or when specialist activities are conducted, when works may be required outside of these times. The Applicant acknowledges that should these circumstances arise, the appropriate permissions and notifications would be sought in advance from MCC.

- 5.54 Where works unavoidably need to take place outside the core working hours, occupiers of nearby residential properties shall be informed by the contractor in advance of the works and their likely duration.

Additional Information

- 5.55 Additional information contained within **ES Volume 2: Chapter 5** includes:

- Description of the Works
- Construction Site Access, Parking and Traffic Management
- Site Compounds
- Construction Plant and Equipment
- Hours and Days of Work
- Environmental Management and Mitigation

6. Application 4 - What are the Likely Environmental Effects and How Would They be Minimised?

Townscape and Visual

The Works

6.1 Various mitigation measures will be implemented during the Works, including:

- Hoardings being erected around the perimeter of the Site, so that the visual effects of demolition will be minimised from adjoining pedestrian routes.
- The site compound will be carefully positioned within the Site to avoid unnecessary visual effect to adjacent receptors.
- Contractors and their subcontractors would be expected to maintain a tidy site and where practical, to operate a 'just-in-time' policy for the delivery and supply of materials for the works. Excavated materials would primarily be removed from Site via heavy good vehicles (HGVs) for transportation to nearby construction or disposal sites.
- As part of the Construction Environment Management Plan (CEMP), procedures and management measures to ensure the protection of ecological resources, including habitats (where retained) and protected species will be included. All trees that are to be retained on-Site will be subject to protective measures.

Effects on Townscape Character

6.1 During the Works, significant adverse effects to the following Townscape Character Areas (TCAs) are expected:

- TCA 1: Lower Irk Valley
 - This is due to the demolition of three buildings within the TCA (the timber yard on Dantzig Street; joinery shop warehouse unit on Hargreaves Street; and warehouse unit on Faber Street). Construction activities will also result in direct changes to the townscape character within the Site and indirect changes to the perceived character of the wider TCA outside the Site.
- TCA 7: Collyhurst
 - Whilst demolition and construction activities with the Site will result in no direct changes to the townscape character of TCA 7, indirect changes will occur to its perceived character through views of the construction works occurring in its townscape context.

Effects on Viewpoints

6.2 During the Works, significant adverse effects to the following Viewpoints are expected:

- Viewpoint 1: St Michael's Flags and / Angel Meadow Park
- Viewpoint 2: Corporation Street
- Viewpoint 9: Dalton Street
- Viewpoint 16: Red Bank
- Viewpoint 17: Rochdale Road

6.3 These significant effects are due to taller plant such as telescopic/support/tower cranes being visible, together with the upper elements of partially constructed buildings.

Effects on Conservation Areas

6.4 No significant effects are expected to Conservation Areas in relation to the Works.

The Completed and Operational Development

6.5 The operational development incorporates high quality buildings and places, which are fundamental to achieving well-designed places that are healthy, greener, enduring and successful in practice. The proposed development demonstrates embedded 'good design', by providing a setting for a diverse range of uses and activities; buildings, landscape and infrastructure that are likely to endure and evolve incrementally; and a richness of experience, including visual, such as views across the landscape of the Irk Valley or the detail of a well-design building.

6.6 Mitigation measures relevant to townscape and visual effects that are incorporated into the design of the Proposed Development are summarised as follows:

- A townscape strategy that addresses height and density of the surrounding townscape. Densities range across the site, with higher density development and taller elements concentrated closer to the city centre, with height and massing stepping down to the River Irk.
- The tallest buildings within the Proposed Development are positioned towards the south of the Site, in the context of other tall buildings within the surrounding TCAs, including NOMA and New Cross, while buildings towards the north of the Site, where there are fewer tall buildings in the surrounding townscape, have fewer storeys.
- The buildings would be developed as three distinct neighbourhoods:
 - New Town, designed to link the city centre with a new park across the Irk Valley;
 - Red Bank Viaduct, designed to create a mixed-use destination; and
 - Red Bank Plateau, designed to create a residential, family-focussed area.

- The differences in character between these three neighbourhoods would help Application 4 to respond to the surrounding townscape context, which changes across the Site. Red Bank Viaduct and New Town comprise predominantly of high-density, mix-use urban blocks with heights between 8 and 55. The Plateau is a lower-density neighbourhood with perimeter blocks ranging between 5-12 storeys. This variation in building heights across the area would create a dynamic skyline.

Effects on Townscape Character

6.7 The completed and operational development would have significant beneficial effects on the following TCAs:

- TCA 1: Lower Irk Valley
 - This is due to physical changes to the townscape of this TCA across its southern extent. Application 4 is likely to alter the character of the area from a generally formerly industrial area, featuring land uses including industrial buildings, vacant plots and areas of informal greenspace, to an area of high-density residential development, featuring areas of green infrastructure.
- TCA 7: Collyhurst
 - Although the larger vertical scale of plots within Application 4 may appear to extend Manchester city centre along the Lower Irk Valley towards this TCA in its backdrop, changes associated with Application 4 will relate well to the character and scale of development within the evolving city centre skyline and introduce built elements of high design quality compared to the existing townscape condition. Effects are also considered to reduce on the wider TCA to the north and east with increasing distance from the Site.

Effects on Viewpoints

6.8 The completed and operational development would have significant effects to the following Viewpoints:

- Viewpoint 1: St Michael's Flags and / Angel Meadow Park (significant neutral)
 - These effects arise from the sensitivity of users of the greenspace and residents, combined with the magnitude of change arising from the vertical scale of RB10 and the introduction of the other plots into the view. In this direction, the view was previously fairly open towards the Lower Irk Valley, providing a contrast with surrounding built form visible at close proximity in other directions, but has been altered recently by other development. The introduction of Application 4 will contribute to providing further enclosure of the view over St Michael's Flags and Angel Meadow Parks.
- Viewpoint 2: Corporation Street (significant adverse)
 - The effect of Application 4 on the view experienced by pedestrians, motorists and people working in the local area arise primarily from the position of RB10, seen in the focal point of the view along the road, in

combination with its vertical scale, contrast and position behind 109 Corporation Street (a Grade II listed building).

- Viewpoint 6: Rochdale Road (significant beneficial)
 - The full extent of Application 4 will be appreciated in this view. It is likely to alter the view of the city centre skyline and will extend the tall building scale of the city centre out along the Lower Irk Valley towards the viewpoint.

Effects on Conservation Areas

- 6.9 No significant effects are expected to Conservation Areas in relation to the completed and operational phase.

Cumulative Effects

- 6.10 When Application 4 is assessed alongside cumulative developments, cumulative effects tend to be further 'mitigated', because Application 4 represents a continuation of the effect that will be established by approved schemes, which appear to extend the city centre skyline northwards towards the Lower Irk Valley. In the context of the cumulative schemes, Application 4 will appear visually more cohesive and connected with the taller building scale of the emerging city centre. The scale of Plot RB10, which represents the tallest plot within Application 4, can be noted as being comparable in height and scale to committed schemes nearby at the Gas Works and Meadowside. The quality of design through detailed design works undertaken as part of the detailed plot design will also contribute to mitigating the cumulative effects of the proposed development when considered in the context of committed schemes.
- 6.11 The gradual reduction in building scale will be evident as the development plots extend north along the Irk Valley away from the city centre, and will respond to the surrounding context which comprises larger-scale buildings within the city centre to the south, and smaller-scale, low- and mid-rise buildings across residential areas to the north and east.
- 6.12 Overall, significant beneficial effects are expected to:
- TCA 1: Lower Irk Valley
 - TCA 7: Collyhurst
 - Viewpoint 6: Rochdale Road (Railway Bridge)
 - Viewpoint 9: Dalton Street

Ecology and Nature Conservation

The Works

- 6.13 The assessment identified two regionally important ecological features: semi-natural and plantation woodland. A further seven locally important ecological features were also identified, these were scattered broadleaved trees, River Irk corridor, dense scrub, roosting bats, bat foraging/commuting, breeding birds and fish.
- 6.14 There is no habitat loss anticipated in Application 4 as site clearance is included in consented Application 2 and was assessed in the accompanying ES.
- 6.15 The potential for disturbance effects and unintended habitat loss or damage resulting from demolition and construction activities were identified through the assessment. The majority of these can be avoided through mitigation measures including the production of a CEMP, LEMP, ISMS, lighting strategy and tree protection measures.
- 6.16 Mitigation measures have been proposed to protect:
- Semi-natural, plantation woodland and scattered trees
 - Dense scrub
 - The River Irk Corridor
 - Roosting bats
 - Bat foraging and commuting
 - Breeding birds
 - Fish
- 6.17 No residual effects during the demolition and construction phase have been identified for the Application 4 site.

The Completed and Operational Development

- 6.18 The potential for further disturbance effects and unintended habitat loss or damage resulting from increased public pressure during the operational phase was identified through the assessment. This can be avoided through mitigation measures including the Landscape Environmental Management Plan (LEM)) and through embedded mitigation of introducing formalised foot and cycleways (included as embedded mitigation in Application 2).
- 6.19 Mitigation measures have been proposed to protect:
- Semi-natural and plantation woodland
 - Foraging/commuting bats
- 6.20 No residual effects during the operational phases have therefore been identified.
- 6.21 A standalone BNG assessment has been undertaken for the entire site using a pre-works baseline and Op-en's proposed Landscape Masterplan which shows FEC's illustrative landscape proposals for the residential led mixed

use development at Red Bank Neighbourhood (proposed under Application 4) and their detailed landscape proposals for the New Town neighbourhood plots to the south of Dantzic Street (proposed under Application 5). The Landscape Masterplan also identifies MCC's intentions for Red Bank and shows the HIF enabling and infrastructure works and new park at St Catherine's Wood which have been granted full planning permission under Applications 1 and 2. This delivers an on-site net gain of 16.27% which is in excess of the targeted 10% net gain (by 6.27 %) to provide flexibility in the approach and will be re-visited at each detailed application under the outline planning permission to achieve the overall target of in excess of 10%.

Cumulative Effects

- 6.22 As anticipated given the inner-city location of this application, the sites considered in the cumulative assessment are generally of low ecological value, dominated by buildings and hardstanding and some with small areas of grassland or ephemeral vegetation. The majority did not provide suitable bat or bird roosting habitat and in the few instances where bat roosting was confirmed these were small roosts of common species and mitigation would be provided on site. Similarly, bird and bat foraging habitat was limited.
- 6.23 Due to the heavily developed nature of the landscape, the potential for fragmentation or disturbance effects to accumulate is limited to only those sites close to this application and only where they contain features of relevance to the habitats and species within this application. No inter-project or intra-project cumulative effects are therefore predicted to arise.
- 6.24 The wider SRF contains similar habitats to those within Application 4 though the most valuable habitats will be largely retained and a large proportion of the SRF is comprised of low-value habitats e.g. hardstanding and buildings.
- 6.25 Due to the heavily developed nature of the landscape in the areas of the wider SRF proposed for development, the potential for fragmentation or disturbance effects to accumulate is limited to only those parts of the SRF close to this application and only where they contain features of relevance to the habitats and species within this application. The assessment did identify additional habitat loss or damage, and disturbance effects once the wider SRF was incorporated. However, these can all be adequately mitigated for as detailed in the table.
- 6.26 Assessment of the Development project i.e. Application 4 and the wider SRF, is provided via a high level combined assessment. It is predicted that there will be no cumulative effects from additional habitat losses in the SRF as no valuable habitat loss is proposed in Application 4. Furthermore, given the commitments within a Northern Gateway Biodiversity Plan, it is likely there would be an overall positive effect on woodland habitat, quality/quantity of bat foraging and commuting habitat and quantity/quality of breeding bird habitat in the long term.

Cultural Heritage (including Archaeology)

The Works

- 6.27 There are no significant effects to heritage assets within Application 4, as the Housing Infrastructure Fund (HIF) enabling works will be complete, which will have removed all surviving archaeological remains in those areas (RB01 – RB07, RB10 and RB12B).
- 6.28 There is potential for effects to Union Bridge (Grade II listed building), however its value is derived from its setting around the River Irk. As its position over the river will remain unchanged, there will be no impact to this asset.
- 6.29 Barney's steps (WSP003) are outside the Proposed Scheme area and will not be physically affected by the works. The footbridge has lost its association with the railway which it once crossed and appears to no longer be in use as a footbridge.
- 6.30 While the Red Bank viaduct (WSP001) is along the red line boundary of the Proposed Scheme, no works are envisaged for the viaduct as part of the enabling works for the Infrastructure Works site. The viaduct has lost its historical association with the railway and its associated infrastructure, with the surrounding area now overgrown waste ground. Therefore, the setting does not contribute to the significance of the heritage value of the asset. As a consequence, there is no impact upon it.
- 6.31 On the basis that excavation and mitigation will be included as part of the HIF, no further archaeological mitigation is required. The HIF mitigation comprises that detailed in the Archaeological Written Scheme of Investigation produced by Orion in September 2022, which proposes a series of trial trenches.

The Completed and Operational Development

- 6.32 No effects on buried heritage assets will arise, as once the Works are complete, no further ground disturbance will occur.
- 6.33 There is no effect on the Grade II listed Union Bridge, the Red Bank viaduct or Barney's Steps. Consequently, no mitigation is required.

Cumulative Effects

- 6.34 No significant cumulative effects are anticipated in relation to cultural heritage during the demolition and construction, or the completed and operational phase.

Ground Conditions

The Works

- 6.35 The following Construction Phase mitigation measures have been assumed:

- Site construction workers will be protected by safe working practices in accordance with the Health & Safety at Work etc. Act (1974) which requires appropriate risk assessments and mitigation to be in place.
- Working methods during construction to ensure that surface water cannot run-off from the works or any stockpiles into adjacent surface watercourses in accordance with Environment Agency requirements for work adjacent to Main rivers (<https://www.gov.uk/permission-work-on-river-flood-sea-defence>).
- Implementation of appropriate pollution incident control e.g., spill kits.
- Adherence to a CEMP.
- A Piling Risk Assessment will be produced to prevent contamination migration during piling (if required).
- A UXO desk study will be produced in order to zone or de-risk the Site.

6.36 With the implementation of such mitigation measures, insignificant effects would arise on:

- Construction/groundworkers
- Third party neighbours
- Groundwater in superficial aquifers, bedrock aquifers and surface waters

6.37 Therefore, impacts can be mitigated against through embedded mitigation, good working practices and the use of an appropriate CEMP.

The Completed and Operational Development

6.38 Operational effects have been scoped out of the assessment as it is assumed that the Demolition, Groundworks, and Construction Phase will ultimately create suitable development platforms for follow-on development. Furthermore, as the Proposed Development is residential-led, additional mitigation measures to mitigate the risk of future contamination during operation are unforeseen.

Cumulative Effects

6.39 No significant cumulative effects on construction works or controlled waters in the River Irk, bedrock and superficial aquifers were identified as embedded mitigation will be adopted through the application of the planning regime and contaminated land regime (if applicable). The same applies when also considering the SRF.

6.40 The assessment of cumulative effects related to the Completed and Operational Development of Application 4 and neighbouring development sites is not considered for the same reason as stated above.

Flood Risk and Drainage

The Works

- 6.41 The measures to be included in a CEMP identified below will be sufficient to minimise the risk of potential impacts to the water environment to a tolerable level. Any works within the channel or within 8 m of the River Irk will require a Flood Risk Activity Permit from the EA. The permitting process should ensure that suitable measures are in place during the demolition and construction phase to manage flood risk and environmental impact.
- 6.42 The potential risk to groundwater quality is expected to be mitigated by the implementation of a Demolition Plan, Remediation Strategy, CEMP, and, if required, a Piling Risk Assessment through sediment and pollution control measures outlined in the Additional Mitigation Section.
- 6.43 Measures to be included within the CEMP address the following issues:
- Sediment and pollution control
 - Vegetation clearance
 - Timing of works
 - Managing flood risk
- 6.44 A detailed list of the above mitigation measures can be found in **ES Volume 2, Chapter 10: Flood Risk and Drainage**.
- 6.45 All mitigation recommended should be adopted to reduce the potential impacts. When mitigation is applied, there are no significant residual effects.

The Completed and Operational Development

- 6.46 The following embedded mitigation measures are proposed as part of the completed development:
- The built development will sit outside of the flood extent for the 1 in 100 year flood event due to the creation of compensatory flood storage;
 - Less vulnerable development such as commercial units will be located on the lower ground level and will be constructed using flood resilient design with a waterproof external construction to a level of the 1 in 100 year flood event plus 45% climate change, plus 150mm freeboard;
 - More vulnerable developments such as a school or residential buildings located on the lower ground level will be constructed using flood resilient design with a waterproof external construction to a level of the 1 in 100 year flood event plus 45% climate change, plus 150mm freeboard;
 - No residential development will have a finished floor level lower than the 1 in 100 year flood event plus 45% climate change plus 300mm freeboard;

- The surface water drainage will be designed such that the rate of surface run-off from the Site is no greater than the existing scenario and as such will not result in an increase of flooding elsewhere; and
- Terracing to occur on both banks of the River Irk, adjacent to plots RB16 and RB17. Terracing will provide flood compensatory storage and betterment for biodiversity gain.

6.47 No additional mitigation is required as all mitigation is embedded in the design of the Proposed Development.

6.48 All additional mitigation recommended should be adopted to reduce the potential impact from the Proposed Development. When mitigation is applied, there are no significant residual effects.

Cumulative Effects

6.49 During both the demolition and construction phase and operational phase, no effects on the River Irk, River Irwell, Water Utilities, Nitrate Vulnerable Zone, developments and construction workers would be significant. The same remains true when also considering the SRF.

Transport and Access

The Works

- 6.50 The worst-case demolition and construction vehicle trips for the Proposed Development (Application 4) would be 256 construction vehicles per day (128 arrivals, 128 departures), consisting of 50% LGV trips and 50% HGV trips. This would occur in Q1 2027.
- 6.51 There would also be 292 employee vehicles per day (146 arrivals, 146 departures). However as parking for staff involved in construction would not be provided on the Site, these would disperse across multiple parking locations in the wider area.
- 6.52 No further assessment was required, as the Institute of Environmental Management and Assessment (IEMA) threshold of a 30% in traffic on a given road would not be exceeded.
- 6.53 Although no adverse effects are identified for the construction phase of Application 4, additional mitigation will comprise the implementation of standard practice management and control measures within the Construction Environmental Management Plan and Construction Logistics Plan to reduce the potential impacts from demolition and construction traffic. These measures would comprise the following:
- Demolition and construction traffic routing and contractor awareness of the selected routes. The selected routes at this time would seek to avoid the city centre and residential areas, i.e. using North Street and Cheetham Hill Road to access the A6010 and the wider highway network;
 - Site traffic control, particularly at peak hours;
 - Use of off-site holding areas or consolidation centres, if required;
 - Site access and egress management e.g. use of traffic marshals, wheel washing facilities;
 - Vehicle loading and unloading on-site as far as possible;
 - Good housekeeping measures; and
 - Early agreement of road and footpath closures and associated communication to receptors within the study area.

The Completed and Operational Development

- 6.54 The Proposed Development would in summary comprise the following:
- Creation of a new network of pedestrian and cycle friendly streets and public realm within and in the vicinity of the site red line boundary;
 - Provision of on-site facilities to minimise the need for travel off-site for purposes such as local shopping;

- Cycle parking provided in public realm areas, and associated secure and indoor cycle parking for residents and visitors in line with MCC and TfGM standards. Cycle parking will be provided to encourage the use of active travel to and from, and within the Application 4 site. The level of provision proposed for residents is 1 cycle space per residential property (up to 3,250 spaces) and is in accordance with MCC and TfGM standards.
- Disabled parking in line with relevant MCC and TfGM standards.

6.55 The provision of car parking for which approval is sought as part of Application 4 is 12% and comprises:

- Up to 325 spaces for the residential development proposed by the outline application of which up to 21 spaces would be accessible which amounts to 6.5% of the total number of spaces for the residential development;
- Up to 25 spaces for the non-residential development proposed by the outline application including visitor and accessible spaces;
- Up to 52 car parking spaces to support the development proposed at Application 5. The intention is that the 52 car park spaces will be provided in a temporary location within the Application 4 area initially with a permanent solution provided in a centralised location as the residential led development proposed by Application 4 is brought forwards.

6.56 A Travel Plan covering all uses within the Proposed Development, setting out measures and enhancements to use non-car modes will be provided. This will be based upon the Framework Travel Plan submitted for the planning application

6.57 Electric Vehicle parking will be provided for residents, in line with relevant local and national standards and the aspirations within the SRF.

6.58 No significant effects are predicted in relation to severance, driver delay, pedestrian delay and amenity, public transport, and accidents and safety.

6.59 Financial contributions are proposed towards additional off-Site highway works which include:

- Amendments to signal timings at Cheetham Hill Rd / Lord St junction including addition of a right turn arrow turning right into Lord St. Physical works would be limited to changing the traffic signal heads and potential road marking changes, there would be no kerblines changes or works outside the adopted highway.
- Minor amendments to kerblines at the Redbank / Lord St junction.

Cumulative Effects

6.60 The relevant cumulative schemes were inherently assessed as part of the future baseline scenario, and thus included within all assessments which build on this future baseline.

6.61 With the wider SRF development being located north and east of the application 4 site, and assuming the same principle of construction traffic is adopted (i.e. directed towards the key radial and orbital roads rather than

through the city centre) it is not anticipated there would be a significant construction traffic impact from the SRF on the traffic network.

- 6.62 The overall principles of the SRF are in line with those adopted within applications 4 i.e. promoting best-practice walking and cycling infrastructure and high quality public transport links. The SRF area as a whole benefits from being in an accessible location and on-site facilities will improve this and reduce the need to travel further.
- 6.63 As such, no significant cumulative effects have been identified.

Air Quality and Dust

The Works

- 6.64 A range of mitigation measures have been proposed. These are listed in full in ES Volume 2, Chapter 12, and cover the following areas:
- General communication with the public
 - General Dust Management
 - Site Management
 - Monitoring
 - Good preparation and maintenance of the Site
 - Using best practice operations
 - Using good waste management techniques
 - Operating vehicle/machinery, construction traffic and sustainable travel effectively
- 6.65 The residual effects of dust and PM₁₀ generated by construction activities following the application of the mitigation measures described above and good site practice will not be significant.
- 6.66 The residual effects of emissions to air from construction vehicles and plant on local air quality is also considered to not be significant.

The Completed and Operational Development

- 6.67 The Proposed Development has been designed to provide a network of pedestrian and cycle friendly routes to integrate the proposals into the wider area and provide opportunities for active and sustainable transport, which will in turn reduce vehicular trips generated by the Site. The provision of on-site facilities (such as local shopping) will also reduce the need to travel off-site.
- 6.68 Cycle parking will be provided to encourage the use of active travel to and from, and within, the Site. The level of provision proposed is 1 cycle space per residential property (up to a total of 3,250 cycle spaces).
- 6.69 Low levels of car parking are also provided within the development to dissuade car trips and encourage the use of alternative modes of transport.
- 6.70 The following additional mitigation measures should be considered for adoption as part the proposed Application 4 development:

- Consideration on the placement of properties should take account of the distance between nearby pollutant sources and receptors such that new properties are in areas where exposure to elevated concentrations of air pollutants can be minimised.
- A Travel Plan/Plans will be prepared for the Proposed Development (Applications 4 and 5) which will set out a range of measures that will be implemented at the Site to promote the use of public and sustainable transport by future site users and reduce the number of vehicle trips generated by the Proposed Development.
- In addition, Electric Vehicle (EV) parking/charging facilities will be provided for residents and visitors to encourage the use of low and zero emission vehicles.

6.71 For the Completed and Operational development, an adverse (but not significant), effect is predicted, on the basis that no exceedances of the statutory air quality objectives will occur. However, best practice design and emissions management measures (including the implementation of a Travel Plan and provision of EV charging points) are recommended to ensure the development is compliant with the policies contained within the Manchester Core Strategy and the NPPF.

Cumulative Effects

6.72 With the implementation of best practice mitigation measures outlined above, the residual cumulative effects during the Works and the operational phase will not be significant.

Noise and Vibration

The Works

- 6.73 With respect to construction noise and vibration, a number of best practice mitigation measures have been presented to minimise construction noise and vibration levels, for incorporation into the proposed Construction Environmental Management Plan (CEMP).
- 6.74 The assessment of construction traffic noise has identified that level changes on local road traffic routes range between +1.2 and +2.8dB. Such level changes are not sufficient to give rise to any significant effects, or the need for additional mitigation.

The Completed and Operational Development

- 6.75 The assessment of operational phase development-generated road traffic noise has identified that level changes on the surrounding network due to both the proposed Application 4 development and other committed developments would range between -0.2 and +3.1dB in the future opening year of 2032. Such level changes are not sufficient to give rise to any significant effects, or the need for additional mitigation.
- 6.76 The assessment has included the determination of appropriate limits for the control of mechanical/fixed plant. These limits have been set based on the results of the baseline noise survey, at a level sufficiently low that significant effects would not be anticipated to arise. It has been demonstrated how compliance with such limits could be ensured with the use of an appropriate planning condition.
- 6.77 The assessment of potential noise impact on the noise sensitive aspects of the scheme (residential and school) has identified that across the residential and potential school development areas, applicable internal noise level criteria can be achieved with due consideration to building fabrication and scheme layout design considerations.
- 6.78 The assessment of external noise levels has identified that for the parts of the potential school site subject to the highest transportation noise levels, mitigation is required in the form of acoustic screening (bunds/acoustic barriers etc.) with associated increased separation distances and careful layout design. It has been demonstrated with the incorporation of such measures at the detailed design stage, noise levels can be controlled to appropriate levels within primary teaching spaces.
- 6.79 With these measures in place, the resulting impact is identified to be low, and sufficiently controlled such that significant effects would not arise.

Cumulative Effects

- 6.80 For construction noise, with the implementation of best practice mitigation measures, the cumulative effects during demolition and construction would remain as reported above, i.e. generally insignificant. When also

considering the SRF, it is anticipated that the residual cumulative effect will generally, remain as reported for above. For NSR7, the effect is considered to be significant.

- 6.81 For construction vibration, with the implementation of best practice mitigation measures, the cumulative effects during demolition and construction would remain as reported above, i.e. not significant. When also considering the SRF, it is anticipated that the residual cumulative effect will generally, remain as reported for above. For NSR16, the effect is considered to be significant.
- 6.82 A separate cumulative assessment is not required for the operational phase as the traffic data used in the assessment, and therefore the modelling results, are inherently cumulative. At the time of writing, insufficient information was available regarding the volume and distribution of traffic that could be generated by the SRF should these developments be brought forward during the construction phase of Application 4. Therefore, it is not currently possible to determine the potential changes in road traffic noise associated with Application 4 and cumulative developments in-combination with the SRF.
- 6.83 With the implementation of best practice mitigation measures and adherence to plant noise limits, it is unlikely there will be significant cumulative noise effects as a result of the combination of the Application 4, the SRF and cumulative developments. Therefore, it is anticipated that the residual cumulative effect will, at worst, remain as reported for Application 4, i.e. a negligible effect.
- 6.84 At the time of writing, insufficient information was available regarding the volume and distribution of traffic that could be generated by the SRF. Therefore, it is not currently possible to determine the potential changes in road traffic noise associated with Application 4 and cumulative developments in-combination with the SRF.

Daylight, Sunlight and Overshadowing

The Works

- 6.85 Effects during the site preparation, earthworks and construction phase have not been quantitatively assessed as the effects will be temporary and variable. However, it is expected that as construction of the Proposed Development proceeds into its different phases, the availability and obstruction of natural light will vary, gradually adjusting to that of the completed Proposed Development.
- 6.86 During periods of demolition as the site becomes relatively free of obstructions, there will be greater levels of daylight and sunlight to existing surrounding buildings. As construction develops, the new structures' obstruction to daylight and sunlight will gradually increase until arriving to their completed condition. The effects of the completed conditions are described in the following sections.

The Completed and Operational Development

- 6.87 A 3D model of the Proposed Development and the relevant surrounding context has been developed for the purpose of the Daylight, Sunlight and Overshadowing Assessment of the Proposed Development (Application 4).
- 6.88 Access to daylight and sunlight in windows and open spaces can be optimised by reducing obstruction to natural light through design, building form, and also by the size of massing. Since the parameter-based approach is a worst-case scenario and allows some flexibility in the definition of the final massing, it will be possible to undertake further detailed studies at the detailed design stage to address the level of daylight and sunlight access to existing surrounding properties to minimise any significant negative effects to neighbouring adjacent buildings.
- 6.89 The results of the Application 4 assessment indicated that the level of daylight and sunlight to existing surrounding properties and open spaces remains largely within the recommended criteria with 69% of the properties retaining suitable levels of daylight, 86% retaining suitable levels on sunlight and 92% of open spaces retaining suitable levels of overshadowing. The loss of light reported in each category is predominantly within the Minor Magnitude of Effect from the baseline. Paragraph 14.66 of the Daylight and Sunlight Assessment contained in Chapter 14 of the ES states:

"14.66 Access to daylight and sunlight in windows and open spaces can be optimised by reducing obstruction to natural light through design, building form, and also by the size of massing. Since the parameter-based approach is a worst-case scenario and allows some flexibility in the definition of the final massing, it will be possible to undertake further detailed studies at the detailed design stage to address the level of daylight and sunlight access to existing surrounding properties. It is important to highlight that given the context of a highly urbanised environment and that the area is characterised by a dense nature of development with tightly packed streets and buildings close to each other, this would have an inevitable effect on the availability of daylight and sunlight. It is therefore considered that the likely impacts arising from the Proposed Development would not be unusual and would be acceptable in the context of a very urban location such as this".

Cumulative Effects

- 6.90 The effects during the site preparation, earthworks and construction phase have not been quantitatively assessed as the effects will be temporary and variable, and the assessment of effects has focused on the comparison between the Baseline and the completed Proposed Development including committed developments as the impacts are permanent. However, it is expected that as construction of the Proposed Development proceeds into its different phases, the availability and obstruction of natural light will vary, gradually adjusting to that of the completed Proposed Development.
- 6.91 During periods of demolition as the site becomes relatively free of obstructions, there will be greater levels of daylight and sunlight to existing surrounding buildings. As construction develops, the new structures' obstruction to daylight and sunlight will gradually increase until arriving to their completed condition. The effects of the completed conditions are described in the following sections.
- 6.92 Access to daylight and sunlight in rooms, windows and open spaces can be optimised by reducing obstruction to natural light through design, building form, and also by the size of massing. Since the parameter-based approach is a worst-case scenario and allows some flexibility in the definition of the final massing, it will be possible to undertake further detailed studies at the detailed design stage to address the level of daylight and sunlight access to existing surrounding properties to minimise any significant negative effects to neighbouring adjacent buildings.
- 6.93 During the operational phase, no significant effects are predicted in the cumulative scenario, as well as in combination with the SRF.

Wind Microclimate

The Works

- 6.94 A quantitative assessment of the impacts of the proposed Application 4 development during demolition and construction has not been, because wind effects at pedestrian level are closely associated with the size and shape of the massing of buildings and, during the demolition and construction stage, this condition will be continuously changing. However, using professional judgement, it can be stated that as demolition and construction work progress, the wind microclimate conditions within and around the Outline Application 4 area of the Site are expected to gradually transition between those of the baseline and the final completed Outline Application 4. The wind microclimate conditions are therefore not expected to exceed the ones of the completed Outline Application 4 provided that the landscaping scheme and the wind mitigation measures are introduced prior to the development itself being fully constructed.
- 6.95 The potential effects during various stages of construction will vary and are likely to be of lesser magnitude than those that will be experienced once Outline Application 4 has been completed. Additionally, demolition and construction activities are less sensitive to wind conditions and a Construction Environment Management Plan (CEMP) would typically be implemented to protect construction workers. Access to the Site of Outline Application 4 will also be restricted via perimeter hoardings. The presence of cranes on-site is unlikely to present a significant impact on wind conditions at the Site of Outline Application 4 due to the typical open-truss type construction of the frame used, which is relatively 'transparent' to wind and thus unlikely to generate downdrafts. Any undesirable wind conditions during construction are temporary and as construction of Outline Application 4 proceeds, the wind conditions at the Site of Outline Application 4 would gradually vary, approaching those of the completed development, the assessment of which is covered in the next section.

The Completed and Operational Development

- 6.96 With the introduction of Outline Application 4, a few exceedances of the pedestrian *safety* criteria occur at localised areas around Plots RB01, RB10, RB12b and RB17. However, with the introduction of the illustrative landscaping strategy and wind mitigation measures, these exceedances are fully mitigated.
- 6.97 It should be noted that the illustrative landscaping scheme and wind mitigation measures assessed were intended to demonstrate a viable option in terms of alleviating exceedances of the pedestrian *safety* and *comfort* criteria. It is likely that the final landscaping and wind mitigation scheme will be different from the one assessed, and its effectiveness will be verified as part of further assessments when the relevant plots of the current Outline Application 4 are brought forward for detailed application.

Cumulative Effects

- 6.98 A quantitative cumulative assessment of the impacts of the Proposed Development during demolition and construction has not been included for the same reasons as stated above. The cumulative wind microclimate conditions are therefore not expected to exceed the ones of the completed cumulative scenario outlined below.
- 6.99 With the introduction of the completed Outline Application 4 and the cumulative schemes, including the landscaping strategy and wind mitigation, wind conditions at all receptors within and around the Site of the development are *safe* and suitable, in terms of wind *comfort*, for the intended use.
- 6.100 When considered alongside the SRF, the aerodynamic effects generated by a development is dependent on its massing and has a limited radius of influence, therefore only developments that are within relative proximity of Outline Application 4 are likely to result in significant In Combination Effects. As further developments emerge within the SRF (particularly within the New Town and Vauxhall Gardens neighbourhoods), it is expected that the wind conditions within the Site of Outline Application 4 will become calmer due to increased shielding from prevailing and less-prevailing winds.

Socio-economics

The Works

- 6.101 The demolition and construction phase would generate around 4,640 net additional temporary construction jobs over the construction period, of which 1,362 could be taken up by residents of MCC. These temporary construction jobs would generate £56.8 million in GVA to the regional economy (of which £16.7 million would be generated in the MCC District economy).

The Completed and Operational Development

- 6.102 It is estimated that the Proposed Development would result in a maximum additional population of 6,066 residents. The Proposed Development would also expect to support up to 657 net additional jobs regionally, of which 193 would be located in MCC. This would generate up to £24.2 million GVA at the regional level (of which £11.1 million would be generated in the MCC district economy).
- 6.103 The completed and operational Proposed Development would give rise to an increased population within the local areas, resulting in total increased amount of Council Tax receipts. Additionally, the Proposed Development itself would directly contribute to the housing delivery targets of the district area. These effects were judged to be beneficial at the district level. Accordingly, no mitigation would be required.
- 6.104 It is considered that there is sufficient capacity within existing primary and secondary education facilities to provide for the additional demand for services that the new population on the Site would create. However, some of the potential effects of this will be partly offset in the form of education floorspace for a primary school as part of the provisions in Application 4, however this forms part of a 'swing plot' which could be used as either a primary school or additional residential units.
- 6.105 The completed and operational Proposed Development would give rise to an increased population within the district area which would require access to open space facilities and play space for children. However, a significant amount of open space is being brought forward which is anticipated to more than mitigate any negative effects.

Cumulative Effects

- 6.106 Considering the impact of the Proposed Development in conjunction with the identified Cumulative Schemes, it is expected that there would be beneficial effects in terms of employment generation and associated GVA, household expenditure impacts, Council Tax receipts and housing delivery. It has been assumed that population related impacts (e.g. the impact of the Proposed Developments on social infrastructure services such as schools and open space) would be adverse effects.
- 6.107 Whilst information on the build cost estimate (and hence the temporary construction employment to be created) was not readily available for all but a small number of Cumulative Schemes, based on the scale of the 26 Cumulative

Schemes in terms of number of new residential units and the scale of new commercial space and using professional judgement, it is estimated that the construction employment generated will be significant and beneficial to the district and regional economies.

- 6.108 It is estimated that the temporary employment associated with the Demolition and Construction of the Proposed Development and the 26 Cumulative Schemes would generate a combined positive GVA to the district and regional economy which is significant and beneficial.
- 6.109 It is estimated that the 21 Cumulative Schemes which include employment generating floorspace would support between 3,000 and 6,500 jobs across Manchester and Salford, of which between 3,000 and 6,000 would be generated by Proposed Developments within the boundaries of Manchester City Council and up to 500 would be generated by Proposed Developments within the boundary of Salford City Council. Combined with the estimated 106 - 193 net additional jobs generated at the Proposed Development (at the district level) gives an estimated total of approximately 3,106 – 6,693 jobs. This is considered to be significant and beneficial.
- 6.110 Based on the regional average GVA of £52,007, it is estimated that the employment to be supported by the 26 Cumulative Schemes would generate a minimum GVA to the district economy of approximately £160 million annually. When combined with the Proposed Development, this will generate a minimum GVA to the district economy of approximately £166 million annually. This is considered to be significant and beneficial.
- 6.111 The cumulative effect would result in the delivery of up to 5,039 new residential units. Along with the up to 3,250 units at the Proposed Development, this would result in a total of 8,289 units. The Manchester Housing Strategy outlines a target housing trajectory (2022-2032) of 3,600 additional dwellings per annum. Assuming the identified cumulative schemes and the Proposed Development come forward in this time period, this equates to up to 230% of MCC's annual target. This is considered to be significant and beneficial.
- 6.112 The net additional household expenditure generated by the new residential population of the 20 Cumulative Schemes (which have a residential component and are located within MCC's boundaries) would be around £68 million per annum, with a further £44.1 million per annum generated by the Proposed Development. This is considered to be significant and beneficial.
- 6.113 It is estimated that the 8,289 residential units would generate Council Tax receipts to MCC of approximately £15.2 million annually. This is considered to be significant and beneficial.
- 6.114 It is estimated that the Cumulative Schemes would generate around 1,327 primary aged students and 1,064 secondary aged students. Combined with the Proposed Development, it is therefore estimated that the new population yield with the Cumulative Schemes with a residential component would be approximately 1,727 primary school aged pupils and 1,364 secondary aged pupils. Primary and secondary schools specifically within 1 and 3 miles, respectively, of the centre of the site are unlikely to be able to accommodate this level of pupil growth.

Even with the potential provision of a 1FE primary school within the swing plot as part of Application 4, this will not be able to provide adequate mitigation across all Proposed Developments.

- 6.115 However, the above assessment does not factor for any mitigation delivered as part of the Identified Committed Schemes, given that this information is largely not publicly available and, in some cases, is yet to be fully agreed. As such, it is expected that these issues would necessarily need to or would have been considered by MCC in the determination of the planning application in the case of each Identified Committed Scheme. It is therefore assumed that any required mitigation to minimise adverse effects on education provision would be considered on a case-by-case basis with specific education-related mitigation provided to counteract any negative effects from each of the individual Identified Committed Schemes. As such, it should be concluded that the Application in combination with the Identified Committed Schemes would not have an effect on education capacity beyond the specific effects of Application 4 on its own.
- 6.116 Given Application 4 seeks permission for up to 3,250 dwellings, the remainder of the SRF would be expected to yield approximately 11,750 units. In addition to this, it is anticipated that a significant quantum of commercial space will also come forward, along with leisure and community uses. Considered in addition to the Cumulative Schemes, there will therefore be around 19,311 new residential units.
- 6.117 In considering Application 4 along with Identified Committed Schemes and the SRF, there will likely be a number of beneficial socio-economic effects. Whilst effects cannot currently be quantified, it is expected that there will be beneficial effects arising from the support for new local temporary and permanent employment, increased gross value added and beneficial contribution towards housing delivery targets, Council Tax and enhanced residential expenditure effects.
- 6.118 Given the vast number of residential units, there may however be adverse effects upon the delivery of social services such as education. Whilst Application 4 includes the potential provision of a primary school within the Proposed Development, this school is unlikely to be able to accommodate the children yielded across the whole SRF – in conjunction with children also yielded from Proposed Developments identified as Cumulative Schemes. Furthermore, given the school remains within the swing plot – this could place further constraints upon the delivery of primary education in the local area.
- 6.119 It can be expected that further Proposed Development of the SRF will be required to assess its own effects on school capacity and primary health care to make provision as necessary in agreement with MCC. On this assumption, it is likely that significant cumulative effects with the SRF are unlikely.

Health and Wellbeing

The Works

- 6.120 The Health and Wellbeing assessment of the Outline Application 4 Development has shown that there are no identified significant adverse effects during the construction and demolition phase.
- 6.121 Through appropriate monitoring and management processes, the demolition and construction phase of the Outline Application 4 Development will unlikely lead to any significant Health and Wellbeing effects. The construction phase represents investment in the local area which will support numerous jobs over a prolonged period of construction activity. This will provide a range of economic benefits to MCC and the North West region more broadly.

The Completed and Operational Development

- 6.122 The Health and Wellbeing assessment of the Outline Application 4 Development has shown that there are no identified significant adverse effects during the operational phases.
- 6.123 The mixed-use nature of the Outline Application 4 Development, along with its commitment to providing a range of different housing typologies and tenures will provide significant benefits to the new residents expected to reside at the Outline Application 4 Development once complete and operational, along with existing neighbouring residents. The provision of social infrastructure uses will also be beneficial, not only to new residents but existing communities close to the Site.
- 6.124 Overall, the Outline Application 4 Development will promote active travel, activate a disused space to enhance perceptions of community safety, provide spaces for the sale of locally grown and healthy foods and incorporate links with other future developments and existing communities. Non-residential uses included within the Outline Application 4 Development will also support local employment opportunities, along with options to enhance health outcomes such as fitness and leisure uses which also foster a sense of community whilst improving physical health.
- 6.125 Importantly, the proximity to open space will also enhance the amenity of the area, whilst also being beneficially used to create a sustainable and resilient development which can proactively respond to climate change and the potential effects of this.

Cumulative Effects

- 6.126 Through the implementation of relevant mitigation measures identified in the Air Quality, Noise and Vibration and Transport and Access sections – along with the implementation of a CEMP within each Cumulative Scheme planning application, no significant cumulative effects in relation to air quality, noise and neighbourhood amenity is expected.

- 6.127 The construction phases of the Cumulative Schemes will also enable a range of employment opportunities to be supported locally. Importantly, as there are numerous large-scale developments proposed – it is likely that a strong pipeline of construction work will be supported, therefore providing local job security. As assessed in Socio-economics sections, it is assumed that the Outline Application 4 Development in conjunction with the Cumulative Schemes will have a beneficial effect.
- 6.128 In relation to the use of resources, through the implementation of relevant measures identified in each CEMP as conditioned by each planning application, there is unlikely to be any cumulative effect with regards to health and wellbeing if processes to reduce the use of resources are upheld.
- 6.129 An approximate number has been arrived at which estimates that all 20 residential developments will include a net uplift of around 7,561 residential units. In combination with the Outline Application 4 Development, it is estimated that around 10,811 residential units will be delivered. Given that MCC requires that a portion of these meet accessibility standards and are affordable homes, this will provide a range of housing types for different people within the local community, a beneficial effect.
- 6.130 Using the standard approach of one FTE GP for every 1,800 patients **Error! Bookmark not defined.** – it is presumed that the Outline Application 4 Development in conjunction with the Cumulative Schemes would yield around 23,229 persons. This would therefore require around 13 FTE GPs to serve this new population. The Outline Application 4 Development potentially includes provision for health centre uses. This could provide enough space for around 10 GPs, as assessed within this Chapter. Taking this into consideration, there would still likely be a need for an additional 3 GPs to serve all Cumulative Schemes. Some of the Cumulative Schemes identify that D1 floorspace may come forward. This therefore means that there is the potential for some of this floorspace to be used by a GP practice, which may assist with capacity constraints. Additionally, it is likely that some of the future residents of these schemes may already be registered patients at the GP practices assessed within the one-mile radius. If this is not the case, there is also a likelihood that some may remain registered at a practice further afield. Capacity constraints and wider estate planning will likely be reviewed by the NHS and MCC as developments come forward in the local area in the coming years, which may also alter as some of the Cumulative Scheme's progress to reserved matters applications. These effects will also be considered by MCC in the determination of each planning application.
- 6.131 Furthermore, there will be additional strains upon dental services which were identified to be currently over capacity within the local area. All dental practices within one mile of the Site were reviewed within this Chapter, meaning many of the Cumulative Schemes will also be seeking to rely upon these services. Much like the provision of GPs, it is possible that some of the D1 floorspace could be used for a dental practice.
- 6.132 The additional residential population estimated across all cumulative schemes may place pressure upon existing open spaces and their use by existing and future residents, however there will likely be some new open space provision included across the cumulative schemes, a beneficial effect.

- 6.133 Given that the Cumulative Schemes are within close proximity to Manchester city centre and the employment, education and leisure uses it supports – it is likely that active travel will be encouraged and supported amongst these schemes. For some, the additional populations in this region will attract public transport improvements which will further enhance accessibility and active travel uptake.
- 6.134 The activation of space across the local area – included areas of land that are currently disused, will help to enhance natural surveillance. The fact that many of the schemes are mixed-use will also promote a range of different uses in the area, ensuring that different activities operating at different times of the day will enhance perceptions of community safety.
- 6.135 The Cumulative schemes, including the Outline Application 4 Development, will support a range of non-residential uses. This may incorporate the sale of healthy food and where possible, support for local farmers markets.
- 6.136 It is estimated that the 21 Cumulative Schemes which include employment generating floorspace would support between 3,000 and 6,500 jobs across Manchester and Salford, of which between 3,000 and 6,000 would be generated by developments within the boundaries of Manchester City Council and up to 500 would be generated by developments within the boundary of Salford City Council. Combined with the estimated 106 - 193 net additional jobs generated at the Outline Application 4 Development (at the district level) gives an estimated total of approximately 3,106 – 6,693 jobs.
- 6.137 In considering Outline Application 4, the Cumulative Schemes and the SRF, there will likely be a number of beneficial health and wellbeing effects arising from the support for new local employment, the development of communities that can be lived in by people of a wide range of physical abilities and ages, the promotion of leisure and community uses close to home to encourage social cohesion and to enhance mental and physical wellbeing, a reduction in crime potential and the resilience of homes to climate change impacts.
- 6.138 Given the vast number of residential units, there may however be adverse effects upon the delivery of social services such as in education or healthcare. Whilst Outline Application 4 includes the potential provision of a primary school within the Outline Application 4 Development, it is unlikely that this school could accommodate the children yielded across the whole SRF – in conjunction with children also yielded from Outline Application 4 and the developments identified as Cumulative Schemes.
- 6.139 This remains the same when considering primary healthcare provision, for example through the delivery of a health care centre within Outline Application 4. Given the number of residential units within the SRF – there would likely be a need for additional GP and dental clinic capacity across the SRF to accommodate the new residential population in conjunction with the identified Cumulative Schemes.

Climate Change

The Works

- 6.140 The demolition and construction phase would result in estimated net GHG emissions of 159,231 tCO₂e,
- 6.141 A Site Waste Management Plan would be prepared for Application 4 and would set out management / control measures to ensure that waste generated from carrying out the Works is kept to a minimum.
- 6.142 Recommendations to minimise the whole-life embodied carbon emissions and construction transport emissions have also been provided and can be found in **ES Volume 2, Chapter**.
- 6.143** With these mitigation measures, the effects from whole life embodied emissions (including construction transport) not significant.

The Completed and Operational Development

- 6.144 The completed and operational phase would result in estimated net GHG emissions of 236,829 tCO₂e over the lifetime of the Application 4 development. These emissions were considered unlikely to impact the UK Government's ability to meet the relevant UK Carbon Budget.
- 6.145 The highest energy efficiency standards should be aimed for and addressed (budget permitting) at the earliest stages of design and designing for expected performance used as a cornerstone of sustainability principles. Solutions should focus on maximising the electrical efficiency (lighting), designing in passive measures (passive ventilation and natural daylight maximisation), and facilitating the use of low carbon plant by end users through futureproofing. These measures are mentioned in Sustainability Strategy, Environmental Standards Statement and Energy Statement and should be followed thoroughly. Additionally, some of the measures around efficient lighting can be included in the specification documents and tender documents.
- 6.146 A Travel Plan covering all uses within Application 4, setting out measures and enhancements to use non-car modes. This will be based upon the Framework Travel Plan submitted for the planning application.
- 6.147 Electric Vehicle parking provided for residents, in line with relevant local and national standards and the aspirations within the SRF.
- 6.148 The effects of the operational building are not significant. The effects from operational transport emissions are moderate adverse, however, are reduced after implementation of mitigation measures.
- 6.149 It is, however, recommended to consider the good practice measures in the further design stages, to help reduce the risk of new significant adverse effects being identified as schemed data becomes more granular.

Cumulative Effects

- 6.150 Cumulative effects with committed schemes and SRF have not been assessed for the proposed Application 4 development, as GHG emissions are assessed in the context of the global climate being the main receptor.

7. Application 5 - What are the Likely Environmental Effects and How Would They be Minimised?

Townscape and Visual

The Works

7.1 Various mitigation measures will be implemented during the Works, including:

- Hoardings being erected around the perimeter of the Site, so that the visual effects of demolition will be minimised from adjoining pedestrian routes.
- The site compound will be carefully positioned within the Site to avoid unnecessary visual effect to adjacent receptors.
- Contractors and their subcontractors would be expected to maintain a tidy site and where practical, to operate a 'just-in-time' policy for the delivery and supply of materials for the works. Excavated materials would primarily be removed from Site via heavy good vehicles (HGVs) for transportation to nearby construction or disposal sites.
- As part of the Construction Environment Management Plan (CEMP), procedures and management measures to ensure the protection of ecological resources, including habitats (where retained) and protected species will be included. All trees that are to be retained on-Site will be subject to protective measures.

Effects on Townscape Character

7.2 During the Works, significant adverse effects to the following Townscape Character Areas (TCAs) are expected:

- TCA 1: Lower Irk Valley
 - This is due to demolition works within the Site resulting in physical changes to parts of the townscape within the Lower Irk Valley (TCA1). The parking/warehouse unit within the site (off Dantzie Street) will be demolished, as well as demolition of several walls within the Site. Construction activities will result in direct changes to the townscape character locally within the Site and indirect changes to the perceived character of the wider TCA outside the Site. Changes to townscape character will occur as a result of the construction works occurring through the phased build out duration.
- TCA 7: Collyhurst
 - Demolition and construction activities with the Site will result in no direct changes to the townscape character of TCA 7: Collyhurst and result only in indirect changes to its perceived character through views of the construction works occurring in its townscape context.

Effects on Viewpoints

- 7.3 During the Works, significant adverse effects to the following Viewpoints are expected:

Effects on Conservation Areas

- 7.4 No significant effects are expected to Conservation Areas in relation to the Works.

The Completed and Operational Development

- 7.5 Operational phase mitigation measures are incorporated into the design of Application 5, as described in Section 4 and in the Design and Access Statement, which is submitted as part of the planning application.
- 7.6 The operational development incorporates high quality buildings and places, which are fundamental to achieving well-designed places that are healthy, greener, enduring and successful in practice. Application 5 demonstrates embedded 'good design', by providing a setting for a diverse range of uses and activities; buildings, landscape and infrastructure that are likely to endure and evolve incrementally; and a richness of experience, including visual, such as views across the landscape of the Irk Valley or the detail of a well-design building.

Effects on Townscape Character

- 7.7 During the completed and operational phase, significant beneficial effects to the following Townscape Character Areas (TCAs) are expected:
- TCA 1: Lower Irk Valley
 - Application 5 is likely to alter the character of the area from a generally formerly industrial area, featuring land uses including industrial buildings and vacant plots, to an area of high-density residential development, featuring areas of green infrastructure.
 - TCA 7: Collyhurst
 - Although the larger vertical scale of plots within Application 5 may appear to extend Manchester city centre along the Lower Irk Valley towards this TCA in its backdrop, changes associated with Application 5 will relate well to the character and scale of development within the evolving city centre skyline and introduce built elements of high design quality compared to the existing townscape condition. Effects are also considered to reduce and become not significant on the perceived character of the wider TCA to the north and east with increasing distance from the Site.

Effects on Viewpoints

- 7.8 Significant effects are expected in relation to the following viewpoints:
- Viewpoint 1: St Michael's Flags and/ Angel Meadow Park (significant neutral)

- These effects arise from the sensitivity of users of the greenspace and residents, combined with the change arising from the scale and massing of buildings within Application 5, and the increased visual enclosure created by their introduction into the view.
- Viewpoint 6: Rochdale Road (Railway Bridge) (significant beneficial)
 - The full extent of Application 5 will be appreciated in this view, with all four towers visible to the south-west. It is likely to alter the view of the city centre skyline and will extend the tall building scale of the city centre out along the Lower Irk Valley towards the viewpoint.
- Viewpoint 8: Sand Hills Park, Collyhurst (significant beneficial)
 - The introduction of Application 5 into the view to the south-west will alter the view of the city centre skyline and extend the tall buildings of the city centre out along the Lower Irk Valley towards the viewpoint.
- Viewpoint 9: Dalton Street (significant beneficial)
 - It is likely to be subject to a high level of change due to the vertical scale and position of buildings within Application 5, primarily the close proximity Tower 5. This will alter the view of the city centre skyline and extend the tall buildings of the city centre out along the Lower Irk Valley towards the viewpoint, providing a beneficial effect on the view experienced mainly by local residents and road users on Dalton Road.
- Viewpoint 17: Rochdale Road (moderate beneficial)
 - The existing townscape in the view is of low value and of relatively lower visual amenity and condition, being dominated by mixed uses, commercial units and trading estates. Application 5 is likely to improve the visual context to the north-west of Rochdale Road on approach to the city centre and extend the emerging character of regeneration around New Cross.

Effects on Conservation Areas

- 7.9 No significant effects are expected to Conservation Areas in relation to the completed and operational phase.

Cumulative Effects

- 7.10 When Application 5 is assessed alongside cumulative developments, cumulative effects tend to be further 'mitigated', because Application 5 represents a continuation of the effect that will be established by approved schemes, which appear to extend the city centre skyline northwards towards the Lower Irk Valley. In the context of the cumulative schemes, Application 5 will appear visually more cohesive and connected with the taller building scale of the emerging city centre. The scale of towers proposed within NT02-NT04, including Tower 1 (34 storeys), Tower 4 (24 storeys) and Tower 5 (28 storeys), which represents the tallest buildings within Application 5, can be noted as being comparable in height and scale to committed schemes nearby at the Gas Works (3) and Victoria Riverside (7).

- 7.11 The materiality of buildings within Application 5 will respond to its surrounding context, and will integrate the proposal with the surrounding townscape. Across plots NT02 and NT03 at the southern, city centre end of the Site, the towers will be finished with anodised aluminium, and will feature full-height windows, which will respond to existing buildings and development taking place across the emerging city centre to the south. Across plot NT04, at the north-eastern end of the Site, the predominant material for the towers will be brick, including a colour palette of red, yellow and buff. This will respond to the historical typology of red brick buildings which are prevalent across the wider Study Area, as well as responding to more modern red-brick residential development occurring within Collyhurst and Miles Platting.

Ecology and Nature Conservation

The Works

- 7.12 The assessment identified seven locally important ecological features, these were: River Irk corridor, dense scrub, scattered broadleaved trees, roosting bats, bat foraging/commuting, breeding birds and fish.
- 7.13 The potential for disturbance effects and unintended habitat loss or damage resulting from demolition and construction activities were identified through the assessment. The majority of these can be avoided through mitigation measures including the production of a CEMP, LEMP, ISMS and lighting strategy.
- 7.14 No residual effects during the demolition and construction phase have been identified for the Application 5 site.
- 7.15 Mitigation measures have been proposed to protect:
- The River Irk
 - Dense scrub
 - Scattered trees
 - Roosting bats
 - Bat foraging and commuting
 - Breeding birds
 - Fish

The Completed and Operational Development

- 7.16 The potential for further disturbance effects and unintended habitat loss or damage resulting from increased public pressure during the operational phase was identified through the assessment. This can be avoided through mitigation measures including the LEMP, ISMS and lighting strategy.
- 7.17 Habitat loss has been minimised as far as is possible, but some loss is unavoidable. Replacement planting will occur (as set out in the proposed Landscaping Strategy). This results in no negative significant residual impacts from habitat loss.
- 7.18 Mitigation measures have been proposed to protect:
- Foraging/commuting bats
- 7.19 No residual effects during the operational phase have been identified for the Application 5 site.
- 7.20 A standalone BNG assessment has been undertaken including a metric for Application 5 only which indicates a net gain of 26.86% for area-based habitats within the Application 5 area only. The above demonstrates that for the full

planning application for Application 5, well in excess of 10% in biodiversity units is achievable. This standalone document is submitted in support of the planning applications.

Cumulative Effects

- 7.21 As anticipated given the inner-city location of this application, the Sites considered in this cumulative assessment describe their baseline conditions to be generally of low ecological value, dominated by buildings and hardstanding and some with small areas of grassland or ephemeral vegetation. The majority did not provide suitable bat or bird roosting habitat and in the few instances where bat roosting was confirmed these were small roosts of common species and mitigation would be provided on site. Similarly, bird and bat foraging habitat was limited.
- 7.22 Due to the heavily developed nature of the landscape, the potential for fragmentation or disturbance effects to accumulate is limited to only those sites close to this application and only where they contain features of relevance to the habitats and species within this application. No inter-project or intra-project cumulative effects are predicted to arise.
- 7.23 Assessment of the Development project i.e. Application 5 and the wider SRF, is provided via a high level combined assessment. It is predicted that the significance effect from the cumulative losses of bat foraging and commuting habitat and breeding bird habitat could increase depending on the timing and extent of habitat removal. However, given the commitments within a Northern Gateway Biodiversity Plan, it is likely there would be an overall positive effect on quality/quantity of bat foraging and commuting habitat and quantity/quality of breeding bird habitat in the long-term.

Cultural Heritage (including Archaeology)

The Works

- 7.24 The assessment has identified that there are no significant residual effects to above ground heritage assets from Application 5.
- 7.25 There is low potential for buried heritage assets of prehistoric, Roman and medieval periods within the Application 5 site due to subsequent post-medieval and industrial development which is likely to have removed any earlier deposits. Should remains from this date survive, they would likely be of low value as they would be compromised by poor preservation due to later development. As a result, no significant effects have been identified.
- 7.26 There is high potential for post-medieval remains within the Application 5 site, associated with Flag Row Terraced Housing, and other unmarked housing shown on historic Ordnance Survey mapping. The terraced housing would be of low value as it would be compromised by poor preservation due to demolition. As they would be totally altered by demolition and construction phases, without mitigation this would have a minor effect.
- 7.27 The area of NT02 was subject to excavation in 2019, where substantial remains of former 19th century glassworks were uncovered. Because of the good survival of remains here, this indicates that further archaeological remains could be located within the adjacent areas of NT03 and NT04.
- 7.28 The area of NT03 and NT04 cannot be evaluated at this stage due to the presence of extant structures and ground level changes. As confirmed in the Scoping Response from MCC's Archaeological Advisor, the required evaluation will be undertaken as a condition of the planning application consent. The aim of the evaluation would be to determine the presence, importance, extent, date, and level of survival of the buried heritage assets, and to inform a mitigation strategy which would be implemented either prior to or during the construction stage.
- 7.29 Where below ground assets cannot be preserved *in situ*, a programme of archaeological excavation would be undertaken to ensure the remains are preserved in record. This could be in the form of open area excavation prior to construction and/or watching brief during construction and would reduce the impacts but not completely remove them.

The Completed and Operational Development

- 7.30 Once the Proposed Development has been completed, no further ground disturbance will occur as part of the Proposed Development. There will also be no setting effects on any heritage assets surrounding the Proposed Development. No further mitigation is therefore required.

Cumulative Effects

- 7.31 No significant cumulative effects are anticipated in relation to cultural heritage during the demolition and construction, or the completed and operational phase.

Ground Conditions

The Works

- 7.32 The same mitigation measures outlined in Section 6 are assumed to be applied.
- 7.33 As with Application 4, impacts can be mitigated against through embedded mitigation, good working practices and the use of an appropriate CEMP. No significant effects on construction/groundworkers, third party neighbours or groundwater in superficial aquifers, bedrock aquifers and surface waters are therefore anticipated.

The Completed and Operational Development

- 7.34 Operational effects have been scoped out of the assessment as it is assumed that the Demolition, Groundworks, and Construction Phase will ultimately create suitable development platforms for follow-on development. Furthermore, as the Proposed Development is residential-led, additional mitigation measures to mitigate the risk of future contamination during operation are unforeseen.

Cumulative Effects

- 7.35 No significant cumulative effects on construction works or controlled waters in the River Irk, bedrock and superficial aquifers were identified as embedded mitigation will be adopted through the application of the planning regime and contaminated land regime (if applicable). The same applies when also considering the SRF.
- 7.36 The assessment of cumulative effects related to the Completed and Operational Development of Application 5 and neighbouring development sites is not considered for the same reason as stated above.

Flood Risk and Drainage

The Works

- 7.37 The measures to be included in a CEMP identified below will be sufficient to minimise the risk of potential impacts to the water environment to a tolerable level. Any works within the channel or within 8 m of the River Irk will require a Flood Risk Activity Permit from the EA. The permitting process should ensure that suitable measures are in place during the demolition and construction phase to manage flood risk and environmental impact.
- 7.38 Measures to be included within the CEMP address the following issues:
- Sediment and pollution control
 - Vegetation clearance
 - Timing of works
 - Managing flood risk
- 7.39 The majority of potential impacts associated with Application 5 will be mitigated through the implementation of a CEMP.
- 7.40 The mitigation measures identified for both the demolition and construction will significantly reduce the risk to the receptors that have been identified. All residual effects of Application 5 on identified receptors have been assessed as not significant.

The Completed and Operational Development

- 7.41 The following embedded mitigation measures are proposed as part of the completed development:
- The built development will sit outside of the flood extent for the 1 in 100 year storm event due to the creation of compensatory flood storage;
 - Less vulnerable development such as commercial units located on the lower ground level will be constructed using flood resilient design with a waterproof external construction to a level of the 1 in 100 year storm event plus 45% climate change, plus 150mm freeboard;
 - More vulnerable developments such residential buildings located on the lower ground level will be constructed using flood resilient design with a waterproof external construction to a level of the 1 in 100 year storm event plus 45% climate change, plus 150mm freeboard;
 - No residential development shall have a finished floor level lower than the 1 in 100 year storm event plus 45% climate change plus 150mm freeboard;
 - The surface water drainage will be designed such that the rate of surface run-off from the Site is no greater than the existing scenario and as such will not result in an increase of flooding elsewhere.

- 7.42 No additional mitigation is required as all mitigation is embedded in the design of the Proposed Development.
- 7.43 All additional mitigation recommended should be adopted to reduce the potential impact from the Proposed Development. When mitigation is applied, there are no significant residual effects.

Cumulative Effects

- 7.44 During both the demolition and construction phase and operational phase, no effects on the River Irk, River Irwell, Water Utilities, Nitrate Vulnerable Zone, developments and construction workers would be significant. The same remains true when also considering the SRF.

Transport and Access

The Works

- 7.45 The worst-case demolition and construction vehicle trips for the Proposed Development would be 216 construction vehicles per day (108 arrivals, 108 departures), consisting of 50% LGV trips and 50% HGV trips. This would occur in Q1 2026.
- 7.46 There would also be 246 employee vehicles per day (123 arrivals, 123 departures). However as parking for staff involved in construction would not be provided on the Site, these would disperse across multiple parking locations in the wider area, and have not therefore been considered within the table below.
- 7.47 No further assessment was required, as the Institute of Environmental Management and Assessment (IEMA) threshold of a 30% in traffic on a given road would not be exceeded.
- 7.48 Although no adverse effects are identified for the construction phase, additional mitigation will comprise the implementation of standard practice management and control measures within the Construction Environmental Management Plan and Construction Logistics Plan to reduce the potential impacts from demolition and construction traffic. These measures would comprise the following:
- Demolition and construction traffic routing and contractor awareness of the selected routes. The selected routes at this time would seek to avoid the city centre and residential areas, i.e. using Collyhurst Road to access the A6010 and the wider highway network;
 - Site traffic control, particularly at peak hours;
 - Use of off-site holding areas or consolidation centres, if required;
 - Site access and egress management e.g. use of traffic marshals, wheel washing facilities;
 - Vehicle loading and unloading on-site as far as possible;
 - Good housekeeping measures; and
 - Early agreement of road and footpath closures and associated communication to receptors within the study area.

The Completed and Operational Development

- 7.49 The Proposed Development would in summary comprise the following:
- Creation of a new network of pedestrian and cycle friendly streets and public realm within and in the vicinity of the site red line boundary;
 - Provision of on-site facilities to minimise the need for travel off-site for purposes such as local shopping;

- Significant changes to Dantzic Street including narrowing of the carriageway and improved walking and cycling routes, to improve active travel conditions whilst not preventing car movement;
- Cycle parking provided in public realm areas, and associated secure and indoor cycle parking for residents and visitors in line with MCC and TfGM standards. Cycle parking will be provided to encourage the use of active travel to and from, and within the Application 5 site. The level of provision proposed is 1 cycle space per residential property (1,551 cycle spaces).
- Disabled parking in line with relevant MCC and TfGM standards;

7.50 Application 5 proposes 10% car parking for residents of the development totalling 155 on site and off site car parking spaces comprising:

- 10% car parking for residents of the development totalling 156 on site and off site car parking spaces comprising:
 - 7% car parking for residents of the development on site and within the podiums and on Dulwich Street totalling 104 car parking spaces. Of these 104 car parking spaces, 10 are accessible which equates to 6.5% of the overall car parking proposed by the proposed development (156 car parking spaces)
 - 3% car parking for residents of the development will be off site in a location within the outline planning application area to be identified, totalling 52 car parking spaces. It is proposed that the location, design and specification of this off site car parking area will be secured by condition. There will be a temporary, secure and well-lit car park provided until the build out of the permanent solution as part of the outline application.
- 13 car parking spaces on site are proposed at Dulwich Street, Dantzic Street and Dalton Street for visitors and users of the non-residential uses proposed by the development, including 4 accessible on-street spaces.

7.51 No significant effects are predicted in relation to severance, driver delay, pedestrian delay and amenity, public transport, and accidents and safety.

Cumulative Effects

7.52 The relevant cumulative schemes were inherently assessed as part of the future baseline scenario, and thus included within all assessments which build on this future baseline.

7.53 With the wider SRF development being located north and east of the application 5 site, and assuming the same principle of construction traffic is adopted (i.e. directed towards the key radial and orbital roads rather than through the city centre) it is not anticipated there would be a significant construction traffic impact from the SRF on the traffic network.

- 7.54 The overall principles of the SRF are in line with those adopted within applications 4 i.e. promoting best-practice walking and cycling infrastructure and high quality public transport links. The SRF area as a whole benefits from being in an accessible location and on-site facilities will improve this and reduce the need to travel further.
- 7.55 As such, no significant cumulative effects have been identified.

Air Quality and Dust

The Works

- 7.56 The mitigation / enhancement measures required are the same as those described in Section 6.
- 7.57 After the implementation of mitigation measures and good site practice, the residual effects of dust and PM₁₀ generated by construction activities would not be significant.
- 7.58 After the implementation of mitigation measures and good site practice, the residual effects of emissions to air from construction vehicles and plant on local air quality would not be significant.

The Completed and Operational Development

- 7.59 The mitigation / enhancement measures required are the same as those described in Section 6.
- 7.60 NT02-NT04 Detailed Application 5 is predicted to have an adverse (but not significant) impact on local air quality, on the basis that no exceedances of the statutory air quality objectives will occur. However, best practice design and emissions management measures are recommended to ensure the development is compliant with the policies contained within the Manchester Core Strategy and the NPPF.

Cumulative Effects

- 7.61 With the implementation of best practice mitigation measures outlined above, the residual cumulative effects during the Works and the operational phase will not be significant.

Noise and Vibration

The Works

- 7.62 With respect to construction noise and vibration, a number of best practice mitigation measures have been presented to minimise construction noise and vibration levels, for incorporation into the proposed Construction Environmental Management Plan (CEMP).
- 7.63 The assessment of construction traffic noise has identified that level changes on local road traffic routes range between +1.2 and +2.8dB. Such level changes are not sufficient to give rise to any significant effects, or the need for additional mitigation.

The Completed and Operational Development

- 7.64 The assessment of operational phase development generated road traffic noise has identified the highest level change on the surrounding network due to both Application 5 and other committed developments would be +1.6dB. in the future opening year of 2029 Such level changes are not sufficient to give rise to any significant effects, or the need for additional mitigation.
- 7.65 The assessment has included the determination of appropriate limits for the control of mechanical/fixed plant. These limits have been set based on the results of the baseline noise survey, at a level sufficiently low that significant effects would not arise. It has been demonstrated how compliance with such limits could be ensured with the use of an appropriate planning condition.
- 7.66 The assessment of potential noise impact on the noise sensitive aspects of the scheme has identified that across the residential development areas, applicable internal noise level criteria can be achieved with due consideration to building fabrication and scheme layout design considerations.
- 7.67 With these measures in place, the resulting impact is identified to be low, and sufficiently controlled such that significant effects would not arise.

Cumulative Effects

- 7.68 With the implementation of best practice mitigation measures, it is unlikely there will be significant cumulative noise effects as a result of the combination of the Red Bank Outline Application 5, the SRF and cumulative developments. Therefore, it is anticipated that the residual cumulative effect will, at worst, remain as reported for Application 5, i.e. adverse effects ranging from negligible to major. For NSR7 and NSR8, the effect is considered to be significant.
- 7.69 Taking into consideration the distances between the existing and future noise sensitive receptors, the nearest development plot within each phase, the SRF and cumulative developments, it is unlikely the vibration generating activities will result in perceptible in-combination vibration effect. Therefore, it is anticipated that the cumulative

effect will, at worst, remain as reported for Application 5, i.e. adverse effects ranging from negligible to moderate. For NSR7, the effect is considered to be significant.

- 7.70 At the time of writing, insufficient information was available regarding the volume and distribution of traffic that could be generated by the SRF should these developments be brought forward during the construction phase of the Proposed Development. Therefore, it is not currently possible to determine the potential changes in road traffic noise associated with Applications 5 and cumulative developments in-combination with the SRF.
- 7.71 With the implementation of best practice mitigation measures and adherence to plant noise limits, it is unlikely there will be significant cumulative noise effects as a result of the combination of the Application 5, the SRF and cumulative developments. Therefore, it is anticipated that the residual cumulative effect will, at worst, remain as reported for Application 5, i.e. negligible effect.
- 7.72 At the time of writing, insufficient information was available regarding the volume and distribution of traffic that could be generated by the SRF. Therefore, it is not currently possible to determine the potential changes in road traffic noise associated with Application 5 and cumulative developments in-combination with the SRF.

Daylight, Sunlight and Overshadowing

The Works

- 7.73 The effects during the site preparation, earthworks and construction phase have not been quantitatively assessed as the effects will be temporary and variable, and the assessment of effects has focused on the comparison between the Baseline and the completed Proposed Development as the impacts are permanent. However, it is expected that as construction of the Proposed Development proceeds into its different phases, the availability and obstruction of natural light will vary, gradually adjusting to that of the completed Proposed Development.
- 7.74 During periods of demolition as the site becomes relatively free of obstructions, there will be greater levels of daylight and sunlight to existing surrounding buildings. As construction develops, the new structures' obstruction to daylight and sunlight will gradually increase until arriving to their completed condition. The effects of the completed conditions are described in the following sections.

The Completed and Operational Development

- 7.75 A 3D model of the Proposed Development and the relevant surrounding context has been developed for the purpose of the Daylight, Sunlight and Overshadowing Assessment of the Proposed Development (Application 5).
- 7.76 The results of the Application 5 assessments indicated that the level of daylight and sunlight to existing surrounding properties and open spaces remains within the recommended criteria with 100% of the properties retaining suitable levels of daylight, sunlight and overshadowing to open spaces. No mitigation has been identified as necessary.

Cumulative Effects

- 7.77 The effects during the site preparation, earthworks and construction phase have not been quantitatively assessed as the effects will be temporary and variable, and the assessment of effects has focused on the comparison between the Baseline and the completed Proposed Development including committed developments as the impacts are permanent. However, it is expected that as construction of the Proposed Development proceeds into its different phases, the availability and obstruction of natural light will vary, gradually adjusting to that of the completed Proposed Development.
- 7.78 During periods of demolition as the site becomes relatively free of obstructions, there will be greater levels of daylight and sunlight to existing surrounding buildings. As construction develops, the new structures' obstruction to daylight and sunlight will gradually increase until arriving to their completed condition. The effects of the completed conditions are described in the following sections.
- 7.79 During the operational phase, no significant effects are predicted in the cumulative scenario, as well as in-combination with the SRF.

Wind Microclimate

The Works

- 7.80** A quantitative assessment of the impacts of Detailed Application 5 during demolition and construction has not been included for the same reasons outlined in Section 6.
- 7.81 It can be stated that as demolition and construction work progress, the conditions within and around the Site are expected to gradually transition between those of the baseline and the final completed Detailed Application 5. The wind microclimate conditions are therefore not expected to exceed the ones of the completed Detailed Application 5 provided that the landscaping scheme and the wind mitigation measures are introduced prior to the development itself being fully constructed.
- 7.82 The potential effects during various stages of construction will vary and are likely to be of lesser magnitude than those that will be experienced once Detailed Application 5 has been completed. Additionally, demolition and construction activities are less sensitive to wind conditions and a CEMP would typically be implemented to protect construction workers. Access to the Site will also be restricted via perimeter hoardings. The presence of cranes on site is unlikely to present a significant impact on wind conditions at the Site due to the typical open-truss type construction of the frame used, which is relatively 'transparent' to wind and thus unlikely to generate downdrafts. Any undesirable wind conditions during construction are temporary and as construction of Detailed Application 5 proceeds, the wind conditions at the Site would gradually vary, approaching those of the completed development, the assessment of which is covered in the next section.

The Completed and Operational Development

- 7.83 With the introduction of the proposed Detailed Application 5, exceedances of the pedestrian *safety* and/or *comfort* criteria are observed at several receptors. However, with the introduction of the proposed landscaping strategy and wind mitigation measures, these exceedances are fully mitigated.

Cumulative Effects

- 7.84 A quantitative cumulative assessment of the impacts of the Proposed Development during demolition and construction has not been included for the same reasons as stated above. The cumulative wind microclimate conditions are therefore not expected to exceed the ones of the completed cumulative scenario outlined below.
- 7.85 With the implementation of the landscaping strategy and wind mitigation measures, all exceedances of the pedestrian safety and wind comfort criteria resulting from the introduction of Detailed Application 5 and the cumulative schemes are fully mitigated.
- 7.86 At all other receptors, the nature and scale of the effects range between Moderate Adverse (Off-Site) and Moderate Beneficial and are therefore considered Not Significant.

- 7.87 When considered alongside the SRF, the aerodynamic effects generated by a development is dependent on its massing and has a limited radius of influence, therefore only developments that are within relative proximity of Outline Application 4 are likely to result in significant In Combination Effects. As further developments emerge within the SRF (particularly within the New Town and Vauxhall Gardens neighbourhoods), it is expected that the wind conditions within the Site of Outline Application 4 will become calmer due to increased shielding from prevailing and less-prevailing winds.

Socio-economics

The Works

- 7.88 The demolition and construction phase would generate up to 1,988 net additional temporary construction jobs over the construction period, of which approximately 584 would likely be taken up by MCC residents. These temporary construction jobs would generate around 18.3 million in GVA per year of the Works to the regional economy (of which £5.4 million could be generated in the MCC District economy).

The Completed and Operational Development

- 7.89 It is estimated that the Proposed Development would result in an additional population of 2,593 residents. The Proposed Development would also expect to support up to 210 net additional jobs regionally, of which up to 62 could be likely taken up by MCC residents. This would generate up to £7.7 million in GVA per year at the regional level (of which £3.6 million could be generated in the MCC district economy).
- 7.90 Residents of the Proposed Development would be anticipated to generate annual expenditure of £21 million per annum within the district economy and £2.9 million per annum in additional Council Tax receipts for MCC. The Proposed Development would contribute to the overall housing delivery targets for the MCC and wider area with the provision of up to 1,550 dwellings (43% of MCC's annual target).
- 7.91 It is estimated that the Proposed Development would have an additional maximum resident population of 2,593 of which 108 would be of primary school age and 62 would be of secondary school age. It is considered that there is sufficient capacity within existing primary school and secondary school education facilities to provide for the additional demand for services that the new population on the Site would create

Cumulative Effects

- 7.92 Considering the impact of the Proposed Development in conjunction with the identified Cumulative Schemes, it is expected that there would be beneficial effects in terms of employment generation and associated GVA, household expenditure impacts, Council Tax receipts and housing delivery. It has been assumed that population related impacts (e.g. the impact of the Proposed Developments on social infrastructure services such as schools and open space) would be adverse effects.
- 7.93 Whilst information on the build cost estimate (and hence the temporary construction employment to be created) was not readily available for all but a small number of Cumulative Schemes, based on the scale of the 26 Cumulative Schemes in terms of number of new residential units and the scale of new commercial space and using professional judgement, it is estimated that the construction employment generated will be significant and beneficial to the district and regional economies.

- 7.94 It is estimated that the temporary employment associated with the Demolition and Construction of the Proposed Development and the 26 Cumulative Schemes would generate a combined positive GVA to the district and regional economy which is significant and beneficial.
- 7.95 It is estimated that the 21 Cumulative Schemes which include employment generating floorspace would support between 3,000 and 6,500 jobs across Manchester and Salford, of which between 3,000 and 6,000 would be generated by Proposed Developments within the boundaries of Manchester City Council and up to 500 would be generated by Proposed Developments within the boundary of Salford City Council. Combined with the estimated 106-193 net additional jobs generated at the Proposed Development (at the district level) gives an estimated total of approximately 3,105 and 6,693 jobs. This is considered to be significant and beneficial.
- 7.96 Based on the regional average GVA of £52,007, it is estimated that the employment to be supported by the 26 Cumulative Schemes would generate a minimum GVA to the district economy of approximately £160 million annually. When combined with the Proposed Development, this will generate a minimum GVA to the district economy of approximately £162 million to £164 million annually. This is considered to be significant and beneficial.
- 7.97 The cumulative effect would result in the delivery of up to 5,039 new residential units. Along with the up to 1,550 units at the Proposed Development, this would result in a total of 6,589 units. The Manchester Housing Strategy outlines a target housing trajectory (2022-2032) of 3,600 additional dwellings per annum. Assuming the identified cumulative schemes and the Proposed Development come forward in this time period, this equates to up to 183% of MCC's annual target. This is considered to be significant and beneficial.
- 7.98 The net additional household expenditure generated by the new residential population at the Proposed Development and 20 Cumulative Schemes (which have a residential component and are located within MCC's boundaries) would be around £89.3 million per annum. This is considered to be significant and beneficial.
- 7.99 It is estimated that the 6,589 residential units would generate Council Tax receipts to MCC of approximately £12.3 million annually. This is considered to be significant and beneficial.
- 7.100 It is estimated that the Cumulative Schemes would generate around 1,327 primary aged students. Combined with the Proposed Development, it is therefore estimated that the new population yield with the Cumulative Schemes with a residential component would be approximately 1,435.
- 7.101 Primary and secondary schools in the local area (as defined by the 1 and 3 mile radiuses, respectively) are currently unlikely to accommodate this level of pupil growth.
- 7.102 However, the above assessment does not factor for any mitigation delivered as part of the Identified Committed Schemes, given that this information is largely not publicly available and, in some cases, is yet to be fully agreed. As such, it is expected that these issues would necessarily need to or would have been considered by MCC in the determination of the planning application in the case of each Identified Committed Scheme. It is therefore

assumed that any required mitigation to minimise adverse effects on education provision would be considered on a case-by-case basis with specific education-related mitigation provided to counteract any negative effects from each of the individual Identified Committed Schemes. As such, it should be concluded that the Application in combination with the Identified Committed Schemes would not have an effect on education capacity beyond the specific effects of Application 4 on its own.

- 7.103 It is assumed that given the MCC standards for the provision of open space, this would have been adequately considered at the time when the Cumulative Schemes were consented, therefore the effect is not significant.
- 7.104 Given Application 5 seeks permission for up to 1,550 dwellings, the remainder of the SRF would be expected to yield approximately 13,450 units. In addition to this, it is anticipated that a significant quantum of commercial space will also come forward, along with leisure and community uses.
- 7.105 In considering Application 5 along with the SRF and the Cumulative Schemes, there will likely be a number of beneficial socio-economic effects. Whilst effects cannot currently be quantified, it is expected that there will be beneficial effects arising from the support for new local temporary and permanent employment, increased gross value added and beneficial contribution towards housing delivery targets, Council Tax and enhanced residential expenditure effects.
- 7.106 Given the vast number of residential units, there may however be adverse effects upon the delivery of social services such as in education.

It can be expected that further Proposed Development of the SRF will be required to assess its own effects on school capacity to make provision as necessary in agreement with MCC. On this assumption, it is likely that significant cumulative effects with the SRF are unlikely.

Health and Wellbeing

The Works

- 7.107** The Health and Wellbeing assessment of the Full Application 5 Development has shown that there are no identified significant adverse effects during the construction and demolition phase.
- 7.108 Through appropriate monitoring and management processes, the demolition and construction phase of the Full Application 5 Development will unlikely lead to any significant Health and Wellbeing effects. The construction phase represents investment in the local area which will support numerous jobs over a prolonged period of construction activity. This will provide a range of economic benefits to MCC and the North West region more broadly.

The Completed and Operational Development

- 7.109 The Health and Wellbeing assessment of the Full Application 5 Development has shown that there are no identified significant adverse effects once the development is complete and operational.
- 7.110 The mixed-use nature of the Full Application 5 Development, along with its commitment to providing a range of different housing typologies and tenures will provide significant benefits to the new residents expected to reside at the complete and operational Full Application 5 Development, along with existing neighbouring residents. The provision of social infrastructure uses will also be beneficial, not only to new residents but existing communities close to the Site.
- 7.111 Overall, the Full Application 5 Development will promote active travel, activate a disused space to enhance perceptions of community safety, provide spaces for the sale of locally grown and healthy foods and incorporate links with other future developments and existing communities. Non-residential uses included within the Full Application 5 Development will also support local employment opportunities, along with options to enhance health outcomes such as fitness and leisure uses which also foster a sense of community whilst improving physical health.
- 7.112 Importantly, the proximity of the Site to extensive open space will also enhance the amenity of the area, whilst also being beneficially used to create a sustainable and resilient development which can proactively respond to climate change and the potential effects of this.

Cumulative Effects

- 7.113 Through the implementation of relevant mitigation measures identified in the Air Quality, Noise and Vibration and Transport and Access sections – along with the implementation of a CEMP within each Cumulative Scheme planning application, no significant cumulative effects in relation to air quality, noise and neighbourhood amenity is expected.

- 7.114 The construction phases of the Cumulative Schemes will also enable a range of employment opportunities to be supported locally. Importantly, as there are numerous large-scale developments proposed – it is likely that a strong pipeline of construction work will be supported, therefore providing local job security. As assessed in Socio-economics sections, it is assumed that the Outline Application 4 Development in conjunction with the Cumulative Schemes will have a beneficial effect.
- 7.115 In relation to the use of resources, through the implementation of relevant measures identified in each CEMP as conditioned by each planning application, there is unlikely to be any cumulative effect with regards to health and wellbeing if processes to reduce the use of resources are upheld.
- 7.116 An approximate number has been arrived at which estimates that all 20 residential developments will include a net uplift of around 7,561 residential units. In combination with the Full Application 5 Development, it is estimated that around 9,111 residential units will be delivered. Given that MCC requires that a portion of these meet accessibility standards and are affordable homes, this will provide a range of housing types for different people within the local community, a beneficial effect.
- 7.117 Using the standard approach of one FTE GP for every 1,800 patients **Error! Bookmark not defined.** – it is presumed that the Full Application 5 Development, in conjunction with the Cumulative Schemes, would therefore yield around 19,759 persons. This would therefore require around 11 FTE GPs to serve this new population. Some of the Cumulative Schemes identify that D1 floorspace may come forward. Additionally, it is likely that some of the future residents of these schemes may already be registered patients at the GP practices assessed within the one-mile radius. If this is not the case, there is also a likelihood that some may remain registered at a practice further afield. Capacity constraints and wider estate planning will likely be reviewed by the NHS and MCC as developments come forward in the local area in the coming years, which may also alter as some of the Cumulative Schemes progress to reserved matters applications. These effects will also be considered by MCC in the determination of each planning application.
- 7.118 Furthermore, there will be additional strains upon dental services which were identified to be currently over capacity within the local area. All dental practices within one mile of the Site were reviewed within this Chapter, meaning many of the Cumulative Schemes will also be seeking to rely upon these services. Much like the provision of GPs, it is possible that some of the D1 floorspace could be used for a dental practice.
- 7.119 Future residents of both the Full Application 5 development and the wider Cumulative Schemes will benefit from the proximity to the open space coming forward as part of Application 2, along with the proposed open spaces as part of Full Application 5. This will ensure that new residents and workers of the complete and operational Developments will be able to easily access open space for recreation purposes, a beneficial effect.
- 7.120 Given that the Cumulative Schemes are within close proximity to Manchester city centre and the employment, education and leisure uses it supports – it is likely that active travel will be encouraged and supported amongst

these schemes. For some, the additional populations in this region will attract public transport improvements which will further enhance accessibility and active travel uptake.

- 7.121 The activation of space across the local area – including areas of land that are currently disused, will help to enhance natural surveillance. The fact that many of the schemes are mixed-use will also promote a range of different uses in the area, ensuring that different activities operating at different times of the day will enhance perceptions of community safety.
- 7.122 The Cumulative schemes, including the Full Application 5 Development, will support a range of non-residential uses. This may incorporate the sale of healthy food and where possible, support for local farmers markets.
- 7.123 It is estimated that the 21 Cumulative Schemes which include employment generating floorspace would support between 3,000 and 6,500 jobs across Manchester and Salford, of which between 3,000 and 6,000 would be generated by developments within the boundaries of Manchester City Council and up to 500 would be generated by developments within the boundary of Salford City Council. Combined with the estimated 35 to 65 net additional jobs generated at the Full Application 5 Development (at the district level) gives an estimated total of approximately 3,035 and 6,565 jobs.
- 7.124 In considering Application 5 along with the SRF, there will likely be a number of beneficial health and wellbeing effects arising from the support for new local employment, the development of communities that can be lived in by people of a wide range of physical abilities and ages, the promotion of leisure and community uses close to home to encourage social cohesion and to enhance mental and physical wellbeing, a reduction in crime potential and the resilience of homes to climate change impacts.
- 7.125 Given the vast number of residential units, there may however be adverse effects upon the delivery of social services such as in education or healthcare. Whilst it is known that Outline Application 4 (within the wider SRF) includes the potential provision of a primary school, it remains unknown if this school could accommodate the children yielded across the whole SRF – in conjunction with children also yielded from the Full Application 5 Development and the developments identified as Cumulative Schemes.
- 7.126 This remains the same when considering primary healthcare provision. Given the number of residential units within the SRF – there would likely be a need for additional GP and dental clinic capacity across the SRF to accommodate the new residential population.

Climate Change

The Works

- 7.127 The demolition and construction phase would result in estimated net GHG emissions of 51,034 tCO₂e,
- 7.128 Application 5 has been designed, as far as possible, to avoid and minimise the impacts and effects of climate change through the process of design-development and by embedding mitigation measures into the design.

The Completed and Operational Development

- 7.129 The demolition and construction phase would result in estimated net GHG emissions of 51,034 tCO₂e. Overall, these emissions were considered unlikely to impact (negligible effect) the UK Government's ability to meet the relevant UK Carbon Budget.
- 7.130 In addition to the fabric first passive design measures, active building services are to be designed to minimise direct energy consumption and CO₂ emissions, with particular emphasis on the following;
- Increased Hot Water Generating Efficiencies;
 - Reduced Standing Losses from Pipes and Cylinders;
 - Energy Efficient LED Lighting;
 - Improved Lighting Controls;
 - Low Energy Motors in Pumps and Fans;
 - Efficient Heat Recovery in relevant systems and,
 - Enhanced heating controls – Wi-Fi enabled,
 - Combined natural and mechanical ventilation systems
- 7.131 All internal lighting installations will make use of low energy technologies combined with presence and absence detection in conjunction with timed setbacks. 100% low energy lighting provision will be included within the development. Photo switching and automatic dimming will be specified to the communal areas of the building in order to improve the efficiency of the lighting system.

Cumulative Effects

- 7.132 Cumulative effects have not been assessed for the proposed Application 5 development as committed developments have not been considered. This is because the GHG emissions are assessed taking global climate as the receptor.

8. Application 4, Application 5 and SRF In-Combination- What are the Likely Environmental Effects and How Would They be Minimised?

Townscape and Visual

- 8.1 Demolition and construction works within the Site will result in physical changes to parts of the townscape within the Lower Irk Valley (TCA1) and similar works within the wider Victoria North SRF area will result in physical changes to parts of the townscape within Collyhurst (TCA 7) and New Cross (TCA 10). Construction activities of the Proposed Development and the SRF will result in direct changes to the townscape character within the Site and indirect changes to the perceived character of the wider townscape. In-combination effects on townscape character will occur as a result of the demolition and construction works occurring through the phased build out duration of the Proposed Development and the SRF, particularly between 2025 – 2032 (for Application 4 and 5) and over a 15-20 year period for the SRF, with an early focus on development activity in the southern parts of the SRF area. Over this period, effects on townscape character are likely to result from the construction works within the Site and wider SRF area, including the introduction of site compounds; materials excavation, storage and handling; piling used for the buildings' foundations; construction plant particularly taller cranes (telescopic, support, tower and tracked cranes); and smaller plant including dump trucks, concrete mixers, piling rigs, lorries, skip wagons, excavators and rollers. Construction traffic will also be present at increased concentrations on the local road network.
- 8.2 During demolition and construction, the in-combination effect of the Proposed Development and the SRF on the character of the Lower Irk Valley (TCA 1), Collyhurst (TCA 7) and New Cross (TCA 10) is assessed as likely to be significant adverse. Adverse effects on townscape character are likely to arise during construction due to the introduction of construction plant and partially constructed buildings, with the adversity of effects reducing during the construction period, as the balance of construction works reduces in favour of completed development materialising through the phased build out of Application 4 and the SRF, and other committed schemes being completed in the surrounding townscape.
- 8.3 During completion and operation, Application 4 will form the new Red Bank neighbourhood and Application 5 will form part of the New Town neighbourhood (defined in the Victoria North SRF). New development within the wider Victoria North SRF area outside these neighbourhoods, is also likely to change the character of the Lower Irk Valley, Collyhurst and New Cross TCAs, reinforcing the existing communities and establishing a series of integrated neighbourhoods within these areas, that extend Manchester's city centre. In addition to the Red Bank and New Town neighbourhoods, a further five interconnected neighbourhoods are likely to emerge, each with their own individual character: Collyhurst Village; South Collyhurst; New Cross; Vauxhall Gardens; and Eggington Street and

Smedley Dip. The in-combination effect of the Proposed Development and the SRF on the character of the Lower Irk Valley (TCA 1), Collyhurst (TCA 7) and New Cross (TCA 10) townscape character areas is assessed as likely to be significant beneficial. Significant effects on townscape character of the SRF area are likely to occur due to the nature of the transformational, residential-led regeneration scheme, comprising approximately 15,000 new homes. These significant effects are likely to arise due to the widespread change in character expected through the implementation of the distinct neighbourhoods within the Victoria North SRF that will emerge as distinct TCAs, with effects considered as beneficial due to changes from the relatively degraded existing character within parts of the Irk Valley and the 'good design' of high quality buildings and places, green infrastructure, retail, social, community, health and education facilities and access improvements that will be delivered as part of the SRF.

- 8.4 The implementation of each of the SRF neighbourhoods will contribute, together with Application 4 and 5, to these significant effects on the character of Victoria North, with each providing locally distinctive changes in character. Collyhurst Village will continue to be a residential-led neighbourhood, delivering a range of new and affordable housing with comparatively lower building heights and densities, linking large green spaces to the City River Park. South Collyhurst will be a medium-high density residential-led neighbourhood providing a variety of house types, predominantly low-rise, with higher-density buildings in key locations providing a transition between the higher density of New Cross and New Town neighbourhoods. New Cross will be a medium to high density residential-led neighbourhood that marks the transition from the city centre, contributing to the urbanisation of Rochdale Road, with a mix of commercial and residential use and distinctive landmark buildings with a focus on architectural treatment. New Town will be a residential-led neighbourhood with higher-density housing types at the interface with the city centre, NOMA, Angel Meadow and the Northern Quarter, with high density and taller/landmark buildings concentrated closer to the city centre and railway. Buildings of (up to) 8 to 12 storeys are expected to provide a level of general development, punctuated by taller structures to provide form and variety. Vauxhall Gardens is expected to become a medium-high density residential-led neighbourhood, integrating with existing residential accommodation, with a denser urban core and proposed integrated transport hub. Eggington Street and Smedley Dip will remain as a residential-led neighbourhood, offering family-oriented homes, with enhanced green space as part of the City River Park, integrating the existing social and community infrastructure provision.
- 8.5 Although the in-combination effect of the Proposed Development and the SRF is likely to be significant on areas within the SRF where character change is expected to occur, the effect on perceived character of the wider townscape of the is likely to be not significant, where only indirect changes may occur to the backdrop and setting of the wider townscape.
- 8.6 The in-combination effect of the Proposed Development and the SRF is likely to be significant on views within the Victoria North SRF area, where transformative change is expected to occur to existing views, such as in views from St Michael's Flags and Angel Meadow Park (Viewpoint 1), limited parts of the northern edges of the city centre (Viewpoint 2), Rochdale Road (Viewpoint 6 and 17) and the closest parts of Collyhurst (Viewpoint 8 and 9). The additional effect of the SRF is likely to contribute to significant effects from other viewpoints on the edge of the SRF area, including from the closest parts of Ancoats (Viewpoint 5), Miles Platting (Viewpoint 12) and potentially

Cheetham Hill (Viewpoint 10) depending on the scale, form and density of building plots that may occupy the foreground of these views. The in-combination effect of the Proposed Development and the SRF on views locally from these areas are likely to be significant due to the extension of the city centre scale of tall buildings within the SRF area, in combination with committed schemes, resulting in significant change to the Manchester city centre skyline to the north of the city.

- 8.7 The in-combination effect of the Proposed Development and the SRF on views from the wider townscape of the TVIA study area is likely to be notable, however effects are assessed not significant where less direct changes may occur to the backdrop of views of the wider townscape and skyline, including on views from the Cathedral, Smithfield and Shudehill areas of the city centre (Viewpoint 3 and 4) where changes to views will be limited by the intervening townscape, from the Strangeways area to the west (Viewpoint 14 and 15) which is more distant from the Victoria North SRF area and is of relatively lower sensitivity to change, and from more enclosed views such as from Queens Park to the north (Viewpoint 11).

Ecology and Nature Conservation

The Works

- 8.8 The assessment identified seven locally important ecological features, these were: River Irk corridor, dense scrub, scattered broadleaved trees, roosting bats, bat foraging/commuting, breeding birds and fish.
- 8.9 The potential for disturbance effects and unintended habitat loss or damage resulting from demolition and construction activities were identified through the assessment. The majority of these can be avoided through mitigation measures including the production of a CEMP, LEMP, ISMS and lighting strategy.
- 8.10 No residual effects during the demolition and construction phase have been identified for the Application 5 site.
- 8.11 Mitigation measures have been proposed to protect:
- The River Irk
 - Dense scrub
 - Scattered trees
 - Roosting bats
 - Bat foraging and commuting
 - Breeding birds
 - Fish

The Completed and Operational Development

- 8.12 The potential for further disturbance effects and unintended habitat loss or damage resulting from increased public pressure during the operational phase was identified through the assessment. This can be avoided through mitigation measures including the LEMP, ISMS and lighting strategy.
- 8.13 Habitat loss has been minimised as far as is possible, but some loss is unavoidable. Replacement planting will occur (as set out in the proposed Landscaping Strategy). This results in no negative significant residual impacts from habitat loss.
- 8.14 Mitigation measures have been proposed to protect:
- Foraging/commuting bats
- 8.15 No residual effects during the operational phase have been identified for the Application 5 site.

- 8.16 A standalone BNG assessment has been undertaken including a metric for Application 5 only. This delivers a net gain of 52.70% such that no off-site habitat is required to exceed 10% net gain for this application. This standalone document is submitted in support of the planning applications.

Cumulative Effects

- 8.17 As anticipated given the inner-city location of this application, the Sites considered in this cumulative assessment describe their baseline conditions to be generally of low ecological value, dominated by buildings and hardstanding and some with small areas of grassland or ephemeral vegetation. The majority did not provide suitable bat or bird roosting habitat and in the few instances where bat roosting was confirmed these were small roosts of common species and mitigation would be provided on site. Similarly, bird and bat foraging habitat was limited.
- 8.18 Due to the heavily developed nature of the landscape, the potential for fragmentation or disturbance effects to accumulate is limited to only those sites close to this application and only where they contain features of relevance to the habitats and species within this application. No inter-project or intra-project cumulative effects are predicted to arise.
- 8.19 Assessment of the Development project i.e. Application 5 and the wider SRF, is provided via a high level combined assessment. It is predicted that the significance effect from the cumulative losses of bat foraging and commuting habitat and breeding bird habitat could increase depending on the timing and extent of habitat removal. However, given the commitments within a Northern Gateway Biodiversity Plan, it is likely there would be an overall positive effect on quality/quantity of bat foraging and commuting habitat and quantity/quality of breeding bird habitat in the long term.

Cultural Heritage (including Archaeology)

- 8.20 As there are no significant effects predicted within either Application 4 or Application 5, there are no further in-combination effects from the SRF.

Ground Conditions

The Works

- 8.21 No additional mitigation measures to those already identified in the assessments of Application 4 and Application 5 have been identified.
- 8.22 As with Applications 4 and 5, impacts can be mitigated against through embedded mitigation, good working practices and the use of an appropriate CEMP. No significant effects on construction/groundworkers, third party neighbours or groundwater in superficial aquifers, bedrock aquifers and surface waters are therefore anticipated.

The Completed and Operational Development

- 8.23 As with Applications 4 and 5, operational effects have been scoped out of the assessment as it is assumed that the Demolition, Groundworks, and Construction Phase will ultimately create suitable development platforms for follow-on development. Furthermore, as the Proposed Development is residential-led, additional mitigation measures to mitigate the risk of future contamination during operation are unforeseen.

Cumulative Effects

- 8.24 No significant cumulative effects on construction works or controlled waters in the River Irk, bedrock and superficial aquifers were identified as embedded mitigation will be adopted through the application of the planning regime and contaminated land regime (if applicable). The same applies when also considering the SRF.
- 8.25 The assessment of cumulative effects related to the Completed and Operational Development and neighbouring development sites is not considered for the same reason as stated above.

Flood Risk and Drainage

The Works

- 8.26 The potential impacts identified for Application 4 and Application 5 remain valid for in-combination effects, and when the SRF is considered. During the demolition and construction phase both developments will involve the adoption of a CEMP to control potential impact to water quality, hydromorphology, groundwater and flood risk. There will be some residual risk associated with in-combination impact to water quality.
- 8.27 Works in and within 8 m of the channel will require a Flood Risk Activities Permit from the EA and therefore the in-combination effects on flood risk associated with in-channel works of the two applications can be regulated.
- 8.28 The likely residual effects remain the same as those reported in previous sections.

8.29 The Completed and Operational Development

- 8.30 The potential impacts identified for Application 4 and Application 5 remain valid for in-combination effects, and when the SRF is considered.
- 8.31 The drainage strategy for each application ensures that the surface water discharge is controlled and sufficiently treated. There will be some minor in-combination effects regarding water quality, but these are negligible and therefore the in-combination effects are similar to those reported for the separate applications.
- 8.32 The flood model has been run for Application 4 and 5 combined. The in-combination scenario results in a reduced benefit upstream and an increase from minor adverse to moderate adverse for a very localised area between RB17 and the River Irk. This change does not affect the less or more vulnerable development. There is no other change shown in depth between Application 4 and the combination of Applications 4 and 5. Therefore, regarding flood risk, the potential effects identified for Application 4 and 5 remain valid for in-combination effects.
- 8.33 The likely residual effects remain the same as those reported in previous sections.

Cumulative Effects

- 8.34 As explained above, the in-combination effects of Application 4 and 5 are similar to the effects reported for the individual applications. The same remains true when considering the SRF. Therefore, the cumulative effects associated with nearby developments as well as Application 4, Application 5 and the SRF remain similar to those reported in the Cumulative Effects section for Application 4 and 5 individually.

Transport and Access

- 8.35 The effects of all applications in combination remain the same as those reported in Sections 6 and 7 respectively. No significant transport and access effects are expected for the Works, the operational phase, or in the cumulative scenario.

Air Quality and Dust

- 8.36 The application of the mitigation measures identified in Section 6 will help to prevent and/or minimise pollutant releases, certainly beyond the construction site boundary, and therefore any in-combination effects are likely to be direct, temporary, short-medium term, negligible and not significant.
- 8.37 It is not currently possible to determine the likely significance of potential impacts on air quality due to a lack of trip generation data. However, in light of the scale of the SRF, it is anticipated that trip generation will be greater than assessed for the Proposed Development. Therefore, the cumulative increase in traffic on the local road network associated with the Proposed Development and the SRF may result in impacts on air quality at nearby sensitive receptors greater than reported for all other assessment scenarios.
- 8.38 With the implementation of appropriate best practice mitigation measures, the residual cumulative effects would remain the same as reported above (insignificant).
- 8.39 In the absence of appropriate information regarding trip generation associated with the SRF, it is not currently possible to define the likely cumulative residual effects on local air quality associated with Applications 4 and 5 in-combination with the SRF and the identified cumulative schemes. However, the in-combination assessment of Applications 4 and 5 together concludes that the effects of these would be insignificant.

Noise and Vibration

The Works

- 8.40 With respect to construction noise and vibration, a number of best practice mitigation measures have been presented to minimise construction noise and vibration levels, for incorporation into the proposed Construction Environmental Management Plan (CEMP).
- 8.41 The assessment of construction traffic noise has identified that level changes on local road traffic routes range between +1.2 and +2.8dB. Such level changes are not sufficient to give rise to any significant effects, or the need for additional mitigation.
- 8.42 With the implementation of best practice mitigation measures, it is unlikely there will be significant noise effects as a result of the combination of Application 4, Application 5 and SRF. Therefore, it is anticipated that the residual cumulative effect will, at worst, remain as reported for Application 4 and Application 5 respectively, i.e. adverse effects ranging from negligible to major. For NSR7 and NSR8, the effect is considered to be significant.
- 8.43 Taking into consideration the distances between the existing and future noise sensitive receptors, the nearest development plot within each phase and the SRF, it is unlikely the vibration generating activities will result in perceptible in-combination vibration effect. Therefore, it is anticipated that the cumulative effect will, at worst, remain as reported for Application 4 and Application 5 respectively, i.e. direct, temporary short-term, adverse residual effects ranging from negligible to moderate. For NSR7 and NSR16, the effect is considered to be significant.
- 8.44 At the time of writing, insufficient information was available regarding the volume and distribution of traffic that could be generated by the SRF should these developments be brought forward during the construction phase of the Proposed Development. Therefore, it is not currently possible to determine the potential changes in road traffic noise associated with Applications 4 and 5 in-combination with the SRF.

The Completed and Operational Development

- 8.45 The assessment of operational phase development generated road traffic noise has identified that level changes on the surrounding network due to both the Proposed Development and other committed developments would range between -0.2 and +3.1dB in the future opening year of 2032. Such level changes are not sufficient to give rise to any significant effects, or the need for additional mitigation.
- 8.46 At the time of writing, insufficient information was available regarding the volume and distribution of traffic that could be generated by the SRF. Therefore, it is not currently possible to determine the potential changes in road traffic noise associated with Applications 4 and 5 in-combination with the SRF.
- 8.47 The assessment has included the determination of appropriate limits for the control of mechanical/fixed plant. These limits have been set based on the results of the baseline noise survey, at a level sufficiently low that

significant effects would not arise. It has been demonstrated how compliance with such limits could be ensured with the use of an appropriate planning condition.

- 8.48 With the implementation of best practice mitigation measures and adherence to plant noise limits, it is unlikely there will be significant cumulative noise effects as a result of the combination of Application 4, Application 5 and SRF. Therefore, it is anticipated that the residual cumulative effect will, at worst, remain as reported for Application 4 and Application 5 respectively, i.e. a direct, permanent, long-term, negligible effect.

Cumulative Effects

- 8.49 With the implementation of best practice mitigation measures, it is unlikely there will be significant cumulative noise effects as a result of the combination of Application 4, Application 5, the SRF and cumulative developments. Therefore, it is anticipated that the residual cumulative effect will, at worst, remain as reported for Application 4 and Application 5 respectively, i.e. adverse effects ranging from negligible to major. For NSR7 and NSR8, the effect is considered to be significant.
- 8.50 Taking into consideration the distances between the existing and future noise sensitive receptors, the nearest development plot within each phase, the SRF and cumulative developments, it is unlikely the vibration generating activities will result in perceptible in-combination vibration effect. Therefore, it is anticipated that the cumulative effect will, at worst, remain as reported for Application 4 and Application 5 respectively, i.e. adverse effects ranging from negligible to moderate. For NSR7 and NSR16, the effect is considered to be significant.
- 8.51 At the time of writing, insufficient information was available regarding the volume and distribution of traffic that could be generated by the SRF should these developments be brought forward during the construction phase of the Proposed Development. Therefore, it is not currently possible to determine the potential changes in road traffic noise associated with Applications 4, Application 5 and cumulative developments in-combination with the SRF.
- 8.52 With the implementation of best practice mitigation measures and adherence to plant noise limits, it is unlikely there will be significant cumulative noise effects as a result of the combination of Application 4, Application 5, the SRF and cumulative developments. Therefore, it is anticipated that the residual cumulative effect will, at worst, remain as reported for Application 4 and Application 5 respectively, i.e. a negligible effect.
- 8.53 At the time of writing, insufficient information was available regarding the volume and distribution of traffic that could be generated by the SRF. Therefore, it is not currently possible to determine the potential changes in road traffic noise associated with Application 4, Application 5 and cumulative developments in-combination with the SRF.

Daylight, Sunlight and Overshadowing

The Works

- 8.54 It is expected that as construction of the Proposed Development proceeds into its different phases, the availability and obstruction of natural light will vary, gradually adjusting to that of the completed Proposed Development. During periods of demolition as the site becomes relatively free of obstructions, there will be greater levels of daylight and sunlight to existing surrounding buildings. As construction develops, the new structures' obstruction to daylight and sunlight will gradually increase until arriving to their completed condition.

The Completed and Operational Development

- 8.55 A 3D model of the Proposed Development and the relevant surrounding context has been developed for the purpose of the Daylight, Sunlight and Overshadowing Assessment of the Proposed Development (Applications 4 and 5).
- 8.56 The results of the Applications 4 and 5 assessments indicated that the level of daylight and sunlight to existing surrounding properties and open spaces remains largely within the recommended criteria with 69% of the properties retaining suitable levels of daylight, 86% retaining suitable levels on sunlight and 92% of open spaces retaining suitable levels of overshadowing. The loss of light reported in each category is predominantly within the Minor Magnitude of Effect from the baseline. Paragraph 14.66 of the Daylight and Sunlight Assessment contained in Chapter 14 of the ES states:

"14.66 Access to daylight and sunlight in windows and open spaces can be optimised by reducing obstruction to natural light through design, building form, and also by the size of massing. Since the parameter-based approach is a worst-case scenario and allows some flexibility in the definition of the final massing, it will be possible to undertake further detailed studies at the detailed design stage to address the level of daylight and sunlight access to existing surrounding properties. It is important to highlight that given the context of a highly urbanised environment and that the area is characterised by a dense nature of development with tightly packed streets and buildings close to each other, this would have an inevitable effect on the availability of daylight and sunlight. It is therefore considered that the likely impacts arising from the Proposed Development would not be unusual and would be acceptable in the context of a very urban location such as this".

- 8.57 Where necessary, it will be possible to undertake further studies at the detailed design stage of Application 4 to further address the level of daylight and sunlight access to existing surrounding properties to minimise any significant adverse effects to neighbouring adjacent buildings.
- 8.58 The effects of the Applications 4 and 5 and SRF assessments are likely to remain similar to Applications 4 and 5 which have been presented earlier in the chapter. The main potential difference is the additional effects of SRF developments immediately adjacent to the site where the schemes may include development blocks in close

proximity to the Proposed Development, in which case a suitable daylight, sunlight and overshadowing assessment should be undertaken as part of the design and planning of those schemes.

Cumulative Effects

- 8.59 The residual effects of the Applications 4 and 5 and SRF assessments are likely to remain similar to the residual effects of Applications 4 and 5 which have been presented earlier. The main potential difference is the additional effects of SRF developments immediately adjacent to the site where the schemes may include development blocks in close proximity to the Proposed Development, in which case a suitable daylight, sunlight and overshadowing assessment should be undertaken as part of the design and planning of those schemes.

Wind Microclimate

The Works

- 8.60 A quantitative assessment of the impacts of Detailed Application 5 during demolition and construction has not been included for the same reasons outlined in Section 6.
- 8.61 it can be stated that as demolition and construction work progress, the conditions within and around the Site are expected to gradually transition between those of the baseline and the final completed Outline Application 4 and Detailed Application 5. The wind microclimate conditions are therefore not expected to exceed the ones of the completed Outline Application 4 and Detailed Application 5 provided that the landscaping scheme and the wind mitigation measures are introduced prior to the Proposed Development being fully constructed.
- 8.62 The potential effects during various stages of construction will vary and are likely to be of lesser magnitude than those that will be experienced once Outline Application 4 and Detailed Application 5 have been completed. Additionally, demolition and construction activities are less sensitive to wind conditions and a CEMP would typically be implemented to protect construction workers. Access to the Site will also be restricted via perimeter hoardings. The presence of cranes on site is unlikely to present a significant impact on wind conditions at the Site due to the typical open-truss type construction of the frame used, which is relatively 'transparent' to wind and thus unlikely to generate downdrafts. Any undesirable wind conditions during construction are temporary and as construction of Outline Application 4 and Detailed Application 5 proceeds, the wind conditions at the Site would gradually vary, approaching those of the completed development, the assessment of which is covered in the next section.

The Completed and Operational Development

- 8.63 With the introduction of the proposed Outline Application 4 and Detailed Application 5, a few exceedances of the pedestrian *safety* criteria occur at localised areas around Plots RB01, RB10 and RB12b. However, with the introduction of the proposed landscaping strategy and wind mitigation measures, these exceedances are alleviated.

Cumulative Effects

- 8.64 A quantitative cumulative assessment of the impacts of the Proposed Development during demolition and construction has not been included for the same reasons as stated above. The cumulative wind microclimate conditions are therefore not expected to exceed the ones of the completed cumulative scenario outlined below.
- 8.65 With the implementation of the landscaping strategy and wind mitigation measures, all exceedances of the pedestrian safety and wind comfort criteria resulting from the introduction of Detailed Application 5 and the cumulative schemes are fully mitigated.

- 8.66 With the introduction of the proposed Outline Application 4, Detailed Application 5, and the cumulative schemes, including the landscaping strategy and wind mitigation, wind conditions at all receptors within and around the Site of the development are *safe* and suitable, in terms of wind *comfort*, for the intended use, for intended use.
- 8.67 The aerodynamic effects generated by a development is dependent on its massing and has a limited radius of influence, therefore only developments that are within relative proximity of the Proposed Development are likely to result in significant In Combination Effects. As further developments emerge within the SRF (particularly within the New Town and Vauxhall Gardens neighbourhoods), it is expected that the wind conditions within the Site will become calmer due to increased shielding from prevailing and less-prevailing winds.

Socio-economics

The Works

- 8.68 The demolition and construction phase would generate around 6,628 net additional temporary construction jobs over the construction period, of which 1,946 could be likely taken up by MCC residents. These temporary construction jobs could generate around £60.9 million in GVA to the regional economy (of which £17.9 million would be generated in the MCC district economy).

The Completed and Operational Development

- 8.69 It is estimated that the Proposed Developments would result in an estimated additional population of 8,662 residents. The Proposed Developments would also expect to support up to 868 net additional FTE jobs regionally, of which up to 225 would likely be taken up by MCC residents. This could generate up to £31.9 million in GVA at the regional level (of which up to £14.7 million could be generated in the MCC district economy).
- 8.70 1,400 to 2,600 jobs could be supported on-site once the SRF is complete and operational, with around 420 to 765 of these at the district level. This could generate GVA to the North West economy of between £74.4 million and £135.4 million annually in perpetuity. Of this, between £24.2 million and £44.1 million would be generated within the district (MCC) economy
- 8.71 Residents of the Proposed Developments would be anticipated to generate annual expenditure of £65 million per annum within the district economy and £9 million per annum in additional Council Tax receipts for MCC. The Proposed Developments would contribute to the overall housing delivery targets for the MCC and wider area with the provision of up to 4,800 dwellings (43% of MCC's annual target).
- 8.72 Residents of the Proposed Developments (including the SRF) would be anticipated to generate annual expenditure of £203.4 million per annum within the district economy and £28.1 million per annum in additional Council Tax receipts for MCC. The Proposed Developments would contribute to the overall housing delivery targets for the MCC and wider area with the provision of up to 15,000 dwellings.
- 8.73 The completed and operational Proposed Development would give rise to an increased population within the district area and as such would result in an increased demand on the existing education (primary and secondary schools) and healthcare (GPs) facilities. It is not considered that there is sufficient capacity within existing primary schools to accommodate the additional demand from both Application 4 and 5. If Application 4 provides a primary school within the swing plot however, this demand would be able to be accommodated across both the new school and the other existing schools across the local area. For secondary school places, it was assessed that there would be sufficient capacity across existing schools to accommodate the new secondary aged child yield.
- 8.74 It is estimated that the wider SRF including Applications 4 and 5 will yield around 27,000 residents. It is estimated that of these residents, 1,344 would be primary aged and 991 would be secondary age. It is presumed that all

secondary aged students could be accommodated within existing schools, however it is unlikely that existing capacities could accommodate the new primary school aged students. This will need to be considered through subsequent applications for Proposed Developments within the SRF and further discussions with MCC.

- 8.75 The completed and operational Proposed Development would give rise to an increased population within the district area which would require access to open space facilities and play space for children. However, open space is being brought forward which is anticipated to more than mitigate any negative effects.

Cumulative Effects

- 8.76 Information on the build cost estimate (and hence the temporary construction employment to be created) was not readily available for all but a small number of Cumulative Schemes. Based on the scale of the 26 Cumulative Schemes in terms of number of new residential units and the scale of new commercial space and using professional judgement, it is estimated that the construction employment generated will be significant and beneficial.
- 8.77 The addition of the combined GVA to the district economy as a result of the Proposed Development, together with the 26 Cumulative Schemes, directly attributable to the Demolition and Construction programme of the proposals, are considered to be significant and beneficial.
- 8.78 It is estimated that the 21 Cumulative Schemes which include employment generating floorspace would support between 3,000 and 6,500 jobs across Manchester and Salford, of which between 3,000 and 6,000 would be generated by Proposed Developments within the boundaries of Manchester City Council and up to 500 would be generated by Proposed Developments within the boundary of Salford City Council. Combined with the estimated 140 and 255 net additional jobs generated at the Proposed Development (at the district level) gives an estimated total of approximately 3,140 and 6,755 jobs. This is a beneficial effect.
- 8.79 Using the regional average GVA of £52,007, it is estimated that the employment to be supported by the 26 Cumulative Schemes would generate a minimum GVA to the district economy of approximately £160 million annually. When combined with the Proposed Development, this will generate a minimum GVA to the district economy of approximately £168.1 million to £174.7 million annually. This is a beneficial effect.
- 8.80 The cumulative effect would result in the delivery of up to 5,039 new residential units. Along with the up to 4,800 units at the Proposed Developments as part of Applications 4 and 5, this would result in a total of 9,839 units. The Manchester Housing Strategy outlines a target housing trajectory (2022-2032) of 3,600 additional dwellings per annum. This is a beneficial effect.
- 8.81 The net additional household expenditure generated by the new residential population at the Proposed Development and 20 Cumulative Schemes (which have a residential component and are located within MCC's boundaries) would be around £133 million per annum.

- 8.82 It is estimated that the 9,839 residential units (including those within Applications 4 and 5) would generate Council Tax receipts to MCC of approximately £18.4 million annually.
- 8.83 It is estimated that the new population yield of the Proposed Development with the Cumulative Schemes with a residential component would be approximately 1,381 secondary school aged pupils. Primary and secondary schools in the local area would be unable to accommodate this level of pupil growth. Even with the potential provision of a primary school as part of Application 4, this will not be able to provide adequate mitigation across all Proposed Developments. However, the above assessment does not factor for any mitigation delivered as part of the Identified Committed Schemes, given that this information is largely not publicly available and, in some cases, is yet to be fully agreed. As such, it is expected that these issues would necessarily need to or would have been considered by MCC in the determination of the planning application in the case of each Identified Committed Scheme. It is therefore assumed that any required mitigation to minimise adverse effects on education provision would be considered on a case-by-case basis with specific education-related mitigation provided to counteract any negative effects from each of the individual Identified Committed Schemes. As such, it should be concluded that the Application in combination with the Identified Committed Schemes would not have an effect on education capacity beyond the specific effects of Application 4 on its own.
- 8.84 It would be assumed that issues relating to demand for open space and play space would have been adequately considered at the time when the Cumulative Schemes were consented.

Health and Wellbeing

The Works

- 8.86 The effects reported in Sections 6 and 7 remain the same when considering Applications 4 and 5 in-combination, and with the SRF.

The Completed and Operational Development

- 8.87 The effects reported in Sections 6 and 7 largely remain the same when considering Applications 4 and 5 in-combination, and with the SRF.
- 8.88 However, it is considered that Outline Application 4 and Full Application 5 combined may result in some minor adverse effects upon health infrastructure such as dental clinic provision and education provision, if the potential primary school in Outline Application 4 is not realised. This will therefore be subject to further review with MCC. This effect would be further exacerbated when considering the SRF too.
- 8.89 With regards to primary school provision, regardless of whether the potential primary school in Outline Application 4 or elsewhere in the SRF is realised or not, there will be a moderate adverse effect upon primary pupil places when considering the overall potential population yield from the SRF. This will therefore be subject to further review with MCC as the other schemes within the SRF are realised through the planning process.

Cumulative Effects

- 8.90 The conclusions of all cumulative effects reported in Sections 6 and 7 largely remain the same. However, the beneficial effects from the increased access to work and training during the construction phase are greater when considered in-combination.

Climate Change

- 8.91 The assessment concluded that the demolition and construction phase would result in estimated net GHG emissions of **210,264 tCO₂e** and the completed and operational phase would result in estimated net GHG emissions of **343,766 tCO₂e** over the lifetime of the Proposed Development. Overall, these emissions were considered unlikely to impact (negligible effect) the UK Government's ability to meet the relevant UK Carbon Budget.
- 8.92 The likely residual effects of the development and their significance is same as mentioned in Application 4 and 5.
- 8.93 Cumulative effects have not been assessed for the Proposed Development as committed developments have not been considered. This is because the GHG emissions are assessed taking global climate as the receptor.

Effect Interactions

- 8.94 This chapter presents an assessment of the likely significant effect interactions of the Proposed Development; that is, the likely combination of significant environmental effects generated by the Proposed Development in isolation upon a particular receptor or group of receptors. Effect interactions were considered for the demolition and construction phase and the completed and operational Development.
- 8.95 During the demolition and construction phase of the project (Application 4 , Application 5, and Application 4 and 5 in combination) no significant effect interactions are anticipated to occur. Whilst there are predicted to be some residual effects to the River Irk, future site users and nearby existing residential reports, the minor adverse effects would be managed by the Construction Environmental Management Plan.
- 8.96 Once operational, effect interactions are anticipated to occur to future site users and nearby residential properties. For Application 4 and Application 4 and 5 the effect on daylight and sunlight is predicted to be significant and so it is reasonable to conclude that where the same property also experiences a minor adverse noise effect the effect interaction would be significant. However, this interaction is only likely to impact a small number of properties (as detailed in Noise and Vibration and Daylight, Sunlight and Overshadowing sections).

9. What Happens Next?

- 9.1 Following the submission of the planning application, there will be an opportunity for any interested parties to comment on the proposals.
- 9.2 Comments on the planning application and ES may be addressed to Jennifer Atkinson at the address below:
- Manchester City Council
Town Hall Extension
Lloyd Street
Manchester
M2 5DB
- 9.3 A CD version of the ES can be purchased from Avison Young on request at a cost of £50. Contact details are provided overleaf.

Contact Details

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