

Greater Manchester Transport Strategy and Delivery Plan 1 (2016/17- 2021/22)

Habitats Regulations Assessment – Stage 1
Screening Report

Transport for Greater Manchester

June 2016

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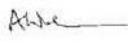
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1. Introduction

1.1. Background to this Assessment

Atkins Limited (Atkins) has been commissioned by Transport for Greater Manchester (TfGM) to undertake a Habitats Regulations Assessment (HRA) Stage 1 Screening of the Greater Manchester Transport Strategy 2040 (GMTS 2040).

This information has been gathered on behalf of TfGM to allow them to make a decision on whether there will be any likely significant effects on European sites as a result of the GMTS 2040, and therefore if an appropriate assessment is required.

1.2. Background to the Greater Manchester Transport Strategy and Delivery Plans

Transport for Greater Manchester (TfGM) has prepared a new long-term transport strategy for Greater Manchester on behalf of GMCA to replace the Local Transport Plan 3 (LTP3)¹, and to support the delivery of the Greater Manchester Strategy² and the emerging Greater Manchester Spatial Framework³.

The first stage in the process involved the preparation by TfGM of a “Vision” document, “*Greater Manchester Transport Strategy 2040: Our Vision*” (*Our 2040 Vision*) which completed a 12-week public consultation period on 9th October 2015. *Our 2040 Vision* helped to inform a draft Greater Manchester 2040 Transport Strategy dated January 2016, which was developed by TfGM in consultation with the ten District Councils listed below and approved by GMCA and the Interim Greater Manchester Mayor:

- Bolton Metropolitan Borough Council;
- Bury Metropolitan Borough Council;
- Manchester City Council;
- Oldham Metropolitan Borough Council;
- Rochdale Metropolitan Borough Council;
- Salford City Council;
- Stockport Metropolitan Borough Council;
- Tameside Metropolitan Borough Council;
- Trafford Metropolitan Borough Council; and
- Wigan Metropolitan Borough Council.

A pre-consultation draft of the GMTS 2040 was finalised in June 2016, which considers development in the Greater Manchester region during the period 2016 to 2040. GMTS 2040 is a high-level strategic document which identifies the strategic principles for delivering a more customer focussed transport system and five ‘spatial themes’ used to highlight the broad interventions⁴ that need to be put in place in order to deliver the goals set out in *Our 2040 Vision*. It highlights the steps that need to be taken to address the following key challenges outlined in *Our 2040 Vision*:

- supporting sustainable economic growth;

¹ http://www.tfgm.com/journey_planning/LTP3/Documents/LTP3_Summary_060511.pdf

² <https://www.greatermanchester-ca.gov.uk/gmsf>

³ In development at the time this report was produced.

⁴ Defined as a combination of strategies or elements that will be put in place to enable the delivery of the GMTS 2040.

- developing an innovative city-region;
- protecting our environment; and
- improving quality of life for all.

The strategy will need to be refreshed on a regular basis to reflect new challenges and opportunities in the Greater Manchester region, in particularly to ensure that the appropriate transport infrastructure is in place to support future economic growth in Greater Manchester, and to be flexible enough to enable new development identified in the developing Greater Manchester Spatial Framework. This flexibility will be achieved through a series of five-year Delivery Plans (DPs) that will accompany the GMTS 2040. The DPs will be updated annually to monitor and evaluate the progress made in delivering the Strategy and reflect any changes required.

Together with the strategy, TfGM have identified in the DP for 2016/17 – 2021/22 schemes for delivery over this first five year period. Together, the GMTS 2040 and DP's will constitute Greater Manchester's Fourth Local Transport Plan.

1.3. Background to Habitats Regulations Assessment

HRA is required under Article 6 of the Habitats Directive⁵ and Regulation 61 of the Conservation of Habitats and Species 2010 (as amended) (the Habitats Regulations), for all plans and projects which may have likely significant effects on a European site (either alone or in combination with other plans or projects) and are not directly connected with, or necessary to, the management of the site.

European sites include Special Areas of Conservation (SAC) and Special Protection Areas (SPA). HRA is also required, as a matter of UK Government policy for potential SPAs (pSPA), candidate SACs (cSAC), Wetlands of European importance (Ramsar sites), and proposed Ramsar sites (pRamsar) for the purposes of considering plans and projects, which may affect them⁶.

There are four stages to the HRA process. These are summarised below:

- Stage 1 – Screening: To test whether a plan or project either alone or in combination with other plans and projects is likely to have a significant effect⁷ on an European site;
- Stage 2 – Appropriate Assessment: To determine whether, in view of a European site's conservation objectives, the plan (either alone or in combination with other projects and plans) would have an adverse effect on the integrity of the site with respect to the site structure, function and conservation objectives. If adverse impacts are anticipated, potential mitigation measures to alleviate impacts should be proposed and assessed;
- Stage 3 – Assessment of alternative solutions: Where a plan is assessed as having an adverse impact (or risk of this) on the integrity of an European site, there should be an examination of alternatives (e.g. alternative locations and designs of development); and
- Stage 4 – Assessment: In exceptional circumstance where no alternative solutions remain and where adverse impacts remain (e.g. where there are imperative reasons of overriding public interest). Compensatory measures would usually be required to offset negative impacts.

This report comprises Stage 1 - Screening and assesses the GMTS 2040 and any specific components that could lead to development and/or increased use of specific parts of the transport network by vehicles or passengers with respect to their potential to generate likely significant effects on sites of European importance. Both vehicles and passengers can lead to significant effects on European I sites, either directly,

⁵ Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (the Habitats Directive)

⁶ *National Planning Policy Framework*. Department for Communities and Local Government. March 2012.

⁷ Likely significant effect is any effect that may reasonably be predicted as a consequence of a plan or project that may affect the conservation objectives of the features for which the site was designated. If any plan or project causes the cited interest features of a site to fall into unfavourable condition they can be considered to have a likely significant effect on the site.

for example, by increasing air pollution from vehicle emissions or indirectly, for example through disturbance caused by increased recreational use of European sites when access is improved.

The results of this screening stage (Stage 1) will be used to establish whether a full appropriate assessment is needed (Stage 2) due to likely significant effects on a European site. This conclusion would need to be agreed with Natural England.

1.4. Outline of this Report

Following this introduction:

- Section 2 of this report sets out the methodology used for the Stage 1 - Screening;
- Section 3 provides details relating to the European sites (including the conservation objectives and site sensitivities);
- Section 4 outlines the details of the GMTS 2040;
- Section 5 details the results of Stage 1 - Screening for the European sites;
- Section 6 details the other plans and projects identified which may lead to in combination effects on the European sites; and
- Section 7 provides the conclusions of the Stage 1 – Screening assessment.

2. Methodology

2.1. Initial Review

Prior to the Stage 1 - Screening, Atkins completed a Scoping Information Review⁸ of *Our 2040 Vision* in relation to identifying Key Sustainability Issues and the Implications/Opportunities of these issues for the draft GMTS dated January 2016. This was not part of the formal HRA process but allowed initial advice to be provided to TfGM in relation to the sensitivities of the European sites and how to avoid significant effects upon them.

2.2. Gathering Information on the draft Greater Manchester Transport Strategy (draft GMTS)

The first step of the HRA process was to gather all available information regarding the GMTS 2040 and associated Delivery Plan (DP) 1. This information was required for the analysis of the GMTS 2040 and DP 1 potential impacts on European sites. A summary of the contents of GMTS 2040 and DP1 is provided in Section 4.

2.3. Identification of Relevant European Sites

The next step was to review which European sites should be included in the HRA. The initial review of the GMTS 2040 looked at the geographic extent or zone of influence of any impacts which could arise as a result of the GMTS 2040, and considered which European sites should be included within the assessment.

As a starting point, all European sites within the Greater Manchester region (including the Districts of Manchester, Trafford, Stockport, Tameside, Oldham, Rochdale, Bury, Bolton, Wigan, and Salford) and up to 20 km from the nearest District boundary were identified⁹. Within this zone of influence, eleven European important sites for nature conservation were considered for inclusion within the assessment. The European sites consist of five located within the Greater Manchester region and a further six located within 20 km of the nearest district boundary. The eleven European sites are listed below:

- Peak District Moors South Pennine Moors (Phase 1) SPA, located within Oldham, Rochdale and Tameside;
- South Pennine Moors SAC, located within Oldham, Rochdale and Tameside;
- South Pennine Moors (Phase 2) SPA, located within Oldham and Rochdale;
- Rochdale Canal SAC, located within Oldham and Rochdale;
- Manchester Mosses SAC, located within Wigan;
- Rostherne Mere Ramsar Site, located approximately 1 km from Trafford;
- Rixton Clay Pits SAC, located approximately 1.6 km from Salford;
- Midland Meres and Mosses Phase 1 Ramsar Site, located approximately 4 km from Trafford;
- Martin Mere SPA and Ramsar, located approximately 11 km from Wigan;
- Ribble and Alt Estuaries SPA, located approximately 16.5 km from Wigan; and

⁸ Atkins, 2015. Technical Note: Key Sustainability Issues.

⁹ The most recent England Leisure Visits report states that people will travel up to 17.3 km to a countryside destination (England Leisure Visits: Summary of the 2005 Leisure Visits Survey, Natural England, 2005). As a precaution, an additional margin is added to this distance to ensure that all sites that may be impacted by a new development are considered as part of the HRA process.

- Mersey Estuary SPA and Ramsar Site, located 18.3km from Trafford.

There are no cSACs, pSPAs or pRamsar sites present within the 20km zone of influence.

Our 2040 Vision for Greater Manchester is to have ‘world class connections that support long-term, sustainable economic growth and access to opportunity for all’. The high-level strategic components of the GMTS 2040 focus on how to support the local economy, improve connections, support new development and regeneration, and reduce vehicle emissions. The proposals for improving the transport network are largely comprised of providing better links outside of the Greater Manchester region, to ports, airports and the Channel Tunnel to improve overseas trade and tourism connectivity, alongside transformed links to other UK cities to deliver crucial access to markets for labour and goods. In the Greater Manchester region, there is a focus on specific transport needs and improvements to ensure long-term economic and residential growth, and more localised access improvements to the town centre and employment locations.

This HRA is a record of the assessment of ‘likely significant effects’ from the GMTS 2040 on the eleven European sites listed above. Further details on these European sites, including their location, reason for designation, and conservation objectives are provided in Section 3.

2.4. Obtaining Information on the European Sites with the Potential to be Affected

Information on all European sites was obtained from the Joint Nature Conservation Committee (JNCC) website¹⁰ and the conservation objectives and favourable conditions tables were obtained from the Natural England website¹¹ for the purpose of this assessment.

2.5. Obtaining Information on Other Plans and Projects

In accordance with the Habitat Regulations there is a need to consider the potential for likely significant effects of the GMTS 2040 ‘in combination’ with other projects and plans.

Statutory bodies surrounding, or in close proximity to the European sites were contacted for details of any projects or plans that have been subject to HRA, in order to determine if there is a cumulative impact on these European sites.

The following authorities and statutory bodies were contacted for details of other plans and projects, which have been subject to HRA and have potential to adversely impact the European sites included within this assessment:

- Bolton Metropolitan Borough Council;
- Bury Metropolitan Borough Council;
- Cheshire East Council;
- Manchester City Council;
- Oldham Metropolitan Borough Council;
- Rochdale Metropolitan Borough Council;
- Salford City Council;
- Stockport Metropolitan Borough Council;
- Tameside Metropolitan Borough Council;

¹⁰ <http://jncc.defra.gov.uk>

¹¹ <https://www.gov.uk/government/organisations/natural-england>

- Trafford Metropolitan Borough Council;
- Wigan Metropolitan Borough Council; and
- Warrington Borough Council.

The Highways England (HE) website¹² was also searched for information about HE road schemes that could potentially result in 'in combination' effects with the GMTS 2040. Road projects within the north-east region were identified from the website where information about the status of the project is given and a contact detail for each scheme is listed.

2.6. Assessing the Impacts of the Plan 'Alone' and 'In-Combination'

Following the gathering of information on the GMTS 2040 and the European sites, an assessment was undertaken to predict the likely significant effects of the GMTS 2040 on the European sites 'alone'. In order to inform this process, all principles, spatial themes, and interventions in the GMTS 2040 were assessed to see if they could result in likely significant effects on the European sites. Table A-1 in Appendix A examines the qualifying features and sensitivities of the eleven European sites identified above, and assesses what aspects of the GMTS 2040 may have potential to affect these European sites, and whether there will be any likely significant effects.

Each of the principles, spatial themes and accompanying interventions (interventions which may lead to new infrastructure, improved access across the region or new development) have been examined in detail to see if the GMTS 2040 could have a likely significant effect on the integrity of the European sites. However, as the GMTS 2040 is at a strategic level (i.e. the new infrastructure, extent of improvements to existing transport links, associated development that may arise as a result these interventions is unknown at this stage), the HRA has also been undertaken at a strategic level. A summary of the spatial themes and accompanying interventions, as well as the findings of this assessment, are provided in Appendix A; Table A-1. Section 5 of this report summarise the findings of the HRA in relation to the European sites.

The potential for likely significant effects of the project on these sites 'in combination' with other projects and plans has also been considered in this HRA. Although impacts from an individual project or plan may have no likely significant effect on a European site, cumulative impacts from other plans and projects may result in an 'in combination' effect on one or more interest features of the European site. Likely significant effects by these means must also be considered. Details of plans and projects that have had HRAs completed due to their potential to impact upon the eleven European sites included within this assessment were reviewed, in order to determine whether there is potential for 'in combination effects' (see Section 6).

Likely significant effects were assessed with reference to the conservation objectives of the qualifying features (interest feature) of the European sites. Any plan or project that may cause the cited interest features of a site to fall into unfavourable condition can be considered to have a likely significant effect on the site. Stage 1 – Screening of the HRA process does not assess the effects of a plan or project on the integrity of European sites (this forms Stage 2 of the HRA process). However, the definition of a site's integrity provided below has been taken into account during the assessment of likely significant effects:

“...the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified.”¹³

Plans or projects can lead to significant effects on a European site by:

- causing delays in progress towards achieving the conservation objectives of the site;
- interrupting progress towards achieving the conservation objectives of the site;

¹² <http://www.highways.gov.uk/roads>

¹³ Part I, Section B, Paragraph 20 of ODPM Circular 06/2005 accompanying Planning Policy Statement 9: Biodiversity and Geological Conservation.

- disrupting those factors that help to maintain the favourable conditions of the site; and
- interfering with the balance, distribution and density of key species that are the indicators of the favourable condition of the site.

HRA is an iterative process. Where necessary, suggestions can be made of how to amend the Strategy to avoid likely significant effects on a European site. This iterative approach has been adopted as part of this assessment and recommendations that were submitted to TfGM have been included in the GMTS 2040.

2.7. Consultation with Natural England

Natural England have been consulted on the scope of the European sites included in this assessment, and are satisfied with the approach to the assessment described in this methodology (by email from Janet Baguley dated 27th January 2016, refer to Appendix C for Consultation Response).

3. The European Sites

3.1. Peak District Moors (South Pennine Moors Phase 1) SPA

Table 3-1 below provides information about the Peak District Moors (South Pennine Moors Phase 1) SPA, its designation status and location in relation to the project boundary, a brief description, its conservation objectives, and its sensitivities¹⁴.

Table 3-1 Information about the Peak District Moors (South Pennine Moors Phase 1) SPA

Location	<p>The SPA encompasses the same area as South Pennine Moors SAC, and includes the major moorland blocks of the South Pennines from Ilkley in the north to Leek and Matlock in the south.</p> <p>In relation to Greater Manchester, the SPA is located in the districts of Oldham, Rochdale and Tameside.</p>
Brief Description	<p>Peak District Moors (South Pennine Moors Phase 1) SPA is designated for supporting populations of European importance that are listed on Annex I of the Habitats Directive. During the breeding season, these are: golden plover, 752 pairs representing at least 3.3% of the breeding population in Great Britain (Count as at 1990); merlin, 77 pairs representing at least 5.9% of the breeding population in Great Britain; peregrine, 16 pairs representing at least 1.4% of the breeding population in Great Britain; and short-eared owl, 25 pairs representing at least 2.5% of the breeding population in Great Britain.</p> <p>This site also qualifies under Article 4.2 of the Habitats Directive by supporting populations of European importance of the following migratory species: during the breeding season; dunlin, 140 pairs representing at least 1.3% of the breeding Baltic/UK/Ireland population.</p>
Conservation Objectives	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:</p> <ul style="list-style-type: none"> • the extent and distribution of the habitats of the qualifying features; • the structure and function of the habitats of the qualifying features; • the supporting processes on which the habitats of the qualifying features rely; • the population of each of the qualifying features, and • the distribution of the qualifying features within the site.
Vulnerabilities of the European Site	<p>The site is vulnerable for a number of reasons, including the threat of:</p> <ul style="list-style-type: none"> • Recreational pressure and disturbance: Major urban and industrial centres near to the Peak District Moors provide significant visitor pressure and approximately two-thirds of the moorlands are open to public access. Habitat damage through physical erosion or fire, combined with disturbance of breeding birds, can be significant; • Land management: Many habitats are sub-optimal (in vegetation terms) as a consequence of high grazing pressure and wildfire burns. Evidence suggests that breeding birds in the south-west of the area may be declining on both open moorland and enclosed rough grazing land, possibly due to general agricultural improvement of the surrounding areas that are used by some species for some of their habitat requirements e.g. golden plovers feed on land off the moor; and • Atmospheric pollution: Many habitats are sub-optimal (in vegetation terms) as a consequence of historic air pollution.

¹⁴ Conservation Objectives and Sensitivities have been taken from *Information on Natura 2000 Sites in the West Midlands* prepared for Natural England by Treweek Environmental Consultants (Version 2, dated 14/07/09)

3.2. South Pennine Moors SAC

Table 3-2 below provides information about the South Pennine Moors SAC, its designation status and location in relation to the project boundary, a brief description, its conservation objectives, and its sensitivities¹⁴.

Table 3-2 Information about the South Pennine Moors SAC

Location	<p>The SAC is located in eight regions, to the north-west/west of Bradford, extending south between Huddersfield and Manchester, west of Sheffield towards Matlock, and east of Macclesfield.</p> <p>In relation to Greater Manchester, the SAC is located in the districts of Oldham, Rochdale and Tameside.</p>
Brief Description	<p>South Pennine Moors SAC is designated for the Annex I habitats: European dry heaths, blanket bogs, and old sessile oak woods.</p> <p>The site is representative of upland dry heath at the southern end of the Pennine range, the habitat's most south-easterly upland location in the UK. Dry heath covers extensive areas, occupying the lower slopes of the moors on mineral soils or where peat is thin, and occurs in transitions to acid grassland, wet heath and blanket bog. Blanket bogs in the south Pennines are the most south-easterly occurrence of the habitat in Europe. Around the fringes of the upland heath and bog of the south Pennines are blocks of old sessile oak woods, usually on slopes.</p> <p>The moors support a rich invertebrate fauna, especially moths, and important bird assemblages.</p>
Conservation Objectives	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:</p> <ul style="list-style-type: none"> • the extent and distribution of the qualifying natural habitats; • the structure and function (including typical species) of the qualifying natural habitats; and • the supporting processes on which the qualifying natural habitats rely.
Vulnerabilities of the European Site	<p>The site is vulnerable for a number of reasons, including the threat of:</p> <ul style="list-style-type: none"> • Recreational pressure and disturbance: The South Pennine Moors SAC is largely enclosed on two sides by large industrial urban areas, which means that large numbers of people use the area for recreational activities. Around two-thirds is within the Peak District National Park and access management is a key issue within this area. Accidental fires can cause extensive damage to vegetation; • Land management: Maintenance of the ecosystems relies primarily on appropriate grazing levels and burning regimes. There are a number of key pressures upon the site; these include overgrazing by sheep, burning as a tool for grouse moor management and inappropriate drainage through moor-gripping. Remaining woods are often unfenced and open to grazing which restricts tree regeneration; • Atmospheric pollution: Over the last few hundred years, atmospheric pollution has depleted the lichen and bryophyte flora and may be affecting dwarf-shrubs. The impact has arguably been greatest on blanket bog, wet heath and transition mire where the bog-building <i>Sphagnum</i> mosses have been largely lost. The quality of flora within woodlands quality, as with bog and heath, has suffered from poor air quality; and • Invasive species: In some remaining woods, <i>Rhododendron</i> has invaded, choking out native flora.

3.3. South Pennine Moors Phase 2 SPA

Table 3-43 below provides information about the South Pennine Moors Phase 2 SPA, its designation status and location in relation to the project boundary, a brief description, its conservation objectives, and its sensitivities¹⁴.

Table 3-3 Information about the South Pennine Moors Phase 2 SPA

Location	<p>The SPA encompasses the same area as South Pennine Moors SAC, and includes the major moorland blocks of the South Pennines from Ilkley in the north to Leek and Matlock in the south.</p> <p>In relation to Greater Manchester, the SPA is located in the Districts of Oldham and Rochdale.</p>
Brief Description	<p>South Pennine Moors Phase 2 SPA is designated for supporting populations of European importance that are listed on Annex I of the Habitats Directive. During the breeding season; the most recent count is: 28 pairs of merlin (4.3% of the British breeding population); and 292 pairs of golden plover (1.2%).</p> <p>This site also qualifies under Article 4.2 of the Habitats Directive by supporting populations of European importance of the following migratory species during the breeding season; golden plover, lapwing, snipe, curlew, redshank, sandpiper, short-eared owl, whinchat, wheatear, ring ouzel, twite, and dunlin.</p>
Conservation Objectives	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:</p> <ul style="list-style-type: none"> • the extent and distribution of the habitats of the qualifying features; • the structure and function of the habitats of the qualifying features; • the supporting processes on which the habitats of the qualifying features rely • the population of each of the qualifying features; and • the distribution of the qualifying features within the site.
Vulnerabilities of the European Site	<p>The site is vulnerable for a number of reasons, including the threat of:</p> <ul style="list-style-type: none"> • Recreational pressure and disturbance: The South Pennine Moors Phase 2 SPA is flanked on two sides by large industrial urban areas, which means that large numbers of people use the area for recreational activities; and • Land management: Maintenance of the ecosystems on which the birds depend relies on appropriate grazing levels and burning regimes, and overgrazing by sheep is a key pressure on the site. Management of grazing is further complicated by the presence of a large number of commons within the SPA. Pressures outside the site, in particular the loss of bird feeding areas through agricultural intensification, increase the vulnerability of the bird populations.

3.4. Rochdale Canal SAC

Table 3-4 below provides information about the Rochdale Canal SAC, its designation status and location in relation to the project boundary, a brief description, its conservation objectives, and its sensitivities¹⁴.

Table 3-4 Information about the Rochdale Canal SAC

Location	<p>The SAC extends approximately 20 km from Littleborough to Failsworth in Greater Manchester.</p> <p>In relation to Greater Manchester, the SAC is located in the Districts of Oldham and Rochdale.</p>
Brief Description	<p>Rochdale Canal SAC is designated for supporting populations of European importance that are listed on Annex II of the Habitats Directive. A significant population of floating water-plantain is present in a botanically diverse aquatic plant community which also includes a wide range of pondweeds. The canal has predominantly mesotrophic water. This population of floating water-plantain is</p>

	representative of the formerly more widespread canal populations of north-west England.
Conservation Objectives	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:</p> <ul style="list-style-type: none"> • the extent and distribution of the habitats of qualifying species; • the structure and function of the habitats of qualifying species; • the supporting processes on which the habitats of qualifying species rely; • the populations of the qualifying species, and • the distribution of the qualifying species within the site.
Vulnerabilities of the European Site	<p>The site is vulnerable from the threat of:</p> <ul style="list-style-type: none"> • Future development: The canal is to be subject to a major restoration scheme to open it up for full navigation from Manchester to Yorkshire. English Nature is working together with partners to ensure the restoration is sensitively done in order to preserve the interest of the site. However, there are concerns about future boat movements as the possible impacts are not fully known at this stage.

3.5. Manchester Mosses SAC

Table 3-45 below provides information about the Manchester Mosses SAC, its designation status and location in relation to the project boundary, a brief description, its conservation objectives, and its sensitivities¹⁴.

Table 3-5 Information about the Manchester Mosses SAC

Location	In relation to Greater Manchester, the SAC is located in the district of Wigan.
Brief Description	<p>Manchester Mosses SAC is designated for supporting habitats of European importance that are listed on Annex I of the Habitats Directive (degraded raised bogs still capable of natural regeneration). Mossland formerly covered a very large part of low-lying Greater Manchester, Merseyside and southern Lancashire. While most has been converted to agriculture or lost to development, several examples have survived as degraded raised bog, such as Risley Moss, Astley & Bedford Mosses, and Holcroft Moss on the Mersey floodplain. Their surfaces are now elevated above surrounding land due to shrinkage of the surrounding tilled land, and all except Holcroft Moss have been cut for peat at some time in the past. While past drainage has resulted in dominant purple moor grass, bracken and birch, wetter pockets have enabled the peat-forming species to survive. Recent rehabilitation management on all three sites has caused these to spread.</p>
Conservation Objectives	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:</p> <ul style="list-style-type: none"> • the extent and distribution of qualifying natural habitats; • the structure and function (including typical species) of qualifying natural habitats, and • the supporting processes on which qualifying natural habitats rely.
Vulnerabilities of the European Site	<p>The site is vulnerable for a number of reasons, including the threat of:</p> <ul style="list-style-type: none"> • Land ownership/management: Manchester Mosses SAC consists of three sites (Risley Moss, Holcroft Moss and Astley and Bedford Mosses). Risley Moss is owned and managed by Warrington Borough Council, whilst Holcroft Moss is owned and managed by Cheshire Wildlife Trust. Both of these sites are undergoing restoration. Part of Astley and Bedford Mosses is owned and managed by Lancashire Wildlife Trust and is undergoing restoration, but the remainder (approximately 50%) is in private ownership. Management agreements or purchase of the land will be necessary for restoration on these areas. • Drainage: All three sites have suffered from drainage in the past and are affected

	<p>by continued, if reduced, drainage, particularly from boundary ditches. Agricultural land forms a significant part of the adjacent land on all three sites, which will have implications for restoration, particularly as re-wetting is one of the key requirements. Adjacent land will need to be taken into consideration and possibly placed under suitable management.</p> <ul style="list-style-type: none"> • Scrub invasion: All three sites are affected by scrub invasion, which is being controlled in some areas but will need further attention. • Land use: Impacts on groundwater will need to be investigated, such as water abstraction, mineral extraction and waste management (landfill). • Air pollution: The sites are located close to heavy industry (Greater Manchester, Merseyside). Air quality may therefore have an impact on <i>Sphagnum</i> regeneration and will need investigating.
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3.6. Rostherne Mere Ramsar Site

Table 3-46 below provides information about the Rostherne Mere Ramsar Site, its designation status and location in relation to the project boundary, a brief description, its conservation objectives, and its sensitivities¹⁴.

Table 3-6 Information about the Rostherne Mere Ramsar Site

Location	In relation to Greater Manchester, the Ramsar site is located approximately 1 km from the district of Trafford.
Brief Description	Part of a series of open water and peatland, including peat bog and marsh areas. Rostherne Mere is one of the deepest and largest of the meres of the Shropshire-Cheshire Plain. Vegetation consists of fringing reedbeds, wooded and agricultural land. Over winter the site supports nationally important numbers of shoveler (86 individuals) and pochard (757 individuals).
Conservation Objectives	<ul style="list-style-type: none"> • reduction of anthropogenic threats is being achieved through Water Level Management Plans. The restoration of water levels and prevention of vegetation incursion is being achieved through Site Management Statements and management agreements. • appropriate control programmes are being continually refined and implemented.
Vulnerabilities of the European Site	<p>The site is vulnerable to the threat of:</p> <ul style="list-style-type: none"> • Eutrophication: The site is vulnerable because of its sensitivity to changes in water quality in the surrounding catchment. Nutrient enrichment from agricultural and domestic sources has been an ongoing concern. • Invasive plants/animals: Introduced species of plants and animals have also caused problems e.g. grazing by Canada geese causes a threat to reed fringes. There have been occurrences of non-native invasive plants such as Himalayan balsam.

3.7. Rixton Clay Pits SAC

Table 3-47 below provides information about the Rixton Clay Pits SAC, its designation status and location in relation to the project boundary, a brief description, its conservation objectives, and its sensitivities¹⁴.

Table 3-7 Information about the Rixton Clay Pits SAC

Location	In relation to Greater Manchester, the SAC is located approximately 1.6 km from the district of Salford.
Brief Description	Rixton Clay Pits SAC is designated for supporting species of European importance that are listed on Annex II of the Habitats Directive (great crested newt). Situated to the east of Warrington, this site comprises parts of an extensive disused brickworks excavated in glacial boulder clay. The excavation has left a series of hollows, which have filled with water since workings ceased in the 1960s, leading to a variety of pond

	sizes. New ponds have also been created more recently for wildlife and amenity purposes. Great crested newt are known to occur in at least 20 ponds across the site. The site also supports species-rich grassland, scrub and mature secondary woodland.
Conservation Objectives	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring: <ul style="list-style-type: none"> • the extent and distribution of the habitats of qualifying species; • the structure and function of the habitats of qualifying species; • the supporting processes on which the habitats of qualifying species rely; • the populations of qualifying species, and • the distribution of qualifying species within the site.
Vulnerabilities of the European Site	The site is vulnerable from the threat of: <ul style="list-style-type: none"> • Habitat management: Warrington Borough Council owns and manages the site, and has a ranger based on-site. A possible conflict between grassland management and great crested newts has been identified; this is being addressed through contract research on the site. However, the great crested newt population is increasing at the site.

3.8. Midland Meres and Mosses Phase 1 Ramsar Site

Table 3-48 below provides information about the Midland Meres and Mosses Phase 1 Ramsar Site, its designation status and location in relation to the project boundary, a brief description, its conservation objectives, and its sensitivities¹⁴.

Table 3-8 Information about the Midland Meres and Mosses Phase 1 Ramsar Site

Location	In relation to Greater Manchester, the Ramsar Site is located approximately 4 km from the district of Trafford.
Brief Description	The Meres & Mosses form a geographically discrete series of lowland open water and peatland sites in the north-west Midlands of England. These have developed in natural depressions in the glacial drift left by receding ice sheets which formerly covered the Cheshire/Shropshire Plain. The 16 component sites include open water bodies (meres), the majority of which are nutrient-rich with associated fringing habitats; reed swamps, fen, carr & damp pasture. Peat accumulation has resulted in nutrient poor peat bogs (mosses) forming in some sites in the fringes of meres or completely infilling basins. In a few cases the result is a floating quaking bog or 'schwingmoor'. The wide range of resulting habitats support nationally important flora & fauna.
Conservation Objectives	Subject to natural change to maintain or restore: <ul style="list-style-type: none"> • the extent and distribution of the habitats of qualifying features; • the structure and function of the habitats of qualifying features; • the supporting processes on which the habitats of qualifying features rely; • the populations of qualifying features; • the populations of the qualifying features; and • the distribution of qualifying features within the site.
Vulnerabilities of the European Site	The site is vulnerable from the threat of: <ul style="list-style-type: none"> • Eutrophication: Various broad activities recorded for the site include agriculture and grazing, fishing, hunting, recreation, research and conservation. This complex site has undergone partial eutrophication from human activities (although some of the mires are naturally eutrophic). Excess nutrients come from intensification of agriculture, fertilizer runoff, and domestic and agricultural effluent. • Introduction of invasive non-native plant species

3.9. Martin Mere SPA and Ramsar Site

Table 3-49 below provides information about the Martin Mere SPA and Ramsar Site, its designation status and location in relation to the project boundary, a brief description, its conservation objectives, and its sensitivities¹⁴.

Table 3-9 Information about the Martin Mere SPA and Ramsar Site

Location	In relation to Greater Manchester, the SPA/Ramsar Site is located approximately 11 km from the district of Wigan.
Brief Description	Martin Mere SPA and Ramsar Site occupies part of a former lake and mire that extended over some 1,300 ha of the Lancashire Coastal Plain during the 17th century. The complex comprises open water, seasonally flooded marsh, and damp, neutral hay meadows overlying deep peat. It includes a wildfowl refuge of European importance, with a large and diverse wintering, passage and breeding bird community. In particular, there are significant wintering populations of Bewick's swan whooper swan, pink-footed goose and pintail. There is considerable movement of wintering birds between this site and the nearby Ribble and Alt Estuaries SPA.
Conservation Objectives	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:</p> <ul style="list-style-type: none"> • the extent and distribution of the habitats of the qualifying features; • the structure and function of the habitats of the qualifying features; • the supporting processes on which the habitats of the qualifying features rely; • the population of each of the qualifying features, and • the distribution of the qualifying features within the site.
Vulnerabilities of the European Site	<p>The site is vulnerable from the threat of:</p> <ul style="list-style-type: none"> • Hydrological changes: Three hundred years of agricultural activity, land drainage and wind erosion have caused shrinkage of peat surrounding the site resulting in the site being significantly higher than adjacent land. Active management of water levels across the site through pumping and drainage is required. There is considerable pressure on the flood defences, and the embankments require constant maintenance to prevent breaches which would result in water draining from the site onto the lower surrounding land. • Invasive species: New Zealand Pygmyweed, a non-native invasive plant species is present within the wider Martin Mere nature reserve in field ditches and the large reedbed (these areas are adjacent to the SPA). This species has a tendency to spread quickly and may form dense smothering mats. It has the potential to affect other plant species and could prevent birds from feeding. It is currently unclear to what extent effective control is feasible, and how prevention of its spread into the site's pools and ditch system can be achieved as effective methods of elimination and control are currently absent. Himalayan Balsam is also a non-native invasive plant present along the main water courses throughout the site and also in woodland close by. Control of this species needs to be undertaken at source as well as on the site to ensure it is effective. • Water pollution: Diffuse water pollution from surrounding agricultural land and a local industrial estate is entering the watercourses and resulting in the eutrophication and degradation of supporting habitats within the site.

3.10. Ribble and Alt Estuaries SPA

Table 3-410 below provides information about the Ribble and Alt Estuaries SPA, its designation status and location in relation to the project boundary, a brief description, its conservation objectives, and its sensitivities¹⁴.

Table 3-10 Information about the Ribble and Alt Estuaries SPA

Location	In relation to Greater Manchester, the SPA is located approximately 16.5 km from the district of Wigan.
Brief Description	There is considerable interchange in the movements of wintering birds between this site and Morecambe Bay, the Mersey Estuary, the Dee Estuary and Martin Mere. A large proportion of the SPA is within the Ribble Estuary National Nature Reserve. The site consists of extensive sand and mud-flats and, particularly in the Ribble Estuary, large areas of saltmarsh. There are also areas of coastal grazing marsh located behind sea embankments. The intertidal flats are rich in invertebrates, on which waders and some of the wildfowl feed. The saltmarshes and coastal grazing marshes support high densities of grazing and seed-eating wildfowl and these, together with the intertidal sand- and mud-flats, are used as high-tide roosts. Important populations of waterbirds occur in winter, including swans, geese, ducks and waders. The SPA is also of major importance during the spring and autumn migration periods, especially for wader populations moving along the west coast of Britain. The larger expanses of saltmarsh and areas of coastal grazing marsh support breeding birds during the summer, including large concentrations of gulls and terns.
Conservation Objectives	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring: <ul style="list-style-type: none"> • the extent and distribution of the habitats of the qualifying features; • the structure and function of the habitats of the qualifying features; • the supporting processes on which the habitats of the qualifying features rely; • the population of each of the qualifying features, and • the distribution of the qualifying features within the site.
Vulnerabilities of the European Site	The site is vulnerable for the threat of: <ul style="list-style-type: none"> • Air pollution: Exceeding critical values for air pollutants may result in changes to the chemical status of its habitat substrate, accelerating or damaging plant growth, altering vegetation structure and composition and thereby affecting the quality and availability of nesting, feeding or roosting habitats. • Grazing by livestock: If livestock numbers are too high during the breeding season, nests may be inadvertently trampled by grazing animals and successful nesting/rearing is undermined. This feature is known to be particularly sensitive to livestock density.

3.11. Mersey Estuary SPA and Ramsar Site

Table 3-411 below provides information about the Mersey Estuary SPA and Ramsar site, its designation status and location in relation to the project boundary, a brief description, its conservation objectives, and its sensitivities¹⁴.

Table 3-11 Information about the Mersey Estuary SPA and Ramsar Site

Location	In relation to Greater Manchester, the SPA/Ramsar site is located approximately 18.3 km from the district of Trafford.
Brief Description	The Mersey Estuary SPA/Ramsar site is a large, sheltered estuary which comprises large areas of saltmarsh and extensive intertidal sand and mud-flats, with limited areas of brackish marsh, rocky shoreline and boulder clay cliffs, within a rural and industrial environment. The intertidal flats and saltmarshes provide feeding and roosting sites for large populations of waterbirds. During the winter, the site is of major importance for

	ducks and waders. The site is also important during the spring and autumn migration periods, particularly for wader populations moving along the west coast of Britain.
Conservation Objectives	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:</p> <ul style="list-style-type: none"> • the extent and distribution of the habitats of the qualifying features; • the structure and function of the habitats of the qualifying features; • the supporting processes on which the habitats of the qualifying features rely; • the population of each of the qualifying features, and • the distribution of the qualifying features within the site.
Vulnerabilities of the European Site	<p>The site is vulnerable for the threat of:</p> <ul style="list-style-type: none"> • Changes in species distribution: Recently commissioned reports indicate there have been large decreases in bird numbers on this SPA compared to local SPAs and regional trends. There is a need to investigate and understand reasons for these changes. • Invasive species: The population of Canada geese has significantly increased on the site introducing resource competition with some bird species e.g. via increased grazing and increased nutrient pressure. There is a threat from the spread and increase in density of invasive non-native species, such as Chinese mitten crab. • Public access/disturbance: Users of public footpaths immediately adjacent to the north shore of the site can cause disturbance to birds roosting and feeding at this location.

4. The Greater Manchester Transport Strategy (GMTS) 2040 and Delivery Plan 1

The broad aspirations and desired transport outcomes for the period to 2040 have been set out in *Our 2040 Vision*, produced by TfGM. The key elements of *Our 2040 Vision* were formed of; supporting sustainable economic growth, improving the quality of life, protecting our environment, and developing an innovative city-region. *Our 2040 Vision* provided the subject of public and stakeholder consultation to help inform the development of the draft GMTS produced in January 2016. A pre-consultation draft GMTS 2040 was subsequently completed in June 2016. The GMTS 2040 sets out key strategic principals for delivering a customer-focused transport system, and five “spatial themes” that highlight the key challenges, ambitions and broad interventions for different types of travel in Greater Manchester. The approach designed to deliver the GMTS 2040 consists of: a summary of broad interventions, the approach to funding, and how performance will be measured.

4.1. Structure of the new GMTS

The delivery of *Our 2040 Vision* will be supported by the production of two key statutory documents:

- Greater Manchester Transport Strategy 2040 (GMTS 2040): a document setting out a detailed strategy, and delivery plans until 2025 and 2040. This will provide detail on policies, interventions and schemes to support delivery of *Our 2040 Vision*; and
- Greater Manchester Transport Delivery Plans (DPs): five-year transport spending plans (updated annually) that will monitor and evaluate transport delivery.

Taken together, the GMTS 2040 and Delivery Plans will constitute Greater Manchester’s Fourth Local Transport Plan.

4.2. Strategic Principles

The GMTS 2040 sets out the principles that will be applied to the transport network throughout Greater Manchester. The principles are set out to ensure that the transport system is customer-focused, and to deliver a strategic approach to planning and managing different modes of transport. Six core principles (“Our Network Principles”) and associated ambitions have been established to ensure the transport network meets the needs of the customers. The six core Network Principles and corresponding ambitions are outlined in Table 4-1 below.

Table 4-1 GMTS 2040 Network Principles and Ambitions

Network Principle	Our Ambition by 2040
Integration at the Heart of our Transport Strategy 2040	To enable customers to move seamlessly between services and modes of transport on a single, high quality, easy-to-use network. ‘Leaving the car at home’ will be seen as a more realistic option.
	To support the delivery of transformational levels of housing and employment growth without significant increases in traffic levels and congestion.
An Inclusive Network	To develop a fully inclusive and affordable sustainable transport system for all.
Supporting a Healthier Greater Manchester	To make walking and cycling the natural choice for local trips.
Environmental	For Greater Manchester to be known for the quality of its urban areas, with

Responsibility	transport emissions reduced to near zero, and a high level of protection for the natural environment.
A Reliable and Resilient Network	To develop a transport network that is reliable, and able to withstand unexpected events and severe weather conditions.
A Safe and Secure Transport System	To reduce deaths on our roads as close as possible to zero.
	To ensure that poor perceptions of personal security are no longer a significant barrier to people using public transport or walking and cycling.

The GMTS 2040 focuses on creating an integrated and well co-ordinated transport system that supports a range of different travel needs. Competing demands are considered through “Our Modal Principles” and associated ambitions, outlined in Table 4-2 below.

Table 4-2 GMTS 2040 Modal Principles and Ambitions

Modal Principle	Our Ambition by 2040
A Multi-Modal Highway Network	To deliver a consistently reliable and resilient network which focuses on the efficient and effective movement of people and goods to, from and across Greater Manchester.
Developing a Comprehensive Walking and Cycling Network	To create a comprehensive network of on and off-road walking and cycling routes that make it easier and safer for people to walk and cycle to key local destinations, such as local centres, jobs, healthcare and education, for leisure purposes and for local public transport access.
Public Transport Integration: Keeping Greater Manchester Moving in 2040	To develop a fully integrated, customer-focused, low-emission public transport network, with simple, integrated ticketing, that provides an attractive and accessible alternative to travelling by car to key Greater Manchester destinations.
	To develop a modern low-emission accessible bus system, fully integrated with the wider Greater Manchester transport network on which everyone will be happy to travel regardless of their background or mobility level.
	To extend the benefits of rapid transit to more areas of Greater Manchester and provide the capacity and reliability needed to support growth in the economy.
	To develop a rail network with the capacity, reliability, speed, resilience and quality to support growth in the Northern economy and extend the benefits of HS2 and Northern Powerhouse Rail throughout Greater Manchester.
Goods and Servicing	To move all goods within our urban areas by low emission vehicles so that the negative impact of freight vehicles on our local communities will be minimised.

The key interventions that support these conurbation-wide strategic principles outlined above, are summarised and assessed in Appendix A, Table A.1.

4.3. Spatial Themes

The GMTS 2040 has a greater spatial focus and a more integrated approach to transport investment at different spatial levels than the modal and/or district focus used in previous Local Transport Plans. *Our 2040 Vision* introduced five spatial themes, which were used to develop an integrated set of proposals. The five key spatial themes and associated ambitions are outlined in Table 4-3 overleaf.

Table 4-3 GMTS 2040 Spatial Themes and Ambitions

Spatial Theme	Our Ambition
Global Connectivity	To support growth at the Airport and the adjacent Enterprise Zone by: bringing many more passengers within a 1hr and 2hr rail journey time; improving the reliability of the highway network; and ensuring that public transport services better meet the needs of airport passengers and employees. Fewer people will drive to work at the Airport, with transformed sustainable transport connectivity to the Airport from across Greater Manchester and beyond.
	The Atlantic Gateway corridor will be developed to maximise the sustainable movement of goods by water and rail. The Port Salford area will be developed as a tri-modal (rail, water and road) logistics park and development zone to improve access to global markets via the Port of Liverpool.
Delivering Better City-to-City Links	To see an increasingly successful Northern Powerhouse Economy, with Greater Manchester at its heart, supported by transformed connectivity between the major cities of the North of England, and to the Midlands, London and Scotland. There will be a step-change in quality, speed and reliability of our city-to-city rail links, allowing travel to Liverpool, Leeds and Sheffield in 30 minutes or less and to London in just over an hour. The strategic highway network will reliably allow 'mile a minute' journey times. More freight will be moved by rail and water. Transformed infrastructure, smart ticketing and customer information will encourage more trans-northern journeys to be made by public transport.
Travel to and Within our Regional Centre	For fully integrated Regional Centre transport networks that support rapid economic growth: with HS2 and Northern Powerhouse Rail services serving the heart of the city centre; and road traffic levels held at or below 2016 volumes. There will be much better public transport, pedestrian and cycle connections between Manchester City Centre and the outer parts of the Regional Centre, and key destinations will be accessible by public transport 24/7. We will create a more liveable Regional Centre by providing high quality and attractive pedestrian and cycle environments and by minimising the negative impacts of traffic (including freight vehicles) on residents.
Travel Across the Wider City-region	That our regenerated town centres are easy to get to, particularly by sustainable modes, and pleasant to walk around and spend time in. Journeys across the area, between centres or to other major destinations will be made easier through better and faster orbital links, reduced congestion, a more reliable bus network, more effective interchange and better-connected cycle routes. Road accidents will fall, year on year, moving towards our goal of reducing deaths and serious injuries as close as possible to zero. The significant new development expected in Greater Manchester will be accessible by sustainable modes of transport, so that the impact of the extra trips on the road network is reduced.
Connecting Neighbourhoods	For local neighbourhoods to be safer and more pleasant to walk and cycle around, with the impact of traffic on local roads reduced and a year-on-year reduction in accidents. Active travel will be the natural choice for many short journeys, 10% of which will be made by bike. Easier access to interchanges and to local centres will increase the proportion of journeys made by public transport and encourage people to use local shops and other facilities.

The GMTS 2040 outlines the proposed interventions, structured around each of the five spatial theme for improving the transport network, in the medium term up to 2025, and aspirations for the longer term, up to 2040. The assessment of proposed interventions under each spatial theme is summarised in Appendix A,

Table A.1. Further work will be necessary by TfGM to refine these in order to identify and prioritise specific schemes, which will be shown in the five-year DPs that will sit alongside the GMTS 2040.

The first five-year DP covers the period 2016/17 – 2021/22 and contains two broad types of scheme:

- Committed Schemes i.e. fully funded and currently being implemented.
- Indicative Schemes and Programmes to be delivered subject to funding.

The Delivery Plan includes the continued implementation of schemes that were identified in the 'Greater Manchester Local Transport Plan 3 Capital Programme 2015/16 – 2020/21' and funded under the Local Growth Fund (committed schemes). It is important to note that these committed schemes have been developed and assessed in accordance to the relevant guidance and legislation applicable at that time and have not been considered further as part of this HRA. The Indicative Schemes and Programmes have been considered in the assessments in Appendix A.

4.4. Provisions within the GMTS 2040 that Protect European Sites

When planning applications are determined all of the relevant policies and supporting text in the GMTS 2040 are taken into account and used as the basis for decision-making.

The GMTS 2040 includes text within the network principle: Environmental Responsibility, which seeks to protect European sites by setting out how the HRA process should be taken forward for new infrastructure projects within the Greater Manchester region. The text clearly states that any proposed development that may have an adverse effect on European important sites will be subject to the HRA process by the competent authority (see relevant text below).

'73. Greater Manchester and its surrounding areas contain a number of statutory nature conservation sites of European level importance. These include Special Areas of Conservation, Special Protection Areas and Ramsar sites. In addition to these areas protected under the European Habitats Directive, there are many locally important sites and green spaces, which both support wildlife and contribute to the wellbeing of the population. These locations are vulnerable to the effects of motorised traffic and the development of new infrastructure.'

'78. Any development that would have an adverse impact on an important environmental site should be avoided as far as possible. If this cannot be achieved, the adverse impacts will be adequately mitigated, or, as a last resort, compensated for. In the case of European designated sites, a Habitat Regulations Appropriate Assessment is required for any proposal likely to have significant effects on the site.'

'79. We will seek to minimise the impact of transport on the built and natural environment, including townscape, the historic environment, cultural heritage, landscape, habitats and biodiversity, water quality, pollution, flood risk and use of resources. Large transport schemes will be subject to statutory Environmental Assessment, as required by the planning process. However we will also continue to apply our established principles for the design of new infrastructure projects, as described in the Delivery Plan.'

The GMTS 2040 therefore ensures that the competent authority (in this case Manchester City Council in consultation with Natural England) will give consideration to European sites in order to inform infrastructure planning decisions on new transport projects. The text states that any development which has an adverse impact on an important environmental site should be avoided as far as possible. If this cannot be achieved, the adverse impacts will be adequately mitigated, or, as a last result, compensated for. A Habitat Regulations Appropriate Assessment will be undertaken in the case of European designated sites for any proposal likely to have significant effects on the site itself.

Therefore, any specific infrastructure proposals will need to be in-line with the GMTS 2040 and will need to satisfy Manchester City Council and Natural England that there will be no adverse effect on the integrity of the European designated sites. Any adverse effects on integrity must be effectively mitigated, or, as a last result, compensated.

4.5. Provisions within Delivery Plan 1 that Protect European Sites

The Delivery Plan recognises that there may be a requirement for Habitat Regulation Assessment as part of the scheme appraisal process that schemes will undergo prior to funding being sought.

5. Stage 1 – Screening Results

The findings of the Stage 1 – Screening for the eleven European sites under consideration are provided below. Justification for the conclusions drawn below is provided in **Appendix A; Table A-1**.

Table 5-1 Results of the HRA Stage 1 – Screening

<p>Site Designation</p>	<ul style="list-style-type: none"> • Peak District Moors (South Pennine Moors Phase 1) SPA • South Pennine Moors SAC • South Pennine Moors Phase 2 SPA • Rochdale Canal SAC • Manchester Mosses SAC • Rostherne Mere Ramsar Site • Rixton Clay Pits SAC • Midland Meres and Mosses Phase 1 Ramsar Site • Martin Mere SPA and Ramsar • Ribble and Alt Estuaries SPA • Mersey Estuary SPA and Ramsar Site
<p>Describe the individual elements of the GMTS 2040 likely to give rise to impacts on the European sites</p>	<p>A number of strategic principles, spatial themes and accompanying broad interventions focus on the need for improvements to existing infrastructure, creation of new transport links by the development of new infrastructure, and improved (i.e. faster and more efficient) connectivity across the Greater Manchester region.</p> <p>A number of interventions are concerned with improvements to the transport network, ticketing and local facilities (e.g. they relate to design, mechanisms and other qualitative criteria) and will not lead directly to new infrastructure or any associated impacts.</p> <p>The GMTS 2040 also includes strategic principles, spatial themes and interventions that focus on the use of low emissions vehicles and improvements to walking and cycling networks to increase the use of passive modes of transport. These interventions will not lead to new infrastructure and seek to improve air quality in the Greater Manchester region, thereby protecting the natural environment.</p>
<p>Provisions included within the GMTS 2040 to protect European sites</p>	<p>Text within the Network Principle: Environmental Responsibility seeks solely to protect European sites, important habitats and species. The principle ensures that any potential infrastructure project is adequately assessed for likely significant effects on European sites. The GMTS 2040 states the following:</p> <p><i>“78. Any development that would have an adverse impact on an important environmental site should be avoided as far as possible. If this cannot be achieved, the adverse impacts will be adequately mitigated, or, as a last resort, compensated for. In the case of European designated sites, a Habitat Regulations Appropriate Assessment is required for any proposal likely to have significant effects on the site.”</i></p> <p>The GMTS 2040 seeks to protect European sites and avoid adverse effects on the integrity of European sites through the HRA process. HRA of any new infrastructure projects will need to satisfy Manchester City Council (in consultation with Natural England) that there will be no adverse effect on the integrity of the European sites.</p>

	Any adverse effects on integrity must be effectively mitigated and/or compensatory measures provided, as appropriate.
<p>Describe any likely direct, indirect or secondary impacts of the GMTS 2040 on the European sites by virtue of:</p> <ul style="list-style-type: none"> • Size and scale; • Land take; • Resource requirements (i.e. water extraction etc.); • Emissions (disposal to land, water or air); • Excavation requirements; • Duration of construction, operation, decommissioning etc.; and • Other. 	<p>The GMTS 2040 seeks to protect European sites by virtue of the text (outlined above) within the Network Principle Environmental Responsibility.</p> <p>Due to the high level strategic nature of the GMTS 2040, only broad details are given of future infrastructure developments and improvements to existing transport networks. The GMTS 2040 commits to HRA being carried out for any future infrastructure project likely to have significant effects on a European site (in accordance with the HRA text in the Network Principle: Environmental Responsibility). Any adverse effects on integrity must be effectively mitigated and/or compensated in-line with the assessment method.</p>
<p>Describe any likely changes to the European sites arising as a result of:</p> <ul style="list-style-type: none"> • Reduction of habitat area; • Disturbance to key species; • Habitat or species fragmentation; • Reduction in species density; • Changes in key indicators of conservation value (e.g. water quality); and • Climate change 	<p>This assessment has concluded that provision under the Network Principle: Environmental Responsibility will ensure the protection of European sites. Therefore, no changes are predicted to arise to the European sites as a result of the GMTS 2040.</p>
<p>Describe from the above those elements of the project, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is not known</p>	<p>The assessment of in-combination effects is based on the relative level of detail in each plan or project. Due to the high level strategic nature of the GMTS 2040, it is only possible to obtain a broad understanding of the future infrastructure development possibly arising from the strategic principles, spatial themes and broad interventions contained within the document. This means that an in-combination assessment can be included within the HRA, albeit a detailed assessment of 'in combination' effects cannot be made at this stage. However, the GMTS 2040 commits to conducting HRA for any future infrastructure project that is likely to have significant effects on an European site (in accordance with the HRA text under the Network Principle: Environmental Responsibility). Any adverse effects on integrity must be effectively mitigated and/or compensated, in-line with the assessment.</p>

6. In-Combination Assessment

Consultation with the relevant authorities has identified other projects or plans which have been subject to HRA due to the possibility of likely significant effects on the European sites included in this Screening report.

Every reasonable effort has been made to obtain information on potentially relevant plans and projects that may have in-combination effects. **Table 6-1** below provides details of each HRA, a summary of their findings and the potential for in-combination effects on the eleven European sites included in this Screening report. This table forms the In-Combination Assessment for Stage 1 – Screening.

Table 6-1 Findings of the In-Combination Assessment

Organisation	Scheme/HRA Details	Results of HRA	Potential for 'in-combination' effects
Greater Manchester Ecology Unit	Habitats Regulations Assessment (HRA) of the Impact on European Protected Sites of Oldham Council's Broad Locations for Preferred Options for the Local Development Framework (December 2008)	Potential impacts arising from the LDF upon Rochdale Canal SAC included water and air pollution, shading, dredging, draining, increased boat traffic, use of herbicides. However, the further assessment concluded that providing mitigating plans, policies and strategies are implemented appropriately through the development management process, development within the Broad Locations could proceed without harm being caused to the special interest of the Rochdale Canal SAC.	The LDF provides measures to avoid and mitigate for any adverse impacts, and the GMTS 2040 provides protection to European sites with the HRA text in the Network Principle: Environmental Responsibility. Therefore, no in-combination effects are anticipated.
	Habitats Regulations Assessment of the Impact on European Protected Sites of Bolton Council's Core Strategy (Publication Document) (October 2009)	The Screening Assessment concluded that no European designated sites have been identified as having the potential to be affected by development within the selected administrative boundary of Bolton. It was recommended that any transport infrastructure schemes (Policy P5) that could potentially have a negative effect on the European Site be referred for possible HRA as part of the development management process.	No potential impacts were identified on European sites, and the GMTS 2040 provides protection to European sites with the HRA text in the Network Principle: Environmental Responsibility. Therefore, there is no scope for in-combination effects.
	Habitats Regulations Assessment of the Impact on European Protected Sites of Manchester Council's Core Strategy – Proposed Option (November 2009)	Potential impacts arising from the Strategy upon Rochdale Canal SAC included drainage, pollution and increased boat traffic. However, the further assessment concluded that providing mitigating plans, policies and strategies are implemented appropriately through the development management process, development within the identified areas could proceed without harm being caused to the special interest of the Rochdale Canal SAC.	The strategy provided measures to avoid and mitigate for any adverse impacts and, the GMTS 2040 provides protection to European sites with the HRA text in the Network Principle: Environmental Responsibility. Therefore, no in-combination effects are anticipated.
	Habitats Regulations Assessment of the	The Screening Assessment concluded that there will be no impacts upon	The strategy provided measures to avoid

Organisation	Scheme/HRA Details	Results of HRA	Potential for 'in-combination' effects
	Impact on European Protected Sites of Trafford Council's DPD1 Core Strategy (Publication) (June 2010)	Rixton Clay Pits SAC, however, potential impacts arising from the Strategy upon Manchester Mosses SAC included atmospheric pollution and recreational pressure. Further assessment concluded that providing that the mitigating plans, policies and strategies are adopted and implemented appropriately through the development management process, it is considered that there will be sufficient safeguards in place to avoid significant harm to the special interest of the Manchester Mosses SAC.	and mitigate for any adverse impacts, and the GMTS 2040 provides protection to European sites with the HRA text in the Network Principle: Environmental Responsibility. Therefore, no in-combination effects are anticipated.
	Habitats Regulations Assessment Screening (Stage 1) of the Greater Manchester Minerals DPD (November 2011)	The Screening Assessment concluded that none of the policies in the Plan have potential to cause significant effects on any European Site alone or in-combination.	The plan incorporated measures to avoid and mitigate for any potential impacts, and the GMTS 2040 provides protection to European sites with the HRA text in the Network Principle: Environmental Responsibility. Therefore, no in-combination effects are anticipated.
	Habitats Regulations Assessment of the Impact on European Protected Sites of Tameside Council's Joint Core Strategy & Development Management Policies (Preferred Options) (August 2012)	Potential impacts arising from the Strategy and Policies upon Rochdale Canal SAC included atmospheric pollution, increased boat traffic using the canal, promoting both water turbidity and disturbance of substrates, and potential impacts upon South Pennine Moors SAC/SPA as a result of air pollution, species disturbance, drainage, peat extraction, and recreational pressure. However, the further assessment concluded that providing the recommendations are implemented appropriately through the development management process, it should be possible to avoid and mitigate for any adverse impacts identified.	The strategy provided measures to avoid and mitigate for any adverse impacts, and the GMTS 2040 provides protection to European sites with the HRA text in the Network Principle: Environmental Responsibility. Therefore, no in-combination effects are anticipated.
	Habitat Regulations Assessment of the Manchester Local Flood Risk Management Strategy (November 2013)	Potential impacts arising from the Strategy upon Rochdale Canal SAC included dredging, direct disturbance, drainage and/or pollution. However, the further assessment concluded that providing the Strategy is amended to safeguard Rochdale Canal SAC, it will have no significant impact upon the European site.	The strategy provided measures to avoid and mitigate for any adverse impacts, and the GMTS 2040 provides protection to European sites with the HRA text in the Network Principle: Environmental Responsibility. Therefore, no in-

Organisation	Scheme/HRA Details	Results of HRA	Potential for 'in-combination' effects
			combination effects are anticipated.
	Habitat Regulations Assessment (Screening) of the Salford Local Flood Risk Management Strategy (April 2015)	The Screening Assessment concluded that the high-level strategic Strategy will provide safeguards to avoid any possible harm to European sites. However, future iterations of the Strategy may need to be subject to HRA, at least to Screening stage.	The strategy provided measures to avoid and mitigate for any adverse impacts, and the GMTS 2040 provides protection to European sites with the HRA text in the Network Principle: Environmental Responsibility. Therefore, no in-combination effects are anticipated.
URS	Blackburn with Darwen Local Plan Part II Habitats Regulations Assessment Screening (November 2013)	The Screening Assessment concluded that there would be no likely significant effects on any European sites as a result of the Blackburn with Darwen SADM DPD.	The strategy provided measures to avoid and mitigate for any adverse impacts, and the GMTS 2040 provides protection to European sites with the HRA text in the Network Principle: Environmental Responsibility. Therefore, no in-combination effects are anticipated.
Rochdale Metropolitan Borough Council	Habitats Regulations Assessment of the Impact on European Protected Sites of the Rochdale Borough Council Core Strategy Development Plan Document (Pre Submission stage) (October 2010)	Potential impacts arising from the Strategy upon Rochdale Canal SAC included shading from new buildings, increased boat traffic and other impacts such as litter, and potential impacts upon South Pennine Moors SAC/SPA as a result of air pollution, peat extraction, and recreational pressure. However, the further assessment concluded that providing the recommended mitigation measures are implemented appropriately in the Plan, there will be no likely significant effects on the special interest of Rochdale Canal SAC.	The strategy provided measures to avoid and mitigate for any adverse impacts, and the GMTS 2040 provides protection to European sites with the HRA text in the Network Principle: Environmental Responsibility. Therefore, no in-combination effects are anticipated.
JBA Consulting	Cheshire East Development Strategy and Emerging Policy Principles Habitats Regulations Assessment (Draft report January 2013)	Potential impacts arising from the Strategy upon Midland Meres and Mosses Phase 1 Ramsar and Rostherne Mere Ramsar included changes in water quality, changes in water levels or table, pollution (air), species disturbance and physical damage (due to recreational pressures). However, the further assessment concluded that providing the recommended mitigation measures are implemented appropriately in the	The strategy provided measures to avoid and mitigate for any adverse impacts, and the GMTS 2040 provides protection to European sites with the HRA text in the Network Principle: Environmental Responsibility. Therefore, no in-

Organisation	Scheme/HRA Details	Results of HRA	Potential for 'in-combination' effects
		Strategy, there will be no likely significant effects on the special interest of Midland Meres and Mosses Phase 1 Ramsar and Rostherne Mere Ramsar.	combination effects are anticipated.
	Cheshire East Local Plan Strategy: Habitat Regulations Assessment (February 2014)	Potential impacts arising from the Strategy upon Midland Meres and Mosses Phase 1 Ramsar and Rostherne Mere Ramsar included water abstraction, changes to surface and ground water levels/quality (surface run-off, pollution events), air pollution and increased recreational pressure. However, the further assessment concluded that the existing policies and provisions in the Strategy should ensure that potential significant adverse effects on the integrity of all identified European sites are avoided.	The strategy provided measures to avoid and mitigate for any adverse impacts, and the GMTS 2040 provides protection to European sites with the HRA text in the Network Principle: Environmental Responsibility. Therefore, no in-combination effects are anticipated.
Burnley Council	Burnley's Local Plan Habitat Regulations Assessment (2013)	The Screening Assessment concluded that the high-level strategic Plan will include mitigation measures by the provision of specific policies to avoid any possible harm to European sites. However, future iterations of the Plan may need to be subject to HRA, at least to Screening stage.	The strategy provided measures to avoid and mitigate for any adverse impacts, and the GMTS 2040 provides protection to European sites with the HRA text in the Network Principle: Environmental Responsibility. Therefore, no in-combination effects are anticipated.
Oldham Metropolitan Borough Council	Habitat Regulations Assessment for the Core Strategy and Development Control Policies Development Plan Document (November 2007)	Potential impacts arising from the Plan upon South Pennine Moors SAC/SPA included increased recreational pressure and it is recommended the Plan should be subjected to further, more detailed Screening Opinions and/or Appropriate Assessment at the Preferred Options Stage of plan development.	The Core Strategy is a high-level strategic document providing limited guidance on the future development, however, the strategy provides protection to European sites. The GMTS 2040 also provides protection to European sites in Network Principle: Environmental Responsibility. Therefore no in-combination effects are anticipated.
	Habitat Regulations Assessment for the Urban Design Guide Supplementary Planning	The Screening assessment concluded that there will be no significant effects upon South Pennine Moors SAC/SPA or Rochdale Canal SAC.	No likely significant effects identified and therefore no potential for in-combination effects.

Organisation	Scheme/HRA Details	Results of HRA	Potential for 'in-combination' effects
	Document(s) (October 2007)		
Land Use Consultants	Draft Kirklees Local Plan	Potential impacts arising from the Plan upon South Pennine Moors SAC, South Pennine Moors SPA (Phases 1 and 2), Rochdale Canal SAC. However, further assessment concluded that providing the recommended mitigation measures are incorporated into the Plan, no likely significant effects are predicted upon European sites.	The strategy provided measures to avoid and mitigate for any adverse impacts, and the GMTS 2040 provides protection to European sites with the HRA text in the Network Principle: Environmental Responsibility. Therefore, no in-combination effects are anticipated.
	Kirklees Local Flood Risk Management Strategy Habitat Regulations Assessment Report (February 2013)	Potential impacts arising from the Strategy upon South Pennine Moors SAC and SPA (Phases 1 and 2), however, providing that the recommended mitigation measures are incorporated into the Strategy, no likely significant effects are predicted upon European sites.	The strategy provided measures to avoid and mitigate for any adverse impacts, and the GMTS 2040 provides protection to European sites with the HRA text in the Network Principle: Environmental Responsibility. Therefore, no in-combination effects are anticipated.
Stockport Metropolitan Borough Council	LDF Core Strategy DPD Habitats Regulations Assessment Screening Report	Potential impacts arising from the Strategy upon European sites. However providing that the recommended mitigation measures are incorporated into the Strategy, no likely significant effects are predicted upon European sites.	The strategy provided measures to avoid and mitigate for any adverse impacts, and the GMTS 2040 provides protection to European sites with the HRA text in the Network Principle: Environmental Responsibility. Therefore, no in-combination effects are anticipated.
Warrington Borough Council	Appropriate Assessment of Core Strategy and Third Local Transport Plan (January 2012)	Appropriate Assessment concluded that the mitigation measures will ensure that no likely significant effects will arise as a result of the Plan.	The strategy provided measures to avoid and mitigate for any adverse impacts, and the GMTS 2040 provides protection to European sites with the HRA text in the Network Principle: Environmental Responsibility. Therefore, no in-combination effects

Organisation	Scheme/HRA Details	Results of HRA	Potential for 'in-combination' effects
			are anticipated.
Scott Wilson	Habitat Regulations Assessment Screening (Stage 1) of the Greater Manchester Joint Waste Development Plan Document (JWDPD) (February, 2009)	The Screening assessment concluded that there will be no likely significant impacts upon Manchester Mosses SAC; and Peak District Moors (South Pennine Moors Phase 1) SPA.	No likely significant effects identified and therefore no potential for in-combination effects.
Highways England	A57/A628 Trans-Pennine Programme	Potential impacts arising from the Programme upon South Pennine Moors SAC/SPA included increased recreational pressure and air pollution ¹⁵ . However, the proposed policies and recommendations provided as part of the revision will ensure that the Programme will have no adverse impacts upon European sites.	The programme included for protecting European sites through amendments to policies. The GMTS 2040 also provides protection to European sites in Network Principle: Environmental Responsibility. Therefore, no in-combination effects are anticipated.

¹⁵ *Habitats Regulations Assessment of the North West Regional Spatial Strategy. Consolidated Report.* Scott Wilson (2008).

7. Conclusions

Atkins Limited (Atkins) has been commissioned by Transport for Greater Manchester (TfGM) to undertake a Stage 1 of the Habitats Regulations Assessment (Screening) in relation to the new Greater Manchester 2040 Transport Strategy (GMTS 2040) and Delivery Plan 1.

Habitats Regulations Assessment (HRA) is required by Regulation 61 of the Conservation of Habitats and Species Regulations 2010 (as amended) for all plans and projects which may have likely significant effects on European sites. This Stage 1 – Screening assesses whether the GMTS 2040 (and associated Delivery Plan 1) is likely to lead to significant effects on the European sites listed below with reference to the conservation objectives of the qualifying feature(s) of the site:

- Peak District Moors South Pennine Moors (Phase 1) SPA;
- South Pennine Moors SAC;
- South Pennine Moors (Phase 2) SPA;
- Rochdale Canal SAC;
- Manchester Mosses SAC;
- Rostherne Mere Ramsar Site;
- Rixton Clay Pits SAC;
- Ribble and Alt Estuaries SPA;
- Mersey Estuary SPA/Ramsar Site;
- Midland Meres and Mosses Phase 1 Ramsar Site;
- Martin Mere SPA/Ramsar Site.

This HRA has assessed whether the spatial themes and broad interventions outlined in the GMTS 2040 are likely to lead to significant effects on these European sites alone and in-combination with projects and plans and what these likely impacts are. Due to the broad strategic level of the GMTS 2040 and of the Delivery Plan 1, precise locations of potential schemes and the proposed magnitude of effects from new infrastructure and potential development areas have not yet been determined. This means that an in-combination assessment can be included within the HRA albeit a detailed assessment of ‘in-combination’ effects cannot be made at this stage. Taking this into account, in combination effects have been considered as part of this assessment. None of the other projects and plans identified in Section 6 (see above) will lead to likely significant effects on the European sites.

At this stage, due to the high level strategic nature of the GMTS 2040, only broad details of future development possibly arising from the policies are given. As such the GMTS 2040 will commit to conducting HRAs for any future infrastructure project which might have likely effects on European sites (in accordance with HRA text in Section 4.4 above and under the Network Principle: Environmental Responsibility of the GMTS 2040). In addition, Delivery Plan 1 which accompanies the GMTS 2040 acknowledges that there may be a requirement for HRA as part of the scheme appraisal process that schemes will undergo prior to funding being sought. Future infrastructure projects will need to be in-line with the GMTS 2040 and will need to satisfy TfGM and Natural England that there will be no adverse effect on the integrity of the European sites. Any adverse effects on site integrity must be effectively mitigated and, as a last resort, compensated for. This HRA Stage 1 Screening Report has identified that there will be no likely significant effects ‘alone’ or ‘in combination’ on any of the European sites included within this assessment.

Appendices



Appendix A. Findings of Stage 1 – Screening Assessment

A.1. HRA Results Tables

This appendix contains Tables A-1 and A-2 (see below) which summarise the broad interventions that apply to the network and modal principles, and the five key spatial themes within the GMTS 2040. The results determine whether the interventions are considered to have a likely significant effect on the European sites. The likely significant effects take into account the measures in the GMTS 2040 which seek to protect European sites.

Where possible, interventions have been categorised into sub policy types based on Natural England published guidance¹⁶, as summarised below.

Table A-1 Categories of Potential Effects of Land-Use Plans on European Sites

Category	Sub Category	Description
A – no negative effect	A1	Policies that will not themselves lead to development e.g. because they relate to design or other qualitative criteria for development, or they are not a land use planning policy.
	A2	Policies intended to protect the natural environment, including biodiversity.
	A3	Policies intended to conserve or enhance the natural, built or historic environment, where enhancement measures will not be likely to have any negative effect on a European site.
	A4	Policies that positively steer development away from European sites and associated sensitive areas.
	A5	Policies that would have no effect because no development could occur through the policy itself, the development being implemented through later policies in the same plan, which are more specific and therefore more appropriate to assess for their effects on European sites and associated sensitive areas.
B – no significant effect	N/A	Policies that could have a negative effect but would not be likely to have a significant effect on a European site alone or in combination with other plans or projects.
C – likely significant effects alone	C1	The policy could directly affect a European site because it provides for, or steers, a quantity or type of development onto a European site, or adjacent to it.
	C2	The policy could indirectly affect an European site e.g. because it provides for or steers, a quantity or type of development that may be very close to it, or ecologically, hydrologically or physically connected to it or it may increase disturbance as a result of increased recreational pressures.
	C3	Proposals for a magnitude of development that no matter where it was located, the development would be likely to have a significant effect on a European site.
	C4	A policy that makes provision for a quantity / type of development but the effects are uncertain because the detailed location of the development is to be selected following consideration of options at a later, more specific plan .
	C5	Policies for developments or infrastructure projects that could block options or alternatives for the provision of other development or projects in the future which will be required in the public interest that may lead to adverse effects on European sites, which would otherwise be avoided.
	C6	Policies which depend on how the policies etc are implemented in due course. There is a theoretical possibility that if implemented in one or more particular ways the proposals could possibly have a significant effect on a European site.
	C7	Any policies that would be vulnerable to failure under the Habitat Regulations

¹⁶ The Habitat Regulations Assessment of Local Development Projects (Revised Draft Guidance) (David Tyldesley & Associates for Natural England, February 2009).

		at project assessment stage to include them in the plan would be regarded by the EC as 'faulty planning'.
	C8	Any other proposal that may have an adverse effect on a European site which might try to pass the tests of the Habitat Regulations at project assessment stage by arguing that the plan provides the imperative reasons of overriding public interest to justify its consent despite a negative assessment.
D – likely significant effects in combination	D1	The policy alone would not be likely to have significant effects but if its effects are combined with the effects of other policies or proposals provided for or coordinated by the LDD (internally) the cumulative effects would be likely to be significant.
	D2	Policies that alone would not be likely to have significant effects but if their effects are combined with the effects of other plans or projects and possibly the effects of other developments provided for in the LDD as well the combined effects would be likely to be significant.
	D3	Policies that are or could be part of a programme or sequence of development delivered over a period where the implementation of the early stages would not have a significant effect on the location, timing of the whole project, the later stages of which could have an adverse effect on such sites.

The above guidance sets out criteria to assist with the screening process and addresses the management of uncertainty in the assessment process. Proposals falling within categories A and B are considered not to have an effect on a European site and can be eliminated from the assessment procedure. Proposals falling within category C and category D require further analysis, including the consideration of 'in-combination' effects to determine whether they should be included in the next stage of the HRA process.

Table A-2: HRA Stage 1 Screening Findings for Interventions

Network and Modal Principles			
	Broad Interventions	Will the broad interventions lead to likely significant effects on the European sites?	Justification of Findings
<p>Network Principles:</p> <ul style="list-style-type: none"> • Integration at the Heart of our 2040 Transport Strategy • An Inclusive Network • Supporting a Healthier Greater Manchester • Environmental Responsibility • A Reliable and Resilient Network • A Safe and Secure Transport System <p>Modal Principles:</p> <ul style="list-style-type: none"> • A Multi-Modal Highway Network • Developing a Comprehensive Walking and Cycling Network • Public Transport: Keeping Greater Manchester Moving in 2040 	<p>GM1 Establish and promote one integrated Greater Manchester public transport network</p> <p>GM2 Establish a unified Greater Manchester approach to managing and maintaining motorways and key roads</p> <p>GM3 Establish a long-term approach to the management of rail stations</p> <p>GM4 Develop and implement a new public transport fares and pricing strategy</p> <p>GM5 Deliver a bus network that reflects travel patterns in Greater Manchester</p> <p>GM6 Increase cashless payment options for account-based travel including integrated smart ticketing for public transport</p> <p>GM7 Travel choices interventions to support mode shift, supported by additional real time travel information and journey planning tools</p> <p>GM8 Improve access (including disabled access), facilities and integration between modes at interchanges</p> <p>GM9 Develop a more integrated approach to provision of Accessible Transport</p> <p>GM10 Deliver measures to improve safety and security on our transport networks</p> <p>GM11 Deliver measures to encourage the uptake of ultra-low emission vehicles, or retrofit of existing vehicles</p> <p>GM12 Review opportunities for establishing a Clean Air Zone *</p>	No	<p>Category A1: The majority of these interventions will not themselves lead to development e.g. because they relate to design or other qualitative criteria for development and it is not a land use planning policy. Interventions in this category include management and maintenance, payments and ticketing, access, facilities and car clubs/cycle hire.</p> <p>Category A5: The interventions could lead to development by provision of new transport infrastructure. However, as the interventions do not outline any development proposals, their design, location, and/or when (or if) these sites will be constructed upon are not known. The GMTS 2040 seeks to protect European sites (through the HRA text under the Network Principle: Environmental Responsibility). Therefore, should infrastructure development arise from the interventions, the need for HRA will be highlighted and undertaken at the development management stage. Any adverse effects will be avoided as far as possible and, if this cannot be achieved, the adverse impacts will be adequately mitigated, or, as a last resort, compensated for.</p> <p>The network and modal principles and interventions are considered to have no</p>

<ul style="list-style-type: none"> • Goods and Servicing 	<p>GM13 Deliver air quality and carbon reduction measures, described in the Greater Manchester Air Quality Action Plan and Climate Change Implementation Plan</p> <p>GM14 Improve pedestrian and cycle facilities, including routes, wayfinding and cycle parking</p> <p>GM15 Develop car clubs and cycle hire schemes (potentially including electric) to expand the transport offer in Greater Manchester</p>		<p>likely significant effects on the European sites.</p>
<p>Spatial Themes</p>			
	<p>Broad Interventions</p>	<p>Will the broad interventions lead to likely significant effects on the European sites?</p>	<p>Justification of Findings</p>
<p>Global Connectivity</p>	<p>G.1 Improved public transport access between the Airport, HS2 and the Enterprise Zone</p> <p>G.2 Better rail services to Manchester Airport from the south</p> <p>G.3 An improved Airport Interchange as part of the Terminal 2 redevelopment</p> <p>G.4 Tackling motorway congestion around the Airport and the north western part of the M60</p> <p>G.5 A new Metrolink line to the Trafford Centre (committed scheme), and potentially on the AJ Bell stadium and then Port Salford</p> <p>G.6 A Ship Canal wharf, rail and road links at Port Salford</p> <p>G.7 HS2 and Northern Powerhouse Rail services direct to the Airport</p> <p>G.8 Better public transport links to the Airport and Port Salford areas from across Greater Manchester, including better orbital connections</p> <p>G.9 Measures to reduce levels of car use by workers at Manchester Airport and Port Salford</p>	<p>No</p>	<p>Category A1: Some of these interventions will not themselves lead to development e.g. because they relate to design or other qualitative criteria for development and it is not a land use planning policy.</p> <p>Category A5: This theme could lead to development by provision of new transport infrastructure. However, as the interventions do not outline any development proposals, the exact details of where development may be located other than general areas, their design and/or when (or if) these sites will be constructed upon are not known.</p> <p>The GMTS 2040 seeks to protect European sites (through the HRA text under the Network Principle: Environmental Responsibility). Therefore, should infrastructure development arise from the interventions, the need for HRA will be highlighted and undertaken at the</p>

			<p>development management stage. Any adverse effects will be avoided as far as possible and, if this cannot be achieved, the adverse impacts will be adequately mitigated, or, as a last resort, compensated for.</p> <p>The spatial theme and interventions are considered to have no likely significant effects on the European sites.</p>
Delivering Better City-to-City Links	<p>C.1 Improved strategic highways connections in Wigan District (A58 and A49 Link Road committed schemes)</p> <p>C.2 Electrification of the Greater Manchester rail network (including Northern Hub/Lancashire triangle and trans-Pennine committed schemes) and delivery of enhanced rolling stock capacity (committed scheme)</p> <p>C.3 Measures to tackle congestion in the Longdendale area, including the Mottram Moor Link Road (committed scheme)</p> <p>C.4 Improved links to the M6, including J25 improvements</p> <p>C.5 Completion of Smart Motorway on M60, M62, M56 and M6 (committed schemes)</p> <p>C.6 Improvements to key 'national hub' rail stations for city to city links (Piccadilly, Victoria, Stockport and integration of Wigan stations)</p> <p>C.7 Further measures to tackle congestion on the motorway network identified by the NW Quadrant Study and other studies</p> <p>C.8 A pan-northern multi-modal ticketing system</p> <p>C.9 Measures to improve the reliability of trans-Pennine highway links</p> <p>C.10 Faster rail journeys to Liverpool, Leeds and Sheffield</p> <p>C.11 Early delivery of HS2 and Northern Powerhouse rail to Manchester city centre, well connected to Greater Manchester rail network</p>	No	<p>Category A1: Some of these interventions will not themselves lead to development e.g. because they relate to design or other qualitative criteria for development and it is not a land use planning policy. Interventions in this category include electrification of the rail network, and improvements to stations and ticketing.</p> <p>Category A5: This theme could lead to development by provision of new transport infrastructure. However, as the interventions do not outline any development proposals, the exact details of where development may be located other than general areas, their design and/or when (or if) these sites will be constructed upon are not known.</p> <p>The GMTS 2040 seeks to protect European sites (through the HRA text under the Network Principle: Environmental Responsibility). Therefore, should infrastructure development arise from the interventions, the need for HRA will be highlighted and undertaken at the development management stage. Any adverse effects will be avoided as far as possible and, if this cannot be achieved, the adverse impacts will be adequately mitigated, or, as a last resort, compensated for.</p> <p>The spatial theme and interventions are considered to have no likely significant</p>

			effects on the European sites.
Travel to and Within our Regional Centre	<p>RC.1 Increased capacity and improved facilities at Salford Central station (committed scheme)</p> <p>RC.2 Manchester and Salford Inner Relief Route improvements: Regent Road and Great Ancoats Street (committed schemes)</p> <p>RC.3 Metrolink fleet expansion and infrastructure enhancements (committed schemes)</p> <p>RC.4 Improved coach and taxi facilities.</p> <p>RC.5 Review of bus routing and interchange facilities within the Regional Centre.</p> <p>RC.6 Review of public transport access for the night-time and weekend economy</p> <p>RC.7 Re-development of Piccadilly station to integrate HS2, Northern Powerhouse Rail, local rail and Metrolink</p> <p>RC.8 Increased capacity for rapid transit in Manchester City Centre, including exploring the feasibility of new tunnels under the City Centre</p> <p>RC.9 Increased capacity at other key Regional Centre rail stations</p> <p>RC.10 Investment in pedestrian and cycling connections into and across the Regional Centre, with City Centre core areas seeing greater pedestrian and cycle priority</p> <p>RC.11 Better sustainable transport links between Manchester City Centre and the wider Regional Centre</p> <p>RC.12 A comprehensive highways demand management strategy to reduce congestion on key corridors into and within the Regional Centre</p> <p>RC.13 Measures to reduce the number of large goods vehicles at peak times.</p>	No	<p>Category A1: Some of these interventions will not themselves lead to development e.g. because they relate to design or other qualitative criteria for development and it is not a land use planning policy. Interventions in this category include improvements to public transport facilities.</p> <p>Category A5: This theme could lead to development by provision of new transport infrastructure. However, as the interventions do not outline any development proposals, the exact details of where development may be located other than general areas, their design and/or when (or if) these sites will be constructed upon are not known.</p> <p>The GMTS 2040 seeks to protect European sites (through the HRA text under the Network Principle: Environmental Responsibility). Therefore, should infrastructure development arise from the interventions, the need for HRA will be highlighted and undertaken at the development management stage. Any adverse effects will be avoided as far as possible and, if this cannot be achieved, the adverse impacts will be adequately mitigated, or, as a last resort, compensated for.</p> <p>The spatial theme and interventions are considered to have no likely significant effects on the European sites.</p>
Travel Across the Wider City Region	<p>W.1 South Heywood M62 J19 Link Road (committed scheme)</p> <p>W.2 Improve bus network in Bolton-Salford area (committed scheme)</p>	No	<p>Category A1: Some of these interventions will not themselves lead to development e.g. because they relate to design or other qualitative criteria</p>

	<p>W.3 New/enhanced interchanges in Ashton, Bolton, Stockport and Wigan town centres (committed schemes)</p> <p>W.4 Improve accessibility and connectivity to and around Stockport town centre (committed scheme)</p> <p>W.5 Studies into long-term transport challenges on southern approaches to Greater Manchester</p> <p>W.6 Establish a Greater Manchester Active Travel network, particularly using 'green and blue' corridors</p> <p>W.7 Roll out the 'next generation' of rapid transit routes (tram-train and bus rapid transit), including orbital links, serving the Regional Centre, key centres and the Airport</p> <p>W.8 Provide infrastructure to serve new development areas, identified through GMSF</p> <p>W.9 Establish long term programme for improvement of facilities at, and access to, transport hubs</p> <p>W.10 Improve maintenance and resilience of our key route network of highways</p>	<p>for development and it is not a land use planning policy. Interventions in this category include transport studies, maintenance, and improvements to public transport facilities.</p> <p>Category A5:</p> <p>This theme could lead to development by provision of new transport infrastructure. However, as the interventions do not outline any development proposals, the exact details of where development may be located other than general areas, their design and/or when (or if) these sites will be constructed upon are not known.</p> <p>The GMTS 2040 seeks to protect European sites (through the HRA text under the Network Principle: Environmental Responsibility). Therefore, should infrastructure development arise from the interventions, the need for HRA will be highlighted and undertaken at the development management stage. Any adverse effects will be avoided as far as possible and, if this cannot be achieved, the adverse impacts will be adequately mitigated, or, as a last resort, compensated for.</p> <p>The spatial theme and interventions are considered to have no likely significant effects on the European sites.</p>
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<p>Connected Neighbourhoods</p>	<p>9.11 Improve the flow of traffic on key roads through measures to release bottlenecks and better manage demand at peak times</p> <p>9.12 Faster rail journeys and increased capacity for local services</p> <p>9.13 Improve sustainable transport to major employment and residential areas within and immediately outside Greater Manchester</p> <p>9.14 Provide much better pedestrian and cycle links across town centres, including reducing severance by major roads</p> <p>9.15 Measures to reduce impact of goods vehicles in centres, with better loading/unloading facilities</p> <p>9.16 Improved road safety at accident blackspots</p> <p>10.1 Improved facilities at local stations</p> <p>10.2 More accessible 'public realm', including bus stops</p> <p>10.3 Better pedestrian and cycle links to stations and stops, as well as to local facilities</p> <p>10.4 Road safety measures where there is a high risk to vulnerable road users</p> <p>10.5 Speed reduction measures in prioritised locations</p> <p>10.6 Reduced noise levels in identified 'hotspot' areas</p>	<p>No</p>	<p>Category A1:</p> <p>The majority of these interventions will not themselves lead to development e.g. because they relate to design or other qualitative criteria for development and it is not a land use planning policy. Interventions in this category include improved road safety, improvements to station facilities and noise levels.</p> <p>Category A5:</p> <p>This theme could lead to development by provision of new transport infrastructure. However, as the interventions do not outline any development proposals, the exact details of where development may be located other than general areas, their design and/or when (or if) these sites will be constructed upon are not known.</p> <p>The GMTS 2040 seeks to protect European sites (through the HRA text under the Network Principle: Environmental Responsibility). Therefore, should infrastructure development arise from the interventions, the need for HRA will be highlighted and undertaken at the development management stage. Any adverse effects will be avoided as far as possible and, if this cannot be achieved, the adverse impacts will be adequately mitigated, or, as a last resort, compensated for.</p> <p>The spatial theme and interventions are considered to have no likely significant effects on the European sites.</p>
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Appendix B. Maps

The map in this appendix provides the following information:

- Districts within GM Region
- Location of European sites in relation to GM

Appendix C. Natural England Consultation Response

Greater Manchester Transport Strategy - HRA Screening - Message (HTML)

McAfee E-mail Scan

FILE MESSAGE

Ignore Delete Reply Reply All Forward Meeting To Manager Team Email More Quick Steps Move Actions Move Tags Follow Up Translate Find Related Select Zoom

Wed 27/01/2016 15:35

 Baguley, Janet (NE) <Janet.Baguley@naturalengland.org.uk>
Greater Manchester Transport Strategy - HRA Screening

To  Ford, Caroline

 Follow up. Start by 12 February 2016. Due by 12 February 2016.

Dear Caroline,

Thank you for consulting Natural England on the Stage 1 Screening of the Habitats Regulations Assessment of the Greater Manchester Transport Strategy 2040.

In general terms it is quite difficult for Natural England to give an opinion on sites being screened out of the assessment without the detail of the Strategy to look at.

As a starting point, we support the methodology of including all sites within the GM region and up to 20km from the nearest district boundary although, depending on the proposals/policies in the strategy, impacts further afield may need to be considered. It is not clear what "a focus on regeneration and improvement to local transport services within the GM region, improving access to the city centre, Manchester Airport and Trafford Park" might entail so without that detail we cannot support the screening out of any sites.

With reference to the wider connectivity objectives, Natural England are not satisfied with the proposal that HRA will be deferred to project level. If the Strategy will contain policies that support/enable the delivery of projects then the potential impacts on Natura 2000 sites should be assessed at a strategic level as far as available detail will allow.

I hope that you find these comments useful and please do not hesitate to contact me if you have any further queries.

Kind regards

Janet Baguley
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Cheshire, Greater Manchester, Merseyside & Lancashire Area
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My working days are Monday, Tuesday and Wednesday.

<https://www.gov.uk/government/organisations/natural-england>
We are here to secure a healthy natural environment for people to enjoy, where wildlife is protected and England's traditional landscapes are safeguarded for future generations.

In an effort to reduce Natural England's carbon footprint, I will, wherever possible, avoid travelling to meetings and attend via audio, video or web conferencing.



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