

Greater Manchester Combined
Authority

**Greater Manchester Spatial
Framework**

Site Suitability Methodology

FINAL ISSUE | 11 October 2017

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 238244-02

Ove Arup & Partners Ltd
6th Floor 3 Piccadilly Place
Manchester M1 3BN
United Kingdom
www.arup.com

ARUP

Contents

| | Page | |
|----------|--|-----------|
| 1 | The approach | 2 |
| 2 | Definition of terms | 3 |
| | 2.1 Acronyms | 3 |
| 3 | Scoping and rationalising the objectives | 4 |
| 4 | Assumptions required | 5 |
| 5 | Approach to Assessment and Presentation of Findings | 6 |
| | 5.1 Assessing Objectives and Indicators | 6 |
| | 5.2 Overall suitability assessment | 9 |
| 6 | Site suitability assessments | 10 |
| | 6.1 Assessment table | 10 |
| | 6.2 Approach to Qualitative Section | 21 |
| 7 | Explanation and Data Sources | 21 |

Appendix A

Working Methodology Framework

1 The approach

This note includes the methodology for developing the 'suitability' section of the wider site selection methodology (SSM) discussed at the meeting on 8th June 2017. The SSM would include this assessment of suitability as well as other factors such as availability and achievability, against the strategic vision and spatial objectives of the Greater Manchester Spatial Framework (GMSF) and consultation responses received to the Draft GMSF consultation October 2016- in January 2017.

The Greater Manchester Combined Authority (GMCA) suggested that the objectives set out in the Greater Manchester Spatial Framework (GMSF) Integrated Assessment (IA) should be used to inform the SSM. Therefore, the main IA objectives, in combination with datasets held by GMCA, have been used to inform the assessment.

It was agreed with the GMCA, that a rating system was required to enable overall conclusions to be reached about relative suitability. Therefore, for each line of assessment, the approach will award a red / amber / green (RAG) colour code. The individual lines of assessment will then inform a RAG summary rating for the site as a whole. The assessment will also include an overall qualitative summary box, which will highlight key issues once the RAG scoring is complete, although the qualitative section is not comprehensive and will not cover all of the objectives referred to in the RAG ratings. The entire exercise is not to add or remove sites from the process, but considers the suitability of each site.

After consideration of what was relevant for the site suitability assessment, a number of the IA objectives were scoped out, and some were merged to avoid double counting, and/or where it was felt they covered the same issues. This scoping exercise is illustrated in the methodology table provided in Appendix A.

2 Definition of terms

The following terms are used in this note:

- **Objective** – objectives are the catchall assessment themes which are commonly used in sustainability assessments, which were identified as part of scoping the IA. There are 18 objectives, which each contain up to four separate assessment criteria (see below). All objectives are shown in the table in Appendix A of this note.
- **Assessment criteria** – the specific questions used in assessment which sit under the broad IA objectives. Each objective contains up to four assessment criteria, each of which covers a distinct topic or issue underneath the broad objective. All assessment criteria are shown in the table in Appendix A of this note.
- **Indicator** – indicators are specific to this methodology. They flow from the assessment criteria to give the red, amber or green scoring.

Not all objectives will be relevant for site selection. Similarly, not all assessment criteria within certain objectives will be relevant. As such, before any assessment can take place, a scoping exercise was undertaken to ensure only the relevant aspects were considered. This is discussed below.

Some of the indicators are relevant across a number of assessment criteria, and in some cases a number of objectives. However they are included with the most relevant assessment criteria, acknowledging they may be applicable elsewhere.

2.1 Acronyms

Within the site summaries there are a number of acronyms used. These are listed below:

- **AQMA** – Air Quality Management Area
- **CfS** – Call for Site
- **GMAL** – Greater Manchester Accessibility Levels

- GMEU – Greater Manchester Ecology Unit
- IDACI – Income Deprivation Affecting Children Index
- IDOPI – Income Deprivation affecting Older People Index
- IMD – Indices of Multiple Deprivation
- JtW – Journey to Work
- LSOA – Lower Super Output Area
- SAC – Special Areas of Conservation
- SBI – Site of Biological Importance
- SPA – Special Protection Area
- SPZ – Source Protection Zone
- SSM – Site Selection Methodology
- SSSI – Site of Special Scientific Interest
- TfGM – Transport for Greater Manchester

3 Scoping and rationalising the objectives

Following the meeting on 8 June 2017, a number of the objectives were scoped out. Some were merged where the focus of the objective (and/or assessment criteria) were considered to be duplicates in this site suitability assessment context. The results of this scoping exercise are shown in the table in Appendix A. Where two or more objectives have been merged, it could be argued that a weighting should be applied to ensure all objectives have equal influence over the final (site) rating. Applying such a weighting was not considered appropriate at this stage as this is not a formal part of the IA, therefore all objectives do not necessarily carry equal weight.

A number of meetings have taken place since the 8th June 2017, where objectives have been further refined. The evolution of the IA objectives to the Site Suitability Criteria is shown in Appendix A, with the agreed Site Suitability Methodology provided in Section 6.

4 Assumptions required

A number of the objectives require headline assumptions to be made in order to allow a site to be RAG rated. Fixing these assumptions at the outset will ensure that there is no need for individual assessors to interpret data (e.g. in terms of site suitability, is a deprived area “red” or “green”?). Specifically:

- Objective 4: An assumption needs to be made about how to use deprivation in site selection. Currently, the assessment assumes that deprivation is "good" (i.e. marked as ‘green’) in terms of site suitability, as targeted investment can improve the area. However, it is acknowledged that deprivation can be positive or negative for a proposal and it is dependent on what the aims of the development area, e.g. a proposal can attract investment and so would be positive for a deprived area. For this to be accurate, it needs to be set out that the GMSF will ensure that:
 - Impact or inconvenience of construction/operation of development is managed, and
 - Opportunities for areas with poor indoor living environment are maximised.
- Objective 6: Deprivation data is used which will follow the same assumption as Objective 4.
- Objective 14: An area of search of 250m around the site for the presence of water features was deemed suitable and any water features within this buffer would be classed as ‘amber’.
- Objective 16: A 250m / 500m buffer has been assumed as being an appropriate distance around heritage and landscape features within the sites.
- Objective 17: Assumption that greenfield land is a ‘red’ rating and previously developed land (PDL) is ‘green’. It is also assumed that the policy and overarching objectives will require remediation of the land.

The consistent application of these assumptions will result in a robust approach that will prevent any misinterpretation or human error resulting from a varied application of these objectives between sites.

5 Approach to Assessment and Presentation of Findings

The table in section 6 outlines the proposed methodology for the site suitability assessment. A heading is provided, along with the proposed thresholds and RAG rating that has been agreed for each objective and indicator.

The table in Appendix A outlines the stages from IA to Site Suitability. The first three columns outline the IA objectives and assessment criteria. The fourth column provides a commentary on the data use and gives a justification for whether the objective/assessment criteria are scoped in or out, and the fifth column highlights the data that will be used. For cases where they are scoped out, there is no further information provided. For relevant objective/assessment criteria, there is a comment on its use and a comment on the data used for the RAG indicators. Section 9 highlights the data sources and provides an explanation for the data used.

5.1 Assessing Objectives and Indicators

Some objectives have one relevant dataset (and one indicator); where this occurs, there will be a simple overall RAG rating for this single line of assessment. For other objectives, the assessment includes several assessment criteria (and related datasets/indicators) which are each rated individually. These objectives will need to be balanced to give an overall RAG rating against the objective.

The two figures below explain how an overall rating will be arrived at for an objective with numerous indicators.

Figure 1: Rules for section ratings

| Total number of indicators per section | Total number of indicators of each colour | | | Final section outcome |
|--|---|-------|-------|-----------------------|
| | Red | Amber | Green | |
| 1 | 1 | 0 | 0 | Red |
| 1 | 0 | 1 | 0 | Amber |
| 1 | 0 | 0 | 1 | Green |
| 2 | 2 | 0 | 0 | Red |
| 2 | 1 | 1 | 0 | Red |
| 2 | 1 | 0 | 1 | Amber |
| 2 | 0 | 2 | 0 | Amber |
| 2 | 0 | 1 | 1 | Amber |
| 2 | 0 | 0 | 2 | Green |
| 3 | 3 | 0 | 0 | Red |
| 3 | 0 | 3 | 0 | Amber |
| 3 | 0 | 0 | 3 | Green |
| 3 | 1 | 1 | 1 | Amber |
| 3 | 2 | 1 | 0 | Red |
| 3 | 2 | 0 | 1 | Red |
| 3 | 1 | 2 | 0 | Red |
| 3 | 1 | 0 | 2 | Amber |
| 3 | 0 | 2 | 1 | Amber |
| 3 | 0 | 1 | 2 | Green |
| 4 | 4 | 0 | 0 | Red |
| 4 | 3 | 1 | 0 | Red |
| 4 | 3 | 0 | 1 | Red |
| 4 | 2 | 2 | 0 | Red |
| 4 | 2 | 1 | 1 | Amber |
| 4 | 2 | 0 | 2 | Amber |
| 4 | 1 | 3 | 0 | Red |
| 4 | 1 | 2 | 1 | Amber |
| 4 | 1 | 1 | 2 | Amber |
| 4 | 1 | 0 | 3 | Amber |
| 4 | 0 | 4 | 0 | Amber |
| 4 | 0 | 0 | 4 | Green |
| 4 | 0 | 3 | 1 | Amber |
| 4 | 0 | 1 | 3 | Green |
| 4 | 0 | 2 | 2 | Amber |
| 6 | 6 | 0 | 0 | Red |
| 6 | 5 | 1 | 0 | Red |
| 6 | 5 | 0 | 1 | Red |
| 6 | 4 | 2 | 0 | Red |
| 6 | 4 | 0 | 2 | Red |
| 6 | 4 | 1 | 1 | Red |
| 6 | 3 | 3 | 0 | Red |
| 6 | 3 | 0 | 3 | Amber |
| 6 | 3 | 2 | 1 | Red |

| | | | | |
|---|---|---|---|-------|
| 6 | 3 | 1 | 2 | Amber |
| 6 | 2 | 4 | 0 | Amber |
| 6 | 2 | 0 | 4 | Amber |
| 6 | 2 | 3 | 1 | Amber |
| 6 | 2 | 1 | 3 | Amber |
| 6 | 2 | 2 | 2 | Amber |
| 6 | 1 | 5 | 0 | Amber |
| 6 | 1 | 0 | 5 | Green |
| 6 | 1 | 4 | 1 | Amber |
| 6 | 1 | 1 | 4 | Green |
| 6 | 1 | 3 | 2 | Amber |
| 6 | 1 | 2 | 3 | Amber |
| 6 | 0 | 6 | 0 | Amber |
| 6 | 0 | 0 | 6 | Green |
| 6 | 0 | 5 | 1 | Amber |
| 6 | 0 | 1 | 5 | Green |
| 6 | 0 | 4 | 2 | Amber |
| 6 | 0 | 2 | 4 | Green |
| 6 | 0 | 3 | 3 | Amber |

5.1.1 Transport and Accessibility Objective

The Transport and Accessibility objective (Objective 2) has required input from TfGM and a wider range of data to input into the assessments than some of the other objectives have required. As this information has a different source to the other objectives, the rules for the assessment of the other objectives have been applied as closely as possible. However, there are some differences and as a result the rules are clearly set out in this section, with more information provided in Appendix A. The overall score is then used in the same way as the other objectives.

The objective takes account of the following:

- **Scale and nature of the CfS site** - the potential scale of residential and / or employment development, identified in terms of net additional residents and / or employees.
- **Modal split** - ascertained from Census 2011 Method of Travel to Work data in order to infer the use of car vs. non car modes at the site.

- **Car driver average trip length** - ascertained from 2011 Origin Destination (Method of Travel to Work) data.
- **Highway ‘pinch points’** - obtained from Greater Manchester SATURN Model (GMSM) and available for 2014 base year and a 2025 growth scenario.

Rules for objective 2

Due to objective 2 being split by use and also being dependent on whether the site is residential or employment use, specific rules have been established to provide the RAG rating for objective 2. The detail of this is provided in Appendix A, which explains in detail the approach which has been applied.

5.2 Overall suitability assessment

An overall RAG scoring will be reached for each site. In order to come to the overall RAG rating, the rules below will apply for different RAG scoring combinations.

Figure 2: A greyscale example of how the overall suitability assessment will be applied to ensure consistency.

| Split of sections | Quantity of sections | | | | | | | | | | | | Overall site suitability |
|---|----------------------|---|---|---|---|---|---|---|---|----|----|----|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| 12 x one colour | | | | | | | | | | | | | Takes single colour |
| 10 - 11 of a single colour | | | | | | | | | | | | | Takes dominant colour |
| 8-9 of a single colour, three colours represented | | | | | | | | | | | | | Takes dominant colour |
| 8-9 of a single colour, two colours represented | | | | | | | | | | | | | Takes dominant colour, unless red/green split, in which case amber |
| 7 / 5 split of two colours | | | | | | | | | | | | | Takes worst case (red/green = red; |

| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|---|
| | | | | | | | | | red/amber = red, amber/green = amber) |
| 6 - 7 of single colour, with all three colours represented | | | | | | | | | Takes dominant colour |
| 5 / 5 / 2 split | | | | | | | | | If 5 x red, then red; otherwise amber |
| 5/4 split | | | | | | | | | Worst case, unless green/red split, in which case amber |
| 6 / 6 split | | | | | | | | | Take worst case of the two main colours |
| 4/4/4 split | | | | | | | | | Amber |

The overall assessment will also incorporate a qualitative summary which will tie together the issues highlighted.

6 Site suitability assessments

6.1 Assessment table

The methodology table, as discussed in section 5 above, is shown below. This outlines both the Site Suitability Criteria that were deemed to be relevant after the initial scoping exercise, and the thresholds which provide the RAG rating. The final table of the document sets out sources of assumptions where distance thresholds are given, and gives an explanation of the data used with the thresholds.

| Site Suitability Criteria | Indicator | RED | AMBER | GREEN |
|---|---|--|--|---|
| Criteria 1: Connectivity and Accessibility | Ensure housing land is well-connected with employment | Red rating: If the lowest Greater Manchester | Amber rating: If the lowest GMAL score is 4 or 5 | Green rating: If the lowest GMAL score is 6, 7 or 8 |

| Site Suitability Criteria | Indicator | RED | AMBER | GREEN |
|---|---|---|--|--|
| | land, centres and green space or co-located where appropriate? | Accessibility Level (GMAL) score is 1, 2 or 3 | | |
| Criteria 2: Transport Infrastructure Capacity | Ensure that the transport network can support and enable the anticipated scale and spatial distribution of development? | Red rating: RESI - Car Driver Journey to Work (JtW) Mode Share (resident population) greater than 70% | Amber rating: RESI - Car Driver JtW Mode Share (resident population) between 60% and 70% | Green rating: RESI - Car Driver JtW Mode Share (resident population) less than 60% |
| Criteria 2: Transport Infrastructure Capacity | Ensure that the transport network can support and enable the anticipated scale and spatial distribution of development? | Red rating: RESI - Car Driver JtW Average Trip Length (km) (resident population) greater than 8km | Amber rating: RESI - Car Driver JtW Average Trip Length (km) (resident population) between 6km and 8km | Green rating: RESI - Car Driver JtW Average Trip Length (km) (resident population) less than 6km |
| Criteria 2: Transport Infrastructure Capacity | Ensure that the transport network can support and enable the anticipated | Red rating: EMP1 - Predicted Car Driver Mode Share (workplace | Amber rating: EMP1 - Predicted Car Driver Mode Share (workplace | Green rating: EMP1 - Predicted Car Driver Mode Share (workplace |

| Site Suitability Criteria | Indicator | RED | AMBER | GREEN |
|---|---|--|---|---|
| | scale and spatial distribution of development? | population) greater than 70% | population) between 60% and 70% | population) less than 60% |
| Criteria 2: Transport Infrastructure Capacity | Ensure that the transport network can support and enable the anticipated scale and spatial distribution of development? | Red rating: Pinch Points 2014 Base (>85 VC) greater than 1 | Amber rating: Pinch Points 2014 Base (>85 VC) between 0 and 1 | Green rating: Pinch Points 2014 Base (>85 VC) equal to 0 |
| Criteria 2: Transport Infrastructure Capacity | Ensure that the transport network can support and enable the anticipated scale and spatial distribution of development? | Red rating: Pinch Points 2025 Base (>85 VC) greater than 1 | Amber rating: Pinch Points 2025 Base (>85 VC) between 0 and 1 | Green rating: Pinch Points 2025 Base (>85 VC) equal to 0 |
| Criteria 3: Deprivation | Reduce the proportion of people living in deprivation? | Red rating: If the lowest decile on site is 1, 2 or 3 | Amber rating: If the lowest decile on site is 4, 5 or 6 | Green rating: If the lowest decile on site is 7, 8, 9 or 10 |
| Criteria 3: Deprivation | Support reductions in poverty | Red rating: If the lowest | Amber rating: If the lowest | Green rating: If the lowest |

| Site Suitability Criteria | Indicator | RED | AMBER | GREEN |
|---------------------------|--|---|---|---|
| | (including child and fuel poverty), deprivation and disparity across the domains of the Indices of Multiple Deprivation? | decile on site is 1, 2 or 3 | decile on site is 4, 5 or 6 | decile on site is 7, 8, 9 or 10 |
| Criteria 3: Deprivation | Support reductions in poverty (including child and fuel poverty), deprivation and disparity across the domains of the Indices of Multiple Deprivation? | Red rating: If the lowest decile on site is 1, 2 or 3 | Amber rating: If the lowest decile on site is 4, 5 or 6 | Green rating: If the lowest decile on site is 7, 8, 9 or 10 |
| Criteria 3: Deprivation | Support reductions in poverty (including child and fuel poverty), deprivation and disparity across the domains of the Indices of | Red rating: If the lowest decile on site is 1, 2 or 3 | Amber rating: If the lowest decile on site is 4, 5 or 6 | Green rating: If the lowest decile on site is 7, 8, 9 or 10 |

| Site Suitability Criteria | Indicator | RED | AMBER | GREEN |
|----------------------------------|--|--|---|---|
| | Multiple Deprivation? | | | |
| Criteria 4: Health and Wellbeing | Support healthier lifestyles and support improvements in determinants of health? | Red rating: If the site is wholly within the noise contours | Amber rating: If any portion of the site is within any of the noise contours | Green rating: None of the site is within the noise contours |
| Criteria 4: Health and Wellbeing | Support healthier lifestyles and support improvements in determinants of health | Red rating: If the lowest decile on site is 1, 2 or 3 | Amber rating: If the lowest decile on site is 4, 5 or 6 | Green rating: If the lowest decile on site is 7, 8, 9 or 10 |
| Criteria 4: Health and Wellbeing | Support healthier lifestyles and support improvements in determinants of health | Red rating: If the site is more than 720 metres from an accessible green space | Amber rating: If the site is between 480 metres and 720 metres of an accessible green space | Green rating: If the site is within 480 metres of an accessible green space |

| Site Suitability Criteria | Indicator | RED | AMBER | GREEN |
|---|--|---|---|---|
| Criteria 5: Social Infrastructure Access | Indicator: Ensure people are adequately served by key healthcare facilities, regardless of socio-economic status? | Red rating: If the nearest GP surgery or dentist is over 3km away | Amber rating: If the nearest GP surgery or dentist is between 0.8km and 3km | Green rating: If the nearest GP or dentist is within 0.8km |
| Criteria 5: Social Infrastructure Access | Indicator: Ensure sufficient access to educational facilities for all children? | Red rating: If the nearest primary school is not within 3.2km of the site, and the nearest secondary school is not within 4.8km of the site | Amber rating: If a primary school is within 3.2km of the site, OR a secondary school is within 4.8km of the site | Green rating: If a primary school is within 3.2km of the site AND a secondary school is within 4.8km of the site |
| Criteria 5: Social Infrastructure Access | Indicator: Promote access to and provision of appropriate community social infrastructure including playgrounds | Red rating: If no facilities are within 4.8km | Amber rating: If one or two facilities are within 4.8km | Green rating: If three or more facilities are within 4.8km |

| Site Suitability Criteria | Indicator | RED | AMBER | GREEN |
|--|---|---|---|--|
| | and sports facilities? | | | |
| Criteria 6: Efficient Patterns of Movement | Indicator: Reduce the need to travel and promote efficient patterns of movement? | Red rating: If neither a general store nor a post office indicator are within 0.8km | Amber rating: If either a general store OR a post office is within 0.8km of the site | Green rating: If both a general store AND a post office are within 0.8km of the site |
| Criteria 7: Air quality | Indicator: Improve air quality within Greater Manchester, particularly in the 10 Air Quality Management Areas (AQMAs)? | Red rating: If any part of the site is within an AQMA | Amber rating: If any part of the site is within 200 metres of an AQMA | Green rating: No AQMA is within 200m of the site |
| Criteria 8: Biodiversity and Green Infrastructure | Indicator: Provide opportunities to enhance new and existing wildlife and geological sites? | Red rating: If any of SSSI, SPA, SAC or Ramsar are within the site | Amber rating: If a wildlife corridor, priority habitat, local nature reserve or SBI is on the site, OR the site is within 1km of an | Green rating: If no wildlife corridors, priority habitats, local nature reserves or SBIs are within the site, AND no SPA or SACs are |
| Criteria 8: Biodiversity and | Indicator: Avoid damage to or destruction of | | | |

| Site Suitability Criteria | Indicator | RED | AMBER | GREEN |
|---|--|---|--|--|
| Green Infrastructure | designated wildlife sites, habitats and species and protected and unique geological features? | | SPA or SAC, OR the site is within 250m of a SSSI or Ramsar site | within 1km of the site, AND no SSSI or Ramsar are within 250m of the site |
| Criteria 8: Biodiversity and Green Infrastructure | Indicator: Avoid damage to or destruction of designated wildlife sites, habitats and species and protected and unique geological features? | Red rating: If any of the site is covered by the priority species layer (which is provided in 200m squares) | Amber rating: If any of the site is within 200m of a priority species area | Green rating: If there are no priority species on or within 200m of the site |
| Criteria 8: Biodiversity and Green Infrastructure | Indicator: Support and enhance existing multifunctional green infrastructure ¹ and / or contribute towards the creation of new | Red rating: If green infrastructure covers any part of the site | Amber rating: If green infrastructure is within 250m of the site | Green rating: If no green infrastructure is within 250m of the site |

| Site Suitability Criteria | Indicator | RED | AMBER | GREEN |
|-------------------------------------|--|---|--|---|
| | multifunctional green infrastructure? (for further information see paragraph below this table) | | | |
| Criteria 9: Flood Risk | Indicator: Restrict the development of property in areas of flood risk? | Red rating: If the site contains any part of flood zone 2 | Amber rating: If the site is within 250m of flood zone 2 | Green rating: If the site is neither covered by nor within 250m of flood zone 2 |
| Criteria 10: Water Resources | Indicator: Promote management practices that will protect water features from pollution? | Red rating: If a water feature from OS Open Rivers or Source Protection Zone is on the site | Amber rating: If a water feature from OS Open Rivers or SPZ is within 250m the site boundary | Green rating: If no water feature from OS Open Rivers or SPZ is on the site |
| Criteria 11: Landscape and Heritage | Conserve and enhance the historic environment, heritage assets and their setting? | Red rating: If any heritage feature is on the site. | Amber rating: If a listed building, structure, monument, locally listed building or | Green rating: No listed buildings are within 250m, AND no conservation areas, |

| Site Suitability Criteria | Indicator | RED | AMBER | GREEN |
|-------------------------------------|---|---|---|--|
| | | | scheduled monument are within 250m of the site boundary, OR if a conservation area, registered park or garden are within 500m of the site | registered parks or gardens are within 500m of the site. |
| Criteria 11: Landscape and Heritage | Respect, maintain and strengthen local character and distinctiveness? | Red rating: If any feature is located within the site | Amber rating: If any feature is within 500m of the site | Green rating: If no feature is within 500m of the site |
| Criteria 12: Land Resources | Support the development of previously developed land and other sustainable locations? | Red rating: If none of the site is PDL (i.e. 0%) | Amber rating: If PDL is greater than 0% and less than 100%, OR the PDL calculation has not been completed | Green rating: If the site is 100% PDL |
| Criteria 12: Land Resources | Protect the best and most versatile agricultural land | Red rating: If site contains any grade 1 land | Amber rating: If site does not contain grade 1 land, | Green rating: If the site does not contain and is |

| Site Suitability Criteria | Indicator | RED | AMBER | GREEN |
|---------------------------|--|-----|---------------------------------|---|
| | / soil resources from inappropriate development? | | but is adjacent to grade 1 land | not adjacent to agricultural land grade 1 |

Further to site suitability criteria 8 (Green Infrastructure), it is noted that Green Infrastructure is the GM Priority Green Infrastructure which has been defined by the GMEU as ‘the broad areas of green and blue infrastructure considered to have the most potential deliver important Ecosystem Services (ESS) [benefits] across Greater Manchester and at a Greater Manchester scale’ There was a focus in the analysis on designated nature conservation sites, habitats and species because it is predominantly natural and semi-natural habitats that deliver ESS (for example, peat bogs deliver the ESS services of storing water and reducing surface water run-off rates, storing carbon and supporting biodiversity). There was also a focus on waterways because it is only through the rivers and canals that a ‘network’ of GI can be developed [a test of the NPPF definition]. Species distributions are useful because they give an indication of where the highest quality habitats are (those most likely to deliver multiple ESS).

6.2 Approach to Qualitative Section

The information and RAG ratings outlined in Section 6.1 are collected in database format, which is linked to the mapping system to enable the data to be viewed alongside the site maps and other information.

The qualitative section that is provided, highlights the key issues that are deemed to be relevant. It does not provide a commentary on all of the information provided through the RAG ratings. All objectives are considered equal, and none are favoured or referenced as having more weighting applied, however some objectives often have more relevance, as they are more relevant to site suitability.

The RAG rating was chosen as it is a common approach and a colour group that many people are familiar with, and although red/amber/green are used any colours could in fact be used. It highlights the relative performance of a site against an objective not whether or not a site will be taken forward. Site suitability is only one part of the SSM and therefore a number of other factors need to be balanced and considered alongside this in determining a final decision on whether a site is selected for allocation or not.

7 Explanation and Data Sources

The following section provides an explanation for how each of the ratings and thresholds were sourced and applied to ensure a clear and transparent approach.

| Site Suitability Criteria | Explanation | Source | Judgement required? |
|---------------------------|---|---|--|
| 1 | GMAL data from TfGM is used to inform this objective. | TfGM http://www.tfgm.com/Corporate/Documents/Miscellaneous/12-1386_Transport-for-sustainable-communities.pdf | None. |
| 2 | The information has been sourced from TfGM who have provided the data and explanations. | TfGM | None. |
| 3 | IMD requires interpretation for purpose of this assessment. | n/a | Yes. See assumptions section |
| 4 | Manchester Airport Leq noise contour data from GMCA. | GMCA mapping | None |
| 4 | Living environment deprivation domain requires interpretation for purpose of this assessment. | n/a | Yes. See assumptions section |
| 4 | The thresholds have been based on the recommended benchmark | http://www.fieldsintrust.org/Upload/file/Guidance/Guidance-for-Outdoor-Sport- | None. Thresholds as per source document. |

| Site Suitability Criteria | Explanation | Source | Judgement required? |
|---------------------------|--|---|---|
| | guidelines from Fields in Trust. | and-Play-England.pdf | |
| 5 | No national guidance for distance to healthcare facilities, these are generally measured by population. A best practice review was undertaken. | Central Lancashire Local Development Framework – Site Allocations Development Plan Documents Sustainability Appraisal Scoping Report (2009) | None. |
| 5 | Statutory distance to/from schools is used | Statutory distance to schools, as defined in Education Act 1996 | No |
| 5 | No clear guidance on reasonable distances to leisure centres, children’s centres, youth centres and community centres. Therefore, the Statutory distance to/from schools is used | Statutory distance to schools, as defined in Education Act 1996 | Yes. Statutory distances to schools assumed to be transferable/applicable. Upper age bracket of 8-16 years old (distance of 3 |

| Site Suitability Criteria | Explanation | Source | Judgement required? |
|---------------------------|---|---|--|
| | | | miles) for leisure, youth and community centres and the lower age bracket for primary schools (distance of 2 miles) used for children's centres. |
| 6 | IMD data is used and distances are applied. Takes the LSOA closest to the centroid of the site and applies the figures from IMD for that LSOA to the site | IMD / LSOA | No. |
| 7 | Distance from site required to make a judgement on where a development might affect an AQMA. | Discussions held with staff working on Clean Air Zone who advised Design Manual for Roads and Bridges (DMRB) figures should be used to establish thresholds, with a buffer of | No – as advise was gained and this was taken forward |

| Site Suitability Criteria | Explanation | Source | Judgement required? |
|---------------------------|--|---|--|
| | | 200m recommended. | |
| 8 | This objective utilises existing datasets from GMCA. | None available. Site assessments take many different factors into account (e.g. connectivity between site, green corridors etc.). As such, no guidance could be found that uses a distance only approach. | Yes. A 250m buffer around the site for national and international features has been utilised. It is recommended this is agreed with GMEU. |
| 9 | Flood zone data is used to identify which, if any, flood zone that the site is within and this is then used to score the site. | EA flood mapping. | Yes. It is assumed that red = where site contains any flood zone 2. Amber = within 250m of an area within flood zone 2. Assuming that activities adjacent to an area of flood risk can influence |

| Site Suitability Criteria | Explanation | Source | Judgement required? |
|---------------------------|--|---|---|
| | | | neighbouring flood risk. |
| 10 | Existing datasets are utilised. | GMCA. No data on thresholds | Yes. Water features 250m from the site assumed to be near enough to require some consideration. |
| 11 | The thresholds have been agreed in accordance to the presence of features or the proximity of features on the site with a 250m or 500m buffer assumed. | None available. Site assessments take many different factors into account (e.g. views to/from a conservation area, which could cover large distances). As such, no guidance could be found that uses a distance only approach. | Yes. Heritage features 250m from the site assumed to be near enough to require some consideration. |
| 12 | PDL/greenfield/BMV | None. Available | Yes – assumed that PDL is preferred over greenfield, and BMV is not preferred. |

Appendix A

Working Methodology Framework

A1 Working Methodology Framework

The table below outlines the IA objectives which were scoped out, merged and gives a comment as to why this was done. The table therefore outlines the evolution from the IA objectives to the Site Suitability Criteria and how the methodology provided in Section 6 has been formed.

| IA Objective | | Assessment criteria | Relevant for site selection ? | Comment on use | Data use for indicator | RED | AMBER | GREEN |
|--------------|----------------------------|---|-------------------------------|---|--|---------------------------------------|------------------------------------|---------------------------------------|
| 1 | Sustainable housing supply | Ensure an appropriate quantity of housing land to meet the objectively assessed need for market and affordable housing? | N | Sites will not be allocated as housing or employment at this stage. | n/a | n/a | n/a | n/a |
| 1 | Sustainable housing supply | Ensure an appropriate mix of types, tenures and sizes of properties in relation to the respective levels of local demand? | N | As above | n/a | n/a | n/a | n/a |
| 1 | Sustainable housing supply | Ensure housing land is well-connected with employment land, centres and green space or co-located where appropriate? | Y | Focus on connectivity using the Greater Manchester Accessibility Level (GMAL) scores. Green space will be covered in objective 11. Local centres covered in objective 7. The distance to the airport has been scoped out, as it is assumed that this will not affect overall accessibility. | GMAL Take worst case scenario so the lowest score that is on the site, regardless of the area of the site that is covered | If the lowest GMAL score is 1, 2 or 3 | If the lowest GMAL score is 4 or 5 | If the lowest GMAL score is 6, 7 or 8 |
| 1 | Sustainable housing supply | Support improvements in the energy efficiency and resilience of the housing stock? | N | Should be guided by policy in GMSF | n/a | n/a | n/a | n/a |

| IA Objective | | Assessment criteria | Relevant for site selection ? | Comment on use | Data use for indicator | RED | AMBER | GREEN |
|--------------|---|---|-------------------------------|--|--|--|--|--|
| 2 | Sustainable employment land supply | Meet current and future demand for employment land across GM? | N | Sites will not be allocated as housing or employment at this stage. | n/a | n/a | n/a | n/a |
| 2 | Sustainable employment land supply | Support education and training to provide a suitable labour force for future growth? | N | Not relevant for site selection. Should be guided by policy in GMSF. | n/a | n/a | n/a | n/a |
| 2 | Sustainable employment land supply | Provide sufficient employment land in locations that are well-connected and well-served by infrastructure? | Y | Employment land element is not yet defined. Connectivity is main focus. Merge into objective 1, and cover with GMAL score. | Employment land element is not yet defined. Connectivity is main focus. Merge into objective 1, and cover with GMAL score. | Employment land element is not yet defined. Connectivity is main focus. Merge into objective 1, and cover with GMAL score. | Employment land element is not yet defined. Connectivity is main focus. Merge into objective 1, and cover with GMAL score. | Employment land element is not yet defined. Connectivity is main focus. Merge into objective 1, and cover with GMAL score. |
| 3 | Transport and utilities coverage and capacity | Ensure that the transport network can support and enable the anticipated scale and spatial distribution of development? | Y | Transport capacity assessment to use TFGM assessment of local travel habits (including buffer around site showing average commuting distance) and local capacity pinch-points. | TfGM have run a range of queries and have information for most sites. They have created 5 indicators: <ul style="list-style-type: none"> proportion of residents travelling to work by car (1); | <u>Suggestion by TfGM</u> | <u>Suggestion by TfGM</u> | <u>Suggestion by TfGM</u> |

| IA Objective | Assessment criteria | Relevant for site selection ? | Comment on use | Data use for indicator | RED | AMBER | GREEN |
|--------------|---------------------|-------------------------------|---|---|-----|-------|-------|
| | | | <p>TFGM suggested that two RAG ratings could be presented, one for housing (so commuting impacts) and one for employment land (workers, deliveries etc.). This would flush out potential “red flags” without having to make a call on the land-use.</p> | <ul style="list-style-type: none"> • average journey distance (in km) for car drivers (2); • predicted proportion of people travelling to the site by car, if it is an employment site (3); • number of pinch points (at 85% capacity or above in the morning peak) on the strategic route network within 2km of the site (4); and • number of pinch points (as defined above) on the SRN within 2km of the site <i>after</i> a 25% increase in flow on the SRN (5). <p>These have been RAG rated and then formed into 6 'composite' indicators from the five indicators above:</p> <ul style="list-style-type: none"> • 1 and 2: taking account of higher | | | |

| IA Objective | Assessment criteria | Relevant for site selection ? | Comment on use | Data use for indicator | RED | AMBER | GREEN |
|--------------|---------------------|-------------------------------|----------------|--|-----|-------|-------|
| | | | | proportions of car drivers travelling further (RES1) <ul style="list-style-type: none"> • 1, 2 and 4: taking account of high proportions of car drivers travelling further and impacting on local roads (RES2) • 1, 2 and 5: taking account of high proportions of car drivers travelling further and having a greater potential impact on local roads (RES3) • 3: taking account of high volumes of car traffic to an employment site (EMP1) • 3 and 4: taking account of how high volumes of car traffic to an employment site | | | |

| IA Objective | | Assessment criteria | Relevant for site selection ? | Comment on use | Data use for indicator | RED | AMBER | GREEN |
|--------------|---|--|-------------------------------|---|--|-----|-------|-------|
| | | | | | <p>may affect local roads (EMP2)</p> <ul style="list-style-type: none"> • 3 and 5: taking account of how high volumes of car traffic to an employment site may potentially significantly affect local roads (EMP3) <p>These 'composite' indicators are made up by a complicated RAG amalgamation technique, which differs from our own.</p> | | | |
| 3 | Transport and utilities coverage and capacity | Improve transport connectivity? | N | Improvements will be as a result of strategic policy, and allocation specific policy. Existing issues should be captured by other objectives. | n/a | n/a | n/a | n/a |
| 3 | Transport and utilities coverage and capacity | Ensure that utilities / digital infrastructure can support and enable the anticipated scale and spatial distribution of development? | N | | Scope out but add an explanation of how this will be picked up in the next stages, such as the masterplan / IDP stage. | n/a | n/a | n/a |

| IA Objective | Assessment criteria | Relevant for site selection ? | Comment on use | Data use for indicator | RED | AMBER | GREEN | |
|--------------|----------------------------------|--|----------------|---|--|---|---|---|
| | | | | | | | | |
| 4 | Reduce deprivation and disparity | Reduce the proportion of people living in deprivation? | Y | Needs to be included. Assumption needs to be made about how to use deprivation is seen in site selection (e.g. is deprivation "good" because targeted investment can improve the area?). This needs to be linked to plan objectives and fundamental assumptions about how development will work. Focus on: <ul style="list-style-type: none"> • IMD; and • Income deprivation affecting children, and • income deprivation affecting older people • | IMD data - general RAG thresholds refer to 10 point scale shown in mapping. | If the lowest decile on site is 1, 2 or 3 | If the lowest decile on site is 4, 5 or 6 | If the lowest decile on site is 7, 8, 9 or 10 |
| 4 | Reduce deprivation and disparity | Support reductions in poverty (including child and fuel poverty), deprivation and disparity across the domains of the Indices of Multiple Deprivation? | Y | Needs to be included. Assumption needs to be made about how to use deprivation is seen in site selection (e.g. is | IMD data focusing on income deprivation affecting children | If the lowest decile on site is 1, 2 or 3 | If the lowest decile on site is 4, 5 or 6 | If the lowest decile on site is 7, 8, 9 or 10 |

| | IA Objective | Assessment criteria | Relevant for site selection ? | Comment on use | Data use for indicator | RED | AMBER | GREEN |
|---|----------------------------------|--|-------------------------------|---|---|---|---|---|
| | | | | deprivation "good" because targeted investment can improve the area?). This needs to be linked to plan objectives and fundamental assumptions about how development will work. Focus on: <ul style="list-style-type: none"> • IMD; and • Income deprivation affecting children, and income deprivation affecting older people | RAG thresholds refer to 10 point scale shown in mapping. | | | |
| 4 | Reduce deprivation and disparity | Support reductions in poverty (including child and fuel poverty), deprivation and disparity across the domains of the Indices of Multiple Deprivation? | Y | Needs to be included. Assumption needs to be made about how to use deprivation is seen in site selection (e.g. is deprivation "good" because targeted investment can improve the area?). This needs to | Income deprivation affecting older people RAG thresholds refer to 10 point scale shown in mapping. | If the lowest decile on site is 1, 2 or 3 | If the lowest decile on site is 4, 5 or 6 | If the lowest decile on site is 7, 8, 9 or 10 |

| IA Objective | Assessment criteria | Relevant for site selection ? | Comment on use | Data use for indicator | RED | AMBER | GREEN |
|--------------|---|---|---|---|---|---|---|
| | | | be linked to plan objectives and fundamental assumptions about how development will work. Focus on: <ul style="list-style-type: none"> IMD; and Income deprivation affecting children, and income deprivation affecting older people | | | | |
| 4 | Reduce deprivation and disparity | Y | Covered by previous datasets. However, may be worth including a national dataset (i.e. deprivation domain) alongside this indicator, to check previous finding. | Barriers to Housing and Services Deprivation domain. If possible, focus on 'geographical barriers' sub domain, which relate to the physical proximity of specific local services. RAG thresholds refer to 10 point scale shown in mapping. | If the lowest decile on site is 1, 2 or 3 | If the lowest decile on site is 4, 5 or 6 | If the lowest decile on site is 7, 8, 9 or 10 |
| 5 | Equality of opportunity and elimination of discrimination | Foster good relations between different people? | N | Not relevant for site selection. Should be guided by policy in GMSF. | n/a | n/a | n/a |

| IA Objective | | Assessment criteria | Relevant for site selection ? | Comment on use | Data use for indicator | RED | AMBER | GREEN |
|--------------|---|---|-------------------------------|---|---|---|--|---|
| 5 | Equality of opportunity and elimination of discrimination | Provide sufficient employment land in locations that are well-connected and well-served by infrastructure? | Y | Access to facilities is covered within objective 7 | Access to facilities is covered within objective 7 | Access to facilities is covered within objective 7 | Access to facilities is covered within objective 7 | Access to facilities is covered within objective 7 |
| 5 | Equality of opportunity and elimination of discrimination | Ensure no discrimination based on 'protected characteristics', as defined in the Equality Act 2010? | N | Not relevant for site selection. Should be guided by policy in GMSF. | n/a | n/a | n/a | n/a |
| 5 | Equality of opportunity and elimination of discrimination | Ensure that the needs of different areas, (namely urban, suburban, urban fringe and rural) are equally addressed? | Y | This indicator is considered to be covered by objective 4 | This indicator is considered to be covered by objective 4 | This indicator is considered to be covered by objective 4 | This indicator is considered to be covered by objective 4 | This indicator is considered to be covered by objective 4 |
| 6 | Improved health and wellbeing | Support healthier lifestyles and support improvements in determinants of health? | Y | <p>Most relevant aspects relate to "physical environment". Clean air is covered elsewhere.</p> <p>This will cover: noise sources and potential cycling trips.</p> <p>[Note: The "pollution associated with surrounding uses" and "sensitive surrounding uses" (populated by local</p> | <p>Proportion of the site within each Manchester Airport Leq noise contour. – use the average figure, not day or night</p> <p>Links to determinants of health</p> | If the site is wholly within the noise contours | If any portion of the site is within any of the noise contours | None of the site is within the noise contours |

| IA Objective | Assessment criteria | Relevant for site selection ? | Comment on use | Data use for indicator | RED | AMBER | GREEN |
|--------------|---------------------|-------------------------------|--|------------------------|-----|-------|-------|
| | | | <p>officers) datasets were not considered to be usable here, but could be brought in at a later date as part of the qualitative appraisal.]</p> <p>The indicators for the other criteria have been moved into criteria 1, an explanation will be added in the upfront section explaining that the indicators relate to the criteria across the objectives.</p> | | | | |

| IA Objective | Assessment criteria | Relevant for site selection ? | Comment on use | Data use for indicator | RED | AMBER | GREEN |
|--------------|---|-------------------------------|--|---|--|---|---|
| 6 | Improved health and wellbeing Support healthier lifestyles and support improvements in determinants of health? | Y | <p>Most relevant aspects relate to “physical environment”. Clean air is covered elsewhere.</p> <p>This will cover: noise sources and potential cycling trips.</p> <p>[Note: The “pollution associated with surrounding uses” and “sensitive surrounding uses” (populated by local officers) datasets were not considered to be usable here, but could be brought in at a later date as part of the qualitative appraisal.]</p> | <p>Living environment domain outdoors subdomain</p> <p>RAG thresholds refer to 10 point scale shown in mapping.</p> | If the lowest decile on site is 1, 2 or 3 | If the lowest decile on site is 4, 5 or 6 | If the lowest decile on site is 7, 8, 9 or 10 |
| 6 | Improved health and wellbeing Support healthier lifestyles and support improvements in determinants of health? | Y | <p>Most relevant aspects relate to “physical environment”. Clean air is covered elsewhere.</p> | <p>Data from OS open space layer:</p> <ul style="list-style-type: none"> • Play Space • Playing Field • Public Park or Garden • Religious Grounds | If the site is more than 720 metres from an accessible green space | If the site is between 480 metres and 720 metres of an accessible green space | If the site is within 480 metres of an accessible green space |

| IA Objective | Assessment criteria | Relevant for site selection ? | Comment on use | Data use for indicator | RED | AMBER | GREEN | |
|--------------|--|--|---|--|--|---|---|--|
| | | | <p>This will cover: noise sources and potential cycling trips.</p> <p>[Note: The “pollution associated with surrounding uses” and “sensitive surrounding uses” (populated by local officers) datasets were not considered to be usable here, but could be brought in at a later date as part of the qualitative appraisal.]</p> | The guidance states that amenity green space should be within 480m and natural and semi-natural green space within 720m. | | | | |
| 6 | Improved health and wellbeing | Reduce health inequalities within GM and with the rest of England? | Y | Merged into criteria 1. | Merged into criteria 1. | Merged into criteria 1. | Merged into criteria 1. | |
| 6 | Improved health and wellbeing | Promote access to green space? | Y | Merged into criteria 1. | Merged into criteria 1. | Merged into criteria 1. | Merged into criteria 1. | |
| 7 | Social infrastructure access and provision | Ensure people are adequately served by key healthcare facilities, regardless of socio-economic status? | Y | Data focusing on local healthcare facilities is used | Distances to local healthcare facilities including dentists and GP surgeries. Using the following thresholds for distances to local healthcare facilities: | If the nearest GP surgery or dentist is over 3km away | If the nearest GP surgery or dentist is between 0.8km and 3km | If the nearest GP or dentist is within 0.8km |

| IA Objective | Assessment criteria | Relevant for site selection ? | Comment on use | Data use for indicator | RED | AMBER | GREEN | |
|--------------|--|---|----------------|--|--|-----------------------------------|--|---|
| | | | | <ul style="list-style-type: none"> Up to 0.8km – Green 0.8km – 3km – Amber Over 3km - Red | | | | |
| 7 | Social infrastructure access and provision | Ensure sufficient access to educational facilities for all children? | Y | Data on locations of primary and secondary schools is provided. | <ul style="list-style-type: none"> Primary school – 3.2km (2 miles) Secondary school – 4.8km (3 miles) | Acceptable distances: | <p>If the nearest primary school is not within 3.2km of the site, and the nearest secondary school is not within 4.8km of the site</p> <p>If a primary school is within 3.2km of the site, OR a secondary school is within 4.8km of the site</p> | <p>If a primary school is within 3.2km of the site AND a secondary school is within 4.8km of the site</p> |
| 7 | Social infrastructure access and provision | Promote access to and provision of appropriate community social infrastructure including playgrounds and sports facilities? | Y | Data on social infrastructure including libraries, leisure centres, youth centres, children's centres | Acceptable distance is based secondary schools (4.8km/ 3miles) | If no facilities are within 4.8km | If one or two facilities are within 4.8km | If three or more facilities are within 4.8km |
| 8 | Educational attainment and skill levels | Improve education levels of children in the area, regardless of their background? | N | Data on education/training is unlikely that the site selection process will be informed by education levels in an area. As such, this is scoped out of the site selection. | n/a | n/a | n/a | n/a |

| IA Objective | | Assessment criteria | Relevant for site selection ? | Comment on use | Data use for indicator | RED | AMBER | GREEN |
|--------------|---|--|-------------------------------|---|---|---|--|--|
| 8 | Educational attainment and skill levels | Improve educational and skill levels of the population of working age? | N | as above | n/a | n/a | n/a | n/a |
| 9 | Sustainable transport modes | Reduce the need to travel and promote efficient patterns of movement? | Y | Does the site inherently enable residents to use the most sustainable mode of travel for journeys – i.e. can they walk to a shop, a doctor, a school, a post office, a pub etc. | General store and post office indicators from IMD School and doctors are covered elsewhere, while a pub was not considered a useful indicator Takes the LSOA closest to the centroid of the site and applies the figures from IMD for that LSOA to the site | If neither a general store nor a post office indicator are within 0.8km | If either a general store OR a post office is within 0.8km of the site | If both a general store AND a post office are within 0.8km of the site |
| 9 | Sustainable transport modes | Promote a safe and sustainable public transport network that reduces reliance on private motor vehicles? | Y | Captured in other transport and connectivity indicators | n/a | n/a | n/a | n/a |
| 9 | Sustainable transport modes | Support the use of sustainable and active modes of transport? | Y | Captured in other transport and connectivity indicators | n/a | n/a | n/a | n/a |

| IA Objective | Assessment criteria | Relevant for site selection ? | Comment on use | Data use for indicator | RED | AMBER | GREEN | |
|--------------|---|--|----------------|--|---|--|---|--|
| 10 | Air quality | Improve air quality within Greater Manchester, particularly in the 10 Air Quality Management Areas (AQMA's)? | Y | <p>AQMA data is included.</p> <p>There are two considerations – first, is there AQMA on site, if yes, there may be health implications in designating the site?</p> <p>And secondly, can an existing local AQMA be exacerbated by the assumed increased traffic from development?</p> <p>This objective should consider the latter only, as objective 6 includes living environment deprivation domain, which picks up the former.</p> | Consultation with air quality colleagues (people working on the Clean Air Zone quoting DMRB guidance) confirmed buffer of 200m should be applied. | If any part of the site is within an AQMA | If any part of the site is within 200 metres of an AQMA | No AQMA is within 200m of the site |
| 11 | Biodiversity, green infrastructure and geodiversity | Provide opportunities to enhance new and existing wildlife and geological sites? | Y | Existing sites on or near a site should be flagged. Enhancement Not relevant for site selection. Should | Data will be included on wildlife and geological sites and the designations that they have. | If any of SSSI, SPA, SAC or Ramsar are within the site | If a wildlife corridor, priority habitat, local nature reserve or | If no wildlife corridors, priority habitats, local nature reserves |

| IA Objective | Assessment criteria | Relevant for site selection ? | Comment on use | Data use for indicator | RED | AMBER | GREEN |
|--------------|--|-------------------------------|--|--|---|---|--|
| | | | be guided by policy in GMSF. | International and National Environmental Designations Local Environmental Designations | | SBI is on the site, OR the site is within 1km of an SPA or SAC, OR the site is within 250m of a SSSI or Ramsar site | or SBIs are within the site, AND no SPA or SACs are within 1km of the site, AND no SSSI or Ramsar are within 250m of the site |
| 11 | Biodiversity, green infrastructure and geodiversity Avoid damage to or destruction of designated wildlife sites, habitats and species and protected and unique geological features? | Y | Note – this had previously been considered as covered by criteria 1 but is now being utilised and assessment criteria 1 and 2 have had merged data use | Data will be included on wildlife and geological sites and the designations that they have. International and National Environmental Designations Local Environmental Designations | If any of SSSI, SPA, SAC or Ramsar are within the site | If a wildlife corridor, priority habitat, local nature reserve or SBI is on the site, OR the site is within 1km of an SPA or SAC, OR the site is within 250m of a SSSI or Ramsar site | If no wildlife corridors, priority habitats, local nature reserves or SBIs are within the site, AND no SPA or SACs are within 1km of the site, AND no SSSI or Ramsar are within 250m of the site |
| 11 | Biodiversity, green infrastructure and geodiversity Avoid damage to or destruction of designated wildlife sites, habitats and species and protected and unique geological features? | Y | Note – this had previously been considered as covered by criteria 1 but is now being utilised and | Data on priority species provided by GMEU. This is a standardised buffer in 200m squares to prevent it | If any of the site is covered by the priority species layer (which is | If any of the site is within 200m of a priority species area | If there are no priority species on or within 200m of the site |

| IA Objective | Assessment criteria | Relevant for site selection ? | Comment on use | Data use for indicator | RED | AMBER | GREEN |
|--------------|--|-------------------------------|---|---|---|--|---|
| | | | assessment criteria 1 and 2 have had merged data use | being clear which habitat is on the site | provided in 200m squares) | | |
| 11 | Biodiversity, green infrastructure and geodiversity Support and enhance existing multifunctional green infrastructure and / or contribute towards the creation of new multifunctional green infrastructure? | Y | Existing green infrastructure should be flagged – need confirmation from GMEU on what GI dataset includes. “Enhancement” should be guided by policy in GMSF. | Percentage of site that lies in an area of green infrastructure. | If green infrastructure covers any part of the site | If green infrastructure is within 250m of the site | If no green infrastructure is within 250m of the site |
| 11 | Biodiversity, green infrastructure and geodiversity Ensure access to green infrastructure providing opportunities for recreation, amenity and tranquillity? | Y | The data is covered in the third indicator within objective 6. | The data is covered in the third indicator within objective 6. | n/a | n/a | n/a |
| 12 | Resilience to climate change Ensure that communities, existing and new developments and infrastructure systems are resilient to the predicted effects of climate change across GM? | Y | Could be linked to below queries on flood risk. Scoping Report identified Urban Heat Island but this is not considered to be an issue for the sites as they are located outside the urban area | Data will be applied that relates to flood risk and this objective will be merged with objective 13. [note: Only flood zone 2 data used, as areas of flood zone 3 included in flood zone 2.] | If the site contains any part of flood zone 2 | If the site is within 250m of flood zone 2 | If the site is neither covered by nor within 250m of flood zone 2 |

| IA Objective | | Assessment criteria | Relevant for site selection ? | Comment on use | Data use for indicator | RED | AMBER | GREEN |
|--------------|--------------------------|--|-------------------------------|--|---|---|--|---|
| 13 | Reduced risk of flooding | Restrict the development of property in areas of flood risk? | Y | Flood risk data included | Data will be applied that relates to flood risk, as is already provided within the maps. This objective will be merged with objective 12 as the topics are similar. | If the site contains any part of flood zone 2 | If the site contains any part of flood zone 2 | If the site contains any part of flood zone 2 |
| 13 | Reduced risk of flooding | Ensure adequate measures are in place to manage existing flood risk? | N | Not relevant for site selection. Should be guided by policy in GMSF. | n/a | n/a | n/a | n/a |
| 13 | Reduced risk of flooding | Ensure that development does not increase flood risk due to increased run-off rates? | N | As above | n/a | n/a | n/a | n/a |
| 13 | Reduced risk of flooding | Ensure development is appropriately future proof to accommodate future levels of flood risk including from climate change? | N | As above | n/a | n/a | n/a | n/a |
| 14 | Water resources | Encourage compliance with the Water Framework Directive? | N | Not relevant for site selection. Should be guided by policy in GMSF. | n/a | n/a | n/a | n/a |
| 14 | Water resources | Promote management practices that will protect water features from pollution? | Y | Water features should be flagged - highlight water features that are present on site and any that are adjacent | OS Open Rivers Database Source Protection Zones | If a water feature from OS Open Rivers or Source Protection Zone is on the site | If a water feature from OS Open Rivers or SPZ is within 250m the site boundary | If no water feature from OS Open Rivers or SPZ is on the site |

| IA Objective | | Assessment criteria | Relevant for site selection ? | Comment on use | Data use for indicator | RED | AMBER | GREEN |
|--------------|---|--|-------------------------------|--|------------------------|-----|-------|-------|
| 14 | Water resources | Avoid consuming greater volumes of water resources than are available to maintain a healthy environment? | N | Not relevant for site selection. Should be guided by policy in GMSF. | n/a | n/a | n/a | n/a |
| 15 | Energy efficiency, carbon generation and greenhouse gas emissions | Encourage reduction in energy use and increased energy efficiency? | N | Main consideration for site selection and GHG will relate to transport. not relevant for site selection. Should be guided by policy in GMSF. | n/a | n/a | n/a | n/a |
| 15 | Energy efficiency, carbon generation and greenhouse gas emissions | Encourage the development of low carbon and renewable energy facilities, including as part of conventional developments? | N | As above | n/a | n/a | n/a | n/a |
| 15 | Energy efficiency, carbon generation and greenhouse gas emissions | Promote a proactive reduction in direct and indirect greenhouse gas emissions emitted across GM? | N | As above | n/a | n/a | n/a | n/a |
| 16 | Landscape, townscape and heritage assets | Improve landscape quality and the character of open spaces and the public realm? | N | Not relevant for site selection. Improvement should be guided by policy in GMSF. | n/a | n/a | n/a | n/a |

| IA Objective | Assessment criteria | Relevant for site selection ? | Comment on use | Data use for indicator | RED | AMBER | GREEN |
|--|---|-------------------------------|--|--|---|---|--|
| 16 Landscape, townscape and heritage assets | Conserve and enhance the historic environment, heritage assets and their setting? | Y | Key designations/assets should be flagged to ensure conservation. Enhancement should be guided by policy in GMSF. | Data for assessment: <ul style="list-style-type: none"> Listed building, structure or monument Locally listed building Scheduled monument Conservation area Registered parks and garden With separate buffers proposed for buildings/structures/SAMs, compared to CAs and parks/gardens. Combine and do as an 'or' as for biodiversity Heritage at Risk scoped out at this level as next stage will be in more detail and can pick this up | If any heritage feature is on the site. | If a listed building, structure, monument, locally listed building or scheduled monument are within 250m of the site boundary, OR if a conservation area, registered park or garden are within 500m of the site | No listed buildings are within 250m, AND no conservation areas, registered parks or gardens are within 500m of the site. |
| 16 Landscape, townscape and heritage assets | Respect, maintain and strengthen local character and distinctiveness? | Y | Not relevant for site selection. Should be guided by policy in GMSF. | Data for assessment: <ul style="list-style-type: none"> National parks Country Parks Protected trees | If any feature is located within the site | If any feature is within 500m of the site | If no feature is within 500m of the site |

| IA Objective | Assessment criteria | Relevant for site selection ? | Comment on use | Data use for indicator | RED | AMBER | GREEN |
|--|---|-------------------------------|--|---|--|---|---|
| 17 Land resources and contamination | Support the development of previously developed land and other sustainable locations? | Y | PDL should be encouraged over greenfield | Information as provided on PDL and the percentage of the site that it covers (Note: Data compiled by local authorities, 262 sites have not had data submitted but over ¾ of sites have. Where data is unknown class as amber.) | If none of the site is PDL (i.e. 0%) | If PDL is greater than 0% and less than 100%, OR the PDL calculation has not been completed | If the site is 100% PDL |
| 17 Land resources and contamination | Protect the best and most versatile agricultural land / soil resources from inappropriate development? | Y | BMV should be avoided | Data highlighting if the site is BMV or if an area is BMV that is within the site Agricultural land | If site contains any grade 1 land | If site does not contain grade 1 land, but is adjacent to grade 1 land | If the site does not contain and is not adjacent to agricultural land grade 1 |
| 17 Land resources and contamination | Encourage the redevelopment of derelict land, properties, buildings and infrastructure, returning them to appropriate uses? | Y | Derelict land assumed to be covered by previous question under IA17. | Derelict land assumed to be covered by previous question under IA17. | Derelict land assumed to be covered by previous question under IA17. | Derelict land assumed to be covered by previous question under IA17. | Derelict land assumed to be covered by previous question under IA17. |

| IA Objective | | Assessment criteria | Relevant for site selection ? | Comment on use | Data use for indicator | RED | AMBER | GREEN |
|--------------|--|--|-------------------------------|--|------------------------|----------|----------|----------|
| 17 | Land resources and contamination | Support reductions in land contamination through the remediation and reuse of previously developed land? | Y | As above | As above | As above | As above | As above |
| 18 | Sustainable resource consumption and waste hierarchy | Support the sustainable use of physical resources? | N | Not relevant for site selection. Should be guided by policy in GMSF. | n/a | n/a | n/a | n/a |
| 18 | Sustainable resource consumption and waste hierarchy | Promote movement up the waste hierarchy? | N | As above | n/a | n/a | n/a | n/a |
| 18 | Sustainable resource consumption and waste hierarchy | Promote reduced waste generation rates? | N | As above | n/a | n/a | n/a | n/a |