



Hotspur Press Manchester

Black Redstart Mitigation Report

Prepared For: Manner Document Reference: 10162.001 October 2023

Version 2.0

TEP
401 Faraday Street
Birchwood Science Park
Warrington
WA3 6GA

Tel: 01925 844004
Email: tep@tep.uk.com

Offices in Warrington, Market Harborough, Gateshead, London and Cornwall

Project Name:	Hotspur Press
Location:	Manchester
Document Title:	Black Redstart Mitigation Report
Client:	Manner
Report Prepared:	October 2023
Prepared by:	The Environment Partnership Ltd
Office:	Warrington
Document Ref:	10162.001

Document history and status:

Version	Date	Description of Issue	Author	Checked	Approved
1	18/10/2023	First issue to client	MHS	MW	MW
2	09/11/2023	Changes in building plan	MHS	MW	MW

The Environment Partnership Ltd is a private limited company registered in England. Registered number 7745159. Registered office: 401 Faraday Street, Birchwood Science Park, Warrington, WA3 6GA.

© Copyright 2023 The Environment Partnership Ltd. All Rights Reserved.

This document has been prepared by The Environment Partnership Ltd ("TEP") for sole use of our Client in accordance with the provisions of the contract between TEP and the Client. No third party may use or rely upon this document or its content. TEP accepts no liability or responsibility for any such use or reliance thereon by any third party.

The content of this document has been prepared in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) Code of Professional Conduct and is compliant with British Standard BS42020:2013 Biodiversity Code of Practice for Planning and Development.

The conclusions and recommendations contained in this document are based upon information gathered by TEP and provided by third parties. Information provided by third parties and referred to herein has not been independently verified by TEP, unless otherwise expressly stated in the document.

Nothing in this report constitutes legal opinion. If legal opinion is required, the advice of a qualified legal professional should be secured.

Contents	Page
1.0 INTRODUCTION	3
Background.....	3
Black Redstart	3
Proposed Development	5
2.0 SURVEY AND SITE ASSESSMENT	6
Pre-existing Data	6
Site Visit	7
3.0 IMPACT ASSESSMENT - WITHOUT MITIGATION.....	12
Potential Impacts	12
4.0 MITIGATION AND COMPENSATION.....	13
Overview	13

Appendices

Appendix A:

Planting Plans

Lnadscape General Arrangement Plans

1.0 Introduction

Background

- 1.1 The Environment Partnership (TEP) has been commissioned by Manner to prepare a mitigation strategy for black redstart *Phoenicurus ochruros*, for the building and associated land known as Hotspur Press, Manchester ('the site').
- 1.2 The purpose of this black redstart Mitigation Strategy document is to assess the suitability of the site to support black redstart, assess the impacts that the proposed development could have on this species, detail the scope of mitigation works required for the site and identify methods that will be used to encourage black redstart to forage and nest within the area.

Black Redstart

- 1.3 Black redstart are a Schedule 1 species (WCA1) meaning they are specially protected under the Wildlife & Countryside Act 1981 (as amended). This means that it is an offence to intentionally disturb these birds whilst they are building a nest, or in, on or near a nest containing eggs or young; or to disturb dependent young even if not in the nest.¹
- 1.4 Black redstart spread northward from continental Europe in the 19th century and began breeding in Britain in the 1920s, colonising bomb sites in London after World War II. It then colonised London's derelict industrial sites from the 1960s onward ².
- 1.5 The United Kingdom (UK) population size is estimated to currently be 58 pairs and is thought to have peaked at 120 pairs.³ It is considered a rare breeding bird species in the UK. Black redstart in the UK are highly localised, with pairs breeding in London, the West Midlands and coast of Norfolk and Suffolk. Manchester is one of the few northern cities where pairs are recorded to breed.
- 1.6 Black redstart is a Greater Manchester Local Biodiversity Action Plan (LBAP) species. The objective of the LBAP is to 'maintain a breeding population of black redstarts in Greater Manchester'⁴. The target of the action plan is to 'create a minimum of 50 green roofs/green walls across the GM conurbation over the next five years, particularly in areas where black redstarts are known to breed'.

¹ Wildlife and Countryside Act 1981 (legislation.gov.uk)

² Grant, G., (2006) Extensive Green Roofs in London. *Urban Habitats*, 4(1) 51-65.

³ Black Redstart | BTO - British Trust for Ornithology (www.bto.org/understanding-birds/birdfacts/black-redstart)

⁴ Black Redstart Species Action Plan (2009). Greater Manchester Biodiversity Project.

Feeding Behaviour

- 1.7 The black redstarts diet is seasonally variable, but the main diet consists of invertebrates: spiders, diptera (true flies), hymenoptera (ants, bees etc.), lepidoptera (butterflies and moths), homoptera (aphids) and earthworms are all consumed. The importance of caterpillars and other larvae for nestlings has been highlighted.⁵ Plant material, fruits and seeds, are a minimum of 25% of their food. Plant species included: docks (*Rumex*), Crucifera species, bramble (*Rubus*) and hawthorn (*Crataegus*).
- 1.8 Black redstart feed directly from the ground, fly from perch to perch catching insects in the air and drop onto prey from above.
- 1.9 Black redstart are not territory loyal, they may occupy a different territory area year on year.⁶ The territory can be up to 7.5 hectares and is typically centred on the nest site.
- 1.10 Sedláček *et al.* (2004) indicate that although some tree species, such as hawthorn are a food source, black redstart territories have proportionally much lower number of trees compared to buildings.

Breeding Behaviour

- 1.11 Black redstart require a variety of ledges or holes to build their nests on or within. These need to be sheltered from the elements and are typically, within urban environments, built structures that have vertical edges. They have been recorded using nestboxes.
- 1.12 Nests are typically 1-4m above ground but may be as high as 45m.
- 1.13 In the UK black redstart often have two broods, the pair may use the same nest site both times. Although most records indicate a single female and male black redstart pair up for the breeding season cooperative breeding has been recorded within the species (a third bird aiding in raising juveniles).⁷
- 1.14 Black redstart juveniles leave the nest before being fully capable of flight, for another 11 days they are totally dependent on the parent. At this point they are highly vulnerable to predators such as cats, rats and gulls.

⁵ Sedláček, O., Fuchs, R. and Exnerová, A. (2004) 'Redstart *phoenicurus phoenicurus* and black redstart *P. ochruros* in a mosaic urban environment: Neighbours or rivals?', *Journal of Avian Biology*, **35**(4), 336–343.

⁶ Sedláček, O., Fuchs, R. and Exnerová, A. (2004) 'Redstart *phoenicurus phoenicurus* and black redstart *P. ochruros* in a mosaic urban environment: Neighbours or rivals?', *Journal of Avian Biology*, **35**(4), 336–343.

⁷ Lu, X. *et al.* (2011) 'Breeding ecology of the Black Redstart *phoenicurus ochruros* at a Tibetan site, with special reference to cooperative breeding', *Ardea*, **99**(2), 235–240. doi:10.5253/078.099.0215.

Proposed Development

- 1.15 The project includes partial demolition and redevelopment of the former Hotspur Press Complex (Medlock Mill) and redevelopment of the site to provide Purpose Built Student Accommodation (Sui Generis Use Class) within a part 4-storey (existing) and part 36-storey (new build) building with ground floor commercial or community uses (Use Classes F(e), F2(a)(b) and E(b)), associated ancillary internal and external amenity space, public realm (including a new public square), hard and soft landscaping and associated highway works.
- 1.16 Aspects of the design proposals relevant to black redstart are provided below. The proposed landscaping has been designed specifically to provide habitat for black redstart through discussion with ecologists. Further details are provided within the mitigation section at the rear of this document (Table 1).
- 1.17 On the ground level 'Hotspur Yard' is the proposed outside space, including an external covered seating area, proposed tree planting within the new public space and proposed tree planting along Whitworth Street West.
- 1.18 The proposed biodiversity roof is primarily on level four of the building (Macgregor Smith Drawing's: Planting Plan – Level 04, 1391-213 and Landscape General Arrangement Plan – Level 04, 1391-013 provided at Appendix A). It is on the west and southern edges of the site (from an aerial view).
- 1.19 There is a small section of biodiversity roof at the far northwest corner of the building which is on level 3, this is a smaller area than on level 4 and is adjacent to a proposed amenity balcony on the west side of the building. (Macgregor Smith Drawing's: Planting Plan – Level 03, 1391-212 and Landscape General Arrangement Plan – Level 03, 1391-012 provided at Appendix A).
- 1.20 The biodiversity roof proposals include a mosaic layout of grass and perennial planting and gravel aggregate:
- 60 cc wildflower plugs planted at 10m²,
 - gravel aggregate of 25mm to dust,
 - water dishes,
 - log piles.
- 1.21 Restoration of the adjacent River Medlock forms part of the proposals, creating meanders to extend and slow the flow. Marginal planting will also be provided along the river.

2.0 Survey and Site Assessment

Pre-existing Data

Historic data

- 2.1 The first confirmed breeding for Greater Manchester was of a record of two fledged young from a nest in central Manchester in 1977, and Five territories were recorded in the city centre during 1981 (Holland, Spence and Sutton 1984⁸).
- 2.2 Records held from 1992 to 2007 show that Black Redstarts have bred or attempted to breed within the Piccadilly Basin area of central Manchester every year except 2003. The total city population is unknown, but may be as low as 2 – 3 pairs⁹

Greater Manchester Local Records Centre Data

- 2.3 Records of black redstart up to 2km for the site were requested from Greater Manchester Local Records Centre (GMLRC). These include records from Greater Manchester Bird Recording Group. Records go back to 1997, however there is more data available for more recent years.
- 2.4 Within the GMLRC data there are 104 records that suggest highly probable or confirm breeding, this indicates that the species is well recorded, particularly within the area of central Manchester.
- 2.5 Monitoring the black redstart populations across the conurbation is one of the ongoing actions of the Black Redstart Greater Manchester Local Action Plan, to be undertaken by Greater Manchester Biodiversity Project and Bird recorders.
- 2.6 Exact nest locations of black redstart are kept confidential for bird welfare reasons. However, the GMLRC data confirms a minimum of two breeding pairs, one confirmed to be with juvenile, were located within 2km of the site in 2022. One pair was just under 500m north east and the second approximately 750m north.
- 2.7 The nearest record of a black redstart to site was in 2011, when a male was recorded singing on Cambridge Street, the street adjacent to the site. A singing male does indicate a male potentially on territory, particularly as this record was from June. This record indicates historically the site has been within a black redstart territory and therefore likely used by black redstart.
- 2.8 The majority of black redstart records are to the north of the site, however there are historic records of black redstart in all directions surrounding the site.

⁸ Holland, P., Spence, I., Sutton, T. (1984) Breeding Birds in Greater Manchester. Manchester: Manchester Ornithological Society

⁹ Black Redstart Species Action Plan (2009). Greater Manchester Biodiversity Project

Greater Manchester Birding Forum

- 2.9 Greater Manchester Birding Forum post records of what birds are recorded throughout Manchester and this information is publicly accessible. There is a specific forum for black-redstart records. Black redstart within Manchester City centre are known by local bird recorders and are well studied.
- 2.10 The 2022 records corroborate what the data from GMLRC shows, going into further details, at least 13 juveniles fledged from two pairs.
- 2.11 The 2023 records are not as concise on numbers, but again suggest two pairs successfully bred within Manchester City centre. Two juvenile were recorded just over 700m north of the site.

Black Redstart Site Survey

- 2.12 A survey of the site for black redstart was undertaken by Estrada Ecology 2018. The survey involved three survey visits between May and June 2018 during the early morning period, to listen and watch for evidence of black redstart. Surveys commenced approximately 1 hour before sunrise and finished approximately 1.5 hours after sunrise.
- 2.13 No evidence of black redstart was recorded during any of the survey visits.
- 2.14 Other bird species recorded included dunnock, blue tit, great tit, feral pigeon, grey wagtail and wren.

Site Visit

Survey Method

- 2.15 A walkover site visit was undertaken on the 29th September 2023 by two suitably experienced ornithologists (Dr Mike Walker MCIEEM and Maddie Heath Sargent).
- 2.16 Before the visit the site was observed on Google Maps to give an aerial view, to determine potential suitability for foraging and nesting and to judge whether any of the surrounding area also had suitability. It was clear that the existing building and adjacent area could be suitable for both foraging and nesting black redstart.
- 2.17 On the aerial view 'brown field' areas within 300m of the site were looked for to determine suitability for foraging black redstart in the wider area, such as disused car parks, any areas of rubble and building sites. All areas identified were south of the railway (directly north of the site) and north of the A57 which is south of the site. The River Medlock adjacent to the site was also viewed to determine its suitability for providing habitat for this species.

- 2.18 These areas were all observed during the walkover survey to give a better understanding of what suitable areas for black redstart foraging are currently present in the wider area.
- 2.19 On the day the surrounding area within 300m was walked, the Q-park First Street multistorey car park, southwest of the site was accessed which gave direct views of the roof of the building. The Hotspur Press building was also entered and each floor inspected.

Site Summary

- 2.20 The building is made up of multiple levels, and two separate roof areas. Both of these roofs in their current state offer potential (though not optimal) foraging habitat. The undulations in the roofs offer raised areas to perch and feed from. There is some (though limited) vegetation on the roofs, largely comprising buddleia, which will harbour and attract invertebrates. Although not clear from the vantage point, it is highly likely that there will be some standing water on the roofs, attracting invertebrates that breed within water.



Figure 1: The roof of the south of the building from the multistorey carpark to the west.

- 2.21 The building itself is missing many windows, which has allowed feral pigeons to nest within the building. There was large amounts of evidence of feral pigeons recently nesting within the building at the time of the walkover survey. This also means there

are nesting opportunities for other birds, including black redstart within the building itself.

- 2.22 Within the existing structure there are many cavities and ledges that could be used as nesting areas. Within the end wall column on the western side in particular there were multiple cavities, although from the survey it was unclear how suitable these were there was one larger hole within this column that offers nesting suitability.



Figure 2: Example of cavity in brick work of building. Open windows can also be clearly seen.

Surrounding Area Summary

- 2.23 The site itself is within an area of new construction, adjacent to the site is an active construction site. An old car park on River Street that may have previously been good foraging habitat was a high noise, very busy construction site that would no longer be suitable. Manchester Hulme Street car park and a plot of land adjacent to this appeared to be the only remaining suitable extensive ground foraging area within the 300m of the site. This was a highly suitable area with emergent vegetation and rubble. Various other previously bare ground areas observed on aerials now contained recently built high rise buildings.
- 2.24 The River Medlock loops round the site, it is on the buildings west and south boundaries (Figure 2). The river could provide a valuable food source for black redstart, black redstart are often found in proximity to open water such as canals and

rivers as invertebrate prey can be found in abundance.¹⁰ A grey wagtail was observed feeding on the river during the site visit, suggesting invertebrate prey is available at this waterway. Depending on how high the water levels rise the existing structures along the river walls potentially provide nesting opportunities for the species.



Figure 3: River Medlock adjacent to the site and existing building

- 2.25 There are potential nesting opportunities within the railway wall structure north of the site itself (Figure 4). The surveyors observed from the multistorey car park vantage point that there were gaps and ledges within the structure that could potentially be used.

¹⁰ Black Redstart Ecology - a U.K. overview (blackredstarts.org.uk)



Figure 4: Nearby railway brick structures adjacent to the site provide further potentially suitable nesting and foraging habitat for black redstart.

- 2.26 Many birds were observed feeding in the area between the building of the site and the railway structure. Numerous families of blue tits, which were feeding on the building itself, great tit, robin and dunnock were recorded. Grey wagtail were also recorded foraging along the River Medlock adjacent to the site. The presence of each of these bird species suggests that there are invertebrates in the area. The presence of robins slightly reduces the value for black redstart, as these highly territorial species are known to outcompete and sometimes drive black redstart out of their territories.

3.0 Impact Assessment - Without Mitigation

Potential Impacts

- 3.1 There is currently no evidence to suggest that black redstart have nested within the site in more recent years, with no evidence of black redstart using the site recorded during the black redstart survey in 2018, and bird records from local recorders and bird groups strongly suggesting that the closest recent nesting locations are approximately 500m from the site.
- 3.2 However, the site does currently provide suitable nesting habitat within cavities in the building, and also provides suitable foraging habitat, particularly directly adjacent to the River Medlock, as well as on the roof structures. Based on territory size and available habitat, the site therefore could be used by a pair of breeding black redstart in the future.
- 3.3 The modernisation and repurposing of the existing building will involve blocking in windows, and repairing any existing cavities. Without mitigation this would remove nesting opportunities available at the site for black redstart.
- 3.4 The building as it exists currently is at a height that is feasible for black redstart to use. Part of the four level building is being maintained and repurposed, the rest of the building will be 34 levels high. Due to the isolated nature of this building due to its height, although there are other high rises in the area there is no way to extensively connect these, it is likely that its height rules it out from being suitable for black redstart foraging or nesting. Black redstart have been recorded to nest as high as 45m.¹¹
- 3.5 The parapets at the edge of the roof structure are likely to provide both song perches and feeding perches for black redstart if feeding habitat is available.
- 3.6 If the biodiversity roof was not provided this would mean the site would lose almost all the suitable foraging areas for black redstart. The roof on the existing building has some limited foraging suitability and allows a connection to the River Medlock which is highly suitable.
- 3.7 Mitigation is therefore necessary to provide suitable nesting habitat for black redstart, as well as to provide foraging areas for this species to enable at least one territory to be maintained.
- 3.8 Construction works could also result in disturbance or damage to an active black redstart nest if they chose to nest at the site prior to or during construction. This would constitute an offence under Schedule 1 of the Wildlife and Countryside Act, 1981. Mitigation measures will therefore be required to prevent this impact from occurring.

¹¹ Evans, K (1997). Site Action Plan for Black Redstarts *Phoenicurus Ochrurus* in the Deptford Creek Area. BTO Research Report No.228.

4.0 Mitigation and Compensation

Overview

- 4.1 The four-storey biodiversity roof provides the most opportunities for black redstart mitigation in terms of foraging area. It is this roof that would therefore be used to create the main biodiversity roof.
- 4.2 The small size and the fact the level three roof is adjacent to the balcony reduces its suitability for foraging black redstart due to potential disturbance, however the level four biodiversity roof is raised above this level, meaning disturbance will be limited.
- 4.3 Mitigation methods for the loss of the existing habitat are described in Table 1, including benefits to black redstart, further details on design and implementation and an outline of management likely to be required.
- 4.4 Key elements of the mitigation for black redstart include the following:
- Restoration of River Medlock corridor to provide foraging habitat for black redstart
 - Provision of 5 x nest boxes specific for black redstart to be integrated into structure of new development
 - Provision of biodiversity roof designed specifically to provide for foraging requirements of black redstart, including structure, substrate, vegetation type and provision of bare areas
 - Provision of wet areas to increase aquatic invertebrate food resources for black redstart
 - Provision of log piles to increase food resources for black redstart as well as song perch and feeding flight locations
 - Specifically designing planting so as not to encourage species known to be detrimental to black redstart usage of a site (i.e. robin)
 - Full length windows overlooking the biodiversity roof and any windows (of any size) adjacent to any nest boxes should either be one way glass or have a mirror film applied to reduce disturbance.
 - Implement an ECoW during construction works to prevent damage or disturbance to active black redstart nests including dependant young
 - Implement further measures to prevent disturbance to black redstart during the operational period.
- 4.5 A Management Plan will be produced prior to construction works commencing which will detail how the various mitigation habitat features will be maintained and managed to continue to provide favourable conditions for black redstart throughout the lifetime of the development.

- 4.6 Following the implementation of these mitigation measures the proposed development is likely to have a beneficial effect on the Manchester City Centre black redstart population.

Table 1: Mitigation methods, specific actions and their benefits for black redstart

Mitigation Measure	Specific Actions	Nesting or Foraging Benefits	Benefits for Black Redstart	Ongoing Management Required
Restoration of River Medlock corridor	- Creating meanders within the river. - Marginal planting using native and appropriate aquatic plant species.	Foraging	- Increase invertebrate numbers for feeding. - Increase available area to forage within. - This measure will increase the foraging suitability of the site above the current baseline situation for black redstart.	- Ongoing vegetation management to prevent invasive species establishment and manage flood risk. - Vegetation should be managed to maintain some open areas at waters edge that will allow black redstart to bathe and drink
Nest boxes	- Install five nest boxes specifically designed for black redstart¹² in considered areas that are both architecturally possible but also in areas not likely to be disturbed. - Nest boxes should not be installed adjacent to the balcony. - Height between 3 and 45m. - At least two should ideally be facing the River Medlock.	Nesting	- Increase nesting opportunities at the site. - The height of the nest boxes will ensure that the boxes cannot be disturbed by people, while being located within the commonly used height range for this species. - The recommended nest box provides an enclosed, but open fronted structure which will be built into the building wall and therefore will provide a permanent sheltered nesting feature for this species.	Nest boxes should not be disturbed within the breeding season March - September inclusive.
Biodiversity Roof: A considered ratio of bare ground to vegetated area	- At least 30% of the biodiversity roof should be bare ground - At least 50% of the roof should be vegetated	Foraging	- Provides correct foraging habitat. - Bare ground warms up and encourages invertebrates such as butterflies, bees, beetles and spiders.¹³	- Removal of unwanted colonising vegetation is necessary. - Species that should be regularly removed include those that could damage the green roof structure, taller species that are unsuitable for black redstart, and species that could outcompete

¹² 1HE Schwegler Brick Box | NHBS Practical Conservation Equipment or Brick Box 1HE » Schwegler Natur (schwegler-natur.de) is recommended

¹³ Buglife (2012) Creating Green Roofs for Invertebrates. A Best Practice Guide

				favourable species and dominate the community.
Biodiversity Roof: Specific vegetation types	- The 50% of the roof which is vegetated should be specific species: - Ephemeral/perennial species that are wind and drought tolerant and suitable for the pH of the site - Grow no taller than 60cm (most species used should be shorter). - Wildflower species should be all of these but also locally appropriate. The Flora Locale suppliers list is recommended to be used on species selection (current species in the proposed plan are appropriate). - Sedum mats will not be used. If any sedum species are used they will be planted into the substrate base and will comprise less than 30% vegetation mix.	Foraging	- Provides suitable foraging habitat found to be beneficial for this species in a range of studies^{14, 15} - Encourages insect biodiversity (and of the right species), so increases the appropriate food source	Annual inspections to be carried out by botanist to monitor establishment of wildflowers and to remove any unwanted species.
Biodiversity Roof: Substrate type	- Can be recycled crushed brick and concrete from the site or can be bought material specific for green roofs - Varied grade of 25mm to dust - Varied depth of 80mm to 150mm across the roof, with average of 130mm	Foraging	- Provides suitable foraging habitat found to be beneficial for this species in a range of studies¹⁶ - Varied depths and contours will increase the soil surface area and will encourage a wider range of plant types and invertebrates and therefore food for black redstart.	- Removal of unwanted colonising vegetation is necessary. - Regular raking of bare substrate areas will slow colonisation by unwanted species.
Biodiversity Roof: Incorporating larger aggregate material including boulders	Only to be included if do not compromise roof structure.	Foraging	- Provides correct foraging habitat by providing perches. - Will provided potential site for males to sing from. - Creates cover for newly fledged juveniles.	None required

¹⁴ Buglife (2012) Creating Green Roofs for Invertebrates. A Best Practice Guide.

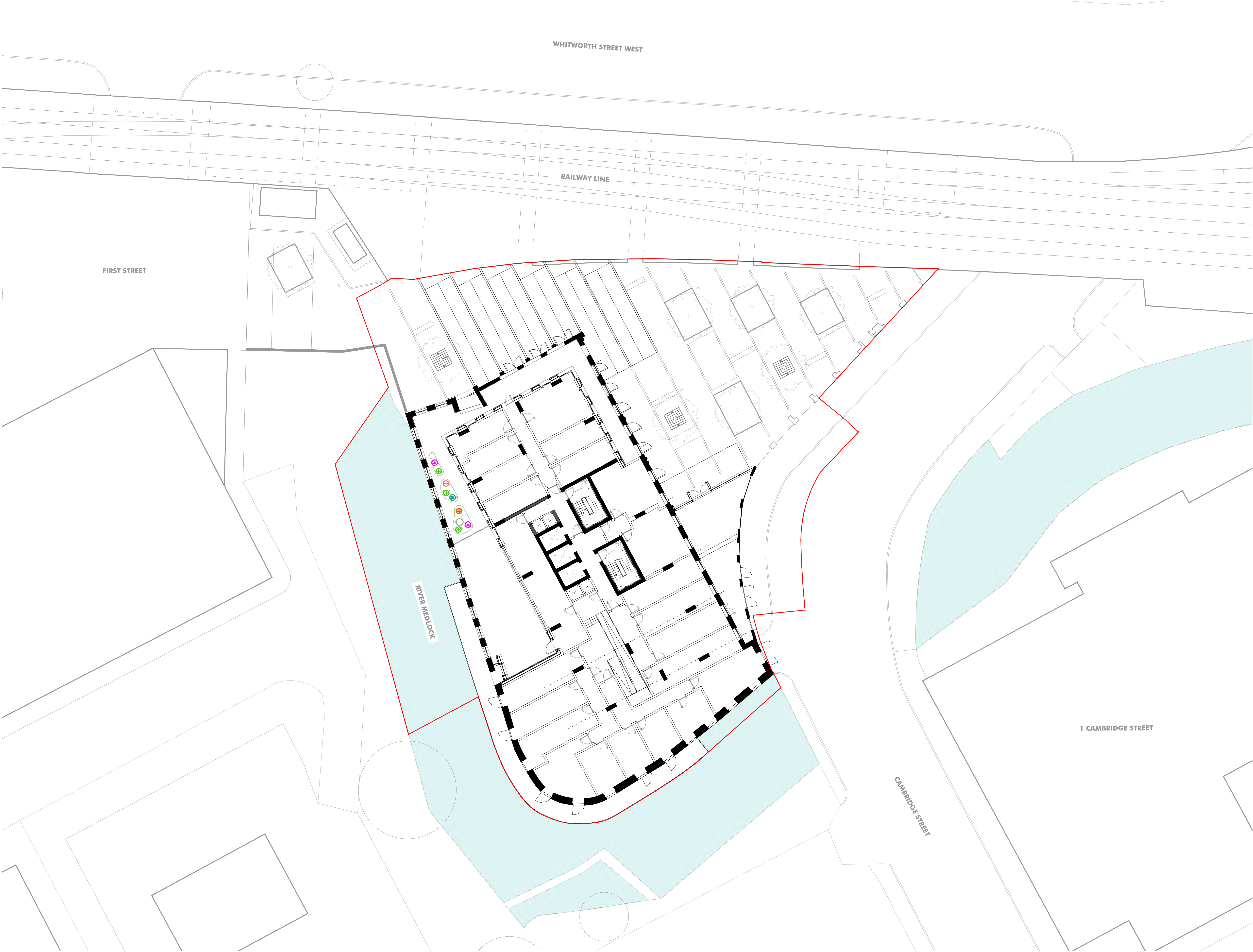
¹⁵ <https://www.blackredstarts.org.uk/>

¹⁶ Evans, K (1997). Site Action Plan for Black Redstarts *Phoenicurus Ochrurus* in the Deptford Creek Area. BTO Research Report No.228.

Biodiversity Roof: Water dishes	Small water sources will be included within biodiversity roof, which will likely be in the form of shallow trays on the ground.	Foraging and Nesting	- Will encourage invertebrates, such as midge larvae which are an important food source for black redstart, thus increasing food supply. - May also function to provide a water source for both adult and fledged juvenile birds and a bathing area for bird species, however this function will likely be provided by adjacent river.	- Will require regular inspection (at least every two weeks) to determine whether any cleaning required. If possible the water should be left to enable aquatic invertebrates to develop within the tray. - In spring and summer months will need refilling in dry conditions.
Biodiversity Roof: Log piles	Log piles consisting of native tree logs of varying diameter (including some below 1mm), deadwood is most suitable	Foraging	- Provides correct foraging habitat by providing perches from which feeding flights may be undertaken. - Will provide potential site for males to sing from. - Creates cover for newly fledged juveniles. - Will encourage invertebrates thus increasing food supply. - Invertebrates such as bees burrow into dead wood. - Increased surface area for invertebrates to bask.	None required.
Not encouraging species in competition with black redstart	- Avoiding usage of none specific nest boxes - No shrub planting or allowing shrubs to develop on the biodiversity roof - Vegetation along the River Medlock should be managed.	Foraging and Nesting	Robin (<i>Erithacus rubecula</i>) are the main species that outcompete black redstart. Habitat creation measures that could encourage robin will be avoided.	Described within 'Specific Actions' column.
Measures to prevent disturbance of black redstart during construction	- Demolition and vegetation clearance activities should be carried out outside of the black redstart nesting season (March to September inclusive). - An Ecology Clerk of Works (ECoW) should be in operation throughout the construction period during the black redstart breeding season to undertake regular checks to ensure that black redstart are not disturbed by construction activities. - Prior to commencement of any construction activities between March and September a nesting bird check should be required to determine if any black redstart are nesting. If	Nesting	Prevents damage or disturbance to active nest	ECoW required during construction

	they are nesting an appropriate disturbance buffer will need to be implemented, as advised by ECoW) to ensure the nests and dependant young are not disturbed. It is likely that building activity will not be permitted within 300m of an active nest site.			
Measures to prevent disturbance to nesting black redstart during operation	- Nest boxes should not be disturbed within the breeding season March - September inclusive. - If it is necessary to carry out works on buildings during the breeding season, then an ecologist should carry out a nesting bird check to determine if black redstart are nesting and advise on a suitable disturbance buffer as appropriate. - Windows overlooking the biodiversity roof and any nest boxes should be one way glass or have a mirror film applied.	Nesting	Prevents damage or disturbance to active nest	Ecologist required to advise prior to any potentially disturbing works to building during period March to September.

Appendix A: Planting Plans Landscape General Arrangement Plans



KEY

Site Boundary

Wildflower Mix
60cc wildflower plugs planted @ 10/m²

Wildflowers

- Achillea millefolium – Yarrow
- Agrimonia eupatoria – Agrimony
- Arctium minus – Lesser Burdock
- Centaurea nigra – Common Knapweed
- Centaurea scabiosa – Greater Knapweed
- Chaerophyllum temulum – Rough Chervil
- Cruciata laevipes – Crosswort
- Daucus carota – Wild Carrot
- Dipsacus fullonum – Wild Teasel
- Filipendula ulmaria – Meadowsweet
- Galium album – Hedge Bedstraw
- Knautia arvensis – Field Scabious
- Lathyrus pratensis – Meadow Vetchling
- Lotus corniculatus – Birdsfoot Trefoil
- Malva moschata – Musk Mallow
- Plantago lanceolata – Ribwort Plantain
- Poterium sanguisorba – Salad Burnet
- Silene dioica – Red Campion
- Vicia Cracca – Tufted Vetch

Structure Planting Species
2L stock, planted at 3no. plants per symbol

- Achillea 'Terracotta'
- Sesleria nitida
- Anemranthe lessoniana
- Sesleria autumnalis
- Sedum matrona

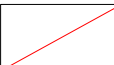
Revision	Description	Drawn by	Checked by	Date
-	Final draft for planning	AL	RG	20.10.23



project	Hotspur Press, Manchester	drawn by	AL
status	Draft For Planning	checked by	RG
title	Planting Plan - Level 03	date	20.10.23
Xref	xref	scale	1:200@a1
drawing No	1391-212	revision	-



KEY

 Site Boundary

 Wildflower Mix
60cc wildflower plugs planted @ 10/m²

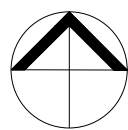
Wildflowers

- Achillea millefolium – Yarrow
- Agrimonia eupatoria – Agrimony
- Arctium minus – Lesser Burdock
- Centaurea nigra – Common Knapweed
- Centaurea scabiosa – Greater Knapweed
- Chaerophyllum temulum – Rough Chervil
- Cruciata laevipes – Crosswort
- Daucus carota – Wild Carrot
- Dipsacus fullonum – Wild Teasel
- Filipendula ulmaria – Meadowsweet
- Galium album – Hedge Bedstraw
- Knautia arvensis – Field Scabious
- Lathyrus pratensis – Meadow Vetchling
- Lotus corniculatus – Birdsfoot Trefoil
- Malva moschata – Musk Mallow
- Plantago lanceolata – Ribwort Plantain
- Poterium sanguisorba – Salad Burnet
- Silene dioica – Red Campion
- Vicia Cracca – Tufted Vetch

 Structure Planting Species
2L stock, planted at 3no. plants per symbol

-  Achillea 'Terracotta'
-  Sesleria nitida
-  Anemranthe lessoniana
-  Sesleria autumnalis
-  Sedum matrona

Revision	Description	Drawn by	Checked by	Date
-	Draft For Planning	AL	RG	29.09.23
A	Draft For Planning	AL	RG	13.10.23
B	Final draft for planning	AL	RG	20.10.23



Macgregor • Smith
Landscape Architecture

project	Hotspur Press, Manchester	drawn by	AL
status	Draft For Planning	checked by	RG
title	Planting Plan - Level 04	date	29.09.23
Xref	xref	scale	1:200@a1
drawing No	1391-213	revision	B



- KEY**
- Application Boundary**
 - Paving - To Terrace**
To architect's detail and specification.
 - Grass & Perennial Planting**
Refer to Planting Plan.
 - Gravel Aggregate**
To maintenance paths and margins to roof.
25mm to dust (Ø) clean washed aggregate.
 - Surface Contouring**
To planting areas to create undulating forms.
 - Water Dish**
Weathered steel water dish
Dimensions: 800mm (Ø), 100mm depth.
 - Black Redstart Boxes**
Schwegler Brick Box 1HE. Final locations to be confirmed by Ecologist.
 - Manual Watering Point**
Manual watering points located to provide full coverage of soft landscape proposals.
 - Free Standing Table & Chairs**
External freestanding furniture. Indicative only.

Revision	Description	Drawn by	Checked by	Date
-	Final draft for planning	AL	RG	20.10.23



This drawing is protected by copyright. Contractors must check all dimensions on site. Only figure dimensions are to be worked from. Discrepancies must be reported to architect before proceeding.
Christopher House, 11-12 High Street, Bath, BA1 5AQ. Tel:01225 464 690 hello@macgregorsmith.co.uk

Macgregor • Smith Landscape Architecture			
project	Hotspur Press, Manchester	drawn by	AL
status	Draft For Planning	checked by	RG
title	Landscape General Arrangement Plan - Level 03	date	20.10.23
Xref	xref	scale	1:200@a1
drawing No	1391-012	revision	-



- KEY**
- Application Boundary**
 - Grass & Perennial Planting**
Refer to Planting Plan.
 - Gravel Aggregate**
To maintenance paths and margins to roof.
25mm to dust (Ø) clean washed aggregate.
 - Surface Contouring**
To planting areas to create undulating forms.
 - Water Dish**
Weathered steel water dish
Dimensions: 800mm (Ø), 100mm depth.
 - Black Redstart Boxes**
Schwegler Brick Box 1HE. Final locations to be confirmed by Ecologist.
 - Log Piles**
Insect log piles
Type and final location to be confirmed by Ecologist.
 - Manual Watering Point**
Manual watering points located to provide full coverage of soft landscape proposals.

Revision	Description	Drawn by	Checked by	Date
-	Draft For Planning	AL	RG	29.09.23
A	Draft For Planning	AL	RG	13.10.23
B	Final draft for planning	AL	RG	20.10.23



Macgregor • Smith Landscape Architecture			
project	Hotspur Press, Manchester	drawn by	AL
status	Draft For Planning	checked by	RG
title	Landscape General Arrangement Plan - Level 04	date	29.09.23
Xref	xref	scale	1:200@a1
drawing No	1391-013	revision	B



HEAD OFFICE

401 Faraday Street,
Birchwood Science Park,
Warrington
WA3 6GA

Tel: 01925 844004
E-mail: tep@tep.uk.com

**MARKET
HARBOROUGH**

The Reynard Suite,
Bowden Business Village,
Market Harborough,
Leicestershire,
LE16 7SA

Tel: 01858 383120
E-mail: mh@tep.uk.com

GATESHEAD

Office 26, Gateshead
International Business
Centre,
Mulgrave Terrace,
Gateshead
NE8 1AN

Tel: 0191 605 3340
E-mail: gateshead@tep.uk.com

LONDON

8 Trinity Street,
London
SE1 1DB

Tel: 020 3096 6050
E-mail: london@tep.uk.com

CORNWALL

4 Park Noweth,
Churchtown,
Cury,
Helston
Cornwall
TR12 7BW

Tel: 01326 240081
E-mail: cornwall@tep.uk.com
