

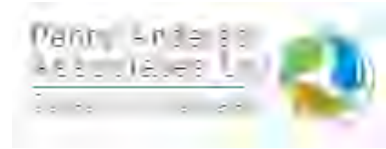


DOWNING LIVING (MANCHESTER SOUTH)
LIMITED PARTNERSHIP INCORPORATED

BLOCK C
PLOT 11 FIRST STREET
MANCHESTER

EXTENDED PHASE 1 HABITAT SURVEY AND
BIODIVERSITY NET GAIN ASSESSMENT





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EXTENDED PHASE 1 HABITAT SURVEY AND BIODIVERSITY NET GAIN ASSESSMENT

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November 2023 (updated)

This project has been undertaken in accordance with PAA policies and procedures on quality assurance.

A handwritten signature in black ink that reads 'Sarah Ross'.

Signed: _____

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1. INTRODUCTION

1.1 Penny Anderson Associates Ltd (PAA) was commissioned in 2023 by Downing Living (Manchester South) Limited Partnership Incorporated to update the extended Phase 1 habitat survey on the parcel of land for the proposed development of Block C on Plot 11 First Street, Manchester (hereafter referred to as the 'Site').

1.2 The survey included a walkover assessment of the Site to review and update against the previous survey completed and provides a biodiversity net gain (BNG) assessment for the scheme. The report also includes the previous (2019) desk study data which was updated with a further review of the Multi-Agency Geographic Information for the Countryside (MAGIC) database in 2023.

Site Description

1.3 Plot 11 First Street comprises two areas separated by a minor road (Newcastle Street). The west side at 0.5ha is mainly hard-standing with small patches of amenity grassland along the west and south edges. The area on the east is 0.4ha and includes large areas of hard-standing and a relatively recently cleared area that has some regenerated vegetation. The northern section of Plot 11 (the area other than Block C) comprises the Downing Living development currently under construction.

1.4 The Site is located in the south of Manchester City Centre and bounded by Hulme Street to the north, Wilmott Street to the east, the Unite Parkway Gate development and Mancunian Way to the south, and Medlock Street to the west. The Site comprises brownfield land which had previously been used as surface level car parking. The wider surrounding land use is primarily urban development comprising offices and residential buildings. The River Medlock runs in a culvert 300m north of the Site.

1.5 The land allocated to the development of Block C is situated between Newcastle Street and Medlock Street and comprises around 0.23ha of hardstanding with few areas of vegetation/planting. It is currently being used as a construction compound for the Downing Living development highlighted above.

Proposed Development Description

1.6 The scheme is for Full Planning Permission for a ground plus 28-storey building comprising purpose-built student accommodation (Sui Generis) and other associated works including public realm, secure cycle parking, accessible car parking spaces and servicing arrangements.

Legislative Context

1.7 The text given below provides a brief summary of the legislation in relation to the species or species group in England and Wales. The original Acts, Regulations and any amendments should be referred to for the precise wording.

1.8 A range of international and national legislation has been established in the UK to protect important nature conservation sites and priority species. At the international level, European Union (EU) Directives require individual member states to implement their conservation provisions nationally for the benefit of Europe as a whole. These Directives have been transposed into UK law by the Conservation of Habitats and Species Regulations 2017 (amended).

1.9 Other international conventions include: the Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979), which requires the maintenance of populations of wild flora and fauna, giving particular protection to endangered and vulnerable species; and the Bonn Convention on the Conservation of Migratory Species of Wild Animals (1979), which requires

the protection of migratory species throughout their entire range. The above conventions are implemented in England and Wales via the Wildlife and Countryside Act (WCA), 1981 (as amended) and Countryside and Rights of Way (CROW) Act 2000. This legislation also protects important habitats and sites such as Sites of Special Scientific Interest (SSSI).

- 1.10 At the national level, Biodiversity 2020 (Defra 2011) forms England's national biodiversity strategy. Building on the Natural Environment White Paper¹ published in 2011, this provides a means of delivering the UK's commitments to maintaining and protecting biodiversity. Under Biodiversity 2020, the Priority Species and Habitats referred to are those of 'Principal Importance' for the conservation of biodiversity in England as listed on Section 41 (England) of the Natural Environment and Rural Communities (NERC) Act 2006 (amended).
- 1.11 More recently, the Environment Act 2021 further supports this commitment to, and strengthens the legislation in respect of, maintaining and also enhancing biodiversity in England, and Part 6 Nature and Biodiversity includes the following key areas:
 - Strengthened biodiversity duty for public authorities in England;
 - Biodiversity net gain to ensure developments deliver at least 10% increase in biodiversity;
 - Local Nature Recovery Strategies to support a Nature Recovery Network;
 - Duty upon Local Authorities to consult on street tree felling;
 - Strengthen woodland protection enforcement measures; and
 - Protected Site Strategies and Species Conservation Strategies to support the design and delivery of strategic approaches to deliver better outcomes for nature.
- 1.12 Finally, the National Planning Policy Framework (NPPF 2023) provides guidance for local authorities on the content of the Local Plans and is a material consideration in determining planning applications. Briefly, with an overall focus on sustainable development, the NPPF states that developments should aim to engender positive outcomes for habitats and biodiversity, with a particular focus on the maintenance and creation of ecological networks.
- 1.13 The NPPF identifies the following principals that should be applied by local planning authorities when determining planning applications:
 - a. if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
 - b. development on land within or outside a SSSI, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of SSSI;
 - c. development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
 - d. development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

¹ <https://www.gov.uk/government/publications/the-natural-choice-securing-the-value-of-nature>

- 1.14 The NPPF states that the planning system should contribute to and enhance the natural environment through a range of actions, including:
- Protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
 - Recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
 - Maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
 - Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
 - Preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
 - Remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.
- 1.15 To protect and enhance biodiversity and geodiversity, plans should:
- Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
 - Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.
- 1.16 A summary of the relevant protected species legislation is given in Appendix 1.

Aim of Report

- 1.17 The aim of this report is to provide an assessment of the ecological features on the Site, identify any ecological constraints on development and make recommendations on further survey work where it is necessary to accompany a planning application.
- 1.18 The report considered the results of this assessment in the light of the previous ecological assessments completed in November 2015 (PAA 2015) and September 2019 (PAA 2019).

2. METHODS

Desk Study

- 2.1 The desk study consisted of a consultation exercise whereby local biological records centres were contacted in 2019² to gather local and site-specific ecological information. The results helped place the Site within a wider ecological context and inform the requirements for further survey work.
- 2.2 The main search zone encompassed a 2km radius from the centre of the Site. The MAGIC³ website was reviewed for information on statutorily protected sites, such as SSSI.
- 2.3 Greater Manchester Ecology Unit (GMEU) provided additional information including:
- The locations of non-statutory wildlife sites within the search area;
 - The locations of protected species records within the search area; and
 - Detailed records for other notable animal and plant species within the search area.
- 2.4 It is important to note that the desk study results provide an indication of the species present in and around the Site and do not confirm current presence or absence of any particular species. Protected species are often under-recorded in county wildlife databases.

Extended Phase 1 Habitat Survey

- 2.5 The update survey was conducted on 16th June 2023 by Caroline Boffey (Senior Ecologist) on a dry, still, warm, clear day. Caroline has extensive experience of surveys of this type and is appropriately qualified to carry out this work based on the Chartered Institute of Ecology and Environmental Management (CIEEM) competencies for survey (CIEEM 2017).
- 2.6 The Phase 1 habitat survey methodology was based on guidance set out in the *Handbook for Phase 1 Habitat Survey* (JNCC 2010). The broad habitat types were mapped, with each habitat type coded according to the standard JNCC Phase 1 habitat survey procedure.
- 2.7 In addition, plant species lists were collated for habitats across the area delineated for the survey. Each plant species was assigned abundance codes within each habitat. This was done using the 'DAFOR' scale (where: D = dominant; A = abundant; F = frequent; O = occasional; R = rare), which provides an indication of the relative abundance of each plant species present within a particular habitat. The plant species present within the Site and their relative abundances are listed in Appendix 2, which shows both common and scientific names according to Stace (2019). Common names only are referred to in the text.
- 2.8 The survey was 'extended' following the approach set out in the Institute of Environmental Assessment (1995) and CIEEM (2017) to include an assessment of the potential for/presence of protected species, to inform any additional survey requirements.

² Please note – these records have not been updated in 2023, due to the small size (c.0.23ha) of the application site

³ <https://magic.defra.gov.uk/MagicMap.aspx> (last accessed 25/10/2023)

Limitations

- 2.9 No significant limitations on the assessment were identified at the time of survey. The Site was fully accessible and the survey was undertaken at an appropriate time of year.

Biodiversity Net Gain Assessment

- 2.10 The Calculator applied in this assessment is the Biodiversity Metric 4.0, which replaces the earlier Defra Metric versions. This Metric is used to calculate the biodiversity units of a site before and after the proposed development. The Calculator spreadsheet and associated guidance notes were available via the Natural England 'Access to Evidence' web pages⁴.
- 2.11 The information required to complete the Calculator is:
- Area of each habitat (ha) and length of linear features (km), e.g. hedgerows;
 - Habitat type;
 - Habitat condition;
 - Impact from development; and
 - Proposed biodiversity mitigation/compensation measures.

Habitat and Linear Feature Assessment

- 2.12 The existing habitats, linear features and habitat condition calculations are based on a Phase 1 habitat survey (Figure 1). The current Landscape Plans for the scheme were used to identify the proposed habitats and post-development land use types (Appendix 3).
- 2.13 Existing habitats were digitised accurately to British National Grid using Ordnance Survey vector mapping as a base, along with high resolution aerial photography as a guide, as part of the previous Phase 1 habitat survey results preparation. These datasets were available for use in the BNG assessment process. The areas (ha) of the development proposal features were calculated by PAA using CAD drawings provided by the Design Team.
- 2.14 The Calculator requires that each habitat is given a 'distinctiveness' score that includes parameters such as species-richness, diversity, rarity and the degree to which habitats support species rarely found in other habitats. This is completed automatically by the Calculator when the habitat type is selected, and the categories comprise:
- Very High;
 - High;
 - Medium;
 - Low; and
 - Very Low.

⁴ <https://publications.naturalengland.org.uk/publication/6049804846366720> (downloaded June 2023)

- 2.15 The Calculator also requires a ‘condition’ assessment for each habitat and feature, and this is allocated to each habitat based on the guidelines and targets provided in the methodology (Natural England 2023) and the Phase 1 habitat survey results, along with ecological expertise. Condition categories available, which vary slightly depending on the habitat in question, within the Calculator are:
- Good;
 - Fairly Good;
 - Moderate;
 - Fairly Poor;
 - Poor; and
 - Not Applicable.
- 2.16 Finally, the ‘strategic significance’ of the habitat is allocated depending on the identification of the habitat in that location being nationally or locally significant. This is evaluated from local plans, designations, etc. In the absence of any relevant strategic documentation indicating the habitat in that area is of strategic significance for biodiversity, then the area is given a value of 1.
- 2.17 The Calculator then requires the GIS⁵-generated data (ha or km) to be input for each of the habitats as classified under each of the following categories:
- Area of habitat retained – kept on site throughout any development of landscaping process and featuring in final site designs;
 - Area of habitat enhanced - kept on site throughout any development or landscaping process but enhance (for wildlife) as part of the design;
 - Area of habitat lost – this is calculated by the Calculator once other fields are completed; and
 - Area of habitat created – this is calculated by the Calculator once other fields are completed.
- 2.18 The area of each habitat type created is then entered along with the same suite of associated characteristics (i.e. condition, strategic significance) and automatically generated data (e.g. distinctiveness).
- 2.19 As part of the proposed habitat creation and restoration, the Calculator takes into account ‘risk factors’. These include:
- Temporal factors – time required to reach target condition (the creation of a habitat, e.g. woodland takes time to mature and reach target condition). The temporal factor is generated automatically for each proposed habitat type but additional data covering delays in habitat creation or advance habitat creation due to specific project schedules can be accommodated in the overall assessment; and
 - Difficulty factors – risk of failure of achieving habitats through restoration and/or creation. Some restoration and enhancements measures are more difficult to achieve than others. The Calculator automatically selects the level of difficulty depending on the habitat chosen.

⁵ *Geographic Information System*

- 2.20 Linear features, such as hedgerows, ditches and streams are assessed separately within the methodology. The current length of the feature is entered, and the feature condition is selected based on the guidelines presented in the methodology. The lengths to be retained, removed or enhanced are added to the spreadsheet along with any new linear features to be created. The units calculated pre- and post-development are compared and the number of 'hedge biodiversity units' or 'river biodiversity units' delivered under the proposed scheme is automatically calculated.
- 2.21 For this Site there are no linear features within either the baseline or proposed landscape scheme.

3. RESULTS

Desk Study

- 3.1 The desk study results showed that there were a number of designated sites and protected species records within a 2km radius of the Site. Further details on these sites and species are provided in Appendix 4.

Statutorily Protected Sites

- 3.2 Statutorily protected sites include all tiers of nature conservation sites that are legally protected, including Special Areas of Conservation (SAC), Special Protection Areas (SPA) and SSSI, along with Local and National Nature Reserves.
- 3.3 No statutorily sites are present within 2km of the Site and the site is not within an Impact Risk Zone (IRZ⁶) for any nearby protected sites.

Other Protected Sites

- 3.4 Local Wildlife Sites (LWS) are discrete areas of land which are considered to be of significance for wildlife features in at least a District/Borough/Unitary Authority context. LWS designation is non-statutory, but it recognises the high value of a site for wildlife. Many sites are of county, and often regional or national, importance. They are often designated because they support characteristic or threatened species or habitats included in the Local or national Biodiversity Action Plan. LWS are not protected by legislation, but their importance is recognised by local authorities when considering any relevant planning applications, and there is a presumption against granting permission for development that would have an adverse impact on a site. Such measures have been strengthened by the provisions of the NERC Act 2006 which requires all public bodies to 'have regard for' the conservation of biodiversity.
- 3.5 In Greater Manchester, LWS are referred to as Sites of Biological Interest (SBI). Three non-statutory SBI are located within 2km of the Site:
- Rochdale Canal Stott's Lane - Ducie Street Basin SBI;
 - Ashton Canal (West) SBI; and
 - River Irwell SBI.
- 3.6 The locations of the SBI are shown in Appendix 4. None occur on the Site itself.

Rochdale Canal Stott's Lane – Ducie Street Basin

- 3.7 This stretch of canal runs through Oldham and Rochdale and lies approximately 1.4km from the proposed development Site boundary. The part of the canal which runs through Manchester is designated as an SBI for its regionally important aquatic habitat and species, including floating water plantain (*Luronium natans*), a species protected by the Conservation of Habitats and Species Regulations 2010. This SBI includes populations of American pondweed (*Potamogeton epihydrus*), included in Cheffings and Farrell (2005, as amended).

⁶ The Impact Risk Zones (IRZ) are a GIS tool developed by Natural England to make a rapid initial assessment of the potential risks posed by development proposals to: Sites of Special Scientific Interest (SSSI), Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Ramsar sites.

Ashton Canal (West)

- 3.8 Ashton Canal (West) lies approximately 1.4km from the Site boundary. It is a navigable canal containing a rich aquatic habitat supporting various species of conservation importance, including populations of floating water plantain and grass-wrack pondweed (*Potamogeton compressus*). Grass-wrack pondweed is a species listed in Cheffings and Farrell (2005, as amended), A Vascular Plant Red List for England (Stroh *et al.* 2014) and is a Species of Principal Importance in England under Section 41 (S41) of the NERC Act 2006.

River Irwell

- 3.9 The River Irwell is a 39-mile (63km) long river which flows through the Irwell Valley in Lancashire and Greater Manchester. The stretch that is classified as an SBI is situated approximately 2km to the north-west of the proposed development Site boundary. The river valley provides an important habitat for wildlife and also acts as a corridor through which species can move on migration, or as their distributions change.

Protected Species

- 3.10 A map showing the locations of all the protected species and S41 species of Principal Importance in England under S41 of the NERC Act 2006 within the 2km search area is provided in Appendix 4. The results are summarised below.

Amphibians

- 3.11 No amphibian records were reported by GMEU within the 2km search area. No records of any great crested newt (*Triturus cristatus*, GCN) EPSL⁷ were present within 1km of the site on the MAGIC website⁸.

Bats

- 3.12 The locations of bat roosts within the 2km desk study search area and the locations of bat signs within the 2km search area are presented in Appendix 4. All bats and their roosts are protected under UK legislation.
- 3.13 The data search returned a total of 37 known bat roosts within the 2km search area comprising, unidentified bat species (one record), common pipistrelle (*Pipistrellus pipistrellus*, 20 records), unidentified pipistrelle species (13 records), soprano pipistrelle (*Pipistrellus pygmaeus*, two records) and Daubenton's bat (*Myotis daubentonii*) (one record). The roost recorded closest to the Site was a common pipistrelle roost located approximately 280m north of the Site. Details of this roost are provided in PAA (2011) and it comprises a common pipistrelle roost of up to 50 bats within the River Medlock culvert. The next closest bat roosts to the Site are located approximately 800m away; these are two sites with common pipistrelle roosts.
- 3.14 Numerous other signs of bat activity were also recorded within the search area, mostly likely to be bats observed flying in the local area or grounded bats rescued. Table 1 shows the numbers of each species recorded in the search zone and the proximity to the Site to the closest record for each.

⁷ European Protected Species Licence(s)

⁸ www.magic.gov.uk accessed 24/10/2023

Table 1 Bat Records (Not Including Roosts)

Species		No. of Records	Closest Record (approximate distance from site)
Unidentified Bat species		7	408m NE
Brown long-eared bat	<i>Plecotus auritus</i>	1	1.4km NW
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	27	368m NW
Daubenton's bat	<i>Myotis daubentonii</i>	1	1.4km N
Pipistrelle species	<i>Pipistrellus</i> sp.	64	250m NW
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	4	1.1km NW

- 3.15 A search of bat EPSL on MAGIC returned five records within 1km of the Site. The closest record related to the known common pipistrelle roost in the nearby River Medlock culvert (over 200m away, see PAA 2011). The other four records are between 900m and 1km to the north of the site, comprising a brown long-eared (*Plecotus auritus*) (a day roost and a breeding roost), three common pipistrelle (day roosts) and a soprano pipistrelle (day roost).

Badger

- 3.16 Two badger (*Meles meles*) records were provided for the 2km search area, some distance from the Site. No records were within or adjacent to the Site and no further details relating to badger are provided here owing to their strictly confidential nature.

Other Mammals

- 3.17 Ten records of hedgehog (*Erinaceus europaeus*), a S41 species of Principal Importance, were returned in the desk study search by GMEU. The closest record was located approximately 670m west of the Site. The additional records were associated with residential areas to the north and the south of the Site boundary.

Birds

- 3.18 Records received from GMEU comprise records of 20 bird species of conservation importance recorded within 2km of the Site. These comprise four species listed on Schedule 1 of the WCA, 1981 (as amended), 13 species of high conservation concern or 'Red Listed' species, and five moderate conservation concern or 'Amber Listed' species (Stanbury *et al.* 2021). In addition, 16 of these are also S41 species. See Appendix 4 for details, however, Schedule 1 species are omitted due to the sensitive nature of these records.
- 3.19 All S41 bird species recorded within the search area are listed in Table 2, along with their Red or Amber conservation status. No records of any protected bird species were found within the Site boundary. The nearest records are for song thrush (*Turdus philomelos*), dunnock (*Prunella modularis*) and house sparrow (*Passer domesticus*) along with a record for black redstart (*Phoenicurus ochrurus*), all within the local area.

Table 2 Bird Species of Principal Importance (S41)

Common Name	Scientific Name	Number of Records	Amber	Red
Artic skua	<i>Stercorarius parasiticus</i>	1		x
Bullfinch	<i>Pyrrhula pyrrhula</i>	11	x	
Cuckoo	<i>Cuculus canorus</i>	2		x
Dunnock	<i>Prunella modularis</i>	59	x	

Common Name	Scientific Name	Number of Records	Amber	Red
Herring gull	<i>Larus argentatus</i>	3		x
House sparrow	<i>Passer domesticus</i>	24		x
Lapwing	<i>Vanellus vanellus</i>	17		x
Lesser redpoll	<i>Acanthis caberet</i>	2		x
Linnet	<i>Linaria cannabina</i>	4		x
Reed bunting	<i>Emberiza pallasii</i>	1	x	
Skylark	<i>Alauda arvensis</i>	6		x
Song thrush	<i>Turdus philomelos</i>	33	x	
Spotted flycatcher	<i>Muscicapa striata</i>	2		x
Starling	<i>Sturnus vulgaris</i>	22		x
Tree sparrow	<i>Passer montanus</i>	1		x
Yellow wagtail	<i>Motacilla flava</i>	1		x

Invertebrates

- 3.20 A total of nine records of a moth classified as a S41 species of Principal Importance were provided within 2km of the Site. The nearest record to the Site is located approximately 0.9km to the south. No records were located on the Site itself.

Plants

- 3.21 Two records of grass-wrack pondweed were provided within the 2km search area, as previously described. One of the records is located within Ashton Canal (West) SBI and the second record is from the western end of Rochdale Canal, approximately 200m north of the boundary of the Site.
- 3.22 No records of non-native invasive plant species (as listed on Schedule 9 of the WCA) were returned from GMEU.

Extended Phase 1 Habitat Survey

Main Habitat Types Present

- 3.23 The Site now largely comprises hard-standing with areas of self-seeded ephemeral/short perennial vegetation and remnant areas of the previous amenity grassland. A single tree is present in the south-east of the Site, within the species-poor semi-improved grassland. The Site is currently being used as a site compound and contains temporary buildings. The habitats are shown in Figure 1 with illustrative photographs in Appendix 5.

Hard-standing

- 3.24 Much of the Site is covered with hard-standing areas, used as a construction compound and for car parking. Some areas have been subject to clearance in earlier phases of the Site's development. These areas largely have very little vegetation developed over them, with only very scattered ruderal vegetation typical of these sites.
- 3.25 The edges of some of the hard-standing areas have colonised with a mixture of plants typical of urban areas in Manchester.

Ephemeral/Short Perennial

- 3.26 There is a narrow area at the edge of the wooden hoarding in the central area of the site, currently used as a storage area for metal drums. Surrounding the drums is self-seeded

vegetation containing annual species, such as smooth sow-thistle and cleavers, perennial species including great willowherb and wild parsnip, and scattered young butterfly-bush and bramble. The area of self-seeded vegetation in the storage area at the west of the site is grassier, containing abundant creeping bent and Yorkshire-fog, with scattered bramble and butterfly-bush.

- 3.27 A triangular area of bare earth at the corner of the car park contains sparsely scattered self-seeded plants with species including dandelion, ribwort plantain and perennial rye-grass.
- 3.28 There are sparsely scattered ephemeral/short perennial species at the base of buildings and in the hardstanding. The area covered by the plants is considered too small and discrete to comprise an area of habitat.

Semi-improved Neutral Grassland

- 3.29 External to the wooden hoarding, at the south of the site, is a narrow band of grassland edging to the tarmac pavement. The grassland contains abundant common bent, with frequent creeping bent, occasional perennial rye-grass and a patch of common couch grass. Forb species in the sward include frequent ribwort plantain, occasional bird's-foot trefoil and dandelion, and black medick, yarrow, wild parsnip and red clover occurring rarely. The vegetation is parched in places, and contains small patches of bare ground.

Poor Semi-improved Grassland

- 3.30 There is a band of remnant amenity grassland at the edge of the current car park, containing an intermittent line of concrete blocks. The poor semi-improved grassland appears currently unmanaged and contains abundant creeping bent with occasional to locally abundant perennial rye-grass, frequent dandelion and occasional creeping thistle and curled dock. A range of other species are present at lower frequency including broad-leaved dock, white clover, yarrow, greater plantain, bird's-foot trefoil, spring beauty, meadow buttercup and broom.

Tree

- 3.31 There is one tree within the site, a semi-mature Norway maple, located in the grassland at the corner of the car park. No potential roost features (PRF) suitable for bats were noted in the tree.

Non-native Invasive Plants

- 3.32 There were no non-native invasive plant species listed in Schedule 9 of the WCA, 1981 (as amended) recorded on Site.

Protected Species

- 3.33 Given the relative isolation of the Site from semi-natural habitat and the lack of suitable refugia for protected species, along with the regular disturbance the site is now subject to as part of the development of the sider Plot 11 area, it was concluded that the species most relevant to this assessment were foraging bats, most likely pipistrelle species, nesting birds and foraging black redstart. The Site lies adjacent to the western edge of, the Greater Manchester Black Redstart Priority Area (GMBPA) (Greater Manchester Biodiversity Partnership 2008) and a record of this species on the north part of First Street is returned in the desk study.

Breeding Birds

- 3.34 A single magpie (*Pica pica*) was observed close to the Site during the survey and other common urban bird species may occasionally access the site. There is potential for birds to nest in the single tree, although current disturbance levels makes this less likely.

- 3.35 The suitability of the Site for black redstart is negligible, with no opportunities for nesting. Occasional use of the Site by foraging black redstart cannot be ruled out, as there are areas of sparsely vegetated stony ground that the species is typically associated with in the UK, along with the green roof provided by One First Street.
- 3.36 There are no significant opportunities for birds to forage within the site as habitats are very limited in extent and regularly disturbed.

Bats

- 3.37 The buildings/structures on Site were all metal cabins and storage containers associated with the construction activities across Plot 11 and were assessed as having no potential for roosting bats.
- 3.38 The tree on Site contains no PRF for bats as there were no suitable features such as woodpecker holes, rot holes, cankers, tear-outs or splits. The grassland, hard-standing and scattered vegetation provide no significant foraging habitat for bats. Street lighting, together with the lack of extensive vegetation and limited connectivity to other semi-natural habitats, further diminish the potential as bat foraging habitat.
- 3.39 The Site is approximately 300m from the closest bat roost: a common pipistrelle roost within the culvert of the River Medlock. Surveys on this roost in 2015 (completed by PAA as part of the post-development monitoring for EPSL works at Plots 1 and 3) indicate that the bats forage along the river corridor, not straying to the surrounding land, and the on-going development of the wider First Street site is likely to have further strengthened this association.

Invertebrates

- 3.40 An incidental record of a red admiral (*Vanessa atalanta*) butterfly was noted on site.

Biodiversity Net Gain Assessment

Existing Habitats

- 3.41 The baseline habitats comprise small areas of ephemeral/short perennial and grassland types with a single tree, all set within a largely hardstanding area.
- 3.42 All habitats are classified as being in Poor condition, with the exception of the ephemeral/short perennial habitat that classified as Moderate condition. The tree is assessed as being of Medium size class and in Poor condition.
- 3.43 A summary of the baseline habitats on site, areas (in ha), the criteria that they passed or failed, and their condition in relation to the BNG assessment criteria are provided in Table 3. The condition criteria can be found in the Technical Annex 1 of the BNG Metric 4.0 information web page⁹.

⁹ <https://publications.naturalengland.org.uk/publication/6049804846366720>

Table 3 Summary of Baseline Habitats and Features and their Condition

Phase 1 Area Habitat	UKHab Equivalent within BNG Metric	Condition Criteria							Area (Hectares)	Condition
		A	B	C	D	E	F	G		
Building	Developed land; sealed surface								0.0605	N/A
Ephemeral/short perennial	Ruderal/ephemeral	N	Y	Y	-	-	-	-	0.0023	Moderate
Hardstanding	Developed land; sealed surface								0.1643	N/A
Neutral grassland	Other neutral grassland	N	N	Y	Y	N	N	-	0.002	Poor
Species-poor neutral grassland	Modified grassland	N	N	Y	N	Y	Y	Y	0.0049	Poor
Tree (retained)	Individual trees, urban trees	N	Y	N	N	N	Y	-	0.0366	Poor

Post-development Habitats

- 3.44 Please refer to Appendix 3, which presents the landscape plans available at the time of the assessment. It should be recognised that the landscape proposals may be subject to minor amendments, however, the broad habitat types and sizes are expected to remain very similar as the design develops.
- 3.45 The total area of the site is estimated as 0.2341 ha.
- 3.46 Only the single tree is proposed to be retained on site.
- 3.47 The value (ha), distinctiveness and condition assigned to each habitat feature is summarised in Table 4. The distinctiveness Criterion is automatically selected by the Calculator. Habitat condition is assessed according to the Condition Assessment criteria set within Metric 4.0 against the landscape proposals and a brief rationale for the selection of habitat condition is given for each habitat and linear feature.
- 3.48 The proposed ornamental shrub planting does not require a Condition Assessment under Metric 4.0; however, the planting is designed to include ecologically beneficial/pollinator-friendly species with additional herbaceous species included (see Appendix 3).
- 3.49 The majority of the proposed habitats are assumed to attain Poor condition over time under the criteria set for BNG, including the tree planting. This may, however, be able to be increased to Moderate for some habitats once the planting specifications are known.
- 3.50 The exception is the proposed rain garden that is likely to achieve Moderate condition.
- 3.51 Overall, a 2-year delay in habitat creation (from habitat loss) has been assumed, however, the construction schedule is not yet confirmed.
- 3.52 The post-development habitat features proposed to be created on site and their anticipated habitat condition are summarised in Table 4.

Table 4 Proposed Post-development Habitat Types

Level	Habitat	Equivalent BNG Habitat Type	Area (Hectares)	Condition
Ground Floor	Amenity grassland	Modified grassland	0.0121	Poor
Ground Floor	Amenity grassland with seasonal bulbs	Modified grassland	0.0040	Poor
Ground Floor	Building	Developed land; sealed surface	0.0753	N/A - Other
Ground Floor	Gravel	Artificial unvegetated, unsealed surface	0.0044	N/A - Other
Ground Floor	Paving	Developed land; sealed surface	0.0784	N/A - Other
Ground Floor	Perennial planting 1	Vegetated garden	0.0285	Condition Assessment N/A
Ground Floor	Rain Garden - Perennial planting 2	Sustainable drainage system	0.0046	Moderate
Ground Floor	Road - tarmac	Developed land; sealed surface	0.0091	N/A - Other
Roof Terrace	Meadow Mix 6	Biodiverse green roof	0.0021	Poor
Roof Terrace	Paving	Developed land; sealed surface	0.0109	N/A - Other
Roof Terrace	Shrub Mix 3 – shrub planting	Intensive green roof	0.0027	Poor
Roof Terrace	Shrub Mix 4 – Sedum mat	Other green roof	0.0016	Condition Assessment N/A
Roof Terrace	Shrub Mix 5 – Sedum mat with plugs	Other green roof	0.0002	Condition Assessment N/A
Trees	Ground level trees x 20 (Small size class)	Urban trees	0.1221	Poor

4. ECOLOGICAL APPRAISAL AND RECOMMENDATIONS

Potential Impacts of the Proposal

- 4.1 It is predicted that most of the construction and operational phase impacts associated with the proposed development would be constrained to the Site and its immediate environs. The main predicted effects that could cause ecological impacts for each phase of the development are:
- Loss of small patches of habitats comprising self-seeded ephemeral/short perennial vegetation and grassland (Construction Phase);
 - Disturbance effects from construction (Construction Phase); and
 - Increased lighting of the Site (Operational Phase).
- 4.2 The effects are discussed further below in terms of their impact on protected sites, habitats, bats and breeding birds.

Protected Sites

- 4.3 The Site contains no statutory nature conservation sites; none are within 2km of the Site and none are likely to be directly affected by its development.
- 4.4 The three non-statutory SBI identified within 2km of the Site are all situated upstream and 1.4km or more from the proposed development Site. Impacts of the development on these sites are, therefore, considered unlikely due to there being no direct links between them and the Site.

Habitats

- 4.5 The habitats and plant species recorded within the Site are widespread and common throughout the UK and Greater Manchester. Habitat areas were very small and unlikely to provide significant resources for local wildlife.
- 4.6 None of the plant species recorded within the Site are either Nationally Scarce or Nationally Rare (Hill *et al.* 2004) or of any other conservation significance (Cheffings and Farrell 2005, as amended, Stroh *et al.* 2014). No Schedule 9 invasive non-native plant species were recorded during the survey.
- 4.7 Overall, the Site is considered representative of isolated patches of self-seeded ephemeral/short perennial vegetation and remnant grassland patches plus a single tree all set within a wider area of hard-standing.

Protected Species

Bats

- 4.8 The Site provides no significant area of habitat and is unlikely to be used by foraging bats. The loss of the vegetation during construction and increased lighting of the Site post-construction is, therefore, predicted to have a negligible impact on the conservation status of bats within the local area and Greater Manchester.
- 4.9 The buildings and the tree on Site offer no potential for use by roosting bats.
- 4.10 There is a known bat roost within the culvert which runs underneath the wider First Street North development Site. The River Medlock Culvert was surveyed in 2008 for bats (Arup 2008) and a roost of between 10 to 20 common pipistrelle bats was confirmed. This survey was subsequently updated in 2011 by PAA, and 33 common pipistrelle bats were observed

emerging from the culvert entrance. This suggested an increase in the usage by bats and that a small maternity roost was present. It is likely that up to 50 bats are present at the culvert. In addition, the relatively stable temperature and humidity provided by the volume of suitable roosting cavities, thick walls and roof structure, along with the water flow, indicate the site has a high potential for bats to hibernate within it. As such, the culvert was assessed as being used by a small colony of common pipistrelle bats all year round.

- 4.11 The 2011 surveys were followed up with post-development monitoring surveys in 2015 by PAA, which showed foraging behaviour was largely confined to the river corridor, and it is unlikely bats would commute to or across the Site or forage in any significant way over it.
- 4.12 As Plot 11 is around 300m from the culvert, it is unlikely that indirect effects from noise and vibration from works on the Site would potentially significantly affect the roost or the bats within it.

Breeding Birds

- 4.13 The tree could offer nesting habitat for some local bird species, such as magpie that have nested on the site previously (PAA 2019). However, the tree is proposed for retention and will, therefore, be protected during construction.
- 4.14 Part of the northern section of the First Street development area is just within the GMBPA (Jones 2009) and there is a single record of a black redstart being observed in this area. The Site is, however, considered to have no opportunities for nesting by black redstart and negligible foraging potential. The Site does not form a key habitat for any black redstart that may be nesting locally.

Invertebrates

- 4.15 The habitats are small in size and while they will provide some nectar and pollen resources for local populations of invertebrates, this will be limited.

Biodiversity Net Gain

- 4.16 The BNG assessment using Metric 4.0 is presented in full in Appendix 6. Overall, the current scheme using the assumed parameters as detailed in Section 3 potentially provides for a +143.43% increase in biodiversity as measured by the Metric, the result of a net increase of 0.25 habitat units. This is summarised in Table 5.

Table 5 Summary of the BNG Assessment Results

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.25
	Hedgerow units	0.00
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	143.43%
	Hedgerow units	0.00%
	Watercourse units	0.00%
Trading rules satisfied?		No - Check Trading Summaries ▲

Recommendations

Lighting Scheme

- 4.17 Lighting design should be sensitively developed allowing for some areas of darker/reduced lighting for at least some of the night to encourage use by species such as bats and moths. Reference should be made to recent guidance (ILP 2023).
- 4.18 The final lighting design should be developed with input from an appropriately qualified Ecologist.

Landscaping Scheme

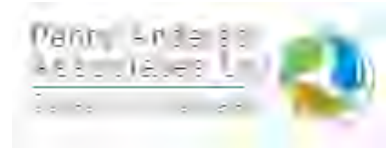
- 4.19 A range of native and wildlife-friendly plants should be included in the landscaping design. The planting design should include nectar- and pollen-rich plant species to support populations of pollinators.

Bat and Bird Boxes

- 4.20 If the design allows, then the inclusion of suitably designed bat roosting boxes/structures and bird nest boxes would support additional biodiversity across the site.
- 4.21 These features should be carefully selected, designed and located with guidance from a suitable qualified Ecologist to target those animal species likely to be present within the local area.

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6. ABBREVIATIONS

BAP	Biodiversity Action Plan
CRoW	Countryside and Rights of Way
EPSL	European Protected Species Licence
EU	European Union
GMBPA	Greater Manchester Black Redstart Priority Area
GMEU	Greater Manchester Ecology Unit
IRZ	Impact Risk Zone(s)
JNCC	Joint Nature Conservation Committee
LWS	Local Wildlife Site(s)
MAGIC	Multi-Agency Geographic Information for the Countryside
NERC	Natural Environment and Rural Communities
NPPF	National Planning Policy Framework
PRF	Potential Roost Feature(s)
S41	Section 41
SAC	Special Area(s) of Conservation
SBI	Site(s) of Biological Importance
SPA	Special Protection Area(s)
SSSI	Sites of Special Scientific Interest
WCA	Wildlife and Countryside Act

FIGURE



Legend

- Site boundary
- Phase 1 Habitats
 - B2.2, Neutral grassland - semi-improved
 - B6, Poor semi-improved grassland
 - J1.3, Ephemeral/short perennial
 - J3.6, Building/structure
 - J5, Hardstanding
 - J2.4, Metal hoarding
 - J2.4, Wooden hoarding
 - A3.1, Broadleaved tree
 - J1.3, Ephemeral/short perennial

British National Grid
Projection: Transverse Mercator
False Easting: 400000.000000
False Northing: -100000.000000
Central Meridian: -2.000000
Scale Factor: 0.999601
Latitude Of Origin: 49.000000

ISO A3

Metres

0 1 2 4 6 8 10

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Buxton, Derbyshire, SK17 6SN.
Telephone 01298 27086

Project Name: First St - Plot 11 Block C

Discipline: Ecology

Title: Phase 1 Habitats
June 2023

Scale: 1:300 Drawing No.: Figure 1

Drawn By: CC Originator: SRS Date: 20/10/2023

PA Ref.: G:\DLML01_Plot11_First Revision: 1.0

APPENDICES

APPENDIX 1

Relevant Protected Species Legislation Summaries

SUMMARY OF THE LEGISLATION RELATING TO BATS

All wild species of bat are protected under the Wildlife and Countryside Act (WCA) 1981, which has also been amended by later legislation, including the Countryside and Rights of Way (CROW) Act 2000. Bats are listed on Schedule 5 of the WCA and are therefore subject to some the provisions of Section 9 which, with the amendments, make it an offence to:

- Intentionally or recklessly disturb a bat while it is occupying a structure or place which it uses for shelter or protection (S9:4b).
- Intentionally or recklessly obstruct access to any structure or place used for shelter or protection by a bat (S9:4c).

There are additional offences in relation to buying and selling (S9:5) any live or dead animal of this species or anything derived from them.

Bat species are also listed under Annexes IIa and IVa of the EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora, also known as the 'Habitats Directive'. Inclusion on Annex IVa means they are consequently identified as European Protected Species (EPS) and protected under the Conservation of Habitats and Species Regulations 2017 (amended).

The Conservation of Habitats and Species Regulations 2017 (amended) state that a person commits an offence if they:

- (a) deliberately capture, injure or kill any wild animal of a European protected species,
- (b) deliberately disturb wild animals of any such species, in such a way as –
 - (i) to impair their ability to survive, to breed or reproduce, or to rear their young, or
 - (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate, or
 - (iii) to affect significantly the local distribution or abundance of the species to which they belong;
- (c) deliberately take or destroy the eggs of such an animal, or
- (d) damage or destroy a breeding site or resting place of such an animal.

Under these Regulations it is an offence to damage or destroy a breeding site or resting place whether the animal is in occupation or not, and protection extends to all life stages of the animal in question. There are additional offences relating to possession, control and sale of a live or dead bat or part of such an animal.

In addition, seven native British bat species, including the soprano pipistrelle (*Pipistrellus pygmaeus*) and the brown long-eared bat (*Plecotus auritus*), are listed as 'species of principal importance' for the conservation of biodiversity in England under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (amended). In Wales, Section 7 of the Environment (Wales) Act 2016 provide a list of organisms of 'principal importance for maintaining and enhancing biodiversity' and lists several species of bat including the common pipistrelle (*Pipistrellus pipistrellus*) which is absent from England's S41 list.

Please note: the above text provides a brief summary of the legislation in relation to bats and their roosts and the original Acts, Regulations and any amendments should be referred to for the precise wording.

SUMMARY OF THE LEGISLATION RELATING TO BREEDING BIRDS

All wild species of breeding birds and their nests and eggs are protected under Part 1 of the Wildlife and Countryside Act (WCA) 1981, as amended by later legislation including the Countryside and Rights of Way (CROW) Act 2000. This legislation applies in England and Wales.

Part 1 (Section 1:1) of the WCA states that:

'If any person intentionally,

- (a) kills, injures or takes any wild bird;
- (b) takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or
- (c) takes or destroys an egg of any wild bird,

he shall be guilty of an offence.'

Part 1 (Section 1:5) of the WCA (amended by the CROW Act 2000) refers to specific birds listed on Schedule 1 of the WCA, and states that:

'If any person intentionally or recklessly,

- (a) disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or
- (b) disturbs dependent young of such a bird,

he shall be guilty of an offence and liable to a special penalty.'

Schedule 1 includes birds such as Western barn owl (*Tyto alba*), black redstart (*Phoenicurus ochrurus*), woodlark (*Lullula arborea*) and Cetti's warbler (*Cettia cetti*). Please refer to the WCA for a complete list of Schedule 1 species¹.

Some provisions are made to allow the killing and taking of certain species under certain circumstances, as follows:

- Birds listed on Schedule 2 (Part 1) of the Act may be taken or killed outside of the 'close season' for each individual species (the 'close season' is defined by the Act). This includes various wild duck and geese species.
- Birds listed on Schedule 2 (Part 2) of the Act may be killed or taken by authorised persons at all times. This includes species such as carrion crow (*Corvus corone*), Eurasian magpie (*Pica pica*), feral pigeon² (*Columba livia*) and greater Canada goose (*Branta canadensis*). An 'authorised person' is defined as a person who has written authorisation to undertake the act from the relevant statutory authority. The written authority is in the form of a licence, either a general licence which covers a number of the more typical 'pest' species, or an individual licence for other individual species. In England these licences are issued by Natural England and in Wales by the Welsh Assembly Government.

Please note: the above text provides a brief summary of the legislation in relation to breeding birds in England and Wales and the original Act and any amendments should be referred to for the precise wording.

¹ <https://www.legislation.gov.uk/ukpga/1981/69/schedule/1>

² Also known as rock dove

APPENDIX 2
Botanical Species List

Appendix 2 Botanical Species List

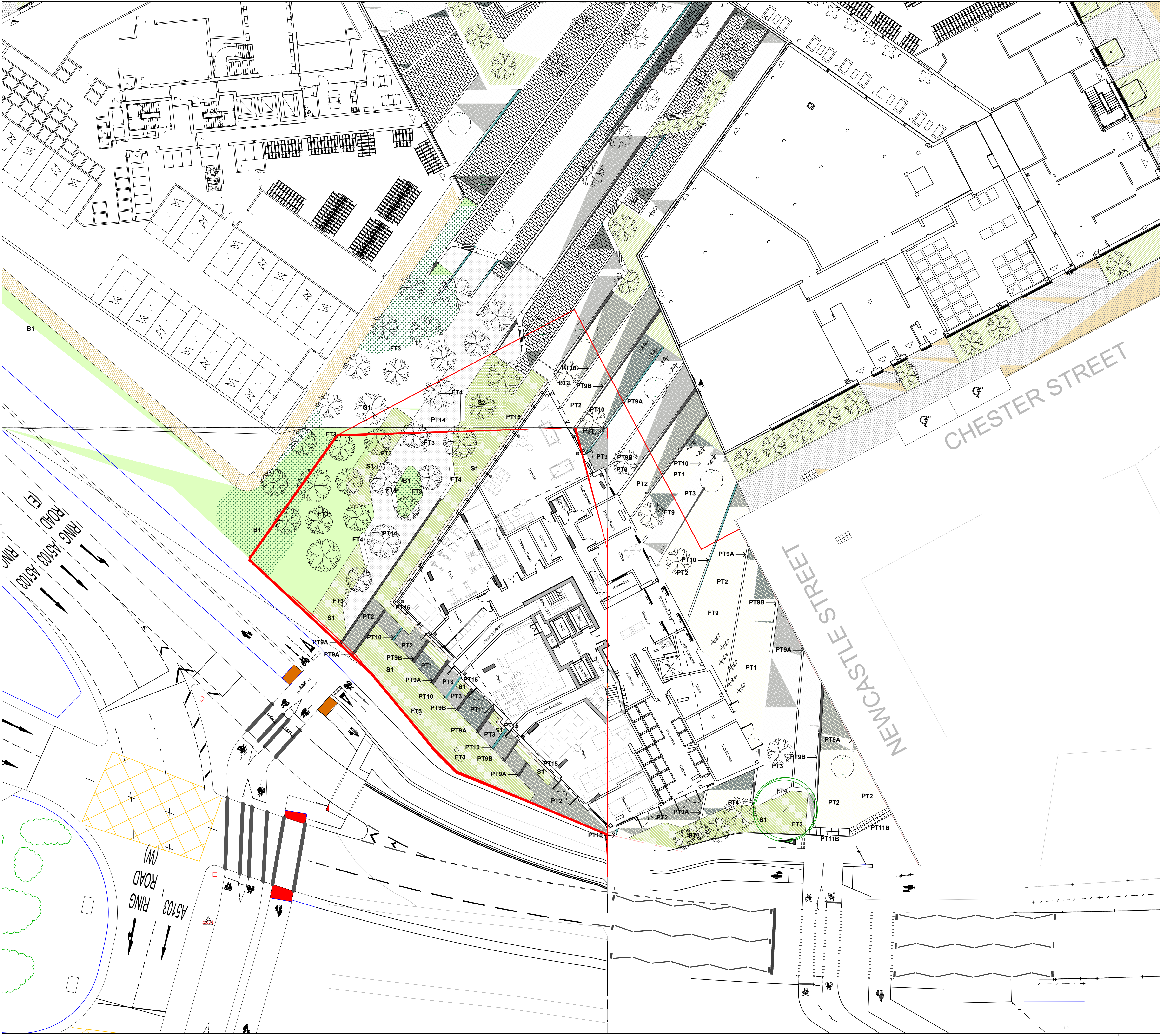
Common Name	Scientific Name	Ephemeral / Short Perennial	Amenity Grassland (Semi-improved Neutral Grassland)	Amenity Grassland (Poor Semi-improved Grassland)	Scattered Trees
Woody Species					
Ash (seedling)	<i>Fraxinus excelsior</i>	R			
Bramble	<i>Rubus fruticosus</i> agg.	O	R	R	
Broom	<i>Cytisus scoparius</i>			R	
Butterfly-bush	<i>Buddleja davidii</i>	O		R	
Norway maple	<i>Acer platanoides</i>				R
Sycamore (sapling)	<i>Acer pseudoplatanus</i>	R			
Herbs, Grasses and Ferns					
American willowherb	<i>Epilobium ciliatum</i>	R			
Barren brome	<i>Anisantha sterilis</i>			R	
Bird's-foot trefoil	<i>Lotus corniculatus</i>	R	O	R	
Black medick	<i>Medicago lupulina</i>		R		
Broad-leaved dock	<i>Rumex obtusifolius</i>	R	R	R	
Broad-leaved willowherb	<i>Epilobium montanum</i>	R			
Bush vetch	<i>Vicia sepium</i>			R	
Canadian fleabane	<i>Erigeron canadensis</i>	R			
Cleavers	<i>Galium aparine</i>	O			
Cock's-foot	<i>Dactylis glomerata</i>		R		
Colt's-foot	<i>Tussilago farfara</i>			R	
Common bent	<i>Agrostis capillaris</i>		A	R-LA	
Common chickweed	<i>Stellaria media</i>	R		R	
Common couch	<i>Elymus repens</i>		LA	R	
Common nettle	<i>Urtica dioica</i>	R			
Common ragwort	<i>Jacobaea vulgaris</i>	O	R	R	
Creeping bent	<i>Agrostis stolonifera</i>	F-LA	F	A	
Creeping buttercup	<i>Ranunculus repens</i>		R	R-O	
Creeping thistle	<i>Cirsium arvense</i>	R-O		O	
Curled dock	<i>Rumex crispus</i>	R		O	
Daisy	<i>Bellis perennis</i>	R			
Dandelion	<i>Taraxacum officinale</i> agg.	O	O	F	
Great willowherb	<i>Epilobium hirsutum</i>	O			
Greater plantain	<i>Plantago major</i>	R		R	
Groundsel	<i>Senecio vulgaris</i>	R			
Hedge mustard	<i>Sisymbrium officinale</i>	O			
Hogweed	<i>Heracleum sphondylium</i>		R		
Knotgrass	<i>Polygonum aviculare</i>	R		R	
Marsh foxtail	<i>Alopecurus geniculatus</i>			R	
Meadow buttercup	<i>Ranunculus acris</i>	R		R	
Nipplewort	<i>Lapsana communis</i>	R			
Oxford ragwort	<i>Senecio squalidus</i>			R	
Perennial rye-grass	<i>Lolium perenne</i>	R	O	O-LA	
Spring beauty	<i>Claytonia perfoliata</i>			R	
Prickly lettuce	<i>Lactuca serriola</i>	R			
Red clover	<i>Trifolium pratense</i>		R		
Red fescue	<i>Festuca rubra</i>	R	R	R	
Ribwort plantain	<i>Plantago lanceolata</i>	O	F	R	
Rough meadow-grass	<i>Poa trivialis</i>	R		R	
Sheep's sorrel	<i>Rumex acetosella</i>		R	R	
Smooth sow-thistle	<i>Sonchus oleraceus</i>	R-O	R	R	
Spear thistle	<i>Cirsium vulgare</i>	R		R	
Squirrel-tail fescue	<i>Vulpia bromoides</i>	R	O-LF	R	
Sticky mouse-ear	<i>Cerastium glomeratum</i>	R		R-O	
Sweet vernal-grass	<i>Anthoxanthum odoratum</i>	R			
Thale cress	<i>Arabidopsis thaliana</i>			R	
Toad rush	<i>Juncus bufonius</i>	R		R	
Wall speedwell	<i>Veronica arvensis</i>			R	
White clover	<i>Trifolium repens</i>	R		R	
Wild parsnip	<i>Pastinaca sativa sylvestris</i>	R	R		
Wood avens	<i>Geum urbanum</i>	R			
Yarrow	<i>Achillea millefolium</i>		R	R	
Yorkshire-fog	<i>Holcus lanatus</i>	F-LA	R	R	

KEY

D-Dominant, A-Abundant, F-Frequent, O-Occasional, R-Rare, L-Locally

APPENDIX 3

Landscape Proposals



GF PUBLIC REALM

SOFTWARES - Note legend is site wide

INGROUND TREE PLANTING IN HARD
GIRTH: 25-30cm
HEIGHT: 5 - 5.5m
STEM: Rootball
ROOT: 2.5m Clear Stem

INGROUND TREE PLANTING IN SOFT
GIRTH: 25-30cm
HEIGHT: 5 - 5.5m
STEM: Rootball
ROOT: 2.5m Clear Stem

RETAINED EXISTING TREE
Existing tree to be retained.

PERENNIAL PLANTING 1 (S1)
DETAILS: Mix of evergreen shrubs, ground cover and herbaceous perennials.
SIZE: 3-10L
ROOT: Containerised

RAIN GARDEN: PERENNIAL PLANTING 2 (S2)
DETAILS: Mix of evergreen shrubs, ground cover and perennials.
SIZE: 3-10L
ROOT: Containerised

AMENITY GRASS (G1)
PRODUCT: Tessa's Plus Turf
SUPPLIER: Lindum or equal & approved

SEASONAL BULBS (B1)
PRODUCT: Seasonal bulb mix.
SUPPLIER: Lindum or equal & approved

GF PUBLIC REALM

HARDWORKS - Note legend is site wide

PAVING TYPE 1 (PT1): GRANITE SETTS
SUPPLIER: Hardscape or equal & approved
SIZE: W100mm x L150mm - 300mm x D80mm
MATERIAL: Granite
PRODUCT: Kobra Green
FINISH: Flamed texture surface, sawn base and sides
SUBBASE: To engineers specification
DETAIL: 10000

PAVING TYPE 2 (PT2): GRANITE SETTS
SUPPLIER: Hardscape Granite Setts or equal & approved
SIZE: W100mm x L150mm / 200mm / 300mm x D80mm
MATERIAL: Granite
PRODUCT: Kobra
FINISH: Flamed texture surface, sawn base and sides
SUBBASE: To engineers specification
DETAIL: 10001

PAVING TYPE 3 (PT3): GRANITE SETTS
SUPPLIER: Hardscape Granite Setts or equal & approved
SIZE: W100mm x L150mm / 200mm / 300mm x D80mm
MATERIAL: Granite
PRODUCT: Alpendorada
FINISH: Flamed texture surface, sawn base and sides
SUBBASE: To engineers specification
DETAIL: 10002

PAVING TYPE 9A (PT9A): GRANITE BAND
SUPPLIER: Hardscape Granite or equal & approved
SIZE: W200mm x L300mm x D100mm
MATERIAL: Granite
PRODUCT: Crystal Black
FINISH: Bush Hammered surface, sawn base and sides
SUBBASE: To engineers specification
DETAIL: 10007

PAVING TYPE 9B (PT9B): GRANITE BAND
SUPPLIER: Hardscape Granite or equal & approved
SIZE: W300mm x L500mm x D100mm
MATERIAL: Granite
PRODUCT: Crystal Black
FINISH: Bush Hammered surface, sawn base and sides
SUBBASE: To engineers specification
DETAIL: 10008

PAVING TYPE 10 (PT10): LIMESTONE BAND
SUPPLIER: Hardscape Granite or equal & approved
SIZE: W200mm x L300mm x D100mm
MATERIAL: Limestone
PRODUCT: Kilkenny Blue Commercial
FINISH: Flamed
SUBBASE: To engineers specification
DETAIL: 10009

PAVING TYPE 11B (PT11B): BLISTER PAVING
PRODUCT: To Manchester City Councils specification
SUBBASE: To engineers specification

PAVING TYPE 14 (PT14): SELF BINDING GRAVEL
SUPPLIER: Hardscape or equal and approved
PRODUCT: Solid Granite Step Unit
SIZE: Tread 400mm x Rise 150mm
MATERIAL: Granite
FINISH: Flamed texture surface, sawn base and sides
COLOUR: Magma
ARIS: Pencil round nose with
NOTE: Inlay contrasting strip
SUBBASE: To engineers specification
DETAIL: 30001

PAVING TYPE 15 (PT15): GRAVEL
SUPPLIER: Hardscape or equal and approved
PRODUCT: Solid Granite Step Unit
SIZE: Tread 400mm x Rise 150mm
MATERIAL: Granite
FINISH: Flamed texture surface, sawn base and sides
COLOUR: Magma
ARIS: Pencil round nose with
NOTE: Inlay contrasting strip
SUBBASE: To engineers specification
DETAIL: 30001

FURNITURE TYPE 3 (FT3): BOULDERS
Supplier: Specialist Aggregates or equal & approved
Size: W450-600 x L 450-600 x H450-500 mm
Colour: Natural
Finish: Free from sharp edges or aggregates
Material: Locally sourced flacial boulder

FURNITURE TYPE 4 (FT4): GRANITE BENCH
SUPPLIER: Hardscape or equal & approved
As shown
MATERIAL: Granite
FINISH: Flamed
COLOUR: Kobra
DETAIL: 50001 / 50002

FURNITURE TYPE 6 (FT6): BOLLARD
PRODUCT: Stainless Steel Bollard
SUPPLIER: Kent Stainless or equal and approved
DIA: 101mm
HEIGHT: 900mm above ground
MATERIAL: Stainless Steel
FINISH: Polished
FIXING: Root fixed

FURNITURE TYPE 9 (FT9): BIKE STAND
PRODUCT: Ride Bike Rack or equal and approved
SUPPLIER: Landscape Forms
SIZE: 1100mm Height x 800mm Wide x 60mm Dia
MATERIAL: Aluminum
FINISH: Polyester Powder Coated
COLOUR: Grey

NOTES

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CDM INFORMATION

- To be completed

KEY PLAN

01	Landscape amendments following new GF layout	GH	06.11.23
02		GH	25.10.23
Issue	Revision	Initial	Date

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LONDON The Curator 38 Chancery Lane London WC2A 1EN t 0203 984 4022 w optimisedenvironments.com			
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Client
Downing Students (Manchester) Ltd

Project
FIRST STREET SOUTH BLOCK C Manchester

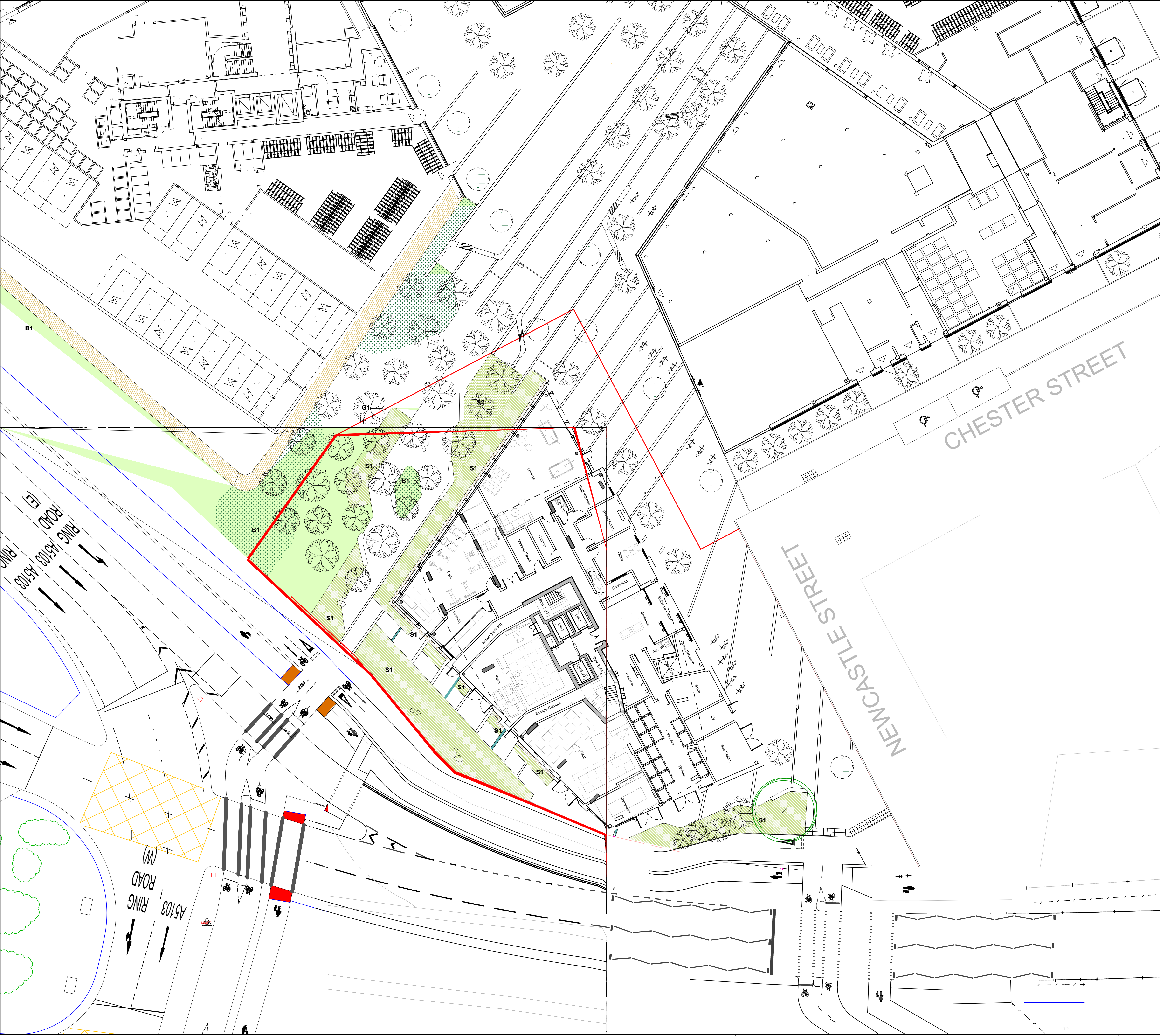
Drawing Title
LANDSCAPE PLAN GENERAL ARRANGEMENT

Scale Bar	North
2m 4m 6m 8m 10m	

Scale: 1:200@A1	Date: 06.11.23
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By: GH	Status: PLANNING
Checked: AW	Approved: AW

Drawing Number	Rev
10474-OPE-00-GF-DR-L-910001	01



GF PUBLIC REALM

SOFTWARES - Note legend is site wide

INGROUND TREE PLANTING IN HARD
GIRTH: 25-30cm
HEIGHT: 5 - 5.5m
STEM: Rootball
ROOT: 2.5m Clear Stem

INGROUND TREE PLANTING IN SOFT
GIRTH: 25-30cm
HEIGHT: 5 - 5.5m
STEM: Rootball
ROOT: 2.5m Clear Stem

RETAINED EXISTING TREE
Existing tree to be retained.

PERENNIAL PLANTING 1 (S1)
DETAILS: Mix of evergreen shrubs, ground cover and herbaceous perennials.
SIZE: 3-10L
ROOT: Containerised

RAIN GARDEN: PERENNIAL PLANTING 2 (S2)
DETAILS: Mix of evergreen shrubs, ground cover and perennials.
SIZE: 3-10L
ROOT: Containerised

AMENITY GRASS (G1)
PRODUCT: LT8 Festival Plus Turf
SUPPLIER: Lindum or equal & approved

SEASONAL BULBS (B1)
PRODUCT: Seasonal bulb mix
SUPPLIER: Lindum or equal & approved

NOTES

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CDM INFORMATION

1. To be completed

KEY PLAN

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02		GH	25.10.23
Issue	Revision	Initial	Date

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t 0161 696 7550 w optimisedenvironments.com

Registered Address: 2nd Floor | Quartermile Two | 2 Lister Square | Edinburgh | EH3 9GL

Client
Downing Students (Manchester) Ltd

Project
**FIRST STREET SOUTH
BLOCK C
Manchester**

Drawing Title
**LANDSCAPE PLAN
SOFTWARES**

Scale Bar 2m 4m 6m 8m 10m North

Scale: 1:200@A1 Date: 06.11.23

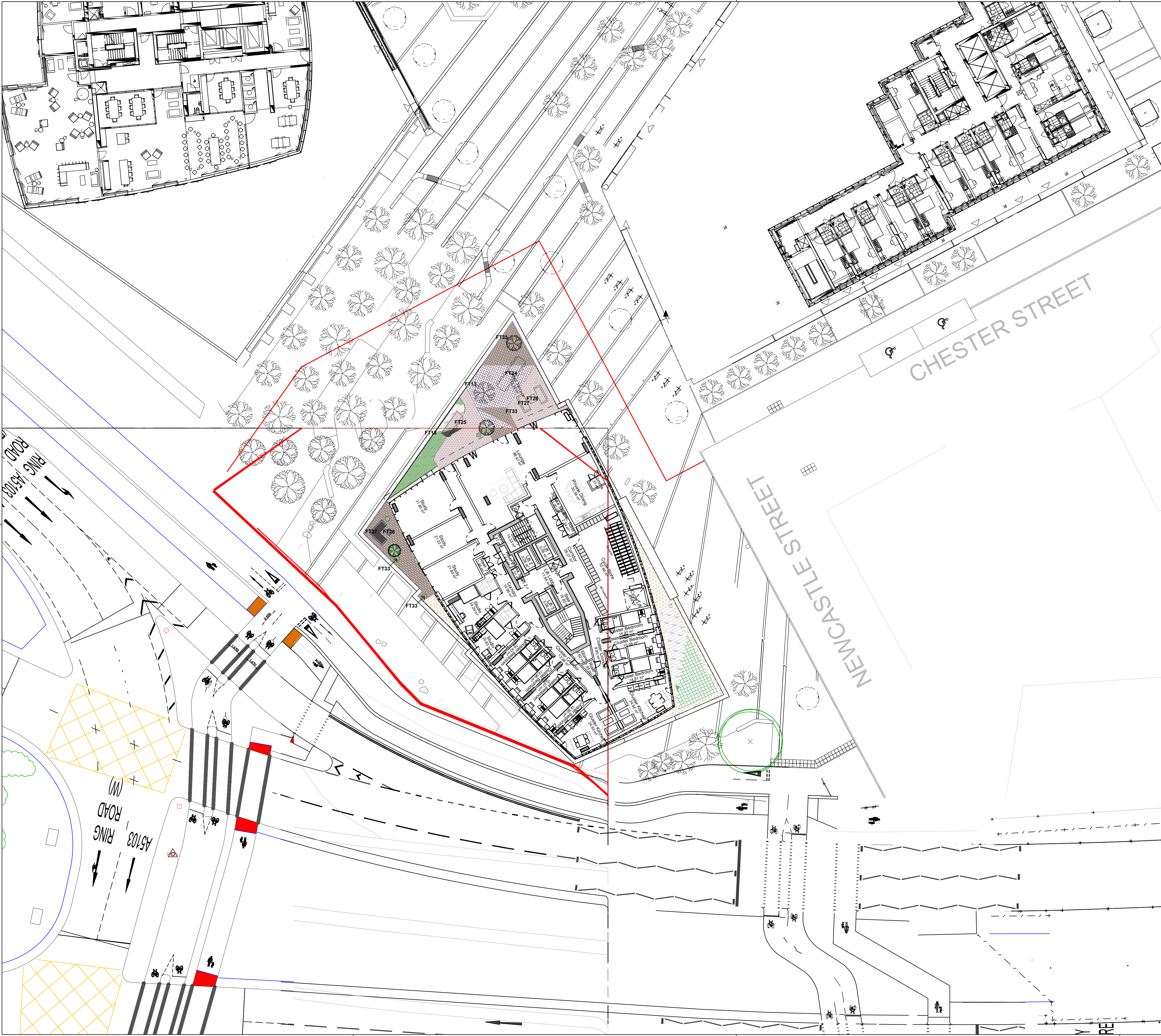
By: GH Status: PLANNING

Checked: AW Approved: AW

Drawing Number
10474-OPE-00-GF-DR-L-910401

Rev
01

Computer File: R:\Projects\2019\M0183_08_FSB\Book\CAD\AUTOCAD\SHEETS



TERRACE
GENERAL ARRANGEMENT

TREE PLANTING IN PLANTER
GIRTH: 20-25cm
HEIGHT: 4 - 4.5m
STEM: Rootball
ROOT: 2m Clear Stem
DETAIL: 60005

SHRUB MIX 3 (S3): TERRACE SHRUB PLANTING
DETAILS: Mix of evergreen shrubs, ground cover and herbaceous perennials
SIZE: 3-10L
ROOT: Containerised
DETAIL: 60015 / 60016

SHRUB MIX 4 (S4): SEDUM MATT
SUPPLIER: Bauder or equal and approved
PRODUCT: Sedum Matt
DETAIL: 60018

SHRUB MIX 5 (S5): SEDUM MATT & PLUGS
SUPPLIER: Bauder or equal and approved
PRODUCT: Sedum Mat & Individual Plugs
DETAIL: As recommended by supplier
DETAIL: 60018

MEADOW MIX 6 (M6): WILD FLOWER BLANKET
SUPPLIER: Bauder or equal and approved
PRODUCT: WB Wildflower Blanket
DETAIL: 60017

PAVING TYPE 14 (PT14): PORCELAIN TILE
PRODUCT: Asti Porcelain Tiles
SUPPLIER: Raaf or equal and approved
COLOUR: Carbon
FINISH: Standard
SIZE: W1200mm x L600mm x D20mm
SUBBASE: To engineers specification
DETAIL: 10021

PAVING TYPE 15 (PT15): CLAY PAVERS
PRODUCT: Wienerberger Aquada DF
SUPPLIER: Hardscape or equal and approved
COLOUR: Grey
FINISH: Standard
SIZE: L200mm x W85mm x D 65mm
SUBBASE: To engineers specification
SPEC: 10022

PAVING TYPE 17 (PT17): LOOSE GRAVEL
PRODUCT: Green Basal Aggregate
SUPPLIER: CED, or equal & approved
SIZE: 14mm
COLOUR: Buff
SUBBASE: To engineers specification
DETAIL: 10024
NOTE: Geocell Required

FT13 FURNITURE TYPE 13 (FT13): RAISED PLANTER
PRODUCT: Planterline Custom
SUPPLIER: Raaf or equal and approved
MATERIAL: 5mm Steel
COLOUR: TBC following coordination with interior designer
FINISH: Polyester Powder Coated
SUBBASE: To engineers specification
DETAIL: 50017

FT24 FURNITURE TYPE 24 (FT24): LONG TABLE WITH STOOLS
PRODUCT: Morrison Table and Stools
SUPPLIER: Urban Artform or equal and approved
MATERIAL: Cast Aluminium inc Timber Top
SIZE: 1018 x 2032 x 1016mm
COLOUR: TBC following coordination with interior designer
FINISH: Polyester Powder Coated

FT25 FURNITURE TYPE 25 (FT25): BAR TABLE WITH STOOLS
PRODUCT: Go Outdoor Table & Chipman Stools
SUPPLIER: Urban Artform or equal and approved
MATERIAL: Cast Aluminium inc Timber Top
SIZE: Table - 1029 x 2696 x 762mm
Stools - 896 x 556 x 469mm
COLOUR: TBC following coordination with interior designer
FINISH: Polyester Powder Coated

FT27 FURNITURE TYPE 27 (FT27): OUTDOOR SOFAS
PRODUCT: Um Sofas & Coffee Table
SUPPLIER: Vondom or equal and approved
MATERIAL: Polythene
SIZE: Sofa - 2000 x 820 x 810mm
COLOUR: TBC following coordination with interior designer
FINISH: Matt

FT28 FURNITURE TYPE 28 (FT28): OUTDOOR COFFEE TABLE
PRODUCT: Um Sofas & Coffee Table
SUPPLIER: Vondom or equal and approved
MATERIAL: Polythene
SIZE: 820 x 520 x 280mm
COLOUR: TBC following coordination with interior designer
FINISH: Matt

FT33 FURNITURE TYPE 33 (FT33): INDIVIDUAL METAL PLANTERS
PRODUCT: Aster Metal Planter
SUPPLIER: Urban Artform or equal and approved
MATERIAL: Steel
SIZE: D 1200 - 550mm x H 400 - 800mm
COLOUR: TBC following coordination with interior designer
FINISH: Powder coated steel

NOTES
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CDM INFORMATION
1. To be completed

KEY PLAN

01	Amendments to landscape layout following updated floor plan	GH	06.11.23
02		GH	25.10.23
Issue	Revision	Initial	Date

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Client

Downing Students (Manchester) Ltd

Project

**FIRST STREET SOUTH
BLOCK C**

Manchester

Drawing Title

**LANDSCAPE PLAN
ROOF TERRACE
GENERAL ARRANGEMENT**

Scale Bar

North

2m 4m 6m 8m 10m

Scale: 1:200@A1

Date: 06.11.23

By: GH

Status: PLANNING

Checked: AW

Approved: AW

Drawing Number

10474-OPE-00-PD-DR-L-910001

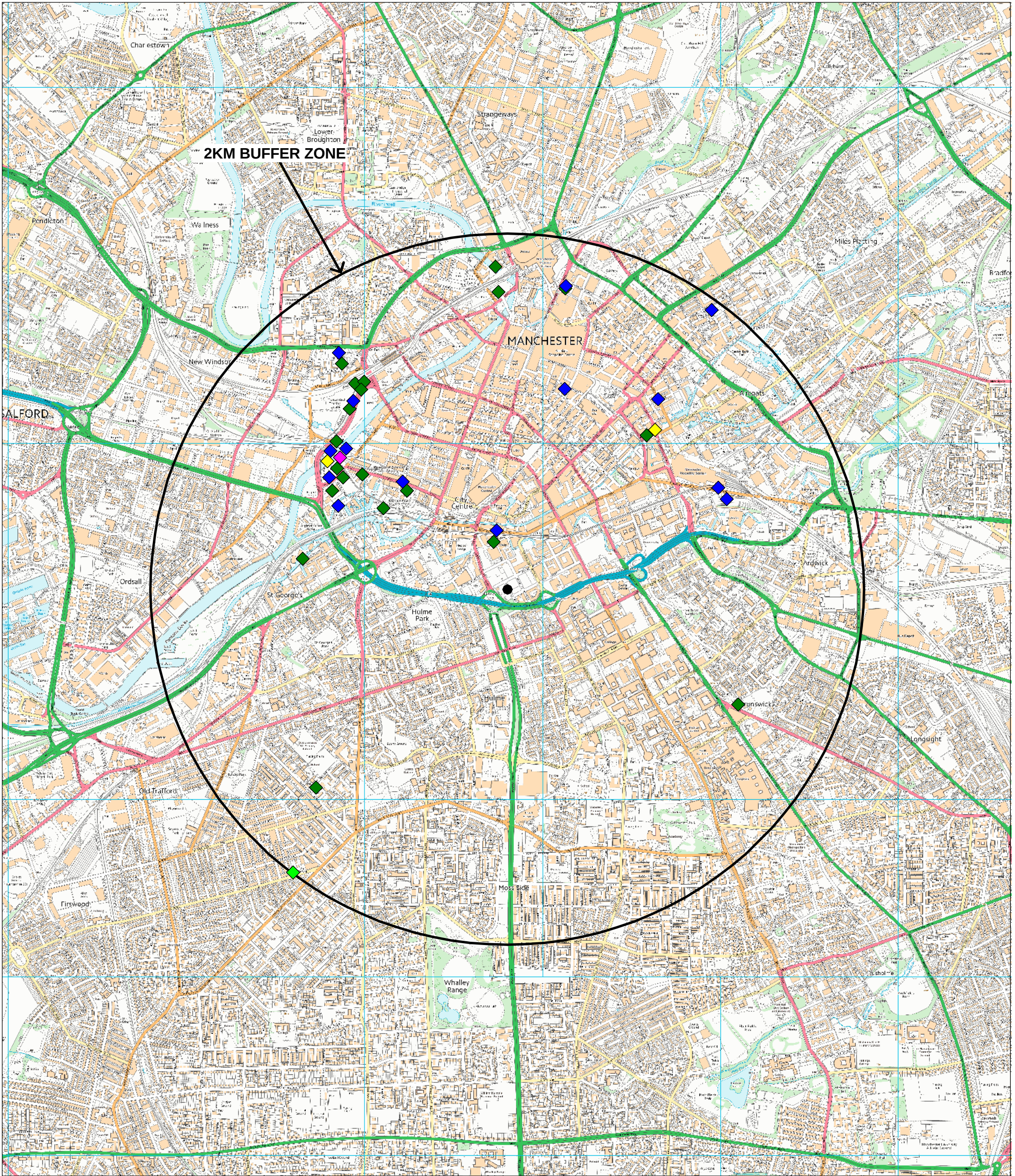
Rev

01

Computer File: R:\Projects\2019\M00183_08_F8BlockC\CAD\AUTOCAD\SHEETS

APPENDIX 4

Desk Study Data



KEY

BAT ROOSTS

- ◆ BAT SP
- ◆ COMMON PIPISTRELLE
- ◆ DAUBENTON'S BAT
- ◆ PIPISTRELLE SP
- ◆ SOPRANO PIPISTRELLE

**GREATER MANCHESTER ECOLOGY UNIT
ECOLOGICAL SEARCH - SJ 8380 9718
NEWCASTLE STREET - MAP 4A**

SCALE 1:20,000

BAT DATA COURTESY OF SOUTH LANCS BAT GROUP

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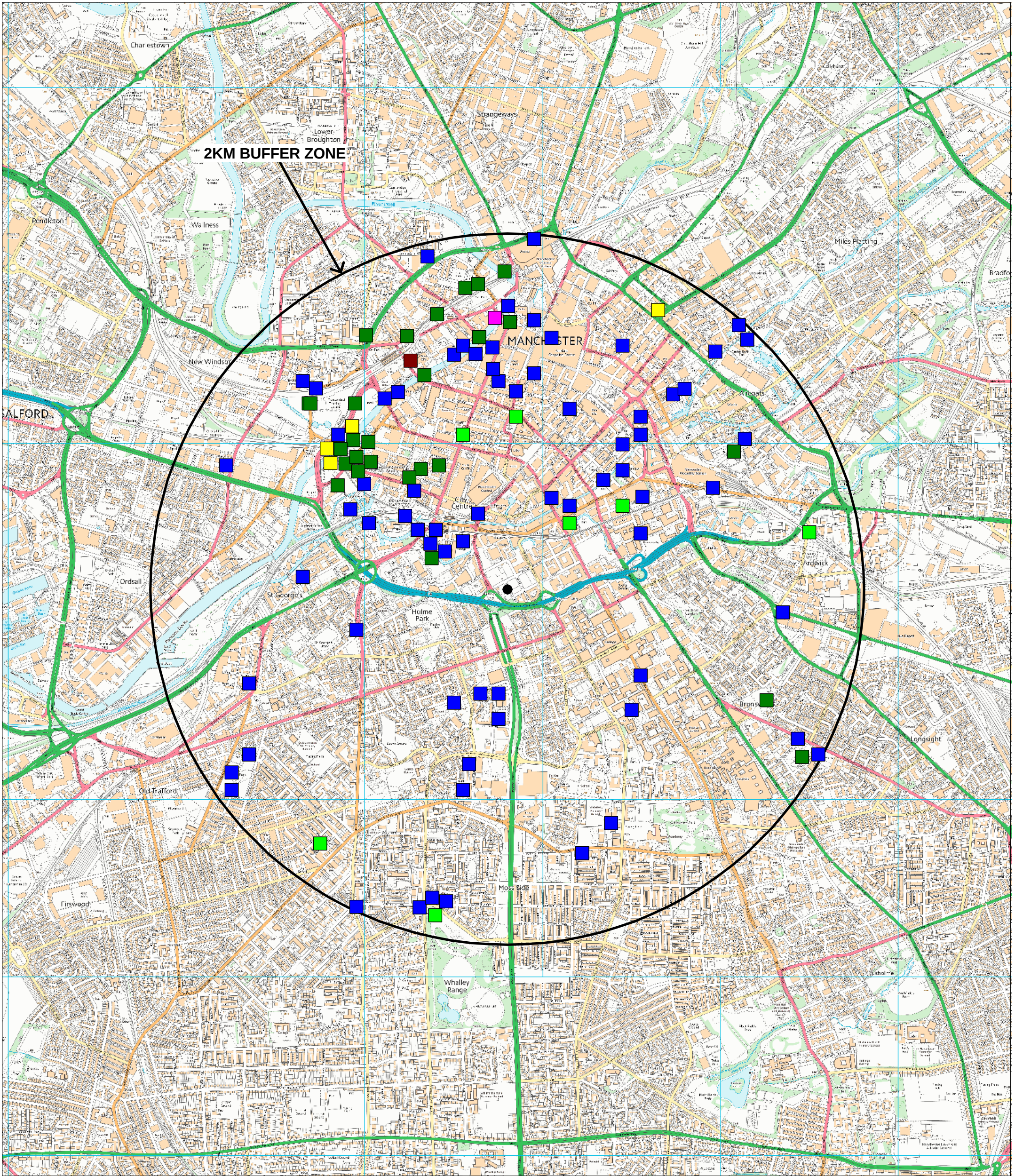
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**Greater Manchester
Ecology Unit**

Telephone 0161 342 4409
Email: gmeu@tameside.gov.uk

Date Produced: 07/10/2019



KEY
BAT SIGNS

- BAT SP
- BROWN LONG-EARED BAT
- COMMON PIPISTRELLE
- DAUBENTON'S BAT
- PIPISTRELLE SP
- SOPRANO PIPISTRELLE

GREATER MANCHESTER ECOLOGY UNIT
ECOLOGICAL SEARCH - SJ 8380 9718
NEWCASTLE STREET - MAP 4B

SCALE 1:20,000

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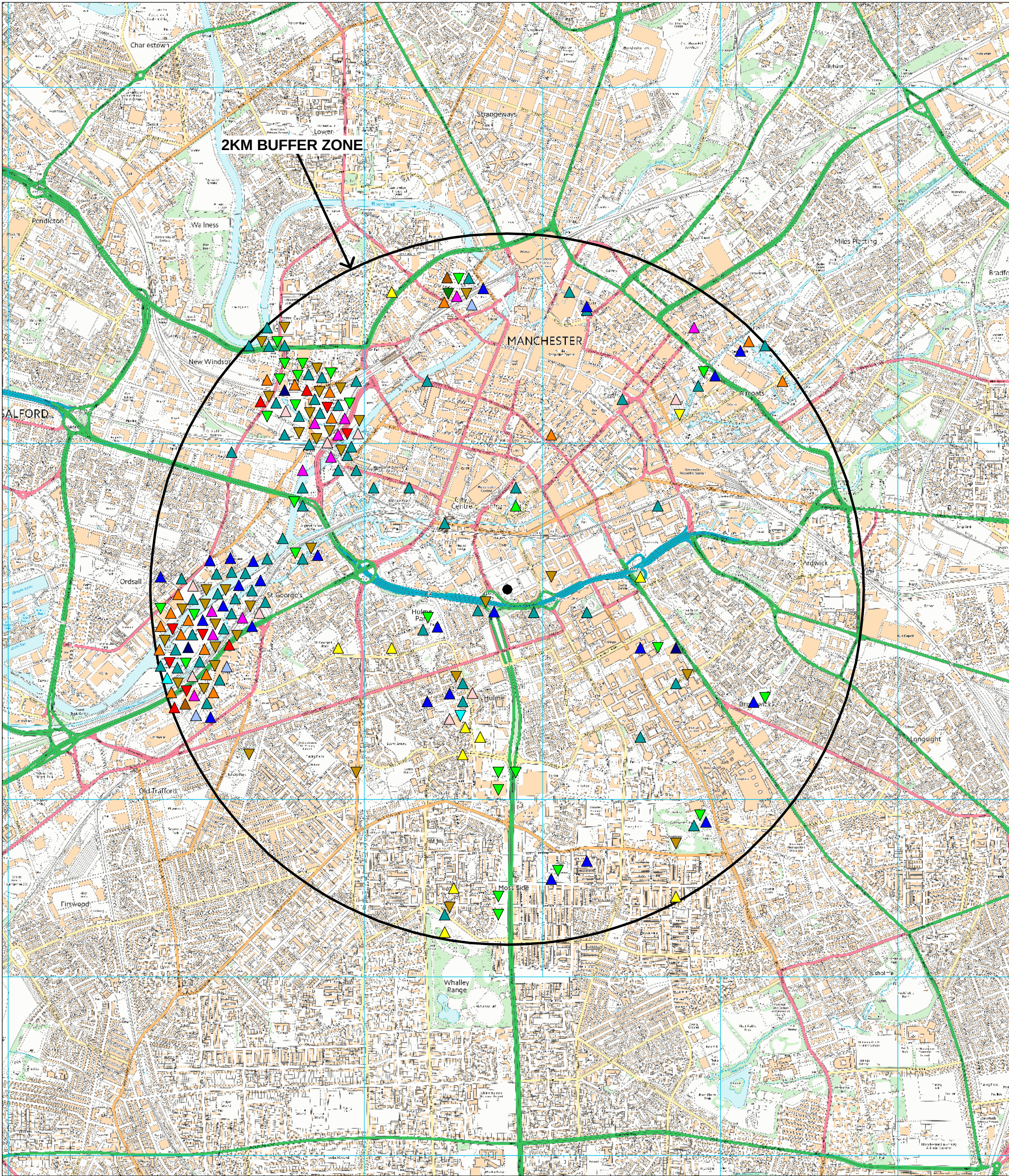
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Ecology Unit

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Date Produced: 07/10/2019



KEY
SECTION 41 SPECIES

- | | |
|--------------------|----------------------|
| ▲ ARCTIC SKUA | ▲ LINNET |
| ▲ BULLFINCH | ▲ REED BUNTING |
| ▲ CUCKOO | ▲ S41 MOTH |
| ▲ DUNNOCK | ▲ SKYLARK |
| ▲ GRS-WRK PONDWEED | ▲ SONG THRUSH |
| ▲ HEDGEHOG | ▲ SPOTTED FLYCATCHER |
| ▲ HERRING GULL | ▲ STARLING |
| ▲ HOUSE SPARROW | ▲ TREE SPARROW |
| ▲ LAPWING | ▲ YELLOW WAGTAIL |
| ▲ LESSER REDPOLL | |

GREATER MANCHESTER ECOLOGY UNIT
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NEWCASTLE STREET - MAP 5

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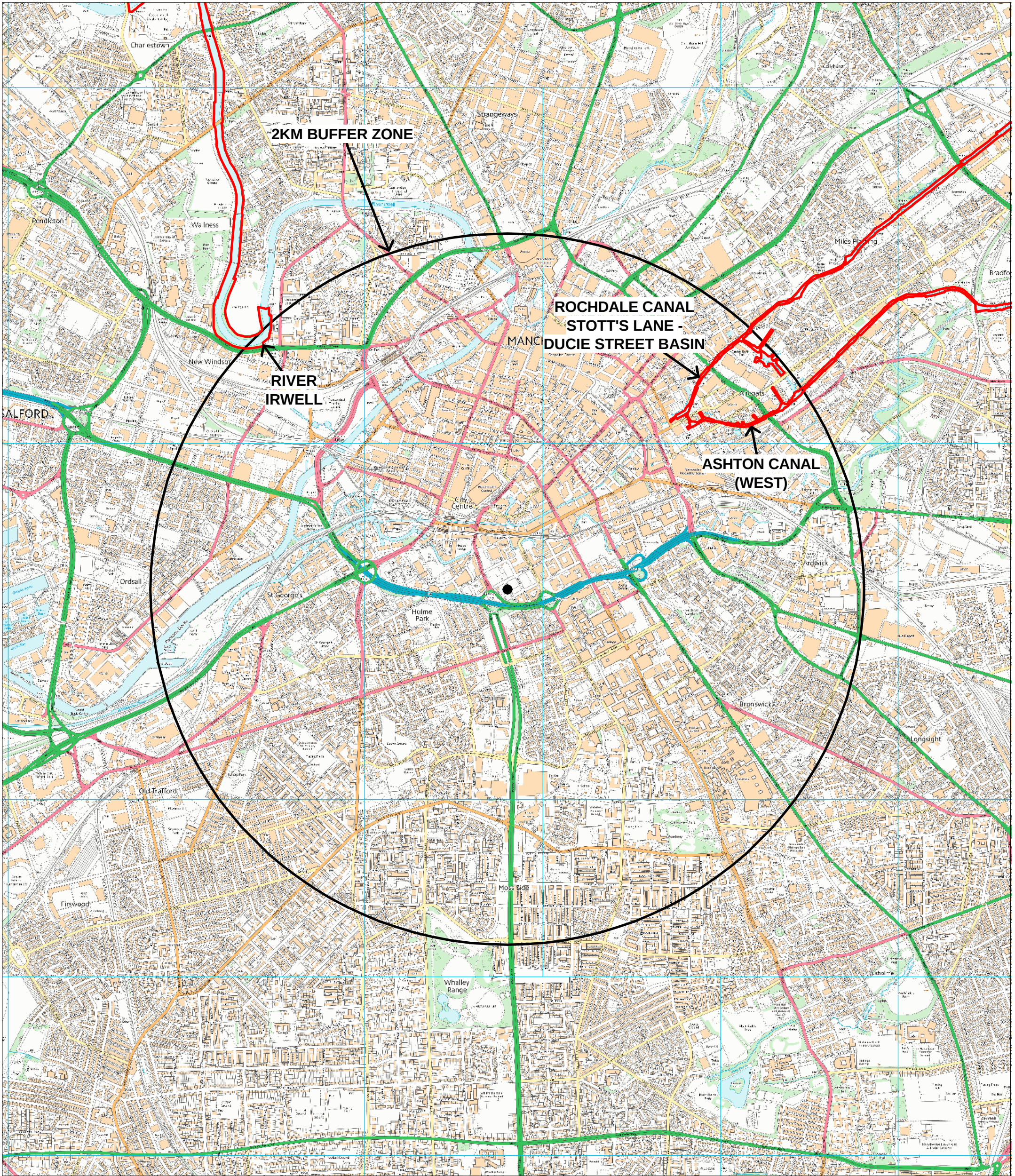
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KEY
SITE OF BIOLOGICAL IMPORTANCE

 **SBI BOUNDARY**

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NEWCASTLE STREET - MAP 1

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Date Produced: 07/10/2019

APPENDIX 5

Site Photographs



Plate 1
General view of the hardstanding area



Plate 2
Remnant grassland with Norway maple tree



Plate 3
Ephemeral/short perennial habitat along wooden hoarding

APPENDIX 6

Metric 4.0

(Sent Separately to this Report)

Penny Anderson
Associates Ltd
CONSULTANT ECOLOGISTS



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Registered Office as Above

Registered in England & Wales

Company No. 4223109

Directors: Mrs P Anderson

Mr P Worrall

Miss S Rogers