APPENDIX C

ROSSENDALE ENVIRONMENTAL NETWORK STUDY

ASSESSMENT OF GREEN INFRASTRUCTURE FUNCTIONS FOR GREENLANDS SITES UNDER DEVELOPMENT PRESSURE

Contents	Page
Introduction	4
Pro-formas for Greenlands sites	10
Summary of the Assessment	82
Recommendations	85

Introduction

- 1.1 This purpose of this document was to report on the assessment of the environmental value of a certain number of Greenlands sites in Rossendale Borough.
- 1.2 The Greenlands sites are designated 'open space' sites from the 1995 Local Plan, subsequently incorporated into Core Strategy Policy 17 and are currently protected from development. The sites are in or on the edge of settlements in the Borough.
- 1.3 The majority of the 88 Greenlands sites are parks, playing pitches, cemeteries and allotments and are likely to remain as green space and will form part of the environmental network.
- 1.4 However, Council Officers have advised that 24 of the Greenlands sites have been or are currently subject to developer interest. The Council required an assessment regarding the environmental value of these sites and whether there would be potential to release some of the sites for development
- 1.5 The schedule on page 8 confirms the sites that were assessed and their location is presented on the plan (ref. G5966.02) on page 9.
- 1.6 The assessment followed a five stage method outlined below.

Method

Stage 1 - Site visit

- 1.7 A visit was undertaken to establish key site features including the type of green or blue infrastructure (GI) present (woodland, scrub, grassland, watercourse). Other factors considered were: site condition and access, presence of PRoW or informal footpaths, the relationship to neighbouring urban form or countryside and indication of any management of the site. The relevant types of GI (definitions provided in Appendix D) were:
 - · General amenity space;
 - Outdoor sports facility;
 - Woodland;
 - Grassland, heathland and scrub;

- Agricultural land;
- · Allotment, urban farm or community garden;
- Cemetery, churchyard or burial ground;
- Private garden;
- Water body;
- Watercourse; and
- Wetland.

Stage 2 – Mapping GI type

1.8 For each site, the type of GI was mapped using a geographical information system (GIS) software package. This was achieved by working with land parcel data supplied by Ordnance Survey Mastermap and aerial photography. Each land parcel within 5 metres of a Greenlands site boundary was assigned a GI type referred to above. A plan confirming GI type was prepared for each site.

Stage 3 – Analysis of GI functions

- 1.9 Consultation was undertaken with the Council to agree an effective way of establishing each site's environmental value or functionality in terms of GI. With reference to paragraph 5.22 of the main report the GI functions most relevant to Rossendale were agreed:
 - Aesthetics and visual character;
 - Supporting heritage;
 - Recreation;
 - Green travel routes;
 - Shading from the sun;
 - Carbon storage;
 - Trapping air pollutants;
 - Habitat for wildlife;

- Connectivity for wildlife;
- · Water interception; and
- Water infiltration.

Using GIS, every OS Mastermap land parcel for each site was individually assessed against the 11 functions using the criteria in Appendix E. A plan confirming the number of applicable GI functions was prepared for each site.

Stage 4 - Reporting

- 1.10 The outputs of the GIS analysis for each site was classified according to the numbers of GI functions delivered. The classification was arranged into 3 categories:
 - 8-11 functions:
 - 5-7 functions; and
 - 1-4 functions.
- 1.11 Reporting included a site description, list of the relevant GI functions, a commentary on the results and opportunities for any enhancement to the site presented on a pro-forma. The pro-forma included the plan showing the type of GI present on site followed by the plan confirming the number of GI functions. The pro-formas are presented from page 10.

<u>Stage 5 – Recommendations</u>

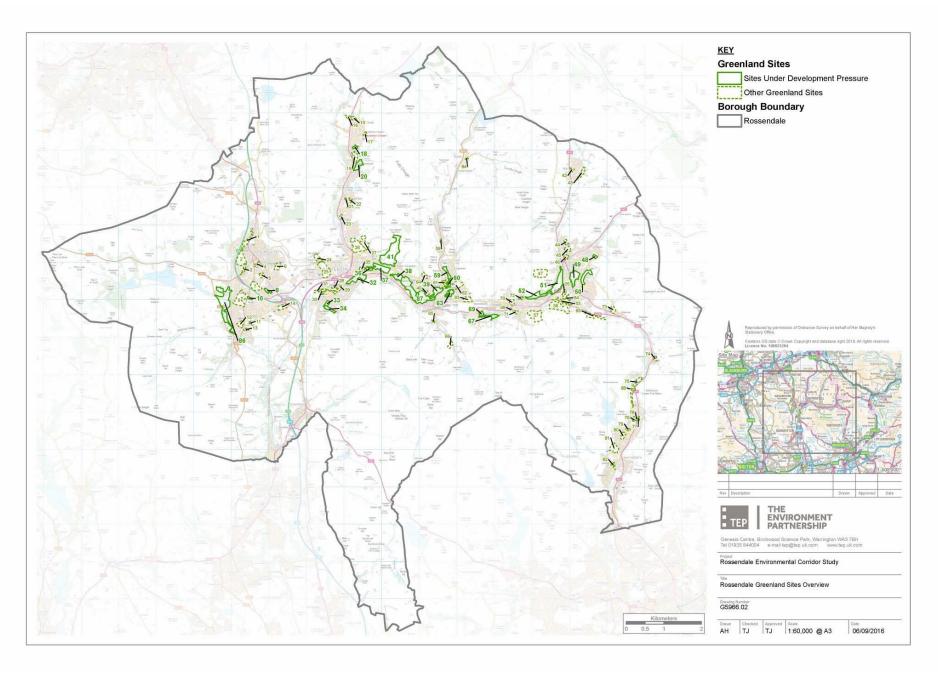
1.12 The schedule on page 8 confirms the findings of the mapping of GI types and analysis of GI functions. Based on those findings and other issues such as flood risk, recommendations were made as to whether a site should be retained as Greenlands forming part of the network of environmental corridors or whether there is potential for release for development. The recommendations are presented from page 83.

Limitations of the assessment

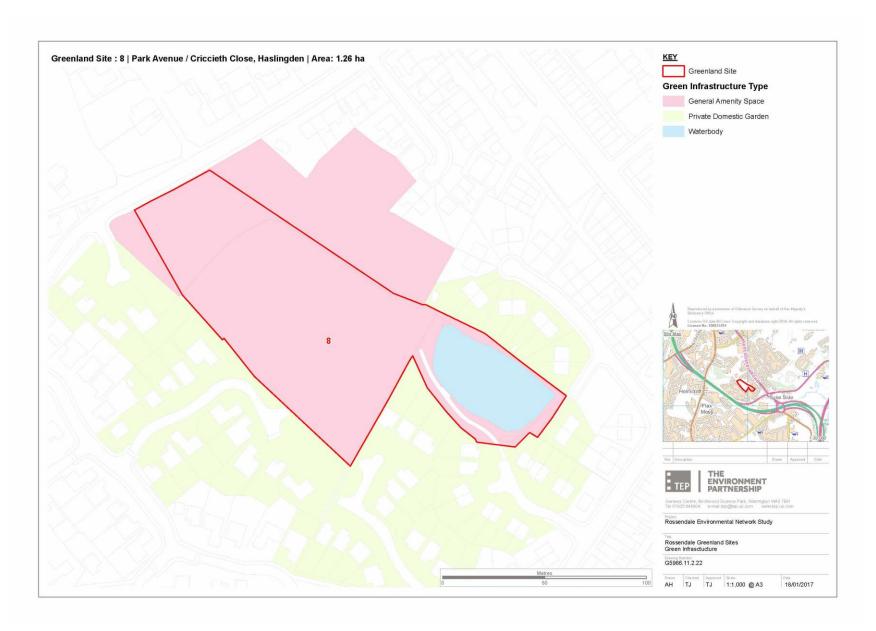
- 1.13 The method is factual, objective and was applied consistently across the 24 sites. It is able to highlight a site or part of a site that currently delivers a lower number of GI functions but through land management could be enhanced to increase environmental value and deliver more GI functions for people and nature.
- 1.14 A site or part of a site with a low number of GI functions does not necessarily imply that it has a low value and that it may be suitable or release from development. For example an amenity green space may currently deliver a low number of GI functions but may meet local needs in terms of accessible space for recreation. The site may also provide an important water infiltration function in area subject to surface water flooding.
- 1.15 A site or part of a site may be occupied by an allotment or similar garden amenity that also has a low number of GI functions. This again does not necessarily imply a low value as it may meet local needs in terms of community cohesion, health and wellbeing and education which did not form part of the scope of Stage 3 Analysis of GI functions (paragraph 1.9).
- 1.16 The outputs of the assessment would need to be considered in the context of other needs in Rossendale and evidence base studies for the Local Plan.

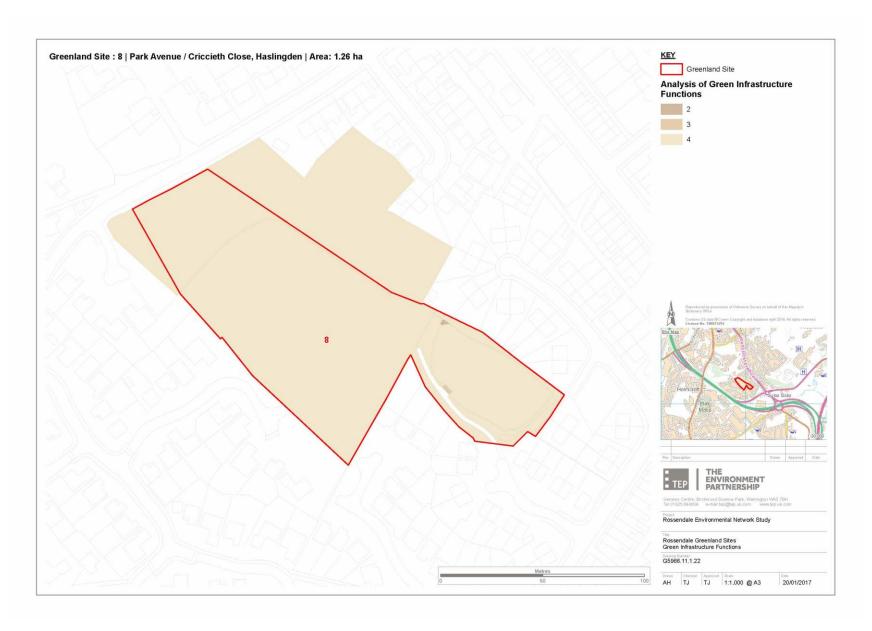
List of Greenlands sites subject to assessment

Page no.	Site ref.	Site name	Settlement	Area (hectares)
	8	Park Avenue/ Criccieth Close, Haslingden	Haslingden	1.26
	10	Rear of Helmshore Road	Haslingden	0.49
	18	Laburnum Cottages, Goodshaw Chapel	Crawshawbooth	0.83
	20	Land to the north of Adelaide Street	Crawshawbooth	3.53
	32	Fallbarn Crescent, Longholme	Rawtenstall	5.94
	33	Playing field off Cherry Tree Lane	Rawtenstall	1.19
	34	Lower Clowes, Townsendfold	Rawtenstall	2.03
	36	Playing Field to the rear of houses on Bacup Road	Rawtenstall	1.13
	37	Lower Cloughfold	Rawtenstall	6.26
	38	Playing Field Cloughfold	Rawtenstall	3.33
	39	Tricketts Memorial Gardens	Waterfoot	3.95
	41	Marl Pits Sports Complex	Rawtenstall	21.12
	48	Land south of Greave Clough Drive	Bacup	0.72
	49	Land east of Rochdale Road, Bacup	Bacup	6.29
	50	Land south of St Mary's Primary School, Bacup	Bacup	3.90
	51	Huttock Top, Bacup	Bacup	10.48
	52	Land north of Osborne Terrace	Bacup	4.63
	59	Land off Taylor Avenue, Waterfoot	Waterfoot	2.39
	60	Land south of Wales Road, Waterfoot	Waterfoot	1.26
	63	Swiss Clough and Booth Fold, Waterfoot	Waterfoot	2.35
	67	Brandwood	Stacksteads	2.45
	69	Waterbarn Recreation Ground	Stacksteads	1.13
	86	Swinnel Brook	Haslingden	18.32
	87	Rossendale Valley	Waterfoot	20.34



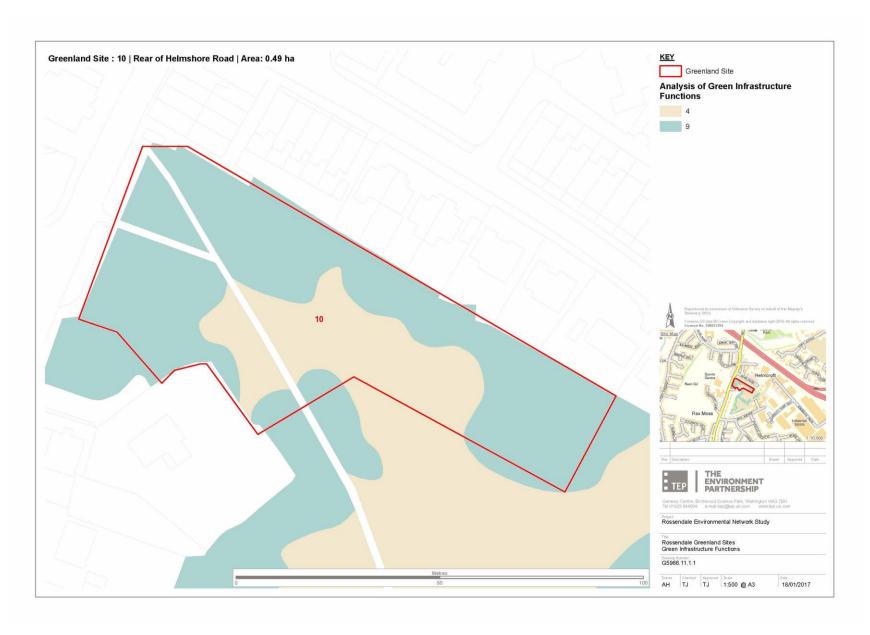
Site ref	Site name	Settlement	Area (ha)	Typology	Description	Functions	Analysis
8	Park Avenue/ Criccieth Close	Haslingden	1.26ha	General amenity space; and Waterbody.	The site is south of Haslingden centre, provides general amenity space and is visible and accessed from Park Avenue. The grass on the site is closely mown although there are also patches of couch grass indicating wet ground. There are a line of trees along the northern and eastern site boundaries and there is a further group of trees in the centre of the site. To the east of the main part of the site is a large pond with an informal footpath on its southern edge linking an adjacent residential development (Fields Road) with the main green space. Beyond the northern site boundary is a small area of seminatural open space with trees. There is residential development beyond the other site boundaries.	Aesthetics & visual character; Recreation; Green travel route; and Water infiltration	The site delivers 4 functions, although the trees along the site boundary and in the centre of the site would contribute to other functions such as: Shading from the sun; Carbon storage; Trapping air pollutants; and Water interception. Local challenges: The surface water flood risk map indicates that the Greenlands site and adjacent Haslingden Road slip from the A56 are at risk of flooding. Opportunities for enhancements: The large pond in the site may be performing a local drainage function and similar attenuation ponds could be installed in the main part of the site reducing the risk of surface water flooding.



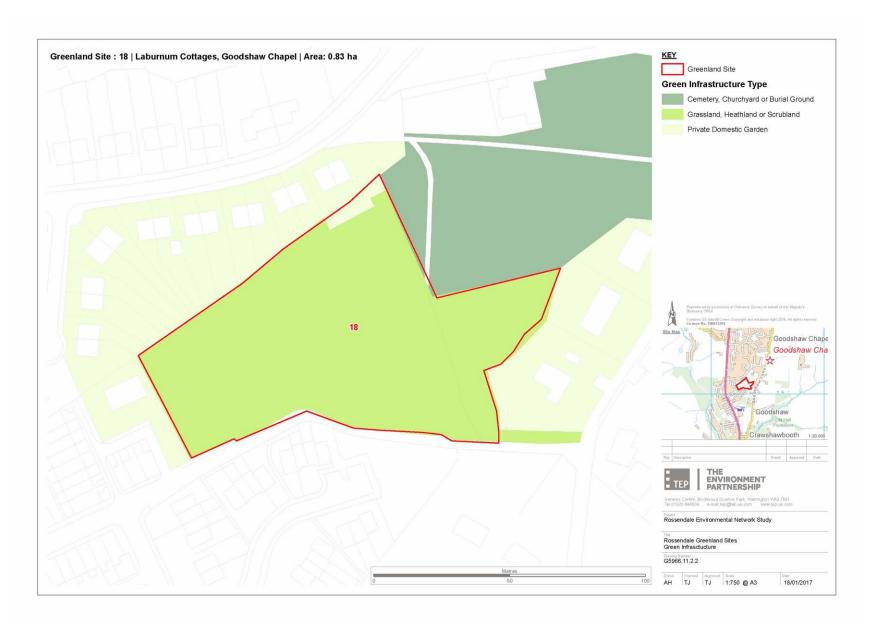


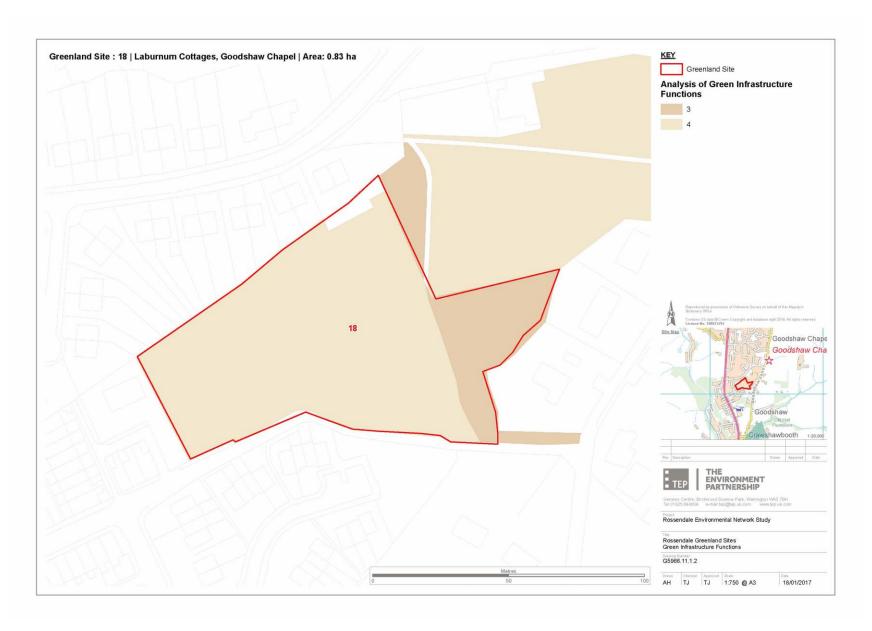
Site ref	Site name	Settlement	Area (ha)	GI Typology	Site Description	GI Functions	Analysis
10	Rear of Helmshore Road	Haslingden	0.49ha	Woodland; General Amenity Space;	The site is in the southern part of Haslingden next to Helmshore Road. The northern and western parts of the site are occupied by broadleaved mature trees and below the tree canopy (covering approx. 70 % of the site) is closely mown amenity grass. The grassed area extends towards the eastern part of the site where there is an informal football pitch. There is a PRoW crossing from Helmshore Road that extends beyond the site boundary into a wider green space of similar character to the south east. The site has a frontage onto Helmshore Road to the west, to the north there is residential development and to the east is an employment area. To the south is the wider area of green space.	Aesthetics & visual character; Recreation; Green travel route; Shading from the sun; Carbon storage; Trapping air pollutants; Connectivity for wildlife; Water interception; and Water infiltration.	In terms of GI functions, the extent of the site covered by the mature trees delivers 9 functions. The area of amenity space to the eastern part of the site delivers 5 functions. The types of GI on the site deliver a different number of functions, however the site does work effectively as an overall space for public benefit. The wooded area provides a high quality setting for the more open amenity space which accommodates team sports such as football.



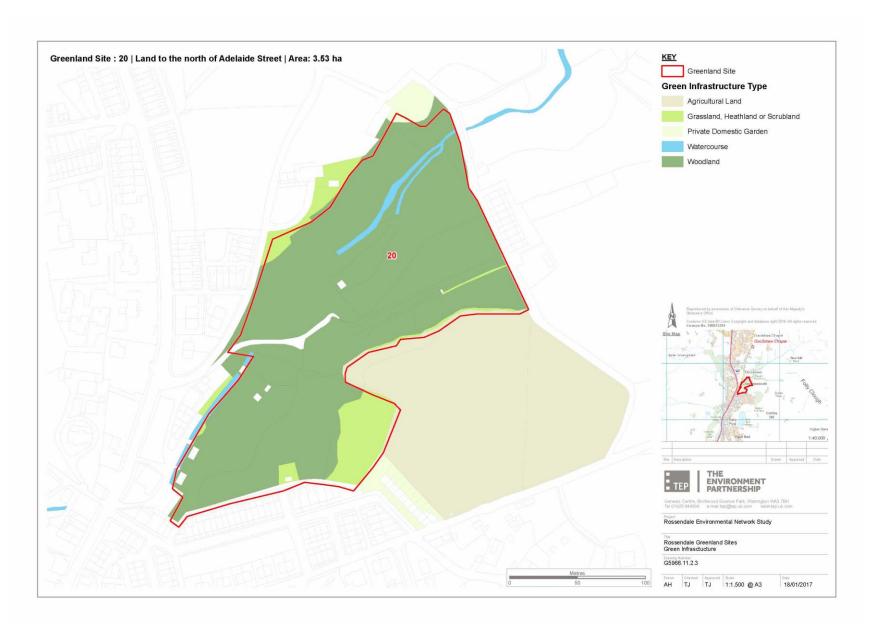


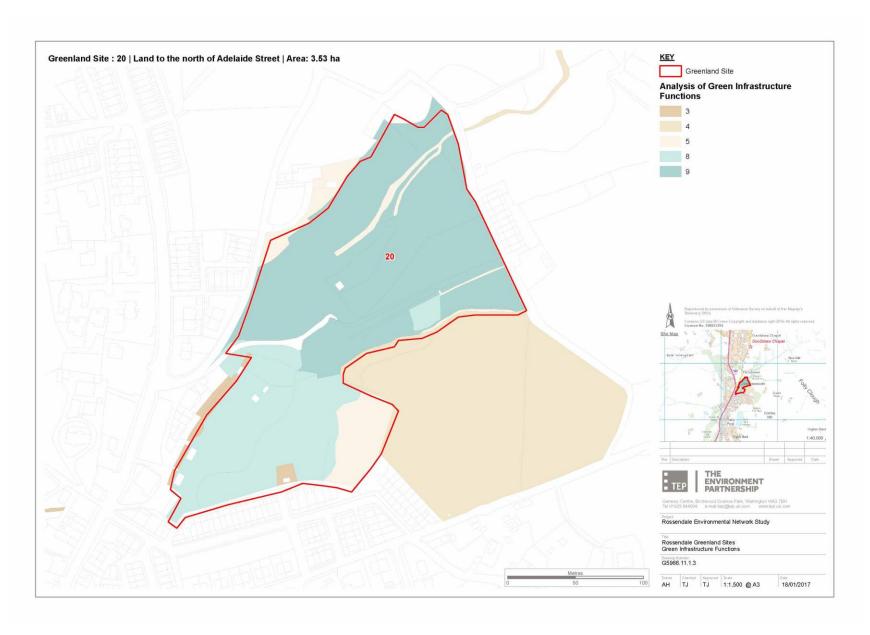
Site ref	Site name	Settlement	Area (ha)	Typology	Description	Functions	Analysis
18	Laburnum Cottages	Goodshaw Chapel	0.83	Grassland, heathland or scrubland	The site is at the eastern edge of Goodshaw. The western part (50%) of the site is characterised by closely mown amenity grass, while the eastern part (50%) is occupied by emerging scrub crossed by some informal footpaths. The site slopes gently downwards from east to west. A belt of semi-mature trees occupy the southern, western and northern boundaries, with residential development beyond those boundaries. Next to the eastern boundary is the cemetery of St Mary's and All Saints Church, Goodshaw.	Aesthetics & visual character; Recreation; Water interception; and Water infiltration.	In terms of GI functions, the site delivers 4 functions. Local challenges: The site is in the Limey Water valley which is subject to fluvial and surface water flooding.





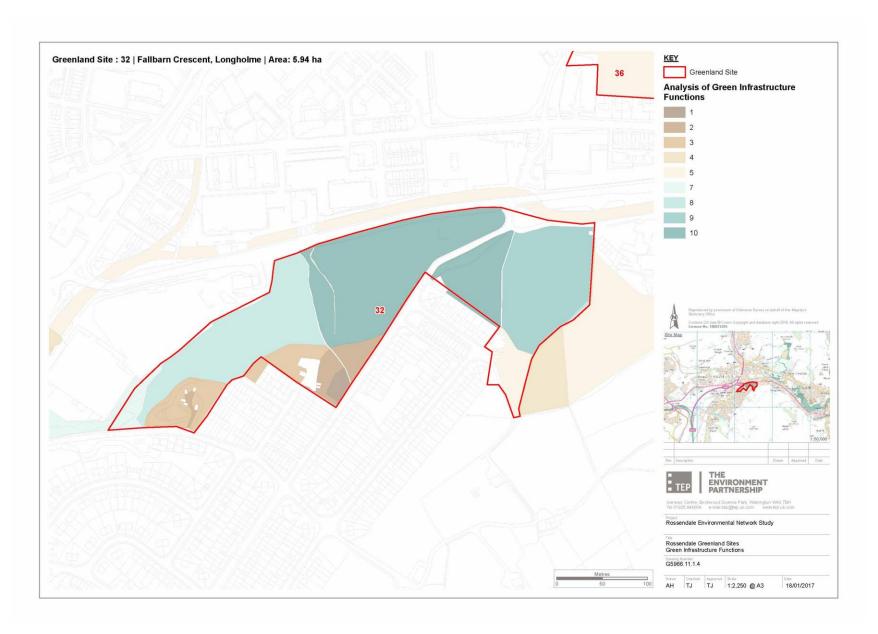
Site ref	Site name	Settlement	Area (ha)	Typology	Description	Functions	Analysis
20	Land north of Adelaide Street	Crawshawbooth	3.5ha	Woodland; and Grassland, heathland or scrubland.	The site, to the east of Crawshawbooth is largely occupied by broad leaved woodland with the exception of a small area of grassland to the south eastern corner. Land slopes steeply from east to west, although a watercourse flows near the northern edge of the site and modifies the local topography. Several footpaths cross the site providing access from Crawshawbooth in the valley bottom in the west to the rural area to the east.	Aesthetics & visual character; Supporting heritage; Recreation; Green travel routes; Shading from the sun; Carbon storage; Connectivity for wildlife; Water interception; and Water infiltration.	Most of the site delivers 8 or 9 functions. The exception is the small area of grassland which delivers 5 functions. Local challenges: The watercourse flowing through the site is considered a primary river by the Risk of Flooding map. Further downstream in the Limey Water Valley, there is a medium risk of flooding. Opportunities for enhancement: Consider planting the area of grassland with woodland to extend the water interception of the site.





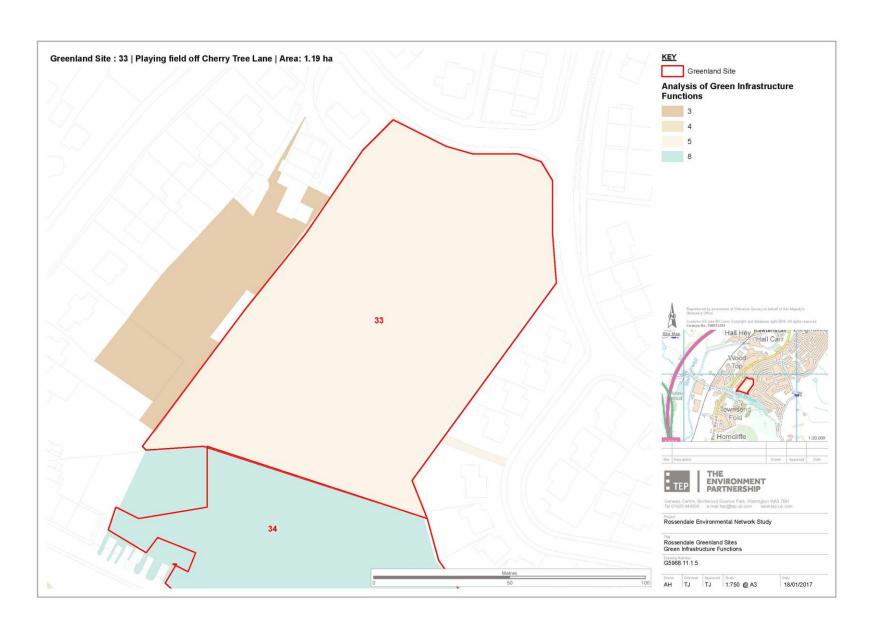
Site	Site	Settlement	Area	Typology	Description	Functions	Analysis
ref	Fallbarn Crescent	Longholme, Rawtenstall	5.94ha	Woodland; Grassland, heathland or scrubland	The site is south of Rawtenstall town centre and is largely occupied by broad leaved woodland (approx. 80% coverage) with the exception of three small areas of grassland and a large play area. Land slopes steeply downwards from south to north towards the A681 and the adjacent River Irwell. A watercourse (secondary river on river network plan) flows through the site towards the River Irwell. One of the small grassed areas is next to the eastern site boundary, while the play area is next to Fallbarn Crescent, with another grassed area adjacent that facility. The third grassed area is next to the western site boundary adjacent Hall Carr Road. The northern boundary of the site is next to the A681 (Bocholt Way). Next to the eastern boundary is a mill site. The southern boundary is next to Hall Carr Road and a residential area accessed from Fallbarn Crescent. The western boundary is next to a superstore site. There are two PRoW that cross the site; the first follows the northern site boundary, the second is routed south across the site from the A681 There are also several informal footpaths that cross the site.	Aesthetics & visual character; Supporting heritage; Recreation; Green travel route; Shading from the sun; Carbon storage; Trapping air pollutants; Connectivity for wildlife; Water interception; and Water infiltration.	The site generally delivers between 8 and 10 functions. The small grassed areas and play area delivers between 2 and 5 functions. Local challenges: Flood risk from the River Irwell immediately north of the site. Opportunities for enhancement: Consider planting up the small areas of grassland with woodland to extend the site's GI functionality.



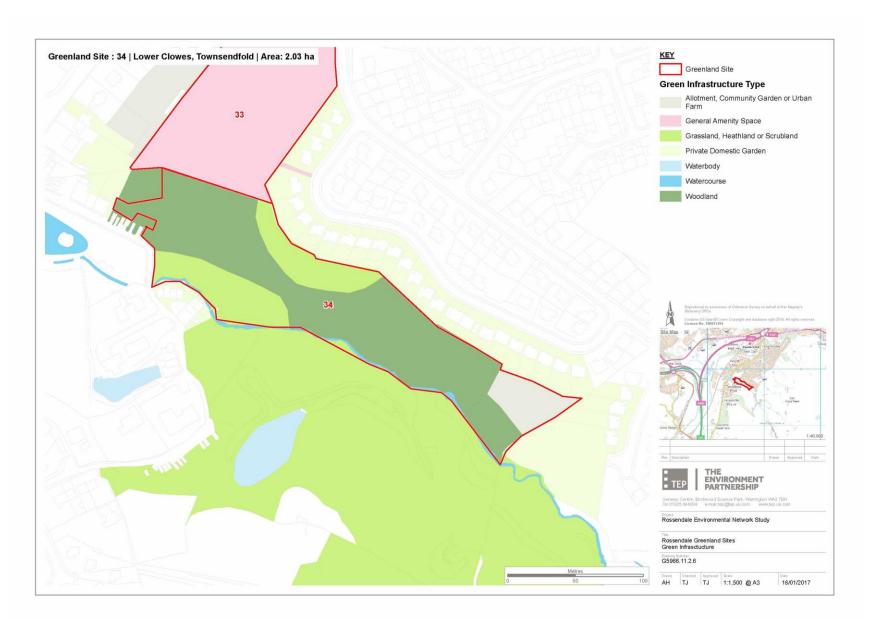


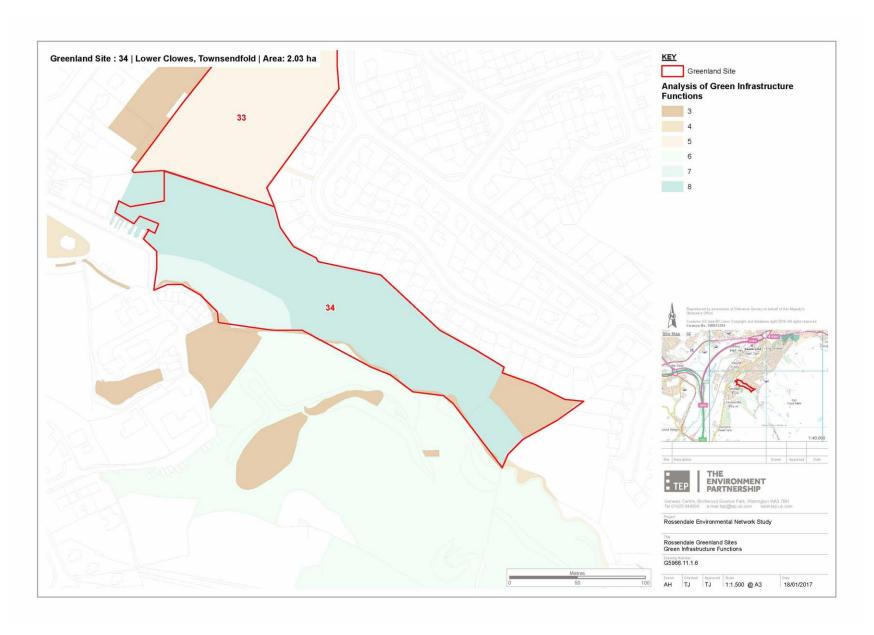
Site ref	Site name	Settlement	Area (ha)	Typology	Description	Functions	Area Analysis
33	Playing field off Cherry Tree Lane	Rawtenstall	1.2ha	General amenity space	The site is south west of Rawtenstall town centre and is occupied by an informal football pitch with closely mown grass. There is a gentle slope down from east to west. Along the northern edge of the site are several tall mature trees with Cherry Tree Crescent and Cherry Tree Lane beyond the northern boundary. Residential properties back onto the eastern and western site boundaries. To the south is an area woodland that forms part of the adjacent site 34.	Aesthetics & visual character; Recreation; Green travel route; Habitat for wildlife; and Water infiltration.	In terms of GI functions, the site scores 5 functions.





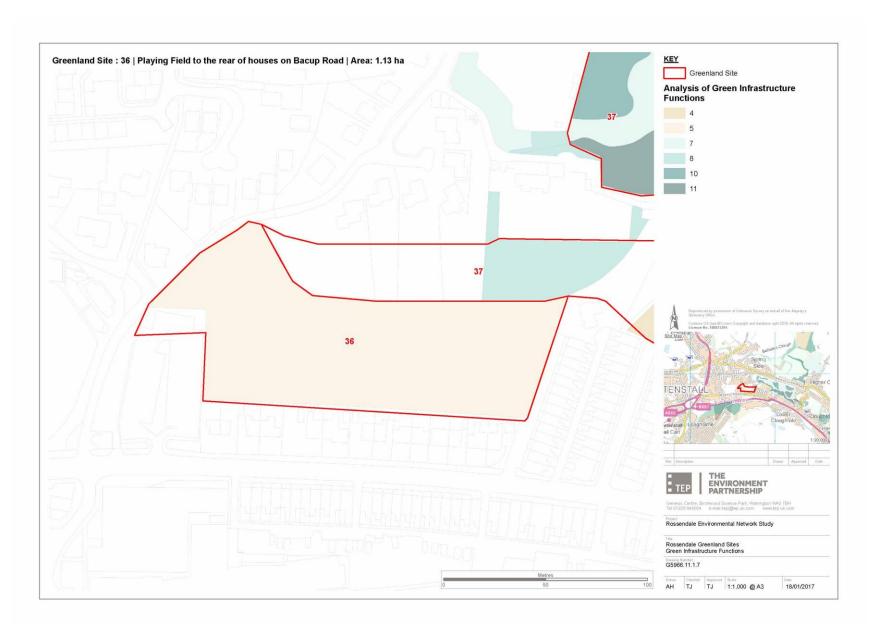
Site ref	Site name	Settlement	Area (ha)	Typology	Description	Functions	Analysis
34	Lower	Rawtenstall	2.03ha	Woodland; Grassland, heathland or scrubland; Allotment, community garden or urban farm.	The steeply sloping site is to the south west of Rawtenstall town centre and is occupied by broadleaved woodland with some smaller areas of grassland and scrub. Land slopes down from north to south towards a watercourse which forms the southern boundary. Aerial photography confirms that part of the site is occupied by private gardens. South of that watercourse, land rises up and is partly covered by trees and areas of moorland forming a wooded valley. The wooded valley continues beyond the eastern boundary. West of the site is a road providing access to some residential properties. Next to the northern boundary is the adjacent site 33 (football pitch) and an area of residential development.	Aesthetics & visual character; Shading from the sun; Carbon storage; Trapping air pollutants; Habitat for wildlife; Connectivity for wildlife; Water interception; and Water infiltration.	The woodland areas delivers 8 functions, with the grassland and scrubland delivering 6 functions. The private gardens deliver 3 functions. Local challenges: The watercourse is a secondary river in the river network and is within 400 metres of joining the River Irwell to the west. South of that confluence there is a high risk of flooding in the River Irwell valley. The woodland in the site is has an important role in water interception and stabilising soils in this valley.



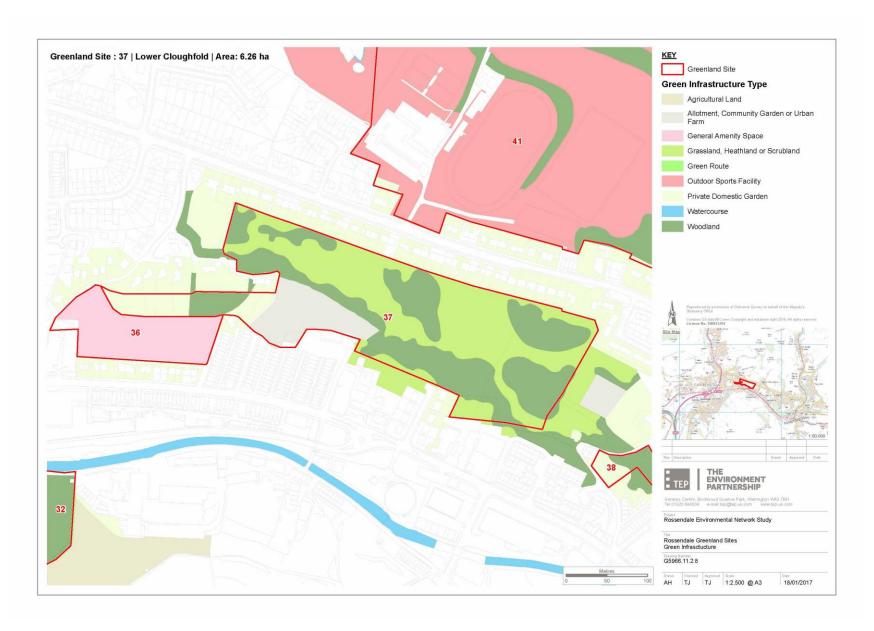


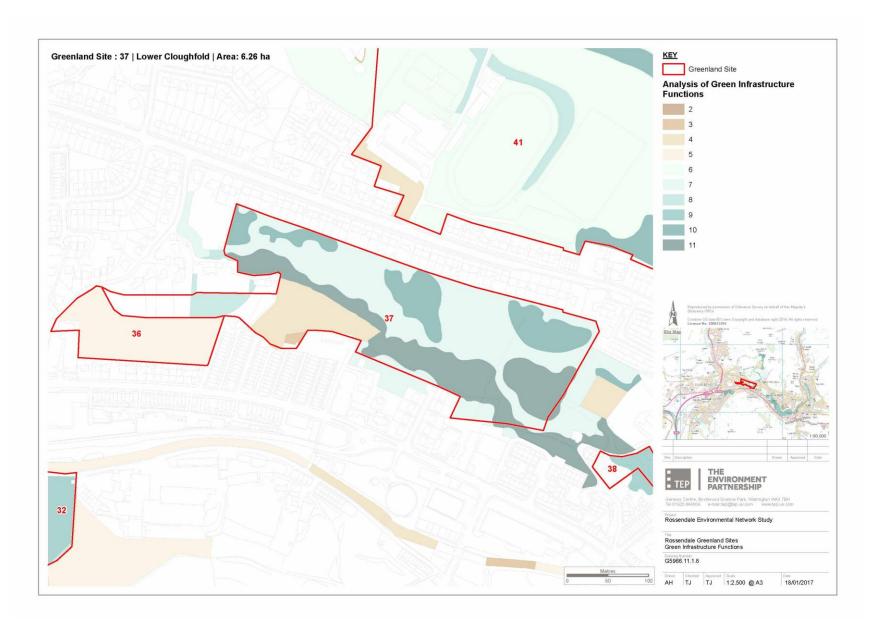
Site ref	Site name	Settlement	Area (ha)	Typology	Description	Functions	Area Analysis
36	Playing fields to the rear of houses on Bacup Road	Rawtenstall	1.13ha	General amenity space	The site is east of Rawtenstall town centre and is occupied by a playing field with close mown grass and is on level ground. To the east and south is residential development and a car park and road to the west. To the north is some steeply sloping land occupied by broadleaved woodland forming part of the adjacent site 37.	Aesthetics & visual character; Recreation; Supporting heritage; Habitat for wildlife; and Water infiltration.	The site delivers 5 functions.



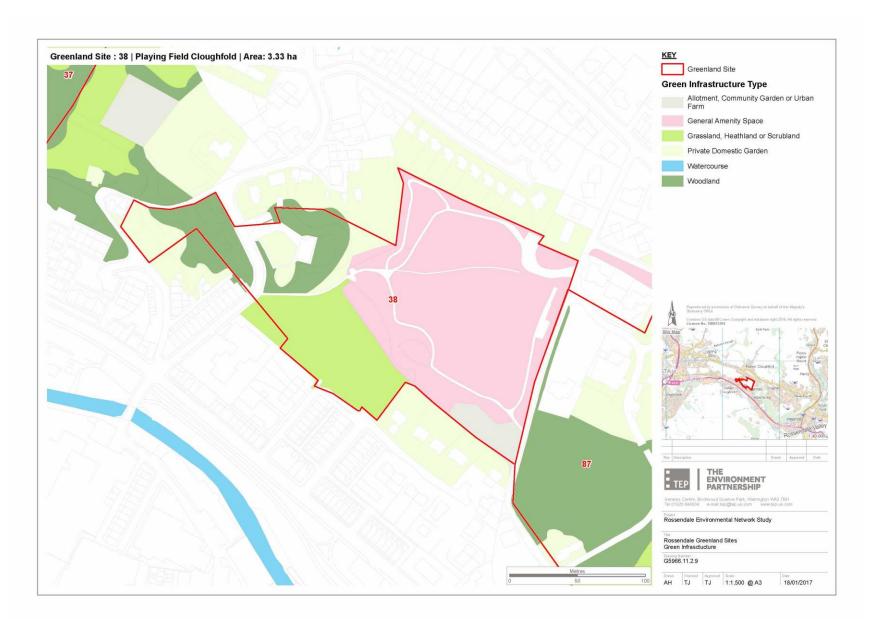


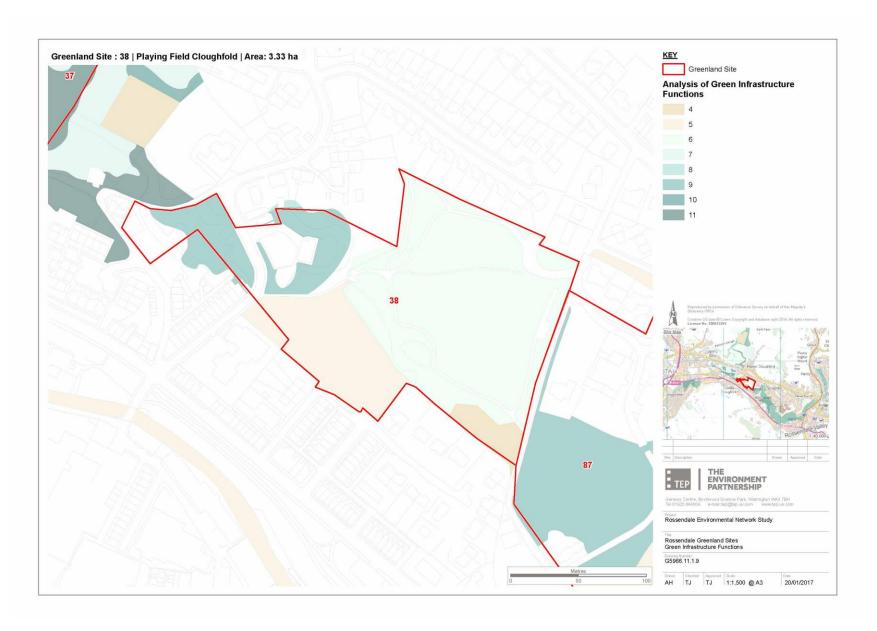
Site ref	Site name	Settlement	Area (ha)	Typology	Description	Functions	Area Analysis
37	Lower	Rawtenstall	6.3ha	Woodland; Grassland, heathland or scrubland; Allotment or community garden.	The site is to the east of Rawtenstall town centre and has some broad leaved woodland (approx. 40% coverage), there are also some areas of grassland. The exception is a small area of land in the western part of the site which appears to function as an allotment or community garden. The northern boundary is next to the rear gardens of residential properties that front onto Newchurch Road. The eastern boundary is next to an allotment, the southern boundary extends along the rear of some terraced properties and then forms an interface with site 36. The irregular western boundary is next to the gardens of some detached properties. Land slopes steeply down from north to south towards the terraced properties beyond the site boundary. There appears to be no public access to the site.	Aesthetics & visual character; Supporting heritage; Recreation; Green travel route; Shading from the sun; Carbon storage; Trapping air pollutants; Habitat for wildlife; Connectivity for wildlife; Water interception; and Water infiltration.	The wooded areas deliver 9-11 functions. The grassland areas deliver 7 functions. The exception are the private or community gardens in the centre of the site which delivers 4 functions.



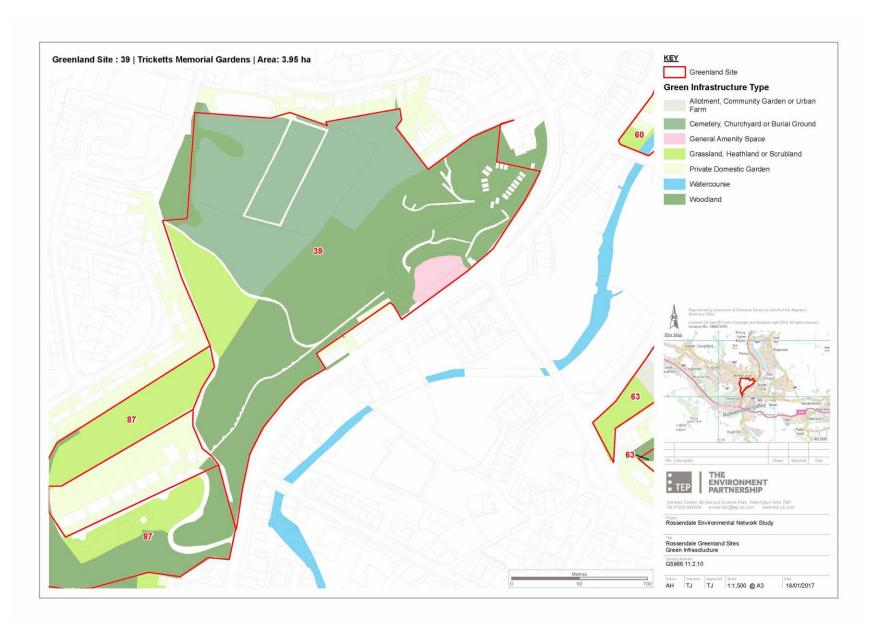


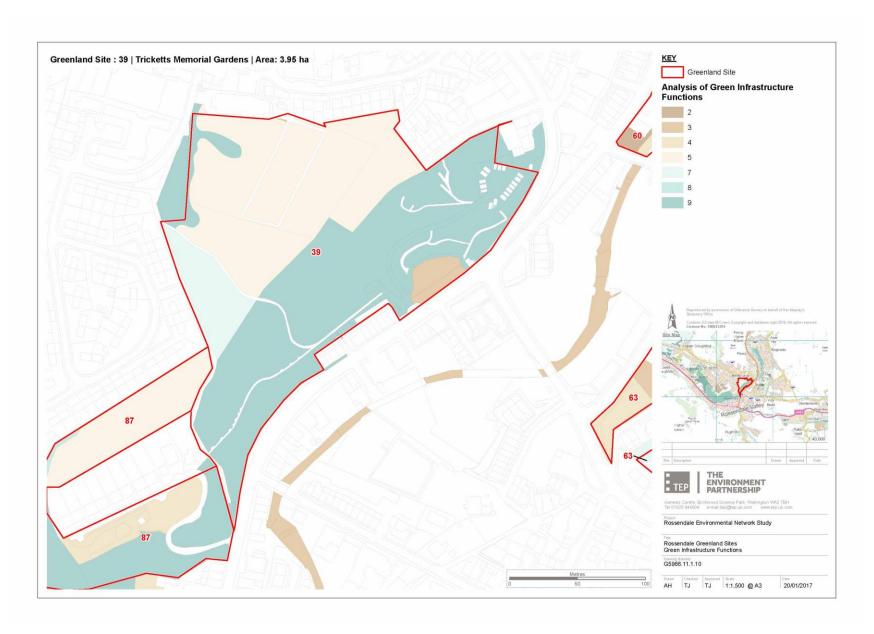
Site ref	Site name	Settlement	Area (ha)	Typology	Description	Functions	Analysis
38	Playing Fields, Cloughfold	Rawtenstall	3.33ha	General amenity space; Outdoor sports facility; Grassland, heathland or scrubland; and Woodland.	The site is east of Rawtenstall town centre and the eastern part is occupied by general amenity space (occupied by a grassed pitch) on relatively level ground with closely mown grass. The general amenity space is to the rear of properties to the north and south, while Hareholme Lane forms the eastern boundary with site 87 beyond.	Aesthetics & visual character; Supporting heritage; Recreation; Green travel route; and Connectivity for wildlife.	The general amenity space delivers 6 functions and the land to the south delivers 5 functions. The areas of woodland deliver 8 functions.
					To the south of the general amenity space, land slopes steeply down towards terraced properties near to Bacup Road (A681). East of the general amenity space, land slopes down towards a bowling green and pavilion. There are groups of mature trees on the sloping land.		
					Access to the bowling green is provided by Peel Street which also bisect the site. Either side of Peel Street is wooded.		
					To the west of Peel Street there is a small area of wooded land to the rear of some terraced properties.		
					There is an informal footpath linking Peel Street to the playing field.		



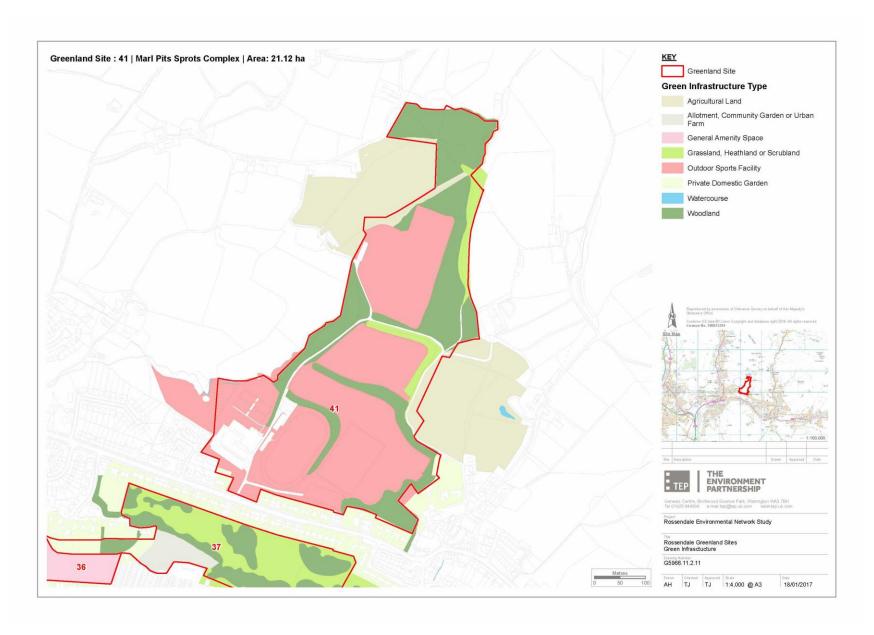


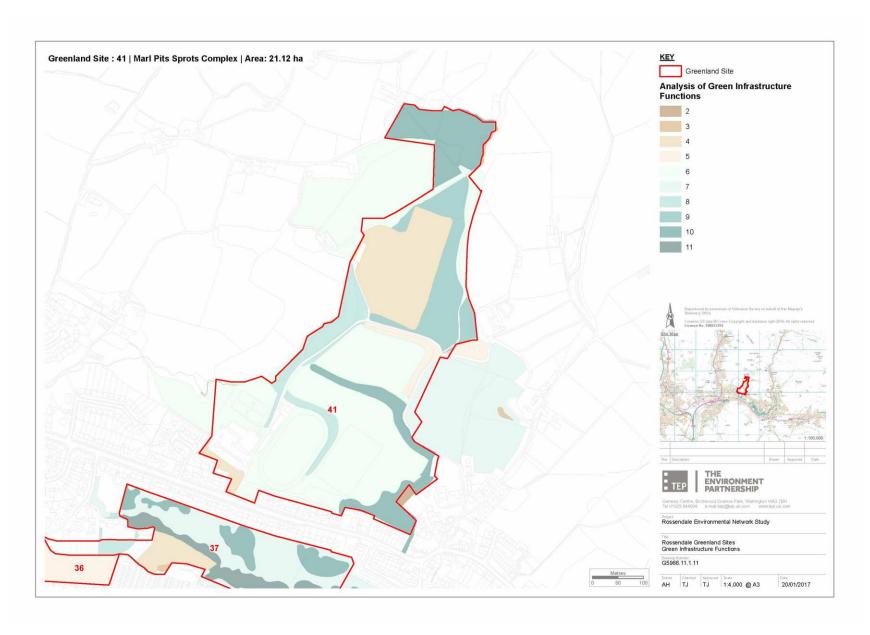
Site ref	Site name	Settlement	Area (ha)	Typology	Description	Functions	Analysis
39	Thicketts Memorial Gardens	Waterfoot	3.95ha	Cemetery; General amenity area; Grassland, heathland or scrubland; and Woodland.	This triangular shaped site is at the eastern edge of Newchurch. The northern part of the site forms the cemetery to Newchurch, St Nicholas St John and St Michael and includes a Grade 2* Listed Memorial. The cemetery is surfaced with closely mown grass but there are belts of mature trees to the perimeter and two groups of trees near to the church building. There is a gradual slope downwards from north to south. The eastern and southern part of the site is characterised by woodland on steeply sloping land. The northern boundary of the site follows the edge of the church and then follows an irregular boundary to the rear of some residential properties. The eastern boundary follows the edge of Burnley Road East and there is a small formal garden (assessed as general amenity area) next to the road but in the site. The western boundary provides an edge to the neighbouring site 87 and then follows the rear of some more residential properties and then near to the edge of Church Lane and rough grassland. There are a number of PRoW that cross the site linking Church Lane with Burnley Road East.	Aesthetics & visual character; Green travel route; Shading from the sun; Carbon storage; Trapping air pollutants; Habitat for wildlife; Connectivity for wildlife; Water interception; and Water infiltration.	The varied typology of the site means that the GI functions tends to vary. The woodland area and the wooded parts of the cemetery score deliver 9 functions, the grassland area delivers 7 functions and the grassed area of the cemetery delivers 5 functions. The small formal garden (general amenity area) on Burnley Road East delivers 3 functions. Local challenges: The eastern edge of the site is within 50m of the Whitewell Brook which is subject to flood risk. The part of Waterfoot in the valley bottom is also subject to surface water flood risk. The wooded part of site 39 provides an important water interception function and if removed could worsen the nearby fluvial and surface water flood risk.



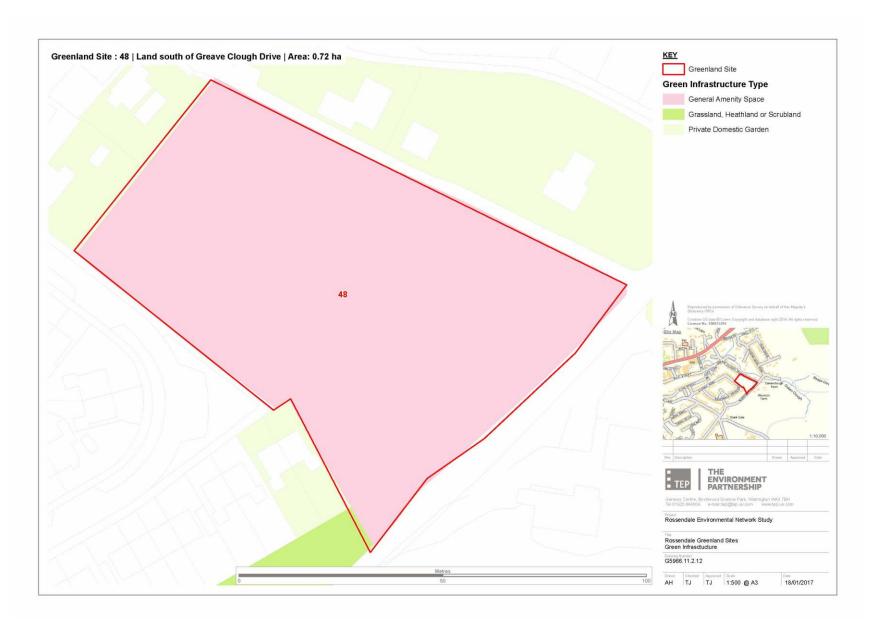


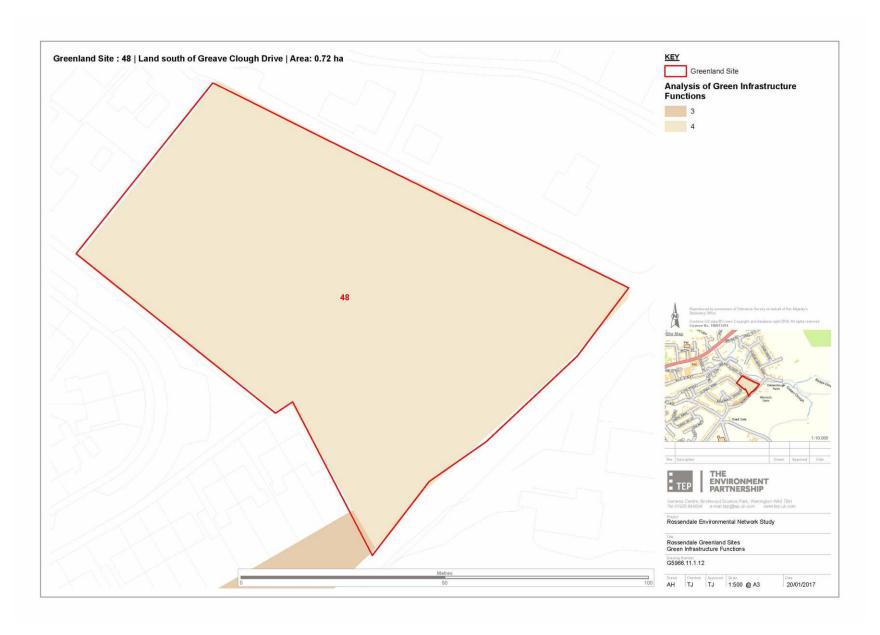
Site ref	Site name	Settlement	Area (ha)	Typology	Description	Functions	Analysis
41	Marl Pits Sports Complex	Rawtenstall	21.12ha	Grassland, heathland or scrubland; Outdoor sports facility; Woodland.	The site is at the northern edge of Rawtenstall and its main purpose is to accommodate groups of sports pitches and an athletic track. There are also a number of wooded corridors, on steeper ground, which separate the pitches. The wooded corridors extend to the eastern and western boundaries of the site. There are also some belts of grassland. The southern boundary of the site is next to residential properties that front onto Newchurch Road. The other site boundaries interface with the wider countryside.	Aesthetics & visual character; Recreation; Green travel route; Shading from the sun; Carbon storage; Trapping air pollutants; Habitat for wildlife; Connectivity for wildlife; Water interception; and Water infiltration.	The varied typology of the site means that the number of GI functions delivered tends to vary. The wooded corridors deliver 9 or 10 functions. The sports pitches delivers 4 or 6 functions. The grassland belts delivers 5-6 functions.



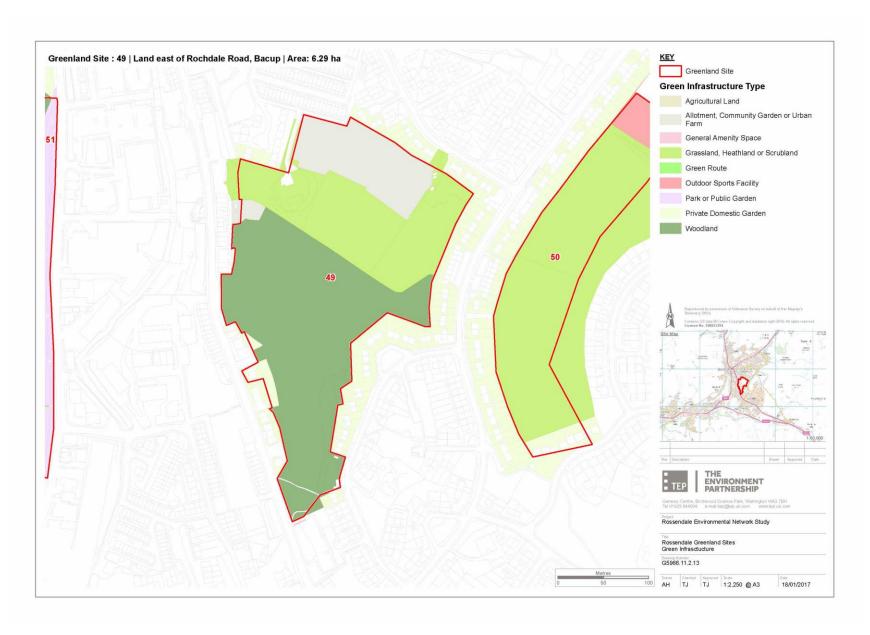


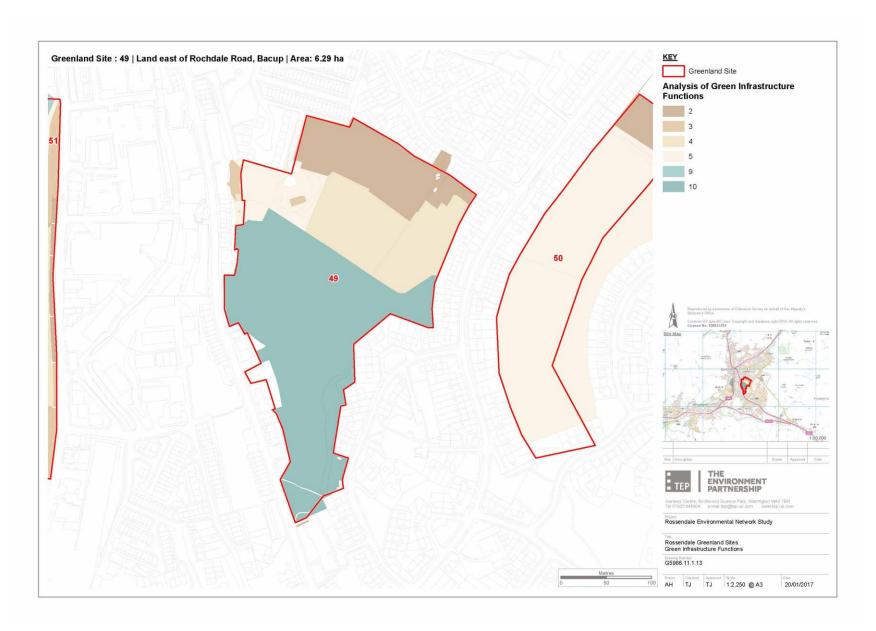
Site ref	Site name	Settlement	Area (ha)	Typology	Description	Functions	Area Analysis
48	Land south of Greave Clough Drive	Bacup	0.72ha	General amenity space	This gently sloping grassed site is at the eastern edge of Bacup. The grass is currently closely mown with the exception of the edges, which are on slightly steeper ground with unmanaged grass. The land slopes down from east to west. The eastern site boundary is next to Warcock Lane and the southern boundary next to Rossendale Crescent. The western boundary is next to some residential properties and the northern boundary next to Greave Clough Lane.	Aesthetics & visual character; Recreation; Green travel route; and Water infiltration.	The site delivers 4 functions.



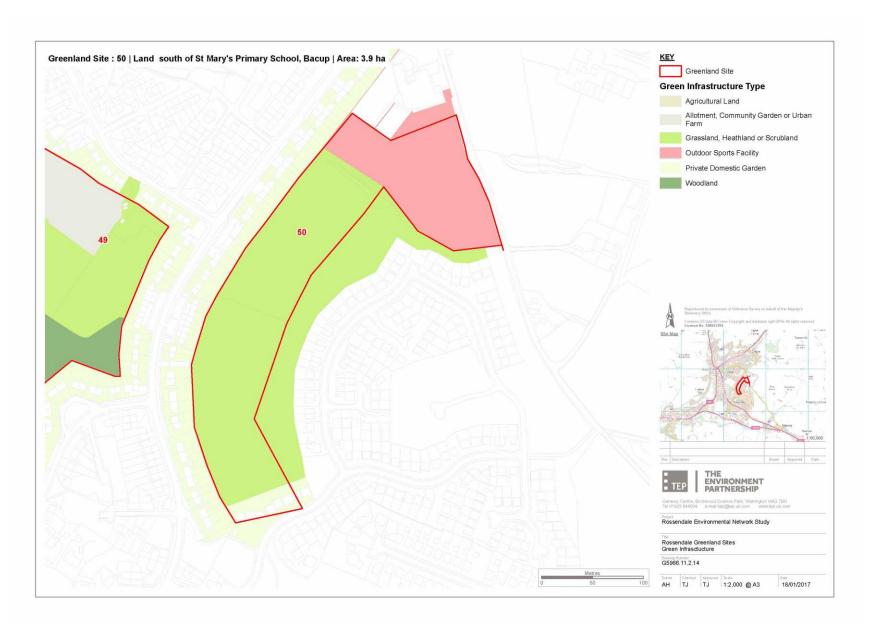


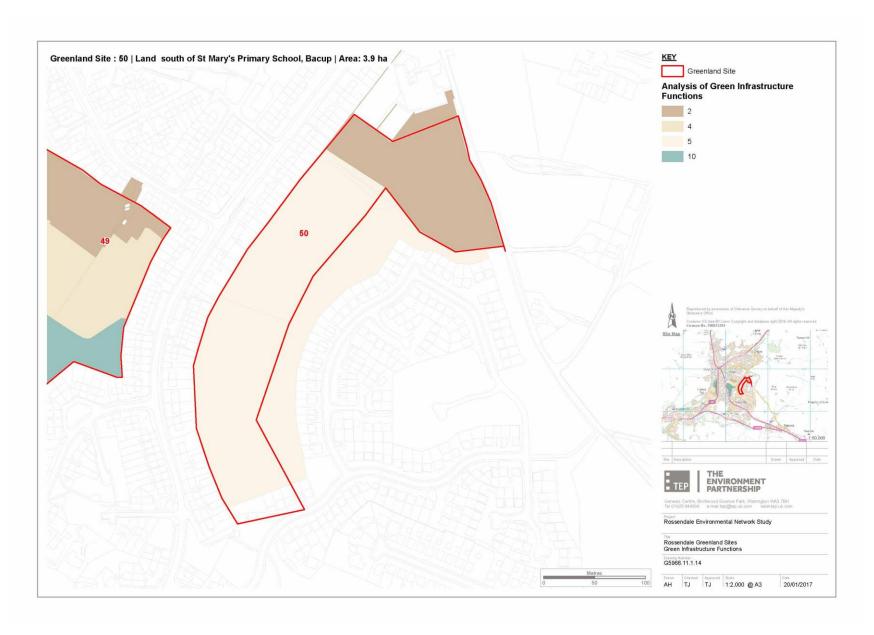
Site ref	Site name	Settlement	Area (ha)	Typology	Description	Functions	Area Analysis
49	Land east of Rochdale Road	Bacup	6.29ha	Allotment, community garden; Grassland, heathland or scrubland; and Woodland.	This triangular site is south east of the centre of Bacup. The northern part of the site appears to accommodate a smallholding, the middle part is occupied by unmanaged grassland with a PRoW at the southern edge linking the centre of Bacup to the west with a residential area to the east. South of the PRoW is a wooded area accounting for about 70% of the site area. Land slopes relatively steeply downwards from east to west. To the north and east are areas of residential properties. The western boundary is partly defined by the A671 (Rochdale Road), although some sections of the boundary meet the rear of residential properties that front onto Rochdale Road.	Aesthetics & visual character; Supporting heritage; Recreation; Green travel route; Shading from the sun; Carbon storage; Trapping air pollutants; Habitat for wildlife; Water interception; and Water infiltration.	The varied typology of the site means that the number of GI functions delivered varies. The wooded area delivers 10 functions. The unmanaged grassland area delivers 4 functions and the smallholding delivers 2 functions. Opportunities for enhancement: The unmanaged grassland area could be planted with a number of groups of native trees to extend the number of functions delivered by that part of the site. This would also increase the number of functions delivered to 10 (see opposite).



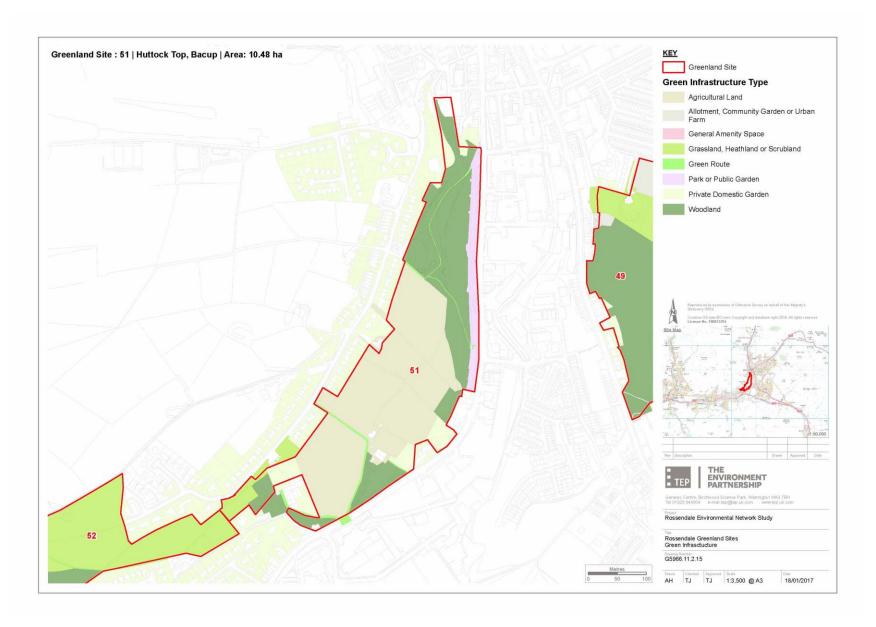


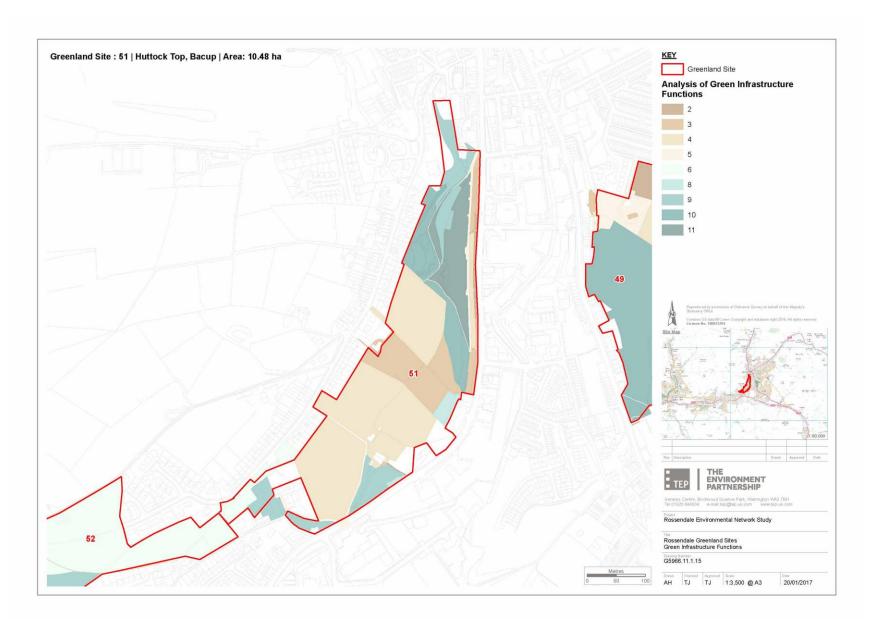
Site ref	Site name	Settlement	Area (ha)	Typology	Description	Functions	Analysis
50	Land south of St Mary's Primary School	Bacup	3.9ha	Grassland, heathland or scrubland; Outdoor sports facility.	The site is to the eastern edge of Bacup and immediately south of St Mary's Primary School. It is a linear site broadly orientated from north to the south. The northern part of the site near to the school is managed to accommodate a grassed sports pitch. The remainder of the site is unmanaged grassland. There is a gentle slope downwards across the site from east to west. The northern site boundary is next to the school. The eastern and southern boundary is next to Tong Lane and a residential area (although the actual boundary as shown on the plan has no physical definition on the site). The same estate extends along the southern boundary. The western edge of the site is defined by the rear boundary to properties that front onto Pennine Road. A PRoW crosses the northern part of the site linking Tong Lane in the east and Pennine Road to the west.	Aesthetics & visual character; Recreation; Green travel routes; Habitat for wildlife; and Water infiltration.	In terms of GI functions the outdoor sports facility delivers 2 functions and the unmanaged grassland area delivers 5 functions.



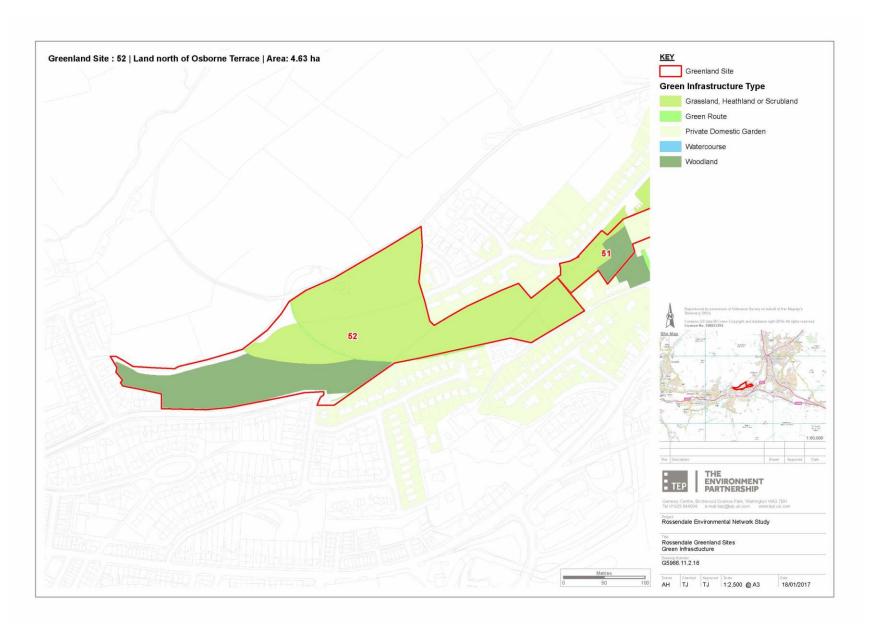


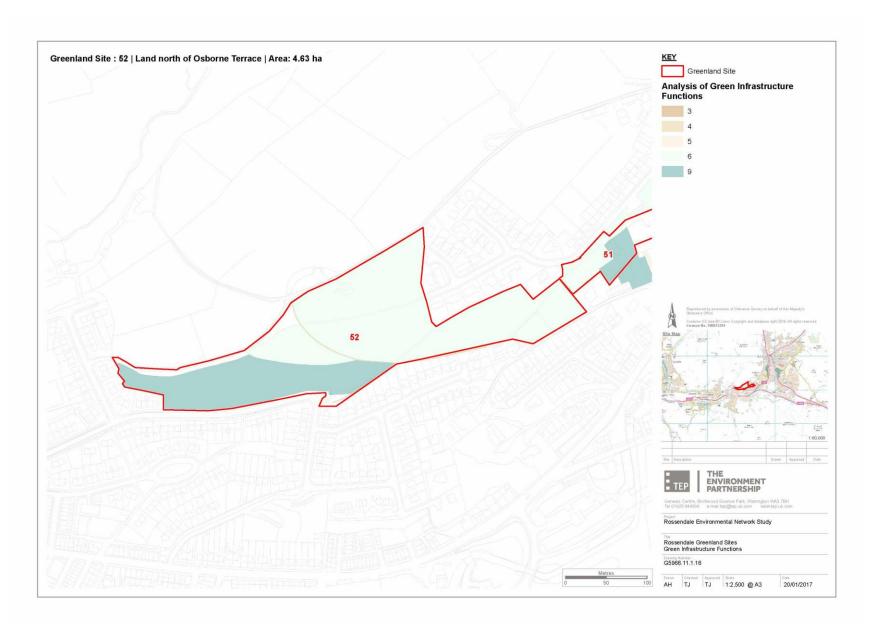
Site ref	Site name	Settlement	Area (ha)	Typology	Description	Functions	Analysis
51	Huttock Top	Bacup	10.48ha	Agricultural land; Park or public garden; Private domestic garden; and Woodland	This site forms a section of hillside to the south west of Bacup town centre. The northern part of the site is occupied by woodland, the central and southern part is agricultural land. There are also some other smaller areas of woodland, residential properties and private gardens. The site is on a relatively steep slope down from west to east. The northern boundary is defined by the rear of buildings forming part of Bacup town centre. There is a linear public garden along the eastern boundary to the site next to Market Street. The remainder of the eastern boundary is defined by private gardens or woodland. The irregular southern boundary wraps around the plots to some residential properties. There is also a short interface with the neighbouring site 52. The western boundary is formed by the rear of residential properties fronting onto Bankside Lane. A network of PRoW crosses the site linking Market Street in the east up to Bankside Lane to the west.	Aesthetics & visual character; Supporting heritage; Recreation; Green travel route; Shading from the sun; Carbon storage; Trapping air pollutants; Habitat for wildlife; Connectivity for wildlife; Water interception; and Water infiltration.	The varied typology of the site means that the functions delivered varies. The wooded areas of the site delivers between 8 and 11 functions. The other areas deliver between 3 and 4 functions. Opportunities for enhancement: The agricultural land is arranged into a number of fields. The field boundaries currently defined by fencing could be planted with hedgerows and hedgerow trees. Alternatively, the landowner could be encouraged to plant wooded areas in the site. These would support the following additional functions: Carbon storage; Habitat for wildlife; Connectivity for wildlife; Trapping air pollutants; and Water interception.



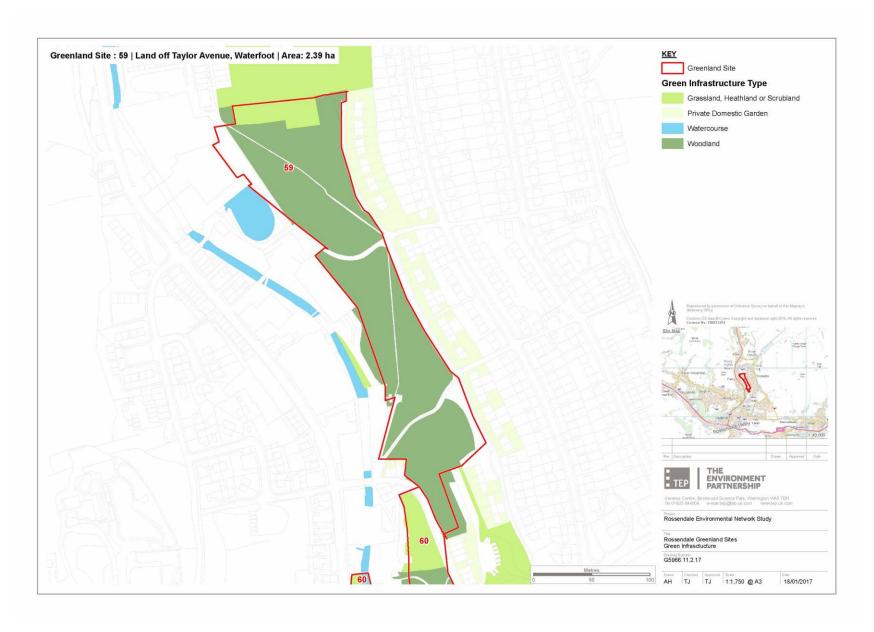


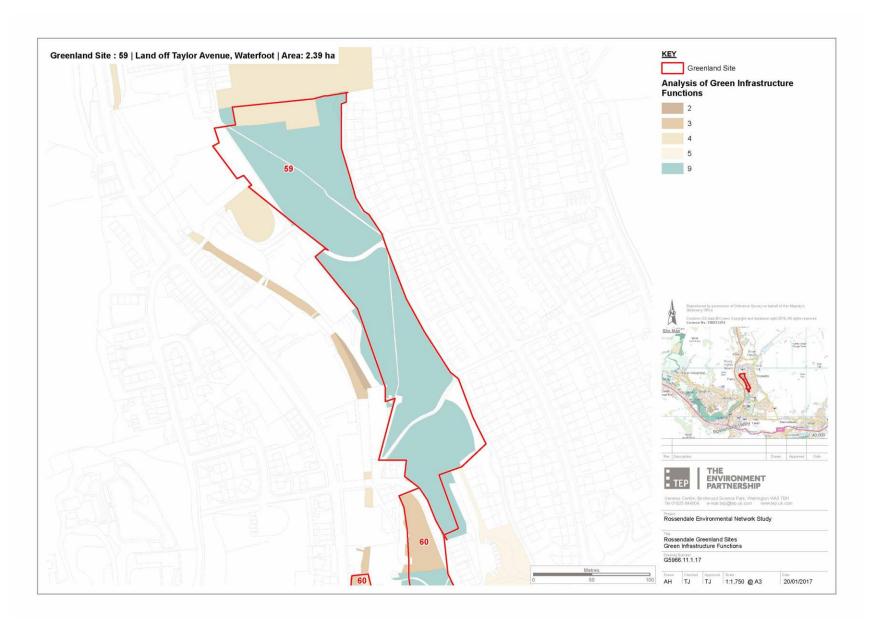
Site ref	Site name	Settlement	Area	Typology	Description	Functions	Analysis
52	Land north of Osborne Terrace	Bacup	(ha) 4.63ha	Grassland, heathland or scrubland; Woodland.	This site forms a section of hillside to the south east of Bacup town centre extending westwards from the neighbouring site 51. The eastern part of the site is occupied by grassland and scrubland, the western part by woodland. There is a relatively steep slope down from north to south. A network of PRoW cross the site linking the residential area to the east and south with the rural area to the north. The Irwell Valley Way passes next to the northern boundary. The eastern site boundary is irregular and is next to a residential area and forms a short interface with site 51. The southern and western boundary is also next to residential development. Next to the northern boundary is the Irwell Valley Way with the wider rural area beyond.	Aesthetics & visual character; Recreation; Green travel route; Shading from the sun; Carbon storage; Trapping air pollutants; Habitat for wildlife; Water interception; and Water infiltration.	In terms of GI functions the wooded area delivers 9 functions. The area of grassland and scrubland deliver 6 functions. However, the site surveyor noted that there are a large number of young but maturing trees across this part of the site. If managed correctly this part of the site would deliver the same functions as the wooded area within 5-10 years.





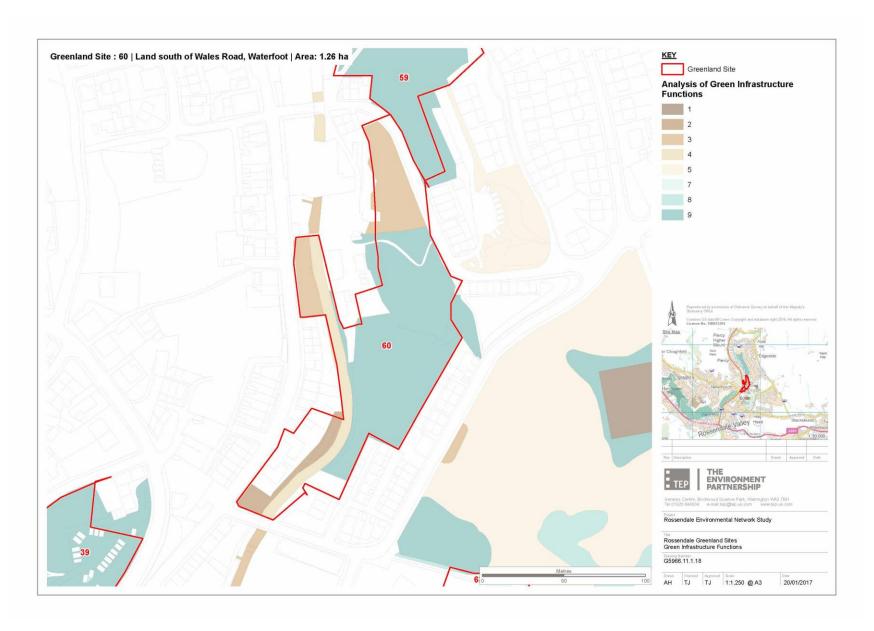
Site ref	Site name	Settlement	Area (ha)	Typology	Description	Functions	Analysis
59	Land off Taylor Ave	Waterfoot	2.4	Grassland, heathland & scrubland; Woodland.	The site is north of Waterfoot centre and is occupied by broad leaved woodland with the exception of a small area of land near the northern boundary. It slopes steeply down from east to west. Overall the site has a seminatural character with residential development to the east and south. To the north is a greenfield site and employment buildings to the west. A network of PRoW in the site link the residential area to the east with employment area to the west.	Aesthetics & visual character; Recreation; Green travel route; Shading from the sun; Carbon storage; Trapping air pollutants; Habitat for wildlife; Water interception; and Water infiltration.	The site delivers 9 functions. The small area of land near the northern boundary delivers 4 functions. Local challenges: High risk of fluvial flooding in Whitewell Brook valley bottom. High risk of surface water flooding along Burnley Road East corridor. Opportunities for enhancement: Extend woodland to include the small area of grassland to extend GI functions delivered.





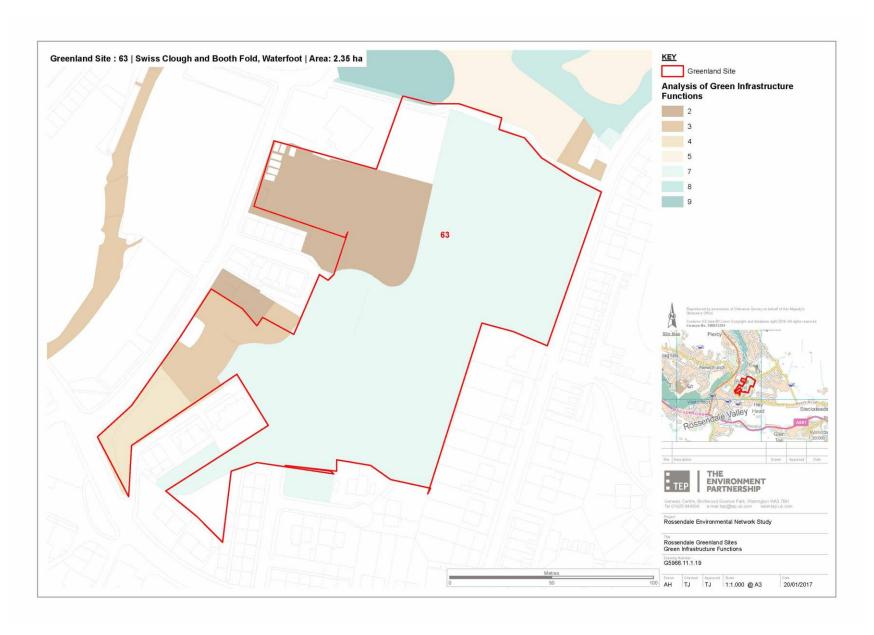
Site ref	Site name	Settlement	Area (ha)	Typology	Description	Functions	Analysis
60	Land south of Wales Road	Waterfoot	1.26ha	Grassland; and Woodland.	The site forms a section of hillside next to the Whitewell Brook and is located to the north of the centre of Waterfoot. A small section of the site extends onto the western side of the Brook. The site also has an interface with site 59 along its eastern boundary. The main part of the site is occupied by woodland, while the northern part is unmanaged grassland. The site slopes steeply down from the east towards Whitewell Brook. The part of the site west of the Brook is occupied by some grassland and street trees. There are also two bungalow properties and their respective gardens within the site. To the north, east and south of the site there is a network of streets serving residential properties. To the west is Burnley Road East fronted by residential properties. There are also some older industrial buildings next to the western edge of the site.	Aesthetics & visual character; Recreation; Green travel route; Shading from the sun; Carbon storage; Trapping air pollutants; Habitat for wildlife; Water interception; and Water infiltration.	The wooded part of the site delivers 9 functions. The grassland area delivers 3 functions. Local challenges: High risk of fluvial flooding in Whitewell Brook valley bottom. High risk of surface water flooding along Burnley Road East corridor. Opportunities for enhancement: Extend woodland to include the area of grassland to extend functions delivered. This part of the site is particularly steep and unlikely to offer potential for recreation or development.



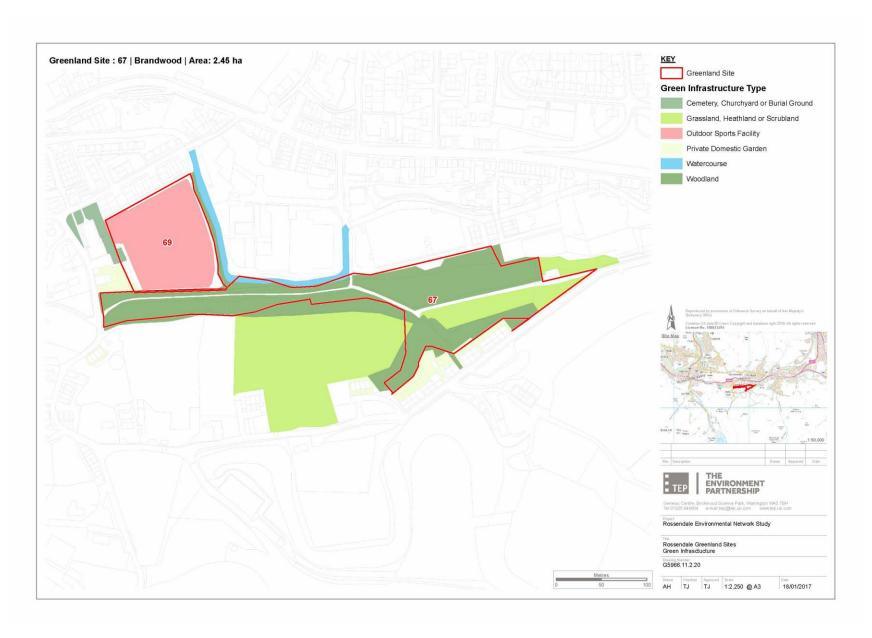


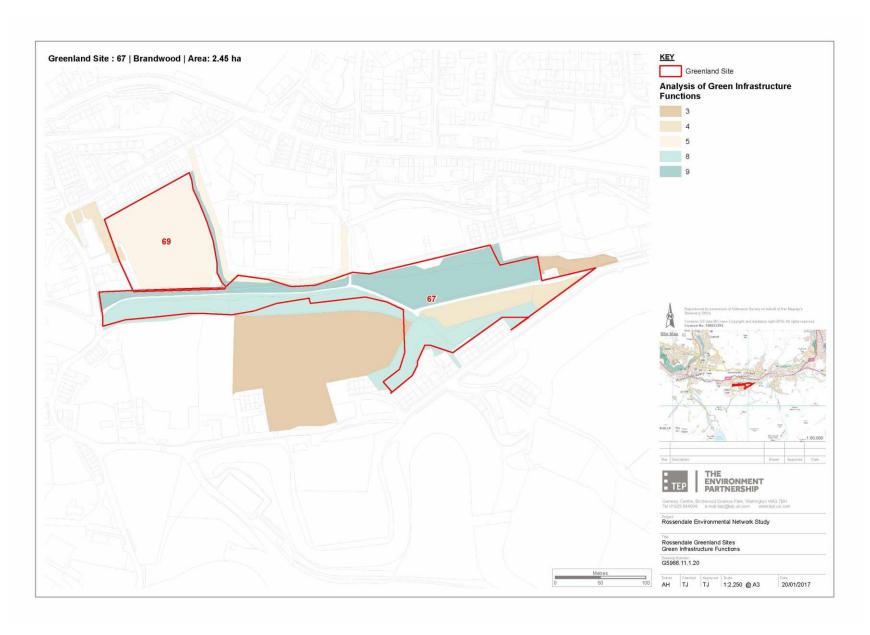
Site ref	Site name	Settlement	Area (ha)	Typology	Description	Functions	Area Analysis
63	Swiss Clough & Booth Fold	Waterfoot	2.35ha	Allotment, community garden or urban farm; Grassland; and Woodland.	The site forms a section of hillside to the east of the centre of Waterfoot. The site has an irregular boundary and an interface with the boundaries of a number of residential plots. The main part of the site is occupied by woodland and the site slopes down from the east towards Todd Carr Road. The north western part of the site is occupied by some garages, small holdings and vegetable gardens. The south western part by is characterised by a grassed area with a number of trees. There is also an area of parking next to Todd Carr Road in the site. Next to the northern boundary is a footpath, with Edgeside Park beyond. To the east and south of the site there is a network of streets serving residential properties. To the west is Todd Carr Road that serves a number of light industrial units.	Aesthetics & visual character; Shading from the sun; Carbon storage; Trapping air pollutants; Habitat for wildlife; Water interception; and Water infiltration.	The wooded part of the site delivers 7 functions. The other parts of the site deliver 3 or 4 functions. Local challenges: High risk of fluvial flooding in Whitewell Brook valley bottom. High risk of surface water flooding along Burnley Road East corridor. Opportunities for enhancement: The south western corner of the site is grassed with some trees. With some increased tree planting the GI function delivered could extend to 7.





Site ref	Site name	Settlement	Area (ha)	Typology	Description	Functions	Analysis
67	Brandwood	Stacksteads	2.45ha	Grassland; and Woodland.	This is a linear site forming a section of a disused railway south of the centre of Stacksteads. There is a pedestrian route running through the middle of the site. (It is to form part of the Valley of Stone multi-user route). Along part of the northern edge of the site is the River Irwell. The main part of the site is wooded but at the eastern edge there is an area of grassland on rising ground to the south. There is a further wooded area to the southern edge. The linear nature of the site means that the northern and southern boundaries are much longer than the others. Along part of the northern boundary is the adjacent site 69. Further east next to the same boundary is an area of employment. Blackwood Road runs along the short eastern edge of the site. Along the southern edge are some residential properties fronting Blackwood Road. There is an area of grazing on rising ground southwards.	Aesthetics & visual character; Green travel route; Shading from the sun; Carbon storage; Trapping air pollutants; Habitat for wildlife; Water interception; and Water infiltration.	The wooded part of the site delivers 8 functions. The other parts of the site deliver 4 functions. Local challenges: High risk of fluvial flooding in Irwell valley bottom. The wooded part of the site provides an important water interception function and if removed could worsen the nearby fluvial water flood risk.



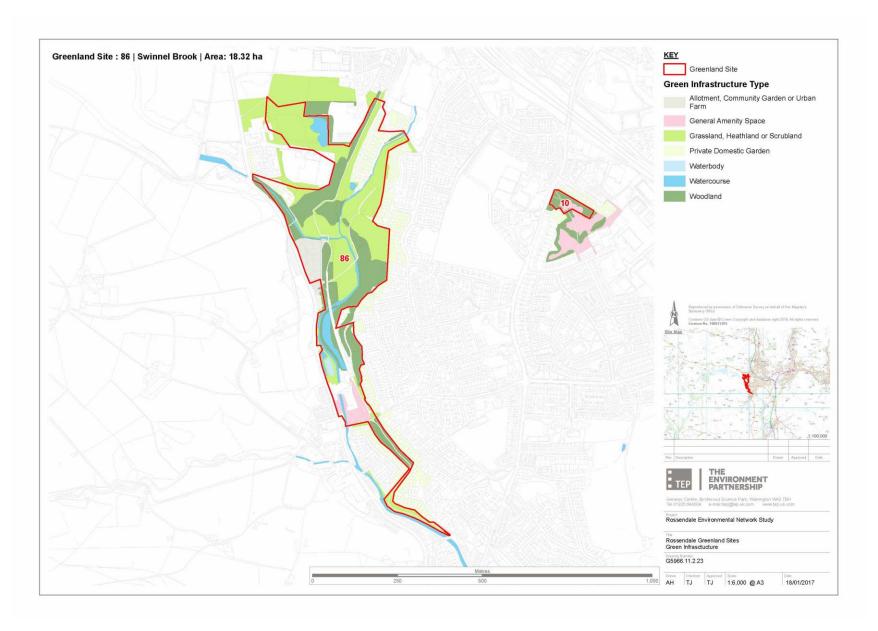


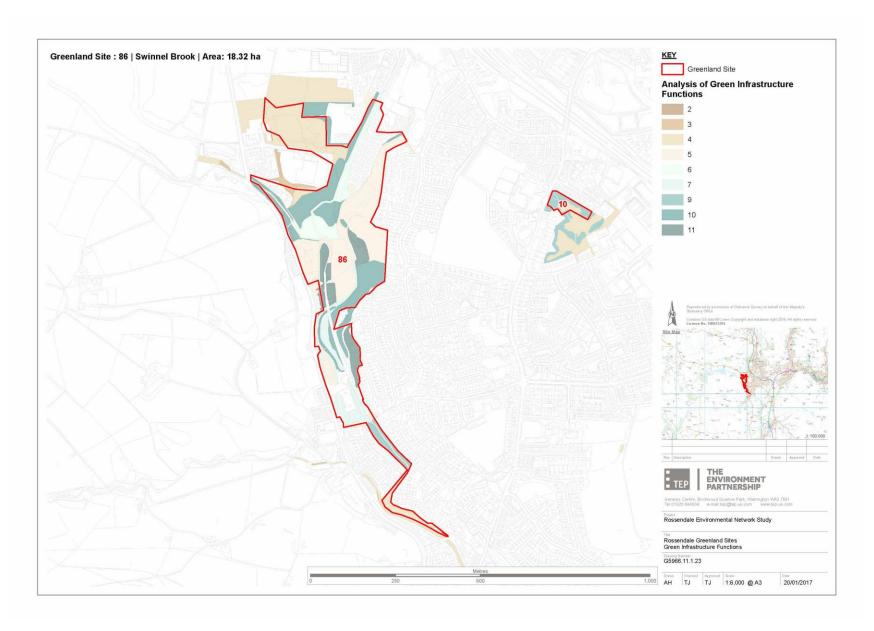
Site ref	Site name	Settlement	Area (ha)	Typology	Description	Functions	Analysis
69	Waterbarn Recreation Ground	Stacksteads	1.13ha	Outdoor sports facility.	The site appears to be a grassed playing pitch facility but appeared unkempt at the time of the site visit in Sept. '16. The site is on level ground and to the eastern boundary is the River Irwell with employment land beyond the River. Along the southern boundary is site 67 and to the west and north is residential development.	Aesthetics & visual character; Supporting heritage; Recreation; Green travel route; and Water infiltration.	The site delivers 5 functions. Local challenges: High risk of fluvial flooding in Irwell valley bottom. Opportunities for enhancement: Given the proximity of the River Irwell and accessibility to the main road network the site could be considered for a flood alleviation installation.



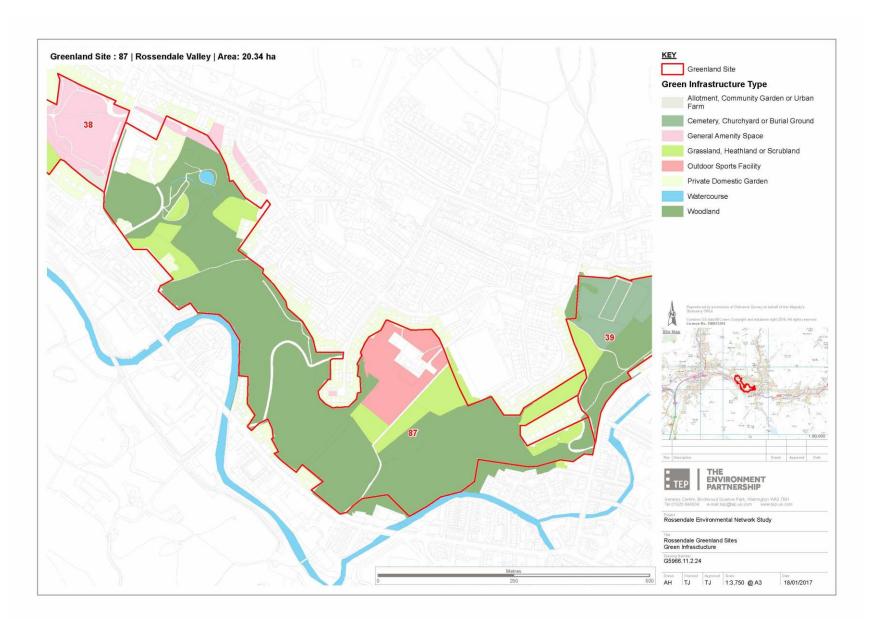


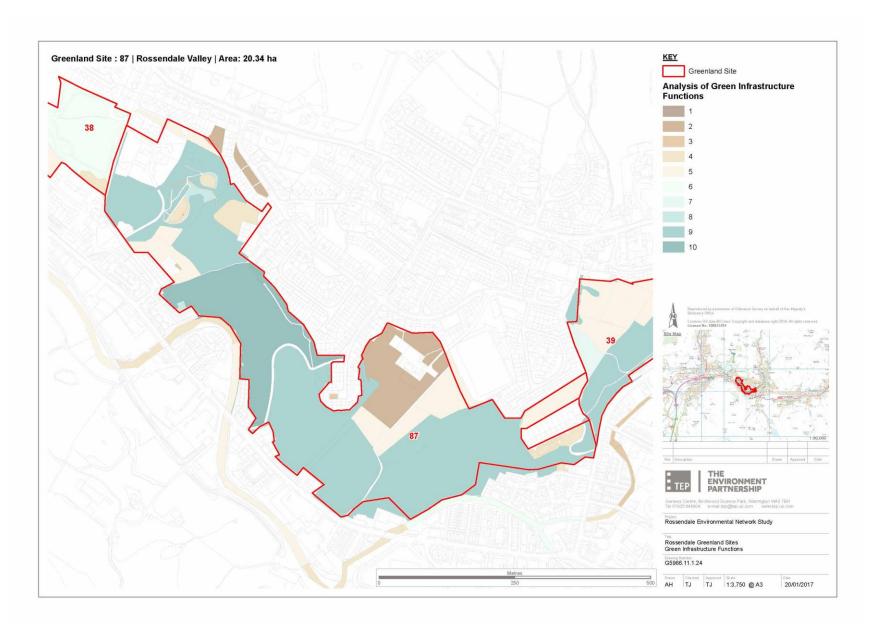
Site ref	Site name	Settlement	Area (ha)	Typology	Description	Functions	Analysis
86	Swinnel Brook	Haslingden	18.32ha	Allotment; General amenity space; Grassland and scrubland; Waterbody; and Woodland.	The site is at the south eastern edge of Haslingden and has a number of prominent features including a network of watercourses and ponds, the Helmshore Mill Textile Museum and the route of a disused railway. There is also a network of wooded and grassed areas forming an informal park character and an off-road cycle route that passes through in a north to south direction. There is an allotment next to part of the western boundary and an area of semi-permanent homes to the north eastern part of the site. At the northern edge of the site there is a pond and immediately to the west there is a car park serving an adjacent warehouse facility on Kingsway in the site. (contrary to the GI typology map) To the north, east and south of the site there is a mix of residential and employment development. To the west there is a rural area rising up towards Haslingden Moor.	Aesthetics & visual character; Supporting heritage; Recreation; Green travel route; Shading from the sun; Carbon storage; Trapping air pollutants; Habitat for wildlife; Connectivity for wildlife; Water interception; and Water infiltration.	Parts of the wooded areas deliver 11 functions, with others of the same type delivering 9 or 10 functions. The grassland areas and allotments deliver 3-5 functions. Local challenges: Risk of fluvial flooding to the site. Opportunities for enhancement: Some of the grassland areas have some emerging trees and if managed appropriately over 5-10 years the number of functions would match the wooded areas.





Site ref	Site name	Settlement	Area (ha)	Typology	Description	Functions	Area Analysis
87	Rossendale Valley	Waterfoot	20.34ha	Grassland, heathland or scrubland; Outdoor sports facility; Waterbody; Watercourse; and Woodland.	This linear site is west of Waterfoot and occupies steeply sloping ground. Much of the site is wooded but there are a number of small grassed areas near to the edges of the site. There is also a pond and stream near to the northern edge of the site. In the north western corner of the site is a small gated residential development. Newchurch Saint Nicholas Primary in the eastern part of the site has a grassed playground. The area to the north is mainly a residential, while to the east is the adjacent site 39. Next to the southern boundary is various development associated with the A681 corridor. The western boundary is defined by Hareholme Lane with site 38 beyond. There are a network of PRoW and informal footpaths that link the residential area on higher ground to the north with the A681 corridor to the south.	Aesthetics & visual character; Supporting heritage; Green travel route; Shading from the sun; Carbon storage; Trapping air pollutants; Habitat for wildlife; Connectivity for wildlife; Water interception; and Water infiltration.	The wooded areas deliver between 8 and 10 functions. The small grassland areas deliver 5 functions and the school grounds deliver 2 functions. Local challenges: High and low risk of fluvial flooding in Irwell valley bottom. The extensive wooded parts of the site provide an important water interception function and if removed could worsen the nearby fluvial water flood risk.





Summary of the Assessment

2.1 The table below provides a summary of the assessment.

Page no.	Site ref.	Site name	Settlement	Area (hectares)	GI Type	Number of GI Functions
	8	Park Avenue/ Criccieth Close, Haslingden	Haslingden	1.26	General amenity space; and Waterbody	4
					Woodland; and General Amenity Space;	9 5
	10	Rear of Helmshore Road	Haslingden	0.49		
	18	Laburnum Cottages, Goodshaw Chapel	Crawshawbooth	0.83	Grassland, heathland or scrubland	4
	20	Land to the north of Adelaide Street	Crawshawbooth	3.53	Woodland; and Grassland, heathland or scrubland.	8-9 5
	32	Fallbarn Crescent, Longholme	Rawtenstall	5.94	Woodland; Grassland, heathland or scrubland	8-10 2-5
	33	Playing field off Cherry Tree Lane	Rawtenstall	1.19	General amenity space	5
	34	Lower Clowes, Townsendfold	Rawtenstall	2.03	Woodland; Grassland, heathland or scrubland; Allotment, community garden or urban farm.	8 6 3
	36	Playing Field to the rear of houses on Bacup Road	Rawtenstall	1.13	General amenity space	5
	37	Lower Cloughfold	Rawtenstall	6.26	Woodland; Grassland, heathland or scrubland; Allotment or community garden.	9-11 7 4
	-				General amenity space; Grassland, heathland or scrubland; and Woodland.	6 5 9
	38	Playing Field Cloughfold	Rawtenstall	3.33		
	39	Tricketts Memorial Gardens		3.95	Cemetery;	9 & 5

				General amenity area;	3
		Waterfoot		Grassland, heathland or scrubland; and	7
		vvaterioot		Woodland.	9
				Grassland, heathland or scrubland;	5-6
				Outdoor sports facility; and	4-6
				Woodland.	9-10
41	Marl Pits Sports Complex	Rawtenstall	21.12		
		_		General amenity space	4
48	Land south of Greave Clough Drive	Bacup	0.72		
				Allotment, community garden;	2
				Grassland, heathland or scrubland;	4
		Bacup		and	10
49	Land east of Rochdale Road, Bacup		6.29	Woodland.	
				Grassland, heathland or scrubland;	5
				Outdoor sports facility.	
50	Land south of St Mary's Primary School, Bacup	Bacup	3.90		2
				Agricultural land;	3-4
				Park or public garden;	
				Private domestic garden; and	
51	Huttock Top, Bacup	Bacup	10.48	Woodland	8-11
				Grassland, heathland or scrubland;	6
				Woodland.	9
52	Land north of Osborne Terrace	Bacup	4.63		
				Grassland, heathland & scrubland;	4
				Woodland.	9
59	Land off Taylor Avenue, Waterfoot	Waterfoot	2.39		
				Grassland; and	3
60	Land south of Wales Road, Waterfoot	Waterfoot	1.26	Woodland.	9
				Allotment, community garden or urban	3-4
				farm;	
				Grassland; and	
63	Swiss Clough and Booth Fold, Waterfoot	Waterfoot	2.35	Woodland.	7
0.7	Describer of	Otaaliataada	0.45	Grassland; and	4
67	Brandwood	Stacksteads	2.45	Woodland.	8
69	Waterbarn Recreation Ground	Stacksteads	1.13	Outdoor sports facility.	5
0.0			40.00	Allotment;	3-5
86	Swinnel Brook		18.32	General amenity space;	

				Grassland and scrubland; Waterbody; and	
		Haslingden		Woodland.	9-11
				Grassland, heathland or scrubland;	5
				Outdoor sports facility;	
				Waterbody;	2
				Watercourse; and	
87	Rossendale Valley	Waterfoot	20.34	Woodland.	8-10

- 2.2 The 24 Greenlands sites assessed are located in or to the edge of the following settlements:
 - Bacup (5 sites);
 - Stacksteads (2 sites);
 - Waterfoot (5 sites);
 - Rawtenstall (7 sites);
 - · Crawshawbooth (2 sites); and
 - Haslingden (3 sites).
- A majority of the sites (14) are predominantly covered by woodland on steeply sided lower slopes leading to valley bottoms. These wooded slopes are a distinctive characteristic of Rossendale and this is highlighted in the context and background section of the Core Strategy (2011-2026).
- 2.4 The 24 Greenlands sites were assessed for their environmental value and the number of GI functions. 10 of the sites were characterised by one type of GI (eg. Woodland). The remaining 14 sites were characterised by more than one GI type.
- 2.5 The findings of the six sites characterised by one GI type were:
 - Three sites delivered 5-7 functions; and
 - Three sites delivered 1-4 functions.
- 2.6 The findings of the remaining 18 sites were:
 - Four sites delivered 8-11 functions and 5-7 functions;
 - Three sites delivered 5-7 functions and 1-4 functions;
 - Six sites delivered 8-11 functions and 1-4 functions; and

- Five sites delivered the range of 8-11 functions, 5-7 functions and 1-4 functions.
- 2.7 The assessment identified woodland as the type with the highest environmental value delivering 7 or more GI functions.
- 2.8 Other common types of GI were: grassland, heathland or scrubland and general amenity space they tended to deliver between 2 6 functions.
- 2.9 Less common types of GI were; agricultural land, outdoor sports facilities, allotments and community gardens and cemeteries also delivered between 2 6 functions.
- 2.10 A number of non-wooded sites (or part non-wooded sites) have potential for woodland planting to increase environmental value and the number of GI functions delivered would help address wider challenges such as fluvial or surface water flood risk.

Recommendations

- 2.11 The assessment confirms that wooded sites have a higher environmental value and a greater number of GI functions delivered and contribution to the wider environmental network.
- 2.12 Where there are local challenges such as fluvial or surface water flood risk, opportunities for planting non-wooded areas with trees should be considered to help address those challenges.
- 2.13 Sites that serve a specific purpose such as outdoor sports facilities, allotments and community gardens and cemeteries should be retained subject to confirmation by the Council they meet local needs, including community cohesion, health and wellbeing and education.
- 2.14 The site survey confirmed that the condition of sites varied, with some areas of vegetation and footpaths in poor condition and some sites suffering from inadequate management. A fuller condition survey of the Greenlands sites with recommendations for management would be subject to further study outside this commission.
- 2.15 The assessment has highlighted some sites of lesser environmental value as they deliver a more limited number of GI functions. These sites could be considered for release for development. A preliminary list of these sites is outlined below:
 - Site 8 Park Avenue/Criccieth Close, Haslingden;
 - Site 18 Laburnum Cottages, Goodshaw Chapel, Crawshawbooth;
 - Site 33 Playing field off Cherry Tree Lane, Rawtenstall;

- Site 36 Playing Field to the rear of houses on Bacup Road, Rawtenstall;
- Site 38 Playing Field, Cloughfold, Rawtenstall;
- Site 48 Land south of Greave Clough Drive, Bacup; and
- Site 50 Land south of St Mary's Primary School, Bacup
- Site 67 Waterbarn
- 2.16 However, the recommendations would need to be tested against the need for people to access green space in the local area.
- 2.17 Any development proposals would need to include a masterplan to demonstrate how the site layout could include measures to contribute to the functions relevant to the site listed at paragraph 1.9.
- 2.18 The assessment also highlighted a number of sites that were characterised by more than one type of GI. As an example this could result in part of a site delivering 8-11 functions, another part delivering 5-7 functions and a third part delivering 1-4 functions.
- 2.19 In these situations, part of a site could be considered for release from development. A preliminary list of these sites is outlined below:
 - Site 32 Fallbarn Crescent, Longholme
 - Site 49 Land east of Rochdale Road, Bacup
 - Site 51 Huttock Top, Bacup
 - Site 60 Land off Wales Road, Waterfoot
 - Site 69 Brandwood
- 2.20 However, a further constraints assessment would be required for these sites to ensure that the parts of the site to be retained as the Greenlands designation would be adequately protected from any proposed development.