

Places for Everyone: JP Allocation 28 - North of Irlam Station

Green Infrastructure, landscape, water courses and water quality Background Report – prepared by Salford City Council

May 2021

1. Introduction

- 1.1 Allocation policy 28 of Places for Everyone identifies land north of Irlam station. Within the allocation policy it is noted that the site is identified for 800 homes. The site is 30 hectares in size and is located to the north of Cadishead and to the south of the M62 motorway. It predominantly comprises of agricultural land that is crossed by a number of tracks, together with farm buildings, a landscaping business and a small number of dwellings. There are a series of hedgerows running across the site.
- 1.2 The site is located within the ward of Cadishead & Lower Irlam and would be an extension of existing residential development to the south of the site. The entire site is designated as Green Belt by saved unitary development plan policy EN1 (Development affecting the Green Belt). Most of the site (excluding the south-east part) is located within the mosslands as identified by saved unitary development plan policy EN11 (Mosslands). A very small area of the site (along its southern boundary) is identified as a wildlife corridor key area of search in policy EN9 (Wildlife Corridors).
- 1.3 This background report has been prepared by Salford City Council's Environment and Climate Change team. It provides a short summary of the ecology and green infrastructure evidence that is available for the site and provides analysis of its implications.

2. Water Courses and Water Quality

- 2.1 The North West River Basin Management Plan¹ (RBMP) seeks to tackle the pressures facing the water environment. The legal framework for protecting and promoting sustainable water management of surface waters and groundwater is currently based on the Water Framework Directive (Directive 2000/60/EC). This promotes an integrated approach to the water environment, including water quality, flood risk, biodiversity and the sustainable use of water as a resource, and requires all inland waters to achieve 'good' status.

¹ Defra and Environment Agency (2015) Water for life and livelihoods: Part 1: North West river basin district River Basin Management Plan

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/718335/North_West_RBD_Part_1_river_basin_management_plan.pdf

- 2.2 The majority of watercourses in Salford and the North West, as well as some canals and reservoirs, are currently failing to meet RBMP objectives. Achieving those objectives will take a combination of measures. Major environmental improvements are needed to most of Salford's river corridors to improve their overall quality, functioning, connectivity and ecological quality, addressing issues such as canalisation and culverting, a lack of greenspace buffers and invasive non-native species.
- 2.3 Development can have a major impact on the water environment, and so needs to be controlled accordingly, delivering enhancements wherever possible. Development that would be likely to lead to deterioration in the overall status of a water body, or would prevent future attainment of good status, can only be permitted in exceptional circumstances as set out in regulations
- 2.4 The city council's mapping identifies an ordinary watercourses as draining the northern part of the site. A large number of smaller drains also cross the site. The western part of the site lies within the Glaze catchment. Although there are no mapped tributaries from the site, into the Glaze, it is likely that some of the land drainage ultimately flows into the Glaze. Glaze Brook has been assessed as bad – the lowest classification under the Water Framework Directive². The eastern part of the site, including the two ordinary watercourses is within the Manchester Ship Canal catchment. The Manchester Ship Canal has been assessed as “moderate” in this area³.
- 2.5 Given the impact that the development can have on the water environment, and the current challenges in meeting water quality objectives within the Glaze catchment, it is essential that any development on this site protects the quality of water draining from the site and as a bare minimum does not lead to any further deterioration. This requirement is addressed within criteria 14 and 15 of the Places for Everyone site allocation policy, namely:
- Criterion 14: Incorporate measures to mimic natural drainage through the use of green sustainable urban drainage to control the rate of surface water run-off.
 - Criterion 15: Protect the quality of watercourses through and around the site.

3. Landscape

- 3.1 The site is covered by a 2007 Landscape Character Assessment published by Salford City Council. The site lies within Rural Mosslands: sub area 2 (Southern Chat Moss). Chat Moss was previously one extensive peat bog, which over time has been largely cut for peat and/or drained and enriched for agriculture.

² 2019 classification, accessed on Catchment Data Explorer - <https://environment.data.gov.uk/catchment-planning/WaterBody/GB112069061420>

³ 2019 classification, accessed on Catchment Data Explorer - <https://environment.data.gov.uk/catchment-planning/WaterBody/GB112069061452>

3.2 Key features of the rural mosslands are identified as:

- Low lying, flat topography associated with reclaimed former lowland peat bogs allows extensive views
- A wide network of deep drainage ditches alongside the private roads and between the larger fields results in a simple ordered landscape
- The dominant arable agricultural land use with large scale fields on the rich peat soils provides an air of prosperity
- The relative lack of built development is in striking contrast to the adjoining urban areas

3.3 Additional features of Southern Chat Moss are identified as:

- A large scale landscape with open views gives a sense of rural remoteness in striking contrast with the adjoining urban areas of the city
- A strip of woodland screens the Liverpool to Manchester railway line which crosses the area on a level with the surrounding mossland
- Long private roads and rough tracks are laid out as a rectilinear network alongside some of the deep drainage ditches
- Apart from grouped farm dwellings and buildings along the main private roads and a line of pylons, there is a lack of built development
- The M62 runs mainly in a shallow cutting and has little visual but significant noise impact on the rural atmosphere
- The mainly small isolated straight edged blocks of unmanaged woodland stand isolated in extensive arable fields
- Two large flat dark mineral extraction sites offer exposed open views

3.4 The 2007 Landscape Character Assessment stops short of recommending policies for the different landscape types, but it is clear from the assessment that this is a very flat, open landscape and therefore minimising the visual impact on the landscape will be important, as required by criterion 10 of the Places for Everyone allocation policy 28.

4. Habitats and Potential Role in Ecological Network

4.1 The site is within the Great Manchester Wetlands Nature Improvement Area (NIA) and also within the Carbon Landscape HLF Landscape Partnership area, which is currently the main focus for conservation activity within the NIA.

4.2 The NIA designation does not prevent new development. However, a location within the NIA makes it essential that a high level of green infrastructure is incorporated within the development site in order to increase the area of priority habitats, improve connectivity between habitats and species populations, and enable the movement of species within the NIA and beyond. It would also be appropriate for development to contribute to off-site improvements within the Biodiversity Heartland to help deliver the NIA objectives. This is reflected within criterion 11 of the allocation policy, which

requires development to support the objectives of the Great Manchester Wetlands Nature Improvement Area.

- 4.3 Almost the entire site has been identified as part of Greater Manchester's priority green infrastructure, following analysis of a number of different datasets, including species records⁴. This does not preclude development, but it does highlight the importance of high levels of green infrastructure provision within the development, as required by criterion 10 of the allocation policy.
- 4.4 The site was not identified within the UDP⁵ as part of a Wildlife Corridor Area of Search, presumably because it is open countryside. The railway line which forms the southern boundary for the western part of the site has been identified as a wildlife corridor area of search.
- 4.5 Greater Manchester Ecology Unit (GMEU) undertook a survey of the Cadishead Moss area on behalf of the city council in 2017⁶. The results of that survey have been published alongside this report. The site allocation boundaries have been refined since 2017 and therefore the species referred to in that report may be present on the wider site and not necessarily the area covered by the allocation. However, given the number of species identified in the area, it is clearly an important area for wildlife, particularly farmland birds, and it is to be expected that many if not all of the species identified could be found on this site. Criterion 12 has been included within the allocation policy to mitigate the impact on bird species, in line with the recommendations of the GMEU report.

5. Other Green Infrastructure Functions

- 5.1 There is a public right of way (a bridleway) along Moss Road on the western boundary of the site, and a further right of way (footpath) along part of the north-western boundary of the site. Roscoe Road and Astley Road, although not definitive rights of way, are also used informally for recreation and access onto Chat Moss.
- 5.2 Significant numbers of responses have been received to the consultation at different stages of the plan preparation. Most recently, comments to the Revised Draft GMSF (2019) stated that the site is currently well used for recreation and functions as a "green lung" for Irlam and Cadishead, with positive impacts on both physical and mental health. It is clear from the responses that local residents place a high value on the Chat Moss area and the opportunities for informal recreation it provides. It is therefore imperative that any development on this site incorporates high levels of green infrastructure and attractive walking and cycling routes through it in order to provide opportunities for recreation and continued access to New Moss Wood, Chat Moss and the countryside beyond.

⁴ GMSF (May 2018) The Natural Environment: Priority Green and Blue Infrastructure

⁵ City of Salford Unitary Development Plan 2004-2016 (adopted June 2006), policy EN9 Wildlife Corridors

⁶ GMEU (January 2018) Draft Ecological Appraisal: Cadishead Moss)

- 5.3 There are a number of criteria proposed within the policy to mitigate impacts of the development of this site on green infrastructure. These include: (6) a high quality network of public routes through the site, and (10) high levels of green infrastructure throughout the site, including retaining landscape features such as mature trees and hedgerows.
- 5.4 A number of potential enhancements to green infrastructure on the site and in surrounding areas are suggested in the Green Belt Opportunities work. These opportunities and the potential deliverability of them will be considered through the masterplanning and planning application stages.
- 5.5 A number of concerns have been raised during previous consultations regarding the peat soils on the site. Recent surveys commissioned by Salford City Council⁷ found that peat depths varied between 0.70 metres and 2.9 metres below ground on the site as allocated in Places for Everyone, with peat depths increasing from the southwest to the northeast of the site. Peat levels are generally lowest in the southern parts of the site. The majority of the peat on the site is understood to be less than 2 metres deep.
- 5.6 Construction methods identified in the ground conditions report⁸ do not propose to remove peat but use ground stabilisation techniques such as soil mixing. Further work will be undertaken to investigate in broad terms the carbon implications of construction using the ground improvement methods identified in the ground conditions survey. It is a requirement of the allocation policy (criterion 5) that development must minimise the loss of the carbon storage function of the peat and avoid any adverse impacts on the hydrology of Chat Moss.

6. Analysis and conclusions

- 6.1 This site forms part of the Chat Moss complex, which is part of Greater Manchester's priority green infrastructure and supports a wide range of species, many of which are a conservation priority. The Chat Moss area, including this site, is part of the Great Manchester Wetlands Nature Improvement Area and also part of the Carbon Landscape Partnership Area. Local people value it as an area of open countryside, providing many benefits to their physical and mental wellbeing.
- 6.2 However, the site itself represents a very small proportion of the total Chat Moss area and avoids the most significant ecological features. A number of ecological constraints have been identified on this site which would require further surveys before any development takes place. These are not likely to prevent development of the site for housing development, but any loss of ecological features should be avoided if possible. If such loss is not avoidable it should be minimised as far as possible and appropriate compensation provided for any remaining loss, in line with emerging policies on biodiversity

⁷ Capita (July 2020) North of Irlam Station Development: Ground Investigation Report
See also: Salford City Council (9 Sept 2020) Non-Technical Summary: GMSF Allocation: Land North of Irlam Station

⁸ Capita (July 2020) – see full reference above

net gain. A large number of criteria relating to ecology and green infrastructure are set out within the allocation policy in order to mitigate the potential negative impacts and maximise the potential benefits of the proposed allocation. These are all set out in Annex 1 and a number of these are discussed below.

- 6.3 One of the most significant ecological issues on this site is the farmland birds. The wider Chat Moss area, including this site, is understood to be a stronghold for many bird species, some of which are a conservation priority. GMEU have advised that these birds are generally vulnerable to disturbance and rely on open sight lines. Therefore in undertaking their appraisal of the wider site allocation (as proposed in the 2016 Draft GMSF), GMEU advised that it would be preferable to reduce the area allocated for development, rather than proceed with a large allocation where built development was interspersed with significant areas of green infrastructure. In this context, it is worth noting that the revised allocation is significantly smaller in area (30 hectares) than the original site allocation (289.2 hectares). In addition, criterion 12 has been added to the allocation policy in line GMEU's recommendations. This requires that development of this site will be required to:

“Be supported by breeding and winter bird surveys to understand and minimise any adverse impact on bird species in this area. Surveys of potential compensation areas should also be undertaken to demonstrate that displacement into the wider landscape is possible”.

- 6.4 The above criterion is considered to adequately mitigate the potential impacts of the proposal on farmland birds. Moreover, any development should maintain links for wildlife to move through and around the site as far as possible, for example, by retaining the established hedgerows. Links should be maintained to the railway line to the south and countryside to the north and west (whilst accepting that the motorway to the north will be a barrier to some species).
- 6.5 Green “corridors” for wildlife through the site could also be used as attractive walking and cycling routes to mitigate the impact on local residents of the loss of some of the open countryside and providing continued access to the wider Chat Moss area beyond the site. This is considered to be covered by criterion 10 of the allocation policy.
- 6.6 Given the site's location within the Nature Improvement Area, it would be appropriate for the Great Manchester Wetlands NIA partnership to be involved in any masterplanning for the site as the partnership contains valuable expertise in relation to biodiversity and green infrastructure. Criterion 1 of the allocation policy requires a masterplan produced in consultation with stakeholders, although specific stakeholders are not named (whilst criterion 2 requires a robust delivery strategy to be prepared in partnership with key stakeholders). Central to the masterplan shall be the consideration of opportunities to restore habitats, strengthen ecological networks, and manage

the carbon and hydrological implications of development, having regard to the presence of peat on this site.

- 6.7 One of the other significant ecological features on this site is the peat beneath the topsoil. As discussed above, it is not proposed to remove the peat prior to construction but to use ground stabilisation techniques. The implications of these techniques for the carbon stored within the peat are not fully understood but it is expected that the effect on carbon storage will be less than removing the peat. Further work will be undertaken to investigate in broad terms the carbon implications of construction using the ground improvement methods identified in the ground conditions survey. Criterion 5 of the policy requires that loss of the carbon storage function should be minimised. Other areas of Chat Moss are considered to represent better opportunities for peatland restoration than this site due to a combination of peat depth, location and land use past and present.
- 6.8 Detailed ecological surveys would need to be undertaken at the time of any planning application to determine the level of mitigation and/or compensation required to address impacts on biodiversity. This would include but not be limited to the bird's surveys discussed above. Relevant measures would need to be taken in relation to protected species on site. Appropriate measures would also need to be taken in handling soil from any areas where invasive species are present.

Annex 1 – List of Policy Criteria relevant to ecology / green infrastructure

- Criterion 5: Minimise the loss of the carbon storage function of the peat and undertake a hydrological assessment in order to avoid any adverse impacts on the hydrology of Chat Moss, whilst ensuring that there is no potential for future problems of land stability or subsidence;
- Criterion 6: Incorporate a high quality network of public routes through the site, connected into the wider pedestrian and cycling network that provides access to local facilities, public transport services, New Moss Wood and Chat Moss;
- Criterion 10: Integrate high levels of green infrastructure throughout the site, including retaining landscape features such as mature trees and hedgerows, so as to minimise the visual impact on the wider landscape, achieve a minimum 10% net gain in biodiversity, mitigate the environmental impacts of development and provide an attractive backdrop to walking and cycling routes;
- Criterion 11: Support the objectives for the Great Manchester Wetlands Nature Improvement Area and avoid harm to protected species;
- Criterion 12: Be supported by breeding and winter bird surveys to understand and minimise any adverse impact on bird species in this area. Surveys of potential compensation areas should also be undertaken to demonstrate that displacement into the wider landscape is possible;
- Criterion 13: Be supported by a project specific Habitats Regulation Assessment for any planning applications involving 50 or more dwellings;
- Criterion 14: Incorporate measures to mimic natural drainage through the use of green sustainable urban drainage to control the rate of surface water run-off;
- Criterion 15: Protect the quality of watercourses through and around the site;
- Criterion 16: Include a new neighbourhood park incorporating equipped areas for play;
- Criterion 17: Include new allotment plots to meet the local standard.



