

Radcliffe and Redvales FRMS Detailed Design - Scheme Wide

Cultural Heritage Desk Based Assessment

30 August 2019

Mott MacDonald
2 Brewery Wharf
Kendell Street
Leeds LS10 1JR
United Kingdom

T +44 (0)113 394 6700
F +44 (0)113 394 6701
mottmac.com

Environment Agency
Richard Fairclough House
Knutsford Road
Warrington
WA4 1HG

Radcliffe and Redvales FRMS Detailed Design - Scheme Wide

Cultural Heritage Desk Based Assessment

30 August 2019

Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description
P01	05/11/18	Z Burn	C Hewitson J Williams & E Campbell	J Starling	First draft for client review (Previously issued as ENV0000389C -MMD-DZ-00- RP-EN- 0302002)
P02	28/08/19	V Nash	C Hewitson L Bagshaw	J Starling	Update to Phase 2 works

Document reference: ENV0000389C-BMM-DZ-4ZZ-RP-HE-03020020

Information class: Standard

This document is issued for the party which commissioned it and for specific purposes connected with the above-captioned project only. It should not be relied upon by any other party or used for any other purpose.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

This document contains confidential information and proprietary intellectual property. It should not be shown to other parties without consent from us and from the party which commissioned it.

Contents

Executive Summary	1
1 Introduction	2
1.1 Overview	2
1.2 The scheme	2
2 Methodology	3
2.1 Introduction	3
2.2 Study area	3
2.3 Site walkover	3
2.4 Resources used	3
2.5 Consultation	4
2.6 Assumptions and limitations	4
3 Planning Policy	5
3.1 National Planning Policy	5
3.1.1 Legislation	5
3.1.2 National planning context	5
3.2 Local planning policy	6
3.2.1 EN2- Conservation and Listed Buildings	6
3.3 Guidance	7
4 Cultural Heritage Baseline	8
4.1 Geology and Topography	8
4.2 Archaeological and historical background	8
4.2.1 Prehistoric	9
4.2.2 Roman	10
4.2.3 Early-medieval and medieval	10
4.2.4 Post-medieval to modern	11
4.3 Geotechnical investigation	12
4.4 Cartographic and pictorial evidence	12
4.4.1 Historic Landscape Characterisation (HLC)	12
4.4.2 Cartographic regression	13
4.4.3 LiDAR	16
4.5 Designated Heritage Assets	17
4.6 Non-designated Assets	17
4.7 Archaeological Potential	18
4.7.1 Components 6, 10, 19, 37, 38, 37 & 45 Raised Linear Defences (embankments and retaining walls)	18
4.7.2 Component 18 Hutchinson's Goit and Bealey's Goit	19

4.7.3	Component 4 Hardy's Gate Bridge	19
4.7.4	Component 21 Linear Flood Defences within Close Park	19
5	Statement of Significance	21
5.1	Designated Heritage Assets	21
5.1.1	Radcliffe Tower (MM001)	21
5.1.2	Church of St. Mary & St. Bartholomew (MM002)	24
5.2	Non-designated Heritage Assets	26
5.2.1	Hardy's Gate Bridge (MM062)	26
5.2.2	Hutchinson's and Bealey's Goit (MM060 and MM061)	27
6	Impact Assessment	30
6.1	Scheme Description	30
6.2	Assessment of Impact and Risk	30
6.2.1	Impact on Built Heritage Assets	30
6.2.2	Impact on Archaeological Remains	31
7	Conclusions	32
8	References	33
	Appendices	34
A.	Gazetteer of heritage assets	35
B.	Location of heritage assets	45

Executive Summary

This report comprises a Cultural Heritage Desk Based Assessment (DBA) to understand the heritage and archaeological constraints in relation to the Radcliffe and Redvales flood risk management scheme (FRMS). It is designed to inform the planning submission(s) to help avoid, mitigate and justify design work which may adversely impact the historic environment.

The FRMS stretches along 6km of the River Irwell through the Radcliffe and Redvales areas of Bury in Greater Manchester. The main objective of the FRMS is to reduce the risk of flooding through conveyance improvement measures and linear defences to people, their property and the critical infrastructure within the towns. A high-level heritage appraisal undertaken as part of Outline Business Case (OBC stage) identified five key heritage assets potentially affected by the FRMS either due to their influence on important views, nature of their heritage value and potential impact on them from construction and operation of the FRMS.

These included the high value designated asset of Radcliffe Tower; the high value designated asset of St Mary and St Bartholomew's Church; and the three low value, non-designated asset of Hardy's Gate Bridge, Hutchinson's Goit and Bealey's Goit. How the improvement measures physically impact the assets and impact their setting is a material consideration in the planning process.

The significance of Radcliffe Tower and the Church of St Mary and St Bartholomew derive primarily from their historic value. They are surviving examples of a medieval tower house and parish church making them the oldest assets within Radcliffe. Historically they would have lain on marginally higher land above the River Irwell. They would have been inter-related as the two principal buildings as the medieval manorial settlement of Radcliffe. Their collective setting forms an important part of their value and constitutes surviving remains of the manor holdings of Radcliffe.

There will be no physical or permanent impact to the designated heritage assets from the improvement works. There would be an impact on the setting of St Mary and St Bartholomew church and the graveyard and Radcliffe Tower from construction of linear defences which will disrupt views from the church and can be seen from the graveyard. Good design through material and height consideration will seek to ensure views to and from the church are not compromised. The works should respect the historic and existing character of the church and not change the setting of the graveyard. The linear defences will create a beneficial impact by providing flood protection for a regionally and nationally important heritage asset and the impact is therefore considered to represent less than substantial harm. The relationship between the church and tower will not be compromised by the work which forms a key part of their setting and is an important part of their historical significance.

Hardy's Gate Bridge, Hutchinson Goit and Bealey's Goit are considered low value assets. The proposed works would involve alteration to these assets. As they are not designated or identified as heritage assets on the Historic Environment Record (HER) further recording would ensure proportionate mitigation to these permanent improvement impacts.

Further archaeological investigation in Close Park where there is a moderate potential for unknown remains will ensure appropriate mitigation for any works involving below-ground disturbance.

1 Introduction

1.1 Overview

This report has been prepared by Mott MacDonald (MM) as part of the BMM JV on behalf of the Environment Agency (EA) to understand the heritage and archaeological constraints in relation to the Radcliffe and Redvales flood risk management scheme (FRMS). The report follows a high-level heritage appraisal undertaken as part of Outline Business Case (OBC) stage designed to inform the option appraisal process.

This report comprises a Cultural Heritage Desk Based Assessment (DBA). It is designed to inform the planning submission/submissions (the development is to be brought forward in phases each subject to individual planning applications) to help avoid, mitigate and justify design work which may adversely impact the historic environment following outcome of the preferred options.

A previous version of this report (P01) was submitted in relation to the Phase 1 (downstream works) planning application and has since been updated (P02) to reflect changes in the design to the Phase 2 works at Hardy's Gate Bridge. Since the time of writing further archaeological evaluation work has been conducted at Close Park. The findings of this work are summarised with the Close Park Archaeological Evaluation Report conducted by Salford Archaeology in July 2019.

1.2 The scheme

The FRMS stretches along 6km of the River Irwell through the Radcliffe (NGR SD790072) and Redvales (NGR SD794100) areas of Bury in Greater Manchester. In 2015 the Radcliffe and Redvales areas suffered significant flooding following a period of heavy rainfall in the upper catchment of the River Irwell.

The main objective of the FRMS is to reduce the risk of flooding to people, their property and the critical infrastructure serving the communities in Radcliffe and Redvales from the River Irwell, the River Roch, various ordinary watercourses and former goits (man-made water channels designed to feed water-driven textile mills) systems.

The FRMS comprises the following conveyance improvement components to achieve this:

- Component 4: raised parapet and new internal doweling to upstream face of Hardy's Gate Bridge
- Components 6, 10, 19, 37, 38 & 45 raised linear defences (embankments and retaining walls) at specific locations along both banks of the River Irwell;
- Component 18 possible works to Hutchinson's and Bealey's Goits to prevent short-circuiting of floodwaters during a flood event; and
- Component 21 linear flood defences within Close Park.

These are detailed in ENV0000389C Radcliffe and Redvales preferred option design report (Ref: ENV0000389C-MMD-XX-00RP-C-0215006-S2-P02) with the extent of the FRMS included in Appendices B, D, E and F.

2 Methodology

2.1 Introduction

The following report represents a Cultural Heritage DBA. An initial high-level appraisal was initially undertaken to identify the impacts of the FRMS on all designated heritage assets within 500m and 250m for non-designated heritage assets of the centre line of the River Irwell. The current report builds on the appraisal with proportionate and focussed assessment on the FRMS components taken forward to the proposed FRMS.

The methodology used to prepare the Cultural Heritage DBA is outlined below. It conforms with the standards set out in the Environment Agency's '*Minimum technical requirements 801 14_SD01 Cultural heritage and archaeology standards*'.

The Cultural Heritage DBA details the heritage baseline, including the geology, topography, historic and archaeological background, geotechnical investigation, map regression, LiDAR, designated and non-designated assets and the archaeological potential of the study area. The report also includes a statement of significance of four key heritage assets in or adjacent to the FRMS components.

2.2 Study area

The study area for the baseline is a 500m buffer for designated assets and 250m buffer for non-designated assets from the site area which follows the course of the River Irwell. These are depicted on drawings ENV0000389C-MMD-DZ-00-DR-EN-0302003-0302006 in Appendix B. The OBC scheme boundary ensured all heritage assets which could be impacted by the full extent of the FRMS were included.

2.3 Site walkover

An initial site visit was undertaken on 29th and 30th August 2017 as part of the high-level heritage appraisal to assess and identify risks and impacts upon historic environment assets recorded on the GMAAS Historic Environment Record (HER) including impacts on their setting.

This was followed by a site walkover on the 3rd September 2018 focussed on the FRMS components following the outcome of the preferred option design development. This was to better assess the impact on historic environment assets to inform the design works and how these can be developed to avoid, mitigate or outline opportunities for the planning submission(s). The site walkover was also designed to assess the significance of key designated assets and the contribution their setting made to their significance.

2.4 Resources used

The following sources were used to gather the baseline:

- A search of the Historic England (HE) National Heritage List for England (NHLE) database for designated heritage assets (Scheduled Monuments, Listed Buildings, Conservation areas, World Heritage Sites, Registered Battlefields and Registered Parks and Gardens) within 500m of the site area following the course of the River Irwell;
- A search of the GMAAS HER database, for non-designated heritage assets within 250m of the site area following the course of the River Irwell;

- Historic Landscape, rural and urban Characterisation (HLC);
- Historic map regression exercise including Ordnance Survey maps, tithe maps and older;
- An examination of local, regional and national planning policies in relation to the historic environment;
- Aerial photographs (vertical and oblique);
- An inspection of EA LiDAR data relevant to the site;
- An assessment of relevant published and unpublished archaeological sources including via the Archaeological Data Service (ADS), maintained online by the University of York for previous archaeological surveys and investigations;
- The North-west Regional Research Agenda;
- Geology of the site from the British Geological Survey, borehole logs or geotechnical investigation results; and
- Information on previous impacts to the site (previous developments, contaminated land and natural erosion).

2.5 Consultation

Historic England were consulted on 26th September 2018 regarding linear defences which may impact the setting of the Grade I listed Church of St Mary and St Bartholomew and scheduled ancient monument and Grade I listed building of Radcliffe Tower. The consultation outlined proposals to assess significance, setting and key views of heritage assets likely impacted by the FRMS. Impacts would be to setting only. Consultation outlined a requirement for good design for the defences which would not compromise views of any Grade I listed structures.

Historic England reviewed the information supplied and did not wish to offer any comments.

Consultation was undertaken with the Local Planning Authority (LPA) Archaeologist at Greater Manchester Archaeology Advisory Service (GMAAS) on 26th April 2018 and 1st July 2019 to design an archaeological mitigation strategy for the FRMS. The key heritage constraints, included:

- Further examination and recording of Hutchinson's/Bealey's goits prior to any alteration works;
- A level 1 historic building survey at Hardy's Gate Bridge prior to alteration works followed by an archaeological watching brief during alteration works; and
- Staged programme of archaeological evaluation within the footprint of the Close Park embankments to understand the potential of unknown Prehistoric remains due to the proximity of the well preserved Mesolithic site on the Ees.

2.6 Assumptions and limitations

The assessment is reliant on available HER data as of August 2017 and National Heritage data as of September 2018. Information provided by the HER can be limited because it depends on random opportunities for research, fieldwork, and discovery. Where nothing of historic interest is shown in a particular area, this can be down to a lack of research, or investigation rather than no assets being present.

Documentary sources are rare before the medieval period, and many historic documents are inherently biased. Older primary sources often fail to accurately locate sites and interpretation can be subjective.

3 Planning Policy

3.1 National Planning Policy

3.1.1 Legislation

The overarching legislation in relation to the historic environment in Britain is provided by:

3.1.1.1 The Ancient Monuments and Archaeological Areas Act 1979

This act relates to the investigation, preservation and recording of matters of archaeological and historic interest.

3.1.1.2 The Planning (Listed Buildings and Conservation Areas) Act 1990

This act sets out the protection given to buildings of special architectural or historic interest through listing. It also sets out the process for designation of conservation areas, being areas of special architectural or historic interest the character or appearance of which it is desirable to preserve or enhance.

3.1.2 National planning context

Chapter 16 of The National Planning Policy Framework (2018; NPPF) addresses the conservation and enhancement of the historic environment.

Paragraph 189:

- In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting;
- The level of detail should be proportionate to the assets importance and no more than is sufficient to understand the potential impact of the proposal on their significance;
- As a minimum the relevant HER should have been consulted and the heritage assets assessed using appropriate expertise where necessary; and
- Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities would require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.

Paragraph 192 asks local planning authorities to take into account three factors when determining applications:

- The desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;
- The positive contribution that conservation of heritage assets can make to sustainable communities including their economic viability; and
- The desirability of new development making a positive contribution to local character and distinctiveness.

Paragraph 193 When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any

potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.

Paragraph 197 states “the effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset”.

In **Paragraph 199** local planning authorities should require developers to record in advance the understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible. However, the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted.

3.2 Local planning policy

The site sits within the authority of Bury Council. The current local planning policy is set out within the Adopted Bury Unitary Development Plan (UDP), adopted 29 August 1997. Although the Council is preparing to replace the UDP with a new document called the Bury Local Plan, whilst in preparation the UDP continues to be used in making planning decisions. Regarding the historic environment associated with the proposed scheme the relevant local policies are as follows:

3.2.1 EN2- Conservation and Listed Buildings

The Council will seek to preserve the Borough's built heritage through the control of development, especially that affecting Conservation Areas, Listed Buildings and areas of local historical importance.

3.2.1.1 EN2/3 Listed Buildings

The Council will actively safeguard the character and setting of Listed Buildings by not permitting works, alterations or changes of use which would have a detrimental effect on their historical or architectural character and features. Proposals for demolition will be opposed and will only be considered where it is demonstrated conclusively that the building(s) cannot be retained.

In considering applications for Listed Building Consent, the Council will have regard to the following criteria: a) the impact of the proposal on the historic fabric of the building;

- the relationship of any extension to the Listed Building in terms of its height, size, design, and roofscape;
- the need to protect the setting of the Listed Building; and
- the impact of associated ancillary facilities and infrastructure works.

3.2.1.2 EN3/1 – Impact of Development on Archaeological Sites

Where a development proposal is submitted which will affect an archaeological site, the developer should submit sufficient information on the potential impact of the development to allow the Council to make a full and proper investigation into its archaeological consequences.

The Council will have regard to the following criteria in determining the importance of an archaeological site and the impact of any proposal:

- the historic importance of the site;
- the quality and condition of the site;
- the rarity value of the site;
- the nature of the proposed development;
- the level/degree of disturbance;
- the permanence of the proposal; and
- the siting of associated infrastructure/services.

3.2.1.3 EN3/2 – Development Affecting Archaeological Sites

On sites where development is considered to be acceptable in principle, consent will only be granted if:

- the development is designed in such a way as to minimise the level of disturbance and damage;
- development is programmed so that such sites and remains can be investigated in accordance with a previously agreed scheme of excavation and evaluation; and
- where damage or disturbance is unavoidable, arrangements are made for the archaeological recording of the site prior to and during development.

3.3 Guidance

The assessment has been undertaken in accordance with guidance set out in:

- Chartered Institute for Archaeologists (CIfA), Standard and Guidance for historic desk-based assessments (2017);
- Environment Agency (EA), Minimum Technical Requirements: Cultural heritage and archaeology standard (801_14_SD01; 2015);
- Historic England (HE) Conservation Principles (2008);
- HE, Good Practice Advice in Planning Note 2: Managing Significance in the Decision-Making Process (2015); and
- HE, Good Practice Advice in Planning Note 3: The Setting of Heritage Assets (2017).
- HE, Understanding Historic Buildings: A Guide to Good Recording Practice (2016)

4 Cultural Heritage Baseline

The baseline describes the Cultural Heritage of the study area defined above. Cultural Heritage (also referred to as the Historic Environment) is defined in the NPPF (2018) as:

“All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora.”

The following sub-topics have been considered:

- Archaeological Remains;
- Built Historic Environment; and
- Historic Landscapes.

For the purposes of this report historic landscapes are not considered individually as no designated or nationally significant historic landscapes exist in the study area. Historic Landscape Characterisation (HLC) has been considered in the assessment of archaeological remains and the built historic environment.

4.1 Geology and Topography

Radcliffe town is situated within the Irwell valley area, north of the river, lying where the stratigraphy alters to thick beds of red sandstone. It is this distinctive colouring that is visible on exposed outcrops, opposite the town on the banks of the river Irwell, which supposedly contributed to the name Radcliffe, meaning Red Cliffs.

The River flows from Deerplay Moor approximately 15km north-east of Bury and takes a winding course south. Several settlements have developed along its banks before it flows through Bury and Radcliffe before winding down through Manchester to outflow as a tributary into the Mersey. The connectivity of the river has made it a focus for later industrial activity, however the wide flood plains and clean water have created an attractive location for activity from the prehistoric period onwards.

The River Irwell is underlain by a combination of coarse, granular, river terrace deposits to the east, alluvial deposits associated with the river, glacio-fluvial deposits to the west and stiff glacial till. The river terrace deposits and glaciofluvial deposits are a product of Pleistocene glacial effects creating a valley within which the Irwell flows. These overlie bedrock of the Lower Coal Measures at the upstream end, moving to Middle Coal Measures with Sherwood Sandstone underlying the downstream end and include variations of mudstone, siltstone and sandstone with outcrops of carboniferous sedimentary sandstone. Prior to FRMS works, Mott MacDonald requested a Coal Authority report which recorded a coal seam running north of the football pavilion within Close Park, continuing north-eastwards and crossing the northern end of the proposed FRMS embankment.

4.2 Archaeological and historical background

The historic narrative of the baseline is provided chronologically as follows:

Table 1: Archaeological and historic periods used for the purpose of this assessment

Prehistoric Period Dates	Historic Period Dates
Palaeolithic 500,000 to 10,000 BC	Roman AD 43 to 410
Late Glacial / Mesolithic 10,000 to 4,000 BC	Early Medieval AD 410 to 1066
Neolithic / Early Bronze Age 4,000 to 1,600 BC	Medieval AD 1066 to 1550
Middle Bronze Age 1,600 to 1,100 BC	Post-medieval AD 1540 to 1900
Late Bronze Age 1,100 BC to 700 BC	Modern AD 1901 to modern
Early Iron Age 700 to 400 BC	
Middle Iron Age 400 to 100 BC	
Late Iron Age/ Roman Transition 100 BC to AD 43	

4.2.1 Prehistoric

The confluence of the River Roch into the River Irwell, south of Radcliffe Tower has resulted in a large flood plain (known as the Ees) proving desirable for activity from the prehistoric period onwards. Initial discovery was as a result of chance finds discovered during gravel extraction by plant workers (MM067). Subsequent archaeological excavations were undertaken over a period of twenty years that revealed good preservation of prehistoric archaeological remains relating to a possible Mesolithic lake settlement and flint-working site.

In 1945 in-situ structures comprising seven circles of posts in double rows measuring approximately 30' in diameter and another circle of posts 15' in diameter which had been overlain by thick organic material such as brushwood, hazelnuts and pinecones and sealed by clay were removed by machine before being subject to archaeological recording. The 1949 excavations revealed posts positioned in 4-5" diameter circles, 21-26" apart with a second row of post, c.40" away which had been interwoven with branches, with a brushwood layer between and over the posts. Fragments of red raddle, baked red clay, hazel nuts, pine & fir cones and flints were found in this layer, with 3 fragments of a possible Mesolithic hide or leather (MM069).

Two layers of horizontal timbers, 9-12" apart with associated alder catkins, hazel nuts and flint flakes were revealed during the 1950 excavations. The flints have been associated with the Pennine Mesolithic Maglemosian Culture. The timbers may form a Bronze Age platform and causeway of stakes, wattling and brushwood (MM070).

During the 1961 excavations, a series of stake lines were revealed with exposed brushwood and branches in-between and a clay band. A willow-tree rested on the timbers and is thought to have been used as a canoe (MM072). The chance finds were not restricted to the Mesolithic period as an early Bronze Age flanged axe was recovered within a gravel pit below the confluence of the River Irwell and Roch in 1950 and the remains of a beaker within topsoil near the seven circles of posts illustrating continual activity on the Ees (MM075). In addition, excavations behind the cemetery in Radcliffe in 1951 uncovered a disk Barrow, although there were no associated inhumations.

The results of the later archaeological excavations suggest either multiple phases of structures or disparity in the date of the structures found in the 1940s. Regardless of any disparity in dates there is evidence for the survival of in-situ archaeological remains dating to multiple periods of significant importance. The preservation of organic remains from that period provides rare evidence into the culture. The finds located upon the large flood plain relate to the desirability for settlement in the prehistoric period and also raises the possibility for additional unrecorded archaeological sites focusing on the river. Information from recent aerial photographs and research undertaken by the Bury Archaeological Group indicate that there may be archaeology remaining on the eastern bank of the Irwell around the position of the 1949-1961 excavations.

The site nonetheless relates to a Mesolithic lake settlement and possible flint-working site probably for seasonal hunting, which continued beyond the Mesolithic period. Other archaeological investigations undertaken 295m north of Radcliffe Tower¹, although only revealed 19th century deposits relating to a housing development, indicated the presence of gravel deposits which cements the argument that gravel terraces are widespread within this part of the town and probably means prehistoric activity is not necessarily restricted to the Ees.

4.2.2 Roman

Artefactual and site evidence for the Roman period is scattered for this area of the North-west. Aerial photographs within the immediate environs of Radcliffe depict patterns of enclosure settlements atypical of farmsteads established in the second half of the millennium BC which continued to be occupied into the Roman period. These are mostly likely on promontory sites overlooking rivers and streams or as hilltop enclosures. The presumed route of the Roman road linking Manchester, through Ribchester and Penrith, with Carlisle considered the principal Roman road in the North-west traverses the southern end of the study area crossing the River Irwell in the location of the Ees (MM077). Margary describes the roads crossing '150 yards to the west of the ruined Radcliffe Tower' and references to its continuation in the surrounding fields with traces of a large agger (raised causeway) at some points. The discovery of several sherds of Roman pottery from excavations on the Ees gives weight to the theory, although firm evidence is lacking. The availability and easy exploitation of river gravels within the area probably provided material for the construction and maintenance of the road. There is also the possibility of roadside settlements located near such a major road. Roman settlements are associated with Castleshaw in Oldham and the fort in Manchester, concentrated within a 1km corridor either side of the Roman road².

4.2.3 Early-medieval and medieval

There is little archaeological evidence for the early medieval to medieval period within the study area. What evidence there is focuses on the settlement at Radcliffe. The name Radcliffe derives from old Norse for rauðr meaning red and kleif meaning cliff 'Red cliff'. This is almost certainly related to the outcrops of red sandstone that are visible along the River Irwell and suggest that there was a settlement in the early medieval period. This is confirmed by the recording of a manor at Radcliffe in the Domesday Book. In 1066 Redcliffe, Radeclive, was held by King Edward (Edward the Confessor, c.1003 to 1066) as part of the Royal Manor of Salford. In 1086, after the Norman conquest, the Baron de Mersey gave Radcliffe manor to Nicolas Fitz-Gilbert de Talbois who adopted the place name as his surname and thus founded the Radcliffe family.

The earliest physical evidence relates to the parish Church of St Mary and St Bartholomew (Grade I listed building), which dates from the 13th century onwards, although there are suggestions that the origins of the church date to the 12th century (MM002; immediately west of Close Park). In 1403 James de Radcliffe was granted a licence to rebuild his manor house "...with walls of stone and lime, to enclose anew and within those walls erect a hall and towers...". Radcliffe Tower (MM001) still stands adjacent to the church and is protected as a Scheduled Monument and Grade I listed building. It is likely that the house would have had an associated park and fishponds which is in part suggested by documentary evidence referring to a 'New Park' in the 14th century. Earthwork depressions and crop marks to the east of Radcliffe Tower, towards Blackford Bridge, appear to represent buildings, including several crofts, ponds, and a track, which may cumulatively represent the remains of a medieval hamlet. A hollow way that is likely to preserve the line of a medieval road is also visible and appears to be a south-

¹ The Greater Manchester Archaeological Unit 1993

² The Greater Manchester Archaeological Unit, 2008

westerly continuation of Roach Street. Beyond this, the landscape is likely to have been extensively settled with dispersed farms, halls, nucleated hamlets and the market centre of Bury. The wider land-use pattern was cattle and sheep rearing in the upland areas and grain production within the low-lying Irwell valley. Trading livestock, textiles and wool was of principal economic importance.

4.2.4 Post-medieval to modern

Following the death of John Radcliffe in 1518 and the subsequent sale of the manor by Thomas Radcliffe, third Early of Sussex, to Richard Ashton of Middleton in 1561, the house served as a gentleman's residence. The tower was leased in 1672 to Richard Walker of The Cross and Richard Walker of Radcliffe Bridge. Following the death of the former the manor was reduced to that of a farm.

The Centre for Applied Archaeology, University of Salford undertook excavations in 2013 as part of Heritage Lottery Funded regeneration plan for Radcliffe on land associated with Radcliffe Tower (MM202). The excavations investigated remains associated with the medieval timber hall, boundary wall and workers housing on tower street. The medieval remains uncovered were highly fragmented in nature but did help to answer questions about the scale and building material utilised for the main hall. The change of use from a fortified manor to a farm had removed large traces of the former medieval structure on site.

Industrial activity developed on the River Irwell from the 18th century with the establishment of a bleach works at Radcliffe in 1750 (MM091); immediately north of Close Park. The original works is associated to the Bealey family who continued to run Radcliffe works until the early 20th century when it formed part of the Bleachers Association. The works drew water from the Irwell and the works were operated by waterwheels that required the associated reservoirs, millraces and tunnels within the landscape. Around 1780 the weir was built on the River Irwell and Bealey's goit was engineered. The firm were also responsible for chemical manufacture including sulphuric acid for use in the bleaching industry and dye works (MM097); 53m north of the River Irwell where it flows through the Ees.

To the west of Radcliffe's historic core was a large industrial complex associated with a calico-printing works established by the firm Shaw, Docker and Yates (MM088), 140m north from the FRMS. This was related to a wider expansion of the paper industry in the Bury area. The printing works was built on the location of a former small wear manufactory and possible site of a former barracks (MM096); 140m north of the River Irwell where it flows through the Ees. In the early 19th century the business changed hands to become a print works owned by Hodson and Quarle and later by Horrox and Sons. In 1830 the company was taken over by the Hutchinson's, firm who in 1860 developed the adjoining field into the East Lancashire Paper Mill (MM096). The extent of the industries that developed through this period is reflected in the numerous mills and works recorded on the HER within the study area:

- Egyptian Mills, cotton mill, dated first to the late 19th century and expanded in the early 20th century (MM100); 275m north of Buckley Wells online storage area.
- Wrath Mills, cotton mill, dated to c.1900 (MM101); 85m north of the Wrath business park linear defence.
- Wilton Mill, cotton mill dated to 1907 (MM085); 91m north-west from the southern boundary of the FRMS.
- The Irwell Tallow and Candle works, early 20th century (MM098); 200m east of Bealey's Goit.
- A former cotton mill and chemical works, dated to the late 19th century with developments in the early 20th (MM056); south of the York Street linear defence.

- Dumers Lane Mill, former textile mill dated to the 1920s but with substantial additions later in the 20th century (MM103); 88m east of Dumers Lane defences.
- Pioneer Mills, cotton mill and textiles dating to the early 20th century (MM057); 100m south from the southern end of the FRMS.

There was settlement and populations growth through the 19th and 20th centuries that is reflected in the expansion of housing in the town. In 1846 the East Lancashire Railway constructed a spur from Manchester to Bolton line, this ran from Clifton Junction through Radcliffe and on to Bury and Rawtenstall. This included the construction of the railway viaduct over the Irwell (MM066). A public pleasure gardens named Victoria Gardens is recorded in the HER on the east side of the River Irwell dating to the 19th century, however this has subsequently been developed (MM093; c. 390m north-west of the Metrolink linear flood defence). There was still open grassland used for farming and new farms that date to the 19th century that are represented in the HER records. Britain Farm (MM083); 221m from Hardy's Gate Bridge dates to the early 19th century.

4.3 Geotechnical investigation

Geotechnical investigations were undertaken as part of OBC stage in July and August 2017 with full details outlined in report ENV000389C-MMD-XX-00-RP-GT-0110001-S2-P01. A total of 56 locations were investigated using cable percussive, rotary, windowless sampling and machine excavation. Further GI was conducted for the Phase 1 downstream works in October 2018, with a second round of GI to be conducted in relation to the Phase 2 upstream works due to start September 2019.

A single windowless sample hole was investigated within the proximity of Bealey's/ Hutchinson's Goit and encountered 2.5m of made ground below the current ground level comprising soft to firm gravelly sandy clay/silt and sandy gravel with fragments of sandstone, brick and landfill. This lay above 0.62m of alluvial grey sandy gravel and cobble deposits.

Previous ground investigation works within close park encountered topsoil which was directly underlain by coarse alluvial sand and gravel. During the 2017 investigations a further two cable percussion boreholes were investigated within the playing fields and recorded a layer of made ground (1.2-1.4m) overlying 1-5m of dense grey/brown sandy alluvial gravel.

The ground model generally consisted of made ground overlying alluvial deposits, glacial deposits over solid Pennine Coal Measure sub-strata as recorded on the British geological soil surveys. The presence of alluvial sand and gravel deposits which prehistoric activity has favoured elsewhere indicate the potential for further archaeological remains of this period to be located here.

4.4 Cartographic and pictorial evidence

4.4.1 Historic Landscape Characterisation (HLC)

The HLC of Bury was mapped by The Greater Manchester Archaeological Unit between 2007 and 2010 as part of a national programme supported and developed by Historic England (formerly English Heritage). HLC data was provided by the GMAAS HER in October 2017 for the FRMS. The FRMS does not run through any designated landscapes. The specific character areas of the historic landscape are presented on drawing ENV000389C-MMD-DZ-00-DR-EN0302005 within Appendix B. The river runs through areas of enclosed land, woodland, ornamental, parkland, recreational areas, waterbodies, commercial, horticulture, communications and residential housing. The landscape is dominated by areas of extensive

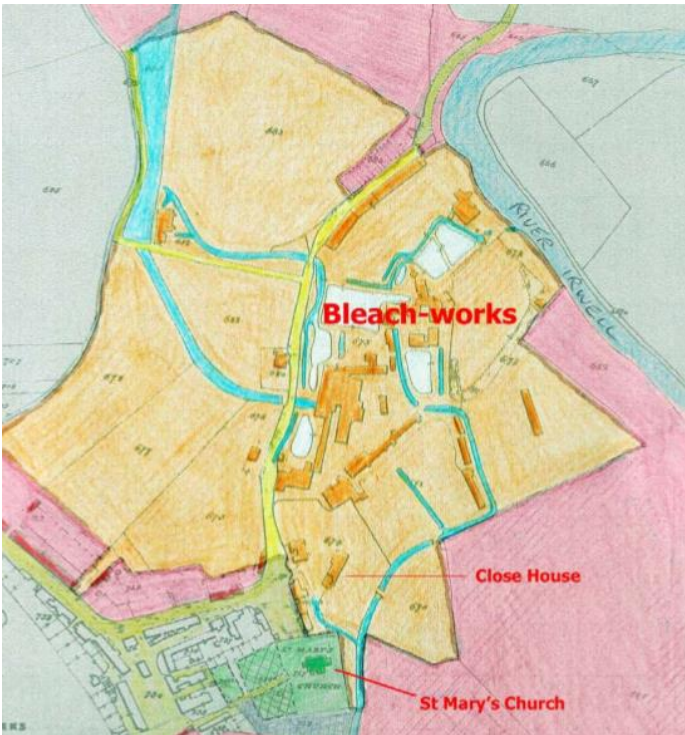
industry which developed from the 18th century because of the availability and quality of water within the district. The high rainfall, soft water and fast-flowing brooks were ready water supplies which led to the success of the textile industry from which commercial urban and market cores began to grow. Although most of the remains of these former industrial buildings are extant the surviving houses, towns and park of these institutes remain concentrated along the route of the river. Settlement patterns established on the fringes of the industrial core are surrounded by the piecemeal enclosure of surviving common land between the 17th and 18th centuries.

4.4.2 Cartographic regression

Historic maps have been consulted in order to identify historic features that may indicate the presence of archaeology, its level of survival and areas of historic ground disturbance. The results are presented within Table 2 and focus on the areas of Close Park and Bealey's/Hutchinson's Goits which will be impacted by the FRMS.

Large scale versions of the maps have not been produced for the Appendices as the areas have seen little change since the development and growth of the textile industry from the 18th century.

Table 2: Cartographic regression

Map	Comments
	1841 Tithe Map, Bury The 1841 Tithe Map which was illustrated as part of the Radcliffe Heritage Project shows the area owned by the Bealeys in orange and the area rented by the Bealey's in red. The Bealey's bleach works are positioned near the River Irwell and dominate the area of Close Park. The bleaching process required clean water. A number of watercourses were culverted through the works to meet the needs of this process including Hutchinson's/Bealey's goits. The 1841 Tithe Map illustrate these running north to south through the area now occupied by the Close Park playing fields. The fields around the Bleach works, Parish Church and Radcliffe Tower, were rented by the family and used for 'grassing' their cloth. Close to the proposed embankment within the playing fields is the former Close House, Field 671 was known at this time as 'Miss Bealey's Garden.'

Radcliffe Heritage Project Volunteer Research, Bury Council 2014

Map



Comments

Ordnance Survey, 1848 Lancashire XCVI.

Close Park – the site is undeveloped, St Mary's Church (Rectory) and Radcliffe Tower are depicted and lie within an area of open fields, still dominated by the Bleach works to the north. Hardy's Gate Bridge carries Drummers Lane over the River Irwell immediately to the north of Close Park and is marked as a thorough-way by Radcliffe Trust. The route appears to link the main road through Radcliffe with the Bleach and Calico Print Works.

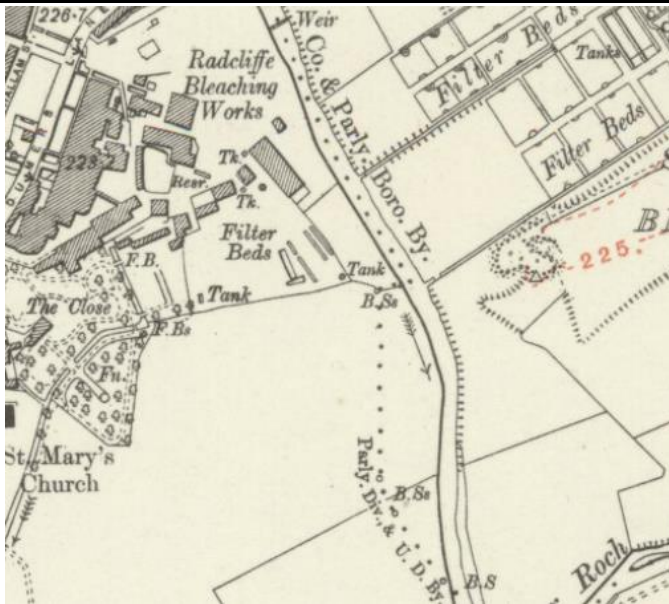
Close House is marked as "Radcliffe Close" and more of the gardens details are depicted.



1848 Ordnance Survey Map

Bealey's/Hutchinson's Goit – Area dominated by the meandering course of the River Irwell, surrounded by enclosed regular parcels of agricultural land. Industries are concentrated further south. Hutchinson's goit is clearly marked on the map.

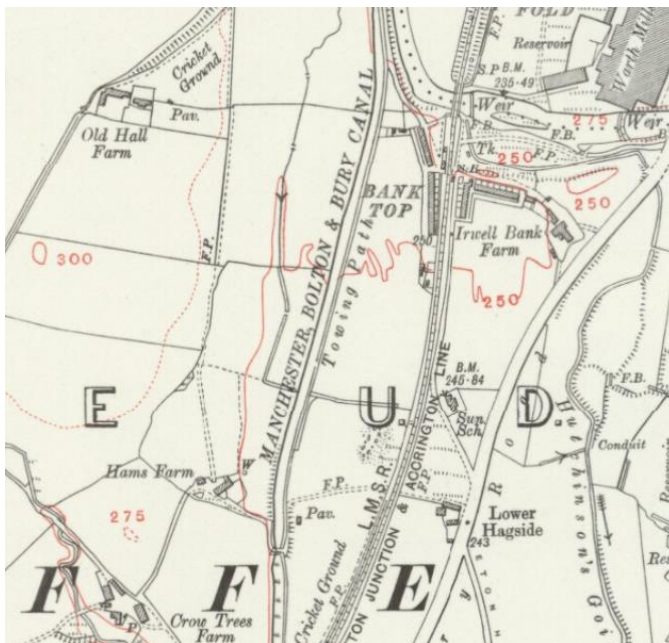
Map



Comments

Ordnance Survey, 1923 Lancashire XCVI

Close Park – The Bleach works are now marked as the Radcliffe Bleaching Works. There is clear expansion adjacent to the area with the addition of filter beds in part of Mrs Bealey's ornamental gardens. Industry has developed along the eastern banks of the River Irwell. A boundary within one of the agricultural fields south of St Mary's Church has been removed to create a larger parcel of land.



Bealey's/Hutchinson's Goit - Warth Mills lies on the northern bank of the River Irwell and not surprisingly directly adjacent to the line of Hutchinson's Goit. The weir is also now clearly marked.

1923 Ordnance Survey Maps

Map



1946 Ordnance Survey Map

Map not available.

Comments

Ordnance Survey, 1946 Lancashire XCVI.NW

Close Park – Close Park is marked on the 1946 map. In 1925 the Bealey family gave part of close gardens to Radcliffe Urban District Council to convert into a public car park. In 1935 the land was gifted to Radcliffe by the Bleaching Association for extensive recreational playing fields.

The area is made-up of a bandstand, tennis courts, a putting green, playground and greenhouses. The Radcliffe Bleaching Works still dominates part of the western bank of the River Irwell.

Bealey's/Hutchinson's Goit -

No change from the 1923 OS Map (No map attached adjacent)

Ordnance Survey, 1983 Lancashire XCVI

The bleach works was demolished after 1984 and replaced by a modern housing estate. A workroom and storage buildings used by Radcliffe Council as well as a pavilion have been constructed within Close Park by this time.

<https://www.old-maps.co.uk> [accessed 18 September 2018]

4.4.3 LiDAR

The following tables provides a brief overview of the relevant available LiDAR data around Close Park from the Environment Agency. This is depicted on drawing ENV0000389C-MMD-DZ-00-DR-EN-0302006 in Appendix B.

Table 3: LiDAR Summary

Enhanced LiDAR	Comments
	The Environment Agency Data WMS LiDAR composite Service Digital Terrain Model (DTM) enhanced to a 1m spatial resolution was available for the FRMS within Close Park. Little could be discerned from the enhanced data. A very faint shadow (annotated on the adjacent map in red) could be identified running north to south through the playing fields. The shadow appears to follow the route of one of the former watercourses mapped on the 1851 Tithe Award Map for Bealey's Bleach Works which were culverted to meet the needs of the bleaching process. Bealey's/Hutchinson's Goits are pronounced on the DTM and follow an undulating course through the area. They are relatively well defined indicating well-cut features within the landscape. The LiDAR data does not provide any indication of stone structures within the Goits at the 1m resolution.

Source: © Environment Agency copyright and/or database right 2015.

4.5 Designated Heritage Assets

Within 500m of the FRMS there are:

- One Scheduled Monument (Radcliffe Tower);
- Two Grade I listed buildings (Radcliffe Tower and Church of St. Mary and St. Bartholomew); and
- Twelve Grade II listed buildings.

There are no World Heritage Sites, Conservation Areas, Registered Battlefields and Registered Parks and Gardens within 500m from the site area which follows the course of the River Irwell.

A full description including a statement of significance, an assessment of the setting, and the contribution setting makes to its significance has been undertaken for Radcliffe Tower and Church of St. Mary and St. Bartholomew (Section 5). A proportional assessment has been undertaken for the other designated assets including the twelve grade II listed buildings. These were assessed during the high-level appraisal and no potential impact from the proposed scheme was identified.

A full list of these assets are included within the Gazetteer in Appendix A. There will be no physical impact to designated heritage assets therefore any potential impacts will be limited to setting impacts. To ensure proportionate assessment key heritage assets identified during the high-level appraisal to be affected by the FRMS either due to their influence on important views, nature of their heritage value and potential impact on them from construction and operation of the FRMS are dealt with in this section only.

4.6 Non-designated Assets

Within 250m of the FRMS there are:

- Fourteen non-designated built heritage assets;
- Three monuments including, a redundant railway viaduct, milestone on the Manchester Bolton and Bury Canal and a wall associated with a former barracks;
- Thirty-six archaeological sites relating to former farms, mills and industrial works; and
- A Bronze Age beaker and axe findspot.

Surviving archaeological monuments, recorded sites and findspots have been used to assess the archaeological potential (see Section 4.7) for unknown archaeological remains in the area. The significance of unknown archaeological remains is impossible to define. However, remains of schedulable quality, international or national importance would be considered as high significance. Well preserved earlier remains, including Prehistoric, Roman and medieval remains would be considered to be regionally significant. Post-medieval remains have the potential to be regionally significant but are generally of local significance only. Findspots are not significant except for the evidence they provide for unknown archaeological remains as the artefact has been removed from its context.

A full description including a statement of significance, an assessment of the setting, and the contribution its setting makes to its significance has been undertaken for Hutchinson's and Bealey's Goits, and Hardy's Gate Bridge (see Section 5). A proportional assessment has been undertaken for the other non-designated assets. These were assessed during the high-level appraisal and no potential impact from the proposed scheme was identified.

A full list of these assets is included within the Gazetteer in Appendix A of this report. Key assets have been identified which have the greatest potential to be affected by the FRMS either due to their proximity, their influence on important views, nature of their heritage value and potential impact on them from operation. To ensure proportionate assessment this section only discusses these assets.

4.7 Archaeological Potential

Archaeological remains include known assets that are defined as designated assets (scheduled monuments) and non-designated assets recorded on the HER. There remains the potential for unknown archaeological assets. The potential for unknown archaeological remains is considered below and defined as low, moderate and high. Potential is a subjective measure of the likelihood that buried archaeological remains survive and is considered on a period basis. It utilises evidence from the HER and background research summarised above in the cultural heritage baseline.

Archaeological finds dating from the Prehistoric, Roman, medieval and post-medieval period exist within Radcliffe and are recorded on the GMAAS HER from documentary sources and following archaeological investigations. For the purpose of clarity this is considered for each of the FRMS component areas.

4.7.1 Components 6, 10, 19, 37, 38, 37 & 45 Raised Linear Defences (embankments and retaining walls)

Prehistoric activity is well documented and recorded on the Ees. There is little evidence for Prehistoric and Roman activity outside of the Ees. The presumed route of the Roman road runs south-west of the raised linear defences, which settlement is usually focused upon. The development of this area expanded during the post-medieval period with industrial buildings concentrated along the River Irwell to provide a water source for the mills, works and industries. Given the extent of later activity, and the dense development of the area during the post-medieval and modern period, the potential for Prehistoric and Roman remains is **low** at the location of the raised linear defences.

There is known settlement in the early medieval and medieval period which would have predominantly centred at the Church of St Mary and St Bartholomew with the wider area utilised for agricultural land management. The potential therefore for medieval remains outside the historic centre is considered **low**.

During the post-medieval period, the River Irwell became the focus for industrial activity. Mills were concentrated along the banks of the river to easily exploit the clean water source. The position of extant former industrial complexes is well documented on historic maps and within trade directories. It is assumed that in these areas archaeological remains are likely to have been disturbed by later development and thus incomplete or heavily truncated and therefore the potential for post-medieval archaeological remains of any value is considered **low**.

4.7.2 Component 18 Hutchinson's Goit and Bealey's Goit

Hutchinson's Goit runs through areas characterised by enclosed agglomerated fields south of the Church of St Mary and St Bartholomew. Landscapes characterised by these have a greater potential for surviving archaeological remains beneath ancient and modern plough soils including prehistoric artefacts and or settlement. However, the original construction of the goit channels have likely removed or truncated any surviving Prehistoric remains, deposits or finds and therefore the potential for further remains from this period must be considered **low**.

The water channels are man-made which were designed to feed water-driven textile mills positioned along the banks of the River Irwell. The intensification of industrial activity from the 18th century onwards suggests that any surviving remains at the position of the goits are likely to relate to the structures/channels themselves. Any post-medieval remains are likely to have been removed during original construction and the potential for further remains from this period is therefore considered **low**.

4.7.3 Component 4 Hardy's Gate Bridge

There is a lack of Prehistoric and Roman evidence outside the area known as the Ees. It is assumed that settlement from these periods favoured the conditions on the Ees to exploit the natural resources. Based on this and the intensification of activity from the 18th century the potential for unknown Prehistoric and Roman remains surviving at the position of Hardy's Gate Bridge is considered **low**.

The bridge was present on the earliest available historic map for the area and was at least constructed before the 19th century to act as a crossing point over the River Irwell to connect the east and west sides of Radcliffe. It is unclear whether the current structure replaced an earlier wooden structure. The intensification of industrial activity from the 18th century onwards no doubt resulted in a need for a sturdier structure to connect the east side of Radcliffe with Bealey's works on the western side of the river. This resulted in extension of the bridge between 1910-1911 and thus the potential for any remains of the earlier structure surviving is **low** based on later alterations which has likely removed or truncated most of the earlier structure.

4.7.4 Component 21 Linear Flood Defences within Close Park

Close Park is characterised as an area of ornamental, parkland and recreation and remains mainly undeveloped. Map evidence suggests no evidence for activity since at least the early 19th century. There is a higher potential for surviving archaeological remains of any age within undeveloped open area such as these.

Prehistoric activity is recorded south of Close Park on the area known as the Ees. Chance finds during gravel extraction led to a programme of archaeological excavations over a twenty-year period. These revealed in-situ structures, organic remains and associated flints relating to a lake settlement and flint-working site. There is also a Bronze Age Barrow that also shows ritual use and an investment in the landscape that suggests an element of permanence during that period. It is assumed that the settlement relates to the favourable conditions in the Ees area to exploit the natural resources. Recent aerial photographs and research undertaken by the Bury

Archaeological Group indicate that there may be further prehistoric remains on the eastern bank of the Irwell around the position of the 1949-1961 excavations. The presence of prehistoric remains near to Close Park therefore suggests that there is a **moderate potential** for prehistoric finds and monuments in this part of the FRMS.

The Roman road runs through the south of the study area. There have been some residual finds dating to the Roman period but no evidence for significant settlement or land management. Excluding the road itself, the potential for Roman remains is considered **low** based on the evidence available.

At Radcliffe there is a known settlement in the early medieval and medieval periods and this suggests a wider pattern of land management during this period. Settlement would have centred on Radcliffe and the Church of St Mary and St Bartholomew and the evidence in the wider area is likely to relate to agricultural land management. The potential here is considered **moderate**.

Radcliffe developed as a centre for industrial activity from the 18th century onwards. The Bealey family were instrumental in the development of industry and Bealey's works was positioned immediately north of Close Park. A series of watercourses were culverted through Close Park to feed regular water supplies to the works. The remains of Mrs Bealey's ornamental gardens is positioned within Close Park. There is a **low potential** for post-medieval remains relating to these to be located within the park.

5 Statement of Significance

The high-level appraisal identified four key assets that had the potential to impact their setting by the proposed scheme. These included:

- The scheduled monument and grade I listed Radcliffe Tower;
- The grade I listed Church of St. Mary and St. Bartholomew;
- The non-designated Hardy's Gate Bridge; and
- The non-designated Hutchinson's Goit and Bealey's Goit.

The following represents a statement of significance, an assessment of their setting and the contribution that setting makes to their significance.

5.1 Designated Heritage Assets

5.1.1 Radcliffe Tower (MM001)

The stone tower house, which is a Grade I Listed Building, survives as a roofless rectangular building. The scheduled monument includes the tower house constructed in the medieval period, together with the archaeological remains of a timber hall constructed at the same time as the tower and lying to the west of the standing building. The present height of the tower is 8.5m but there is evidence from the 18th century that the original was three storeys high. The tower and hall were built by James de Radcliffe in 1403 when he was granted a licence to crenellate, that is, permission from the king to fortify his residence.

This tower was built with a timber hall butted onto the west wall. The timber hall was used as a farm building until it was demolished in about 1830. Excavations in 1979-1980 have revealed that the hall and tower were contained within a ditched enclosure on the northern side and that this was later reinforced by a rubble wall to form a square courtyard. The railings and post and wire fence erected around the remains of the tower are not included in the scheduling, but the ground beneath is included.

Setting

The current setting immediately around Radcliffe Tower lies within an enclosed area of land at the southern edge of the settlement of Radcliffe. It sits in an area of open grassland, beneath which are the partially exposed and buried archaeological remains of the scheduled monument which are integral to its setting. Originally it would have been one of a series of buildings that have been investigated during archaeological excavation at the site.

The hall stands within 100m of the Church of St Mary and St Bartholomew and its graveyard lie directly to the north-east (see Photo 1). This should be viewed as part of the extent of the original manor precinct. This creates a continuity of historic landscape between the two sites and a strong inter-relationship with the church and graveyard. Together the two sites form a survival of the historic setting of the tower and church, both associated with the medieval manor of Radcliffe and two oldest buildings in the parish. Key views are along pathways between the church and the tower. The space retains a sense of enclosed, quiet, tranquillity associated with the graveyard and the ruins of the tower appreciated as a community space for visitor's and local people alike.

It is surrounded by houses to the north-west where the original medieval settlement of Radcliffe was located (see Photo 2). These houses have enclosed the tower and few surviving historic buildings survive, the exception being the grade II listed Tithe Barn, which is not inter-visible. However, those that currently exist adjacent to the tower date to the 20th century and have little relationship to it. To the south the site is enclosed by mature trees that have grown up on the northern edge of a former landfill site. The historic setting of the tower would have been on a raised area of land overlooking the flood plain of the River Irwell and this relationship has been eroded by the landfill site. These aspects have eroded the original setting of the site.

Statement of Significance

Radcliffe Tower is a high value designated asset that is both a Scheduled Monument and Grade I listed building.

The tower has historic value as an example of a medieval tower house. Tower houses are a type of defensible house that developed in the medieval period from the 13th to 16th centuries and were characteristic of the borderlands of England and Scotland. They developed as defensible structures, both as prestigious houses and to protect against intermittent conflict and raiders typical of the borderlands. The example at Radcliffe has further significance due to it being one of the furthest south of this monument type. It also has historical value due to its association with the Lords of Radcliffe and as one of the oldest and most important buildings in the district of Bury. The medieval manor reflects the wealth and importance of the family who ranked amongst the most important in Lancashire.

It has evidential value for the spread of tower houses through Lancashire. It is an example where defensive consideration may have been secondary to a sense of prestige. It also has evidential value for the development of the structure of tower houses, as it contains both upstanding remains of the tower, archaeological evidence for the attached hall and the enclosure ditch.

It has aesthetic value in its present ruined condition, especially when considered against the backdrop of the adjacent church and churchyard.

The setting forms an important part of the value of Radcliffe Tower but is limited in its historic integrity to the immediate surrounding of the scheduled monument and elements associated with the adjacent graveyard and church, which constitute the remains of the manor holdings.

Photo 1: Radcliffe Tower from Church Graveyard. Facing West



Source: Mott MacDonald 2018

Photo 2: Radcliffe Tower. Facing North-west



Source: Mott MacDonald 2018

5.1.2 Church of St. Mary & St. Bartholomew (MM002)

The parish church of St Mary and St Bartholomew, a Grade I Listed Building, is the oldest building within Radcliffe. The church is first mentioned in 1202 when William de Radclyffe held the right to appoint a priest. The oldest surviving part of the church structure is the chancel arch built in the 13th century, its style contemporary with this period and probably constructed as part of the works funded by William de Radclyffe. The 'gothic' arcades of the two-bay nave date from the 15th century and the short western tower was rebuilt in 1665 by the rector Charles Beswick.

The church was significantly altered and rebuilt during the 19th century following a period of neglect and decay during the Reformation. This included a rebuild of the chancel in 1817, the north transept in 1846 and removal of the south porch thereafter. The church was restored and extended in 1870 and 1905 creating its present square plan. These restoration and extensions works included rebuilding the southern aisle, the re-flooring of the interior and replacement of the roof trusses.

On the interior of the church is a fragile alabaster effigy of James de Radclyffe and his wife and three children under the altar which dates from the early 16th century. James de Radclyffe was instrumental in rebuilding the nearby Tower and Hall at the beginning of the 15th century. A piece of stained glass depicting a crown head, thought to represent King Henry IV is positioned within this part of the church as well.

The church graveyard contains war memorials including; a memorial stone with the Lancashire Fusiliers Regiment Roll of Honour, the timber lych gate and a memorial offering thanks for the safe return of First World War soldiers. Graves of the Bealey family are also located within the graveyard.

Setting

The current setting of the church and graveyard is semi-rural. Positioned at the southern limit of Radcliffe town adjacent to Close Park, 100m of Radcliffe Tower and north of a former land-fill site which has been left to overgrow creating an almost undulating unkept 'semi-natural' landscape.

Despite expansion of the settlement of Radcliffe and construction of a disused modern car park and council compound which are aesthetically unappealing to look at from within the graveyard the setting continues to be largely rural in nature (see Photos 3 and 4). Historically the setting of the church would have been on the south-eastern edge of Radcliffe village. It would have lain on marginally higher land above the flood plain of the River Irwell, traditionally with an inter-relation with the adjacent medieval tower house. This relationship has been maintained by a tree-lined grove through the graveyard creating a continuity of historic landscape between the two sites. The historic setting between the church and the River Irwell has been eroded by the landfill site to the south.

Key views are towards Radcliffe Tower, along paths to the south and across the open landscape beyond this. The presence and density of high mature trees in Close Park means that views towards the river are limited. The varying sized grave stones within the graveyard create intermittent rather than long, drawn out views towards the former landfill site. These create a feeling of tranquil enclosure with little noise pollution apart from the regular chime of the church bells allowing the asset to be fully appreciated particularly during periods of reflection.

Statement of Significance

The Church of St Mary and St Bartholomew is a high value designated asset that is a Grade I listed building.

The church has both historical and evidential value as a significant parish church in the local area with elements dating back to the 14th century making it the oldest building in Radcliffe. It has association with the de Radcliffe family (members who are buried in the church) who owned both the manor and the adjacent Radcliffe Tower. James de Radclyffe rebuilt the tower and hall in the 15th century and the effigy which is preserved beneath the alter of the church adds further historic value through association.

Its communal value lies in its continued use as the principal parish church of Radcliffe from the medieval period through to the present day. The graveyard contains graves of the Bealey family who were instrumental in the local community during industrialisation of Radcliffe town.

It has aesthetic value with a distinct square plan which can be appreciated from within the graveyard and beyond. Despite a number of periods of later construction and alteration it has maintained its medieval character and historical importance and thus a high value designated asset which is recognised in its Grade I listed status.

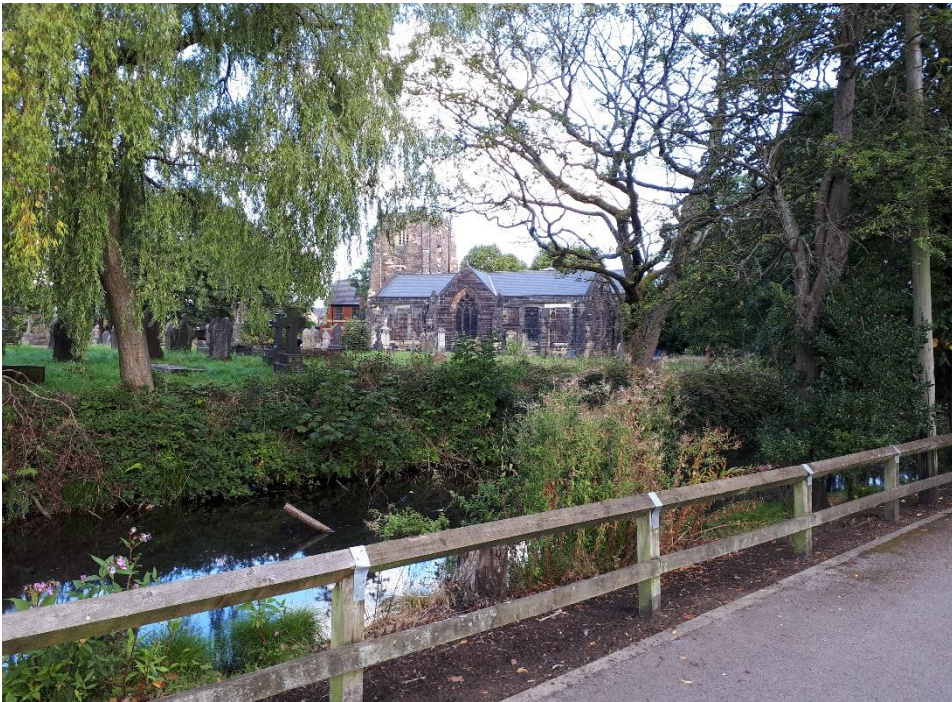
Its setting plays an important part to its high value status which continues to be semi-rural. The clear historical association with Radcliffe Tower has been maintained by a tree lined grove creating inter-relation an important part of the assets collective settings.

Photo 3: St. Mary & St. Bartholomew Church. Facing North



Source: Mott MacDonald 2018

Photo 4: St. Mary & St. Bartholomew Church. Facing North-west



Source: Mott MacDonald 2018

5.2 Non-designated Heritage Assets

5.2.1 Hardy's Gate Bridge (MM062)

Hardy's Gate Bridge is a non-designated heritage asset and is not recorded on the GMAAS HER.

The bridge comprises a double span 19th century bridge, that has been widened and refaced in ashlar in 1911. It is unclear exactly when the bridge was built but its current form is likely to have replaced an earlier structure. The bridge is depicted on the 1848 first edition OS Map, likely to have been constructed prior to this date as a crossing point over the River Irwell from the core of Radcliffe to the bleach works. It is referred locally as New Bridge. It currently carries the A6053 Dumers Lane over the River Irwell.

Setting

The current setting of the bridge sits within an area of modern industry, dominated by 20th century pre-fabricated retail and manufacturing units which line the banks of the River Irwell and tower over the backdrop of the bridge (see Photo 5).

Historically the bridge would have sat within an area of industrial premises which developed from the 18th century onwards and thus the current contextual visualisation of the bridge and its setting has not been significantly altered. It is surrounded by modern housing to the east and is in keeping with the historic development of the town which has expanded outwards from the core of industrial expansion along the River Irwell. Key views are from downstream along the riverside walk routes and include a fringe of trees and vegetation growth. The character of the

bridge is one of functional rather than appreciation of aesthetic appeal as Dumers Lane is a relatively busy road detracting from appreciating tranquil riverside walks towards the bridge.

Statement of significance

Hardy's Gate Bridge is a low value non-designated heritage asset and is neither locally listed nor recorded on the GMAAS HER.

The significance of the bridge derives from its role as a crossing point dictated by the need to cross the River for access between the industrial works and the outer edge of the town. Hardy's Gate Bridge holds evidential value as it remains largely intact and functional, still serving as a road bridge carrying Dumers Lane over the River Irwell. The ashlar faced sandstone construction possesses some architectural merit in the local area but is not of regional importance and is low value architecturally because it is not distinct or unique in its construction. The bridge has some historic interest as a surviving example of a structure built to act as a crossing point over the River Irwell to connect the east side of Radcliffe with Bealey's works on the western side of the river and likely replaced an earlier wooden structure which was widened between 1910-1911.

The bridge is a low value non-designated asset of simple, recent construction over the River Irwell. The bridge is not distinct or unique and thus possesses little architectural significance.

Photo 5: Hardy's Gate Bridge from Riverside Walk. Facing North-west



Source: Mott MacDonald 2018

5.2.2 Hutchinson's and Bealey's Goit (MM060 and MM061)

Hutchinson Goit and Bealey's Goit are non-designated assets and are not recorded on the GMAAS HER.

Hutchinson's Goit runs from upper sections of the River Irwell adjacent to Hutchinson's Weirs (NGR SD 79406 09052) and exits close to Rectory Lane in Radcliffe. Hutchinson's Goit comprises a sluice gate built from sandstone blocks which sits on the western bank of the River Irwell adjacent to the extant Wrath Mill site (see Photo 6). Bealey's Goit runs from upper sections of the River Irwell adjacent to Bealey's Weir, south-east of Hutchinson's Weir and passes through Close Park forming the boundary of the Church of Saint Mary and Saint Bartholomew before exiting at Rectory Lane. Both pass through the area known as Swan Lodge. They were originally designed and constructed to provide water for chemical works located on the banks of the River Irwell. They were culverted as part of the industrialisation of Radcliffe during the 18th century.

Setting

The goits run through the river valley of the Irwell, creating a semi-rural setting within the wider open floodplains which has been encroached by industrialisation as you move closer towards the banks of the river. Nature has reclaimed the former industrial works fed by the goits and these from part of Swan Lodge.

Views of Hutchinson's goit are generally from upstream. The channel is dominated by invasive species and vegetation overgrowth obscuring and diminishing long-distance views. Although the riverside location provides a picturesque setting the density of vegetation prevents the ability to understand the full extent of the channel and the meandering course it takes through the landscape at its more upstream location. As the goit continues downstream, flowing through the open river valley the extent of the channel can be more appreciated and understood. Bealey's goit is not readily visible within the wider landscape, with views diminished from modern housing development and the encroachment of the Close Park playing fields. Historic views from the goit towards the former Bealey's works have been lost and impaired by modern infrastructure and thus its historical setting altered. The setting is now somewhat open and semi-natural within the park and west of dense woodland which was no doubt at one time dominated by large industrial chemical works and chimneys.

Statement of Significance

Hutchinson and Bealey's goits are low value non-designated heritage assets that are neither locally listed nor recorded on the GMAAS HER.

The goits are of local evidential significance due to their association with the former chemical industries once prominent along the banks of the River Irwell. The location of Hutchinson's goit alongside Hutchinson's weir and the River Irwell are important for collectively understanding the functional significance and importance of water within the town and therefore hold both evidential and historical value. They demonstrate the functional use of the river and how it shaped later settlement and activity within the town of Radcliffe meaning they possess only local value. The vast amounts of vegetation growth in the area obscure views of the channels and do not allow full appreciation and understanding of the channels construction/maintenance from the 18th century to the present day. The demolition of the former Bealey's works and Wrath Mill means there is no longer a functional relationship between the sluice, the goits and the River Irwell for which they were originally constructed for.

The significantly altered historical setting which would have once been dominated by large industrial chemical works and chimneys lessens the value of the assets as they no longer serve a functional purpose and can no longer be appreciated collectively. The vegetation overgrowth diminishes how the channels can be fully understood within the landscape.

Photo 6: Hutchinson's Sluice. Facing South



Source: Mott MacDonald 2018

6 Impact Assessment

6.1 Scheme Description

The following is a summary description of potential impacts to be covered by the subsequent planning application(s). For a full description and accompanying drawings see the Planning, Design and Access Statement (Ref: ENV0000389C-MMD-DZ-ZZ-RP-PL-0304005-S2-P01).

6.2 Assessment of Impact and Risk

This section deals with impacts to both built heritage assets and archaeological remains within the study area of the FRMS. A summary of this assessment alongside other key environmental topics are contained in the Non-Statutory Environmental Report (Ref: ENV0000389C-BMM-DZ-4ZZ-RP-EN-03040051-S2-P01) compiled in support of the subsequent planning application(s).

6.2.1 Impact on Built Heritage Assets

The FRMS will not physically impact on any built heritage assets.

There would be an impact to the setting of Grade I listed Church of St Mary and St Bartholomew and scheduled ancient monument and Grade I listed building of Radcliffe Tower from construction of linear flood defences within Close Park. There would be temporary impacts to the setting of the two assets during construction work as a result of noise and visual impacts from construction traffic. However, the duration of the work should be short term (less than 2 years) and therefore the impact would be negligible. There would be impacts from the loss of trees due to the construction of linear flood defences. However, new landscaping would occur in the area and the impact would last in the medium term for the duration of the time it took for the planting to become mature. The impact would therefore be negligible.

There would be a permanent impact on the setting of the two assets from raised linear defences within Close Park where they run close to the churchyard. The key aspects of the setting of the church and tower are their connection with each other which dates to the medieval period when they formed the manor precinct. This relationship would not be compromised by the construction of the linear flood defences. The setting of the assets have been altered though recent construction and thus removed from their historical setting. Good design through height and material consideration will seek to ensure key views are not compromised by the construction of the flood defences.

The linear defences would create beneficial operational impacts of positive flood protection for the church which was badly impacted by the 2015 floods. The flood defences therefore have the potential to provide positive enhancement improving long term protection of a regionally and nationally important heritage assets. Use of appropriate landscape design would reduce the impact to negligible negative from a visual point of view. The beneficial impacts of the flood defences would balance these and overall it would constitute neutral effect and represent less than substantial harm.

There would be an impact on the non-designated heritage assets of Hardy's Gate Bridge and Hutchinson's and Bealey's Goits from alteration works as a result of the FRMS. As they are low value local assets, further historic building recording prior to undertaking the alteration works followed by an archaeological watching brief during alteration works will record the assets current form by mitigating any change to their historic fabric. The goits are currently difficult to understand in the landscape as they are overgrown with invasive plant species and this reduces

their historic value. Hutchinsons channel would be reopened, its form enhanced, and reused as part of the flood defences. It would become a physical monument visible and interpretable in the landscape once more. This would result in a beneficial operational impact. Overall the works would have a permanent negative impact resulting in a neutral effect.

There will be no impact on other built heritage assets or their setting from the construction of linear flood defences. The works lie at a sufficient distance from any designated or non-designated built heritage assets. Furthermore, the works would not affect how any historic assets are appreciated as they are generally confined to the riverbanks within heavy industrialised areas thus in keeping with the current visual context of the landscape.

6.2.2 Impact on Archaeological Remains

There is **low** potential for unknown archaeological remains associated with the removal of Hardy's Gate Bridge and improvement works to Hutchinson's and Bealey's Goits due to initial construction of these structures which has likely removed or truncated any earlier deposits. Remains are likely to be post-medieval in date, incomplete or partial and therefore of negligible value. This would result in impacts in less than significant effects.

There is a **low** potential for unknown archaeological remains from construction of raised linear defences outside Close park. The location and extent of the works are positioned within the heavily industrialised post-medieval landscape and it is assumed archaeological remains within these areas are likely to have been disturbed by later development. This would result in negligible impacts and a neutral effect.

The greatest archaeological potential lies within Close Park an area historically retained as open parkland and thus there is a higher potential for below ground archaeological remains to survive. Remains are likely to date to the Prehistoric period and be **medium value** due to the proximity of the Mesolithic lake dwelling and flint-working site revealed during excavations on the Ees. The loss of archaeological remains due to below ground construction works is regarded as permanent.

Mitigation measures for impacts to archaeological remains impacted by the FRMS have been developed in liaison with the Local Planning Authority (LPA) archaeologist at GMAAS. These would constitute less than significant effect, and include:

- Close park – staged programme of archaeological evaluation to understand the survival of unknown archaeological remains within the footprint of the proposed linear defences.
- Multi-phased recording of Hutchinson's and Bealey's goits involving background research; a photographic record; an annotated topographic survey; and archaeological monitoring of Ground investigation (GI) test pits to assess the nature of the goits' original construction where necessary.

7 Conclusions

This report has outlined the cultural heritage baseline within the study area and a heritage statement (also known as a statement of significance) for four key heritage assets to understand the heritage and archaeological constraints in relation to the Radcliffe and Redvales flood risk management scheme (FRMS). It is designed to inform the planning submission(s) to help avoid, mitigate and justify design work which may adversely impact the historic environment.

The proposed works represent crucial safety improvement to properties, people and the infrastructure of Radcliffe and Redvales and will have no physical or permanent impact on designated heritage assets. Works will be confined to the surrounding area of the assets and thus impact their settings only. These works do not require listed building consent.

There would be an impact on the setting of the church of St Mary and St Bartholomew and the graveyard and scheduled ancient monument and Grade I listed building of Radcliffe Tower from construction of linear defences which will disrupt views from the church and can be seen from the graveyard. Good design through material and height consideration will seek to ensure views to and from the church are not compromised. The linear defences will create beneficial impacts of positive flood protection for a regionally and nationally important heritage asset and any change to their setting is therefore considered to represent less than substantial harm. The relationship between the church and tower will not be compromised by the work which forms the most important element of their significance and collective historical setting.

Hardy's Gate Bridge, Hutchinson's Goit and Bealey's Goit are considered low value assets. The proposed works will involve alteration to these assets. The works would impact the aesthetic value of the assets, however the functional value of these assets which represent key elements of the assets significance including carrying Dumers Lane over the River Irwell and improving the flow of Hutchinson's goit channel will remain unaffected. As they are not listed and not identified as non-designated heritage assets on the Historic Environment Record (HER) further historic building recording will record the assets current form by partially mitigating the loss.

Further archaeological investigation in areas where there is a moderate potential for unknown remains will ensure appropriate mitigation for any works involving below-ground disturbance thus minimising the impact. This should be undertaken as a programme of archaeological evaluation prior to construction and an archaeological watching brief during construction works.

8 References

Margary, I. D., Roman Roads in Britain, Third Ed. (London, John Baker 1973), pp. 370-71

Mott MacDonald (2017) ENV000389C Radcliffe and Redvales Ground Investigation Report. ENV000389-MMD-XX-00RP-GT-0110001-S2-P01-A1000-MMD-LOD4

Mott MacDonald (2018) Non-Statutory Environmental Report. ENV000389C-MMD-DZ-00-RP-EN-0304006-S2-P01.

Mott MacDonald (2018) Planning, Design and Access Statement. ENV000389C-MMD-DZ-ZZ-RP-PL-0304005-S2-P01.

Mott MacDonald (2018) ENV000389C Radcliffe and Redvales Preferred Option Design Report. ENV000389C-MMD-XX-00RP-C-0215006-S2-P02-B1500-EA3-LOD3

Mott MacDonald (2018) ENV000389C Radcliffe and Redvales FRMS- Detailed Design Phase 1. Project Design for Archaeological Investigations- Close Park. ENV000389C-MMD-DZ-CP-RP-HE-0302001

The Greater Manchester Archaeological Unit (2008) Greater Manchester Urban Historic Landscape Characterisation. Bury District Report. English Heritage

Oxford Archaeology North, Archaeological Evaluation Report: Radcliffe Riverside School, West Campus, Radcliffe, Greater Manchester, Issue number 2010/1070 (Oxford Archaeology North, 2010)

Oxford Archaeology North, Archaeological Evaluation Report: Radcliffe Tower, Radcliffe, Greater Manchester, Issue number 2007 08/660 (Oxford Archaeology North, 2007)

Tyson, N, Excavations at Radcliffe Tower 1979-80 In, Greater Manchester Archaeological Journal, vol 1, 39-53 (1985)

University of Manchester Archaeological Unit (1995) Radcliffe Tower. The Historic Fabric Analysis of an Early 15th century Pele Tower.

University of Salford Manchester, Archaeological Evaluation: Dig Greater Manchester: Close Park, Radcliffe, Bury, Report No. 19/2013 (Association of Greater Manchester Authorities, 2013)

<http://opendomesday.org/>

<http://www.radcliffeheritage.co.uk/research/>

Appendices

A.	Gazetteer of heritage assets	35
B.	Location of heritage assets	45

A. Gazetteer of heritage assets

Table 4: Designated Assets within 500m of the FRMS

MM Ref	Asset Type	Name	Description	Period	Designation	Grade	Value	NHL Ref
MM001	Scheduled Monument	Radcliffe Tower	The monument includes a stone built tower house constructed in the medieval period, together with the buried remains of a timber hall constructed at the same time as the tower and lying to the west of the standing building. The tower, which is a Grade I Listed Building, survives as a roofless rectangular building. The ground floor has a stone tunnel vault, of which substantial parts remain. Internally the building measures 12.2m from north to south and 5.5m from east to west. The walls are 1.5m thick at the base, increased to 1.9m by a plinth surrounding the building at ground level. In the south west corner the wall is reinforced to 1.8m thick to accommodate a staircase in the thickness of the wall. In the eastern wall are two openings with a deep splay for windows, a fireplace in the centre and the flue in the thickness of the wall. In the opposite western wall is a central doorway with a pointed arch of a decorated style with a simple roll moulded surround. Larger windows were set in the north and south walls. Below each of these two windows there is a fireplace 3.2m wide and 2.2m high. The arches above the fires are repeated as a decoration in the outside walls of the tower. Above the ground floor room was an upper room with a fireplace set in the centre of the west wall. The present height of the tower is 8.5m but there is evidence from the 18 th century that the original was three storeys high. This tower was built with a timber hall butted onto the west wall. Remains of the slot for the timbers of the hall are visible in the west wall, as is the outline of the hall gable end. This shows that access to the tower was through the hall and that the two buildings were designed as a whole. The timber hall was used as a farm building until it was demolished in about 1830. Excavations in 1979-1980 have revealed that the hall and tower were contained within a ditched enclosure on the northern side and that this was later reinforced by a rubble wall to form a square courtyard. The tower and hall were built by James de Radcliffe in 1403 when he was granted a licence to crenellate, that is, permission from the king to fortify his residence. The hall stands within 100m of the present parish church and this should be viewed as part of the extent of the original manor precinct. The railings and post and wire fence erected around the remains of the tower are not included in the scheduling, but the ground beneath is included.		Scheduled Monument/ Listed Building	I	High	DGM18/ 1014721
MM002	Built Heritage	Church of St. Mary & St. Bartholomew	14 th , 15 th , 17 th and 19 th centuries. Chancel arch of Decorated period. North transept with some mediaeval masonry. Former south transept demolished on construction of south aisle by J M and H Taylor in 1870-73. Chancel of 1817. Tower probably 15 th century, but dated '1665', when it was probably merely restored.	1300	Listed Building	I	High	1163125
MM003	Built Heritage	Radcliffe Tower and site of Hall	Domesday Survey records the manor of Radcliffe held by King Edward as part of the Royal Manor of Salford. Baron de Mersey gave the manor to Nicholas Fitz-Gilbert de Talbois who adopted the Radcliffe family name.	1403	Listed Building	I	High	1309271

MM Ref	Asset Type	Name	Description	Period	Designation	Grade	Value	NHL Ref
			Tower built in 1403 as a fortification, positioned on a natural bend in the river. There is a hall attached to the tower.					
MM004	Built Heritage	Carriage Shed at Buckley Wells Locomotive Works	1856 carriage shed by J S Perring, for East Lancashire Railway Company. One of oldest surviving railway workshops and probably the only example still in use until recently (currently used by Metrolink for servicing new Manchester tram).	1856	Listed Building	II	Medium	1250822
MM005	Built Heritage	Drinking Fountain	By T R Kitsell. A gift of Miss Openshaw of Tenterden Street. Italianate in style. Ornate arched canopy of Portland stone on 4 short red granite Ionic columns.	1897	Listed Building	II	Medium	1356806
MM006	Built Heritage	Lancashire Fusiliers Boer War Memorial	Boer War Memorial, by Sir George James Frampton, comprising a sandstone plinth with bronze inscriptions and a realistically-depicted statue of a soldier.	1905	Listed Building	II	Medium	1440258
MM007	Built Heritage	108, 108a and 110, Manchester Road	Pair of brick cottages	Early 19 th century	Listed Building	II	Medium	1067234
MM008	Built Heritage	Haslam Bank House	Incorporating parts of older timber-framed structure. Unevenly coursed squared stone.	17 th century	Listed Building	II	Medium	1067235
MM009	Built Heritage	Wall Immediately South of Heaton Grove	Arcaded garden wall. Terracotta and stock red brick. 7 round-headed arches supported on square section brick piers.	Late 19 th century	Listed Building	II	Medium	1250752
MM010	Built Heritage	Heaton Grove	For Thomas Heaton (workhouse governor at Redvales 1820). Classical in style.	1840	Listed Building	II	Medium	1356844
MM011	Built Heritage	The Manor House (Including The Crest and The Nook), Goshen Lane	A rambling detached house, sub-divided into three residences. Front of brick. 8 windows, mainly sashes.	17 th century	Listed Building	II	Medium	1067265
MM012	Built Heritage	Drinking Fountain in Recreation Ground	Memorial fountain. Designed by J D Mould, architect, of Silver Street Chambers, Bury	1898	Listed Building	II	Medium	1386814
MM013	Built Heritage	Gate Piers to North West of Old Hall Farmhouse	Rusticated stone, with ball finials	Early 18 th century	Listed Building	II	Medium	1067227
MM014	Built Heritage	Old Hall Farmhouse, near Elton Reservoir	1872 (dated on Keystone of arched entry). Red brick. Symmetrical. 2 storeys. 5 windows, with keyed cambered heads; sashes with glazing bars on first floor, margin-glazed on ground floor. 4-panel door; plain fan. First floor sill band. Painted quoins. Slate roof over moulded gutter cornice. 2-bay extension to right has 4 squat sash windows. Interior includes fielded panelling in left-hand ground floor room. Mantel flanked by fluted pilasters in this room and to one over it. Original shutters and window seats on first floor. Stair with moulded swept rail; probably-spiral balusters are boxed in.	Early 18 th century	Listed Building	II	Medium	1317966

MM Ref	Asset Type	Name	Description	Period	Designation	Grade	Value	NHL Ref
MM015	Built Heritage	Tythe, Barn Street, Radcliffe	Rubble, partly rendered. Vehicular central door (bricked up); window to right. Old stone slab roof over original hewn trusses, rafters, ridge and purlins with braces. Converted to use as a shop.	17 th century	Listed Building	II	Medium	1067225

Source: National Heritage List for England

Table 5: Non-designated Assets within 250m of the FRMS

MM Ref	Asset Type	Name	Description	Period	Designation	Value	HER No.
MM050	Built Heritage	Woodsnab (Woos Nab Farm)	Woodsnab is a farmstead of two buildings from the late 18 th and 19 th centuries.	1540	Non-designated	Low	9255.1.0
MM051	Built Heritage	Irwell Bank Farm (formerly Hag Side)	Former farmstead, now Newbank Garden Centre. Shown as three buildings on the Tithe Award for Radcliffe and named as "Hag Side".	1760	Non-designated	Low	9257.1.0
MM052	Built Heritage	Goat's Head Cottages (Goats Gate Terrace)	Cottages, still in use. The Earl of Derby's Estate Plan shows a rectangular building on location and Greenwoods map of 1818 shows buildings in the general area.	1780	Non-designated	Low	13758.1.0
MM053	Built Heritage	Top o' th' Bank Farm	Former farmstead, converted to multiple residential use. Two structures are shown on the Earl of Derby's Estate Plan.	1780	Non-designated	Low	4020.1.0
MM054	Built Heritage	Milestone on Manchester, Bolton & Bury Canal, c. 77m W of Hinds Lane	Extant milestone on the Manchester, Bolton and Bury Canal. One of a series, set at 1/4 mile intervals.	1796	Non-designated	Low	15911.1.0
MM055	Built Heritage	Manchester, Bolton and Bury Canal	Canal opened in 1797 from Bolton and Bury to the Oldfield Road terminus and extended down five locks to the River Irwell in 1808. Originally the canal was built with narrow locks but during construction the locks were altered into broad locks when there was a proposal to link the navigation to the Leeds and Liverpool Canal at Wigan Top Lock which was still being built.	1797	Non-designated	Medium	Not listed on HER
MM056	Built Heritage	Cotton Weaving Mill	Former cotton mill and chemical works complex. Now very little of the original late 19 th century to early 20 th century textile mill survives, and the only original building still standing is the main mill building.	1850	Non-designated	Low	3865.1.0
MM057	Built Heritage	Pioneer Mills	Early 20 th century Cotton mill with an unusual layout. The two original spinning mill buildings survive intact.	1900	Non-designated	Low	3890.1.0
MM058	Built Heritage	Hutchinson's Weir	Small weir on River Irwell, barely visible below water flow, designed to create pool to feed Hutchinson's Goit.	1900	Non-designated	Medium	Not listed on HER

MM Ref	Asset Type	Name	Description	Period	Designation	Value	HER No.
MM059	Built Heritage	Bealey's Weir	Large weir in rusticated ashlar stone on River Irwell, forms substantial barrier across the river, designed to create pool to feed Bealey's Goit.	1900	Non-designated	Medium	Not listed on HER
MM060	Built Heritage	Hutchinson's Goit	Goit that runs from upper section of the River Irwell adjacent to Hutchinson's Weir and exits close to Rectory Lane in Radcliffe. Designed to provide water for the chemical works located on the River Irwell. Of local evidential significance due to their association with the chemical industry.	1900	Non-designated	Medium	Not listed on HER
MM061	Built Heritage	Bealey's Goit	Goit that runs from upper section of the River Irwell adjacent to Bealey's Weir, passes through Close Park forming the boundary of the Church of Saint Mary and Saint Bartholomew and exits close to Rectory Lane in Radcliffe. Designed to provide water for the chemical works located on the River Irwell. Of local evidential significance due to their association with the chemical industry.	1900	Non-designated	Medium	Not listed on HER
MM062	Built Heritage	Hardy's Gate Bridge	Ashlar faced road bridge of two spans, referred locally as New Bridge. Some architectural merit in the local area but not of regional importance.	1900	Non-designated	Medium	9255.1.0
MM063	Built Heritage	Weir, Hinds Lane	Small weir on River Irwell, barely visible below water flow	Post-medieval	Non-designated	Medium	9257.1.0
MM064	Monument	Milestone on Manchester, Bolton & Bury Canal, c170m West of Warth Road	Extant milestone on the Manchester, Bolton and Bury Canal. One of a series, set at 1/4 mile intervals.	1796	Non-designated	Negligible	15912.1.0
MM065	Monument	Wall possibly associated with former Barracks	Wall, approximately 3.80m high was revealed to the south of Church Street East and east of Cock Clod Street; this might have represented one of the northern walls of the East Lancashire Paper Mill. Two culverts were revealed at the base of the wall. The tithe map of 1841 and the OS map of 1850 showed barracks buildings to have been located in this area, prior to the construction of the paper mill.	1800	Non-designated	Negligible	6381.2.1
MM066	Monument	Railway Viaduct over Irwell	Railway viaduct over Irwell. Still in use by Manchester Metrolink (trams).	1840	Non-designated	Low	11199.1.0
MM067	Archaeological Site	Mesolithic Lake Settlement (site of)	Possible Mesolithic lake settlement and flint-working site discovered by gravel extraction workers.	-500000	Non-designated	Medium	77.1.0
MM068	Archaeological Site	Mesolithic Lake Settlement (site of) 1996 Summary	Information from recent aerial photographs and Bury Archaeological Group shows that the site has been reclaimed by dumped gravel and landscaped. Aerial photographs indicate that there may be archaeology remaining on the eastern bank of the Irwell around the position of the 1949-1961 excavations.	-500000	Non-designated	Medium	77.8.0

MM Ref	Asset Type	Name	Description	Period	Designation	Value	HER No.
MM069	Archaeological Site	Mesolithic Lake Settlement (site of) 1949 Excavation	14 posts were found on excavation, 21-26" apart and 4-5" diameter, circular, triangular and semi-circular in section. A second row of posts ran parallel to the first c.40" away. Posts were interwoven with branches, with a brushwood layer between and over the posts. Fragments of red raddle, baked red clay, hazel nuts, pine & fir cones and flints were found in this layer, with 3 fragments of hide or leather (Mesolithic?).	-10000	Non-designated	Medium	77.2.0
MM070	Archaeological Site	Mesolithic Lake Settlement (site of) 1950 Excavation	Two layers of horizontal timbering were found, 9-12" apart. Alder catkins, hazel nuts and flint flakes were found in association. 2 spindle whorls, thought to be Neolithic, were found which had fallen into the gravels of the 1949 excavation. Other finds include several teeth and 2 bones from a small type of ox, and 35 flints and vegetable detritus from the low water table level gravel. The flints have been associated with the Pennine Mesolithic Maglemosian Culture. The timbers may form a Bronze Age platform and causeway of stakes, wattling and brushwood.	-10000	Non-designated	Medium	77.3.0
MM071	Archaeological Site	Mesolithic Lake Settlement (site of) 1960 Excavation	A 30' trench was excavated showing vertical stakes and branches associated with a clay band. Horizontal oak timbers on this horizon were roughly hewn, appearing as square-cut, some bearing notches or slots. Birch stakes were driven into the gravels; some lay on top.	-10000	Non-designated	Medium	77.4.0
MM072	Archaeological Site	Mesolithic Lake Settlement (site of) 1961 Excavation (Site 1)	More horizontal timbers, stake line, brushwood and branches were exposed. Some timbers were removed for preservation. A number of small stakes were found, 12"-15" in length with a diameter of 3". A willow tree, probably axe-felled from markings on the trunk, rested on the timbers at SW cut face, horizontal stake protruded through its branches, but was in line with other timbers. Two other willow trees, branches, worked timbers and a stake lay in the NE section cut. Some willow branches and leaves survived almost intact, retaining their colour. Wooden object, described as part of a plough, found in this excavation.	-10000	Non-designated	Medium	77.5.0
MM073	Archaeological Site	Mesolithic Lake Settlement (site of) 1961 Excavation (Site 2)	Main 12 stake line ran E-W, 22" apart, c.5" diameter. 4 of split trunks or main spars. 2 stake lines, 14" apart, joined this at right-angles. W line of 7 stakes, E line of 5. E line stakes less substantial, 2"-3" diameter. One stake was drilled with a peg still in it; top taken off second similar stake and preserved. Branches formed low wattling wall.	-10000	Non-designated	Medium	77.6.0
MM074	Archaeological Site	Mesolithic Lake Settlement (site of) 1961 Excavation (Site 2)	Grid 2: Continues Grid 1 features. 9 stakes, 22" apart, 4" diameter. 4 chamfered. At right-angles to main line were 2 other lines running E-W, of 6 stakes, 4" diameter. 10' between lines. 12' between E line of Grid 1 and W line of Grid 2. Main line and some of side line were linked by	-10000	Non-designated	Medium	77.7.0

MM Ref	Asset Type	Name	Description	Period	Designation	Value	HER No.
			branches, 1"-3" diameter. Stakes isolated in sandy area. 2 areas within the stakes: 12'x10', sand in N half, S half of branch covered floor, no cobbles.				
MM075	Find Spot	Beaker and Bronze Age Axe	Early Bronze Age flanged axe found in 1950 in gravel pit below the confluence of rivers Irwell and Roch. Found in topsoil with "beaker", near 7 circles of posts.	-2350	Non-designated	Medium	77.2.1
MM076	Archaeological Site	Manchester to Ribchester Roman Road	Part of Roman Road from Manchester to Ribchester, appearing to follow line of the modern Bury New Road. An evaluation in advance of the demolished clubhouse at Whitefield Golf Club in 2008 revealed no remains that might have been associated with the Roman road.	43	Non-designated	Low	14.1.1
MM077	Archaeological Site	Manchester to Ribchester Roman Road	Part of the Roman road from Manchester to Ribchester. After crossing the valley of the River Irwell, 150 yds west of the ruined Radcliffe Tower, the line has been proved by traces of the road in fields beyond.	43	Non-designated	Low	14.1.2
MM078	Archaeological Site	Barlow Fold	Yates names Barlow Fold, showing a scatter of buildings on the western side of the present Manchester Road.	1066	Non-designated	Negligible	3579.1.0
MM079	Archaeological Monument	Radcliffe Tower, 15th Century Work	In 1403 James de Radcliffe was granted licence to crenellate and embattle the walls of the Manor. Radcliffe Tower is of decorated style, built of local sandstone, fortified with a tunnel vaulted basement (Pele tower). A great hall, timber framed, underpinned with low sandstone wall was built, probably contemporary with the Tower. The medieval ditch was levelled up, the courtyard was consolidated during the 15th century, and parallel to the old ditch a rubble wall was built fronted by a shallow ditch.	1400	Non-designated	Medium	354.1.1
MM080	Archaeological Site	Radcliffe Tower, Post-Medieval Work	In 1518 the main line of the Radcliffe family ended. A 2-storey wing was added, described by Whitaker in 1781 as of timber and plaster, with gabled roof and ruined stone tower. Buildings fell into disrepair leading to encroachment from farm buildings and Tower Street Cottages. By 1844 the hall had been demolished; only the ruins of the tower remain to this day.	1540	Non-designated	Medium	354.1.2
MM081	Archaeological Site	Radcliffe Tower, Smithing Hearth (site of)	Excavation of ruined smithing hearth by Bury Archaeological Group in 1976. A circular pit 3.5m in diameter, 1.3m deep with a burnt lining 20cm thick. Appeared to have been lined with stone and part of a surviving flue end.	1540	Non-designated	Medium	354.2.0
MM082	Archaeological Site	Warth Fold (site of)	The Tithe Award shows two buildings on the site, named as "Warth Fold" shown as rectangular and irregular plan.	1540	Non-designated	Negligible	7703.1.0
MM083	Archaeological Site	Britain/ Britain Farm (site of)	The Tithe Award of 1840 shows three buildings, now lost, at the site between the modern paper mill and Britain's Farm.	1700	Non-designated	Negligible	9337.1.0

MM Ref	Asset Type	Name	Description	Period	Designation	Value	HER No.
MM084	Archaeological Site	Bank Top (later Farmer's Arms Beer House) (site of)	Shown as a group of three buildings on the Tithe Award for Radcliffe and one of these may still survive. The former beer house/public house with an extension, is shown on 2006 map.	1750	Non-designated	Negligible	9256.1.0
MM085	Archaeological Site	Wilton Mill (site of)	Large cotton-spinning mill of 1907, originally driven by Galloway triple-expansion steam engine, taken over by Lancashire Cotton Corporation in 1929. Demolished in 1999.	1750	Non-designated	Negligible	3894.1.0
MM086	Archaeological Site	Rectory (site of)	This area was known as "Glebe Land" in 1767. The Tithe Award shows a complex of six buildings to the site which are named as "Rectory". The site had been built over with terraced housing by the 1950s.	1750	Non-designated	Negligible	7712.1.0
MM087	Archaeological Site	Waterside Mill, Hinds Mill [formerly Logwood Mill] (site of)	Site of late 18 th century/early 19 th century disused water-powered cotton mill. Millstone in yard "1834" plaque stone.	1775	Non-designated	Negligible	3958.1.0
MM088	Archaeological Site	Calico Printing Works and Barracks (site of)	The earliest references to the calico printing works date to 1825 and are provided in commercial trades directories by Baines and Pigot & Dean. Ceased production in 1850.	1800	Non-designated	Negligible	6381.2.0
MM089	Archaeological Site	Little Britain (site of) (formerly Irwell Cottage)	Little Britain is named on the 1st edition OS map. By 1928 the farmstead was no longer extant.	1800	Non-designated	Negligible	13791.1.0
MM090	Archaeological Site	Spring Water Print Works (site of)	A large complex of buildings comprising the "Spring Water Print Works", now an extant "Bleach Works" with five reservoirs and various outbuildings.	1800	Non-designated	Negligible	7637.1.0
MM091	Archaeological Site	Bealey's Mill (Radcliffe Bleach and Chemical Works) (site of)	This site is shown on the Tithe Award for Radcliffe as a large mill building next to the Irwell. Shown and described as "Bleach and Chemical Works". Water rights were leased by Lord Derby to Richard Benley for his bleach works in 1816.	1800	Non-designated	Negligible	7705.1.0
MM092	Archaeological Site	Springwater Park site of Spring Cottage/ Spring Water House and grounds	House with grounds bounded by the river Irwell to the northwest and Goats Lane and Back Lane to the south, open areas on other boundaries.	1800	Non-designated	Negligible	9345.1.0
MM093	Archaeological Site	Victoria Gardens (site of)	Public pleasure gardens to east of river Irwell and near to Daisy Field Cotton Mill and Hinds Logwood Mill.	1800	Non-designated	Negligible	9349.1.0
MM094	Archaeological Site	Cock Clod	Shown as a settlement area of ten plus structures on the Tithe Award. The site has some development, Cock Clod Street still shown as one boundary to the site.	1800	Non-designated	Negligible	7711.1.0
MM095	Archaeological Site	Irwell Viaduct	On Lancashire & Yorkshire Railway line to Bolton, opened in 1848. Five arches, skewed, stone-built, turrets at each end and a plain stone parapet. Railway has now been dismantled.	1848	Non-designated	Negligible	676.1.0

MM Ref	Asset Type	Name	Description	Period	Designation	Value	HER No.
MM096	Archaeological Site	Chimney base at East Lancashire Paper Mill (site of)	The remains of a brick chimney were observed during a watching brief along part of the route of a pipeline associated with the East Lancashire Paper Mill.	1851	Non-designated	Negligible	6381.1.1
MM097	Archaeological Site	East Lancashire Paper Mill (site of)	Site of paper mill on a former calico print works and barracks. Part of the 19 th century expansion of the paper industry in the Bury area. Six paper-making machines by Bentley & Jackson and Walmsleys of Bury, 1908.	1860	Non-designated	Negligible	6381.1.0
MM098	Archaeological Site	Irwell Tallow and Candle Works (site of)	Former Irwell Tallow & Candle Works, shown on the 1930 OS map. Demolished in 2006.	1880	Non-designated	Negligible	11216.1.0
MM099	Archaeological Site	Irwell Bleach & Dye Works (site of)	Bleach and dye works with some large weaving sheds immediately nearby. All original buildings are still extant.	1880	Non-designated	Low	3866.1.0
MM100	Archaeological Site	Egyptian Mills (Daisyfield Industrial Park)	Remains of cotton mill complex. Marked on map as a cotton & fustian mill and as a cotton weaving mill on map, which shows the full extent of the complex. Later converted to a finishing works. Two main phases.	1880	Non-designated	Low	3818.1.0
MM101	Archaeological Site	Warth Mills (remains of)	Remains of small cotton weaving and spinning mill complex dating from around 1900. Used as a PoW Camp during WWII.	1885	Non-designated	Low	3836.1.0
MM102	Archaeological Site	20 th century carvings, North East Dam wall, Elton Reservoir	Unassigned carvings (20 th century?) on the face of the north-east dam wall, Elton reservoir. The exact location of the carvings is not clear.	1900	Non-designated	Negligible	13744.1.0
MM103	Archaeological Site	Dumers Lane Mill (site of)	Former textile weaving mill on the River Irwell. Originally an unremarkable single-storey mill. There have been substantial additions and alterations to the surviving buildings since the site was converted to a confectionery manufacturing works. The offices were probably former warehouses.	1900	Non-designated	Negligible	3864.1.0

Source: GMAAS HER

Table 6: Events within 250m of the FRMS

MM No.	Name	HER No.	Type	Year of Event	Summary Description
MM201	Excavation of smithing hearth at Radcliffe Tower	EGM546	Excavation	1976	A hearth was excavated during the 1976 excavations at Radcliffe Tower within trench F. The discovery hinted at the possibility of a west wing which was open to the rafters.
MM202	Radcliffe Tower architectural history and archaeological research	EGM4112	Desk-based Assessment	2013	Historical research and photographic survey undertaken as part of HLF-funded Radcliffe Heritage Project.
MM203	East Lancashire Paper Mill, Radcliffe	EGM3649	Desk-based Assessment	2004	DBA by Oxford Archaeology North. Indicated total of 26 sites of archaeological interest although the proposed work would only impact upon the mill itself. Works unlikely to impact on earlier remains that survive beneath the footprint of the extant buildings.
MM204	Wellington Street, Elton, Bury	EGM4236	Desk-based Assessment	2013	DBA undertaken for proposed Fire Training Centre.
MM205	Mersey Valley Sludge	EGM4009	Watching Brief	2007	Watching brief along proposed pipeline route. No evidence of features associated with the medieval settlement of Cock Clod or the postulated Roman road in the area were observed. Disturbance by construction of water management features including culverts and the installation of services in the area likely to have disturbed any remains here.

Source: GMAAS HER

B. Location of heritage assets

