November 2020

Transport Locality Assessments

Introductory Note and Assessments – Tameside allocations

GMSF 2020

GREATER MANCHESTER
DOING THINGS DIFFERENTLY

Table of contents

1. Background

1.1 Greater Manchester Spatial Framework (GMSF)

1.1.1 The GMSF is a joint plan of all ten local authorities in Greater Manchester, providing a spatial interpretation of the Greater Manchester Strategy which will set out how Greater Manchester should develop over the next two decades up to the year 2037. It will:

- identify the amount of new development that will come forward across the 10 Local Authorities, in terms of housing, offices, and industry and warehousing, and the main areas in which this will be focused;
- ensure we have an appropriate supply of land to meet this need;
- protect the important environmental assets across the conurbation;
- allocate sites for employment and housing outside of the urban area;
- support the delivery of key infrastructure, such as transport and utilities;
- define a new Green Belt boundary for Greater Manchester.

1.1.2 The Plan focuses on making the most of Greater Manchester's brownfield sites, prioritising redevelopment of town centres and other sustainable locations. The Plan is required to demonstrate that Greater Manchester has enough land to deliver the homes and jobs people require up until 2037, and whilst there is an expectation that the focus of development will be on brownfield sites in the early years, it is recognised that some land will need to be released from the green belt to fully meet Greater Manchester's housing and employment requirement.

1.1.3 The comments from the Draft GMSF 2019, together with local and national policy, have helped to inform the Locality Assessments methodology for the Draft GMSF 2020. More information on the consultation comments can be found in the Consultation Statement and within each of the Allocation Locality Assessments.

1.1.4 This document has been prepared as evidence for the GMSF and is part of a suite of documents that examine the implications of the GMSF on transport in Greater Manchester. The other` documents are:

- Greater Manchester Transport Strategy 2040 and supporting Five Year Transport Delivery Plan. These documents together set out our strategic aspirations for transport in Greater Manchester and articulate our plan for delivery.
- Greater Manchester Transport Strategy 2040 'Right Mix' Technical Note. This note describes the 'Right Mix' transport vision and sets out a pathway to achieving this vision.
- GMSF Existing Land Supply and Transport Technical Note. This describes the distribution and quantity of the Existing Land Supply, identified key growth areas, and considers the relationship of these growth areas to the transport schemes proposed within the Greater Manchester Transport Strategy Delivery Plan.
- GMSF Allocations Strategic Modelling Technical Note. This provides analysis of the potential strategic impact of growth on our transport network in a "policy-off" scenario.

1.2 Policy Context – The National Planning Policy Framework

1.2.1 The National Planning Policy Framework sets out the Government's planning policies for England and Wales and how these are to be applied. It provides a framework for which locally prepared plans for housing and development, such as the GMSF, can be produced.

1.2.2 The NPPF makes it clear that transport issues should be considered from the earliest stages of plan-making and development proposals, so that:

- the potential impacts of development on transport networks can be addressed;
- opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;
- opportunities to promote walking, cycling and public transport use are identified and pursued;
- the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and
- patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places.

1.2.3 The NPPF makes clear that when assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

- appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;
- safe and suitable access to the site can be achieved for all users; and
- any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.

1.2.4 Importantly, NPPF states that: 'development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe'. (NPPF, Chapter 9, Para 109).

1.2.5 In order to ensure that the requirements of the NPPF were fully met and that that these allocations can be brought forward and operate sustainably within the context of the wider transport network, Transport for Greater Manchester (TfGM), on behalf of the ten Greater Manchester Local Planning Authorities, appointed SYSTRA Ltd to oversee the development of Locality Assessments for each site.

1.2.6 These Locality Assessments forecast the likely level and distribution of traffic generated by each Allocation and assess its impact on the transport network. Where that impact is considered significant, possible schemes to mitigate that impact and reduce it back to the reference level of operation have been developed, tested and costed. Potential mitigations could include the introduction of new public transport schemes, cycling and walking routes, as well as highway engineering solutions. Where suitable mitigations could not be identified, a decision to either reduce the level of development at the Allocation such that it had a lesser impact on the transport network, or to remove the site from the GMSF completely were considered.

1.2.7 It is important to note that the mitigation schemes developed are intended to demonstrate only that significant transport impacts of the Allocation can be appropriately ameliorated. As such they are indicative only, and are not intended to

act as a definitive proposal for the mitigation of any Allocation, which would be developed as part of a Transport Assessment submitted as part of a planning application at a later date.

1.2.8 The Locality Assessments are one of a number of pieces of evidence developed in order to assess and evaluate the impact of the GMSF proposals on the transport network and focus only on the sites being allocated in the Plan. The majority of sites proposed for development are actually contained within the existing land supply (ELS) and have been split into three subcategories; Homes (both houses and apartments), Offices, and Industry and Warehousing. A separate "Existing Land Supply and Transport Technical Note" describes the quantity and distribution of the ELS, the key growth areas and the relationship between areas and the transport schemes proposed to serve them.

1.2.9 Transport for Greater Manchester has also worked closely with Highways England to understand the impact that the Allocations may have on the Strategic Road Network (SRN). SYSTRA Ltd was asked to carry out an exercise to assign the 'with GMSF' traffic flows to an representation of an empty SRN network and to produce network stress maps which identified areas of significant delay on the network, as well as providing detailed breakdowns of GMSF Allocation traffic for key sections of the SRN. This exercise has enabled all parties to move towards a common understanding of where the most significant traffic impacts are likely to occur, and provides a common basis to enable Highways England to make investment decisions as part of future Road Investment Strategy (RIS) planning discussions.

1.3 Policy Context – Greater Manchester Transport Strategy 2040

1.3.1 It is important to recognise that the GMSF has been developed with the benefit of an adopted Local Transport Plan – the Greater Manchester Transport Strategy 2040 (hereafter referred to as the 2040 Transport Strategy). The 2040 Transport Strategy has an established long-term vision for transport, of providing *world class connections that support long-term, sustainable economic growth and access to opportunity for all*. The four key elements of this vision are:

- Supporting sustainable economic growth;
- Protecting the environment;
- Improving quality of life for all; and,
- Developing an innovative city region.

1.3.2 The 2040 Transport Strategy was first published in February 2017. The Strategy has undergone a 'light touch' refresh to reflect work undertaken and the changed context, since 2017. As well as refreshing the 2040 Transport Strategy, to support the GMSF an updated Five Year Transport Delivery Plan has also been prepared. It sets out the practical actions planned to deliver the 2040 Transport Strategy and achieve the ambitions of the GMCA and the Mayor, providing a coordinated approach to transport investment. It is also intended to inform the development of the Greater Manchester Infrastructure Programme (GMIP).

1.3.3 Covid-19 has had a massive health and economic impact on our city region, affecting every person and every business in our city-region. The impact from the pandemic has not been equal or fair, highlighting inequalities across Greater Manchester. Travel demand remains well below levels prior to the pandemic and, although it is increasing, it is clear that Greater Manchester's plans for transport and other policy areas will need to be adaptive as the recovery continues.

1.3.4 The aim will be to "lock in" some of the benefits our neighbourhoods, communities, towns and cities have experienced from lower vehicle traffic levels and embracing the opportunities to be more productive through flexible working and accessing services through high quality digital systems. The vision is for a future where walking and cycling are the obvious choice for shorter journeys and where the past dependency on the car is superseded by a reliable and responsive public transport system. Our Five Year Transport Delivery Plan sets out those first steps, from a transport and place making perspective to support leading the recovery and creating a stronger, sustainable and resilient Greater Manchester.

1.3.5 The Our Network policies in the GMSF and in Our Five Year Transport Delivery Plan support the implementation of "Our Network", a ten-year plan to create an integrated, modern and accessible transport network for Greater Manchester. The Delivery Plan brings together different modes of public transport –- bus, tram, rail,

tram-train and cycling and walking in an integrated, easy-to-use system with seamless connections, and simplified ticketing and fares.

1.3.6 The Five Year Delivery Plan has been prepared to respond to the transport opportunities and challenges facing Greater Manchester, in parallel with the development of the Greater Manchester Spatial Framework (GMSF). Together, these documents provide an integrated approach to transport and land use planning by identifying the strategic transport interventions required to deliver the scale of growth set out in the GMSF. It also supports the priorities of the Greater Manchester Strategy (2018).

1.3.7 A key ambition is to improve our transport system so that, by 2040, 50% of all journeys in Greater Manchester are made by public transport or active travel, supporting a reduction in car use to no more than 50% of daily trips. This will mean one million more sustainable journeys every day in Greater Manchester by 2040, enabling us to deliver a healthier, greener and more productive city-region – this is known as the "Right Mix". Achieving the Right Mix is expected to lead to zero net growth in motor vehicle traffic in Greater Manchester between 2017 and 2040.

1.3.8 Fundamental to delivering the Right Mix will be the adoption of a "Streets for All" framework – to enable more people to walk, cycle and use public transport, and improve reliability for, in particular, buses and freight vehicles on the key route network serving our towns and Regional Centre.

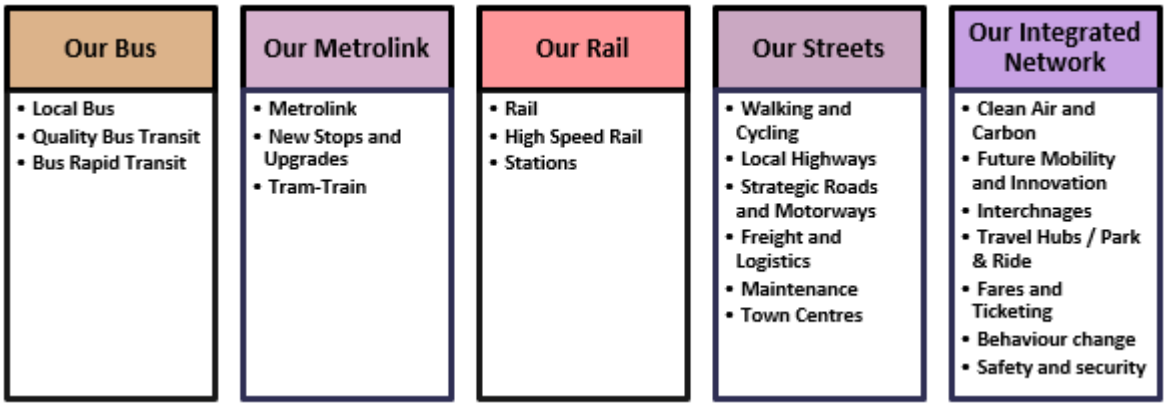
1.3.9 This will be one of the mechanisms used to grow bus patronage alongside:

- Bus Reform
- Integrated Ticketing
- Quality Bus Transit and Bus Corridor Upgrades
- Bus Rapid Transit

1.3.10 Following the introduction of the Bus Services Act (2017), the GMCA asked TfGM to carry out an assessment of a bus franchising scheme, have that assessment reviewed by an independent audit organisation, and carry out a consultation on a proposed franchising scheme which ran from 14 October 2019 to 8 January 2020. The Covid-19 pandemic has had a significant impact on Greater Manchester's bus market, including timetables, revenues, passenger numbers and the public's attitudes to public transport. Due to this, further work will be undertaken to assess the impact of coronavirus on the bus reform process.

1.3.11 Greater Manchester is also delivering the Bee Network - the UK's largest cycling and walking network as a key element in delivering the Right Mix vision. The Combined Authority has allocated £160m between 2018-2022 to fund the first phase of the Bee Network. The network has at its core a programme of new and upgraded pedestrian and cycling crossing points of major roads and other sources of severance, connected by a network of signed cycling and walking routes – known as Beeways – on existing quiet streets. These will be complemented by a number of routes on busier roads where Dutch style cycle lanes protected from motor traffic will be constructed.

1.3.12 Our Five Year Transport Delivery Plan sets out a comprehensive programme of work across all modes and in all Local Authorities which are focused on ensuring the realisation of the 'Right Mix' vision. It contains explanatory text and a summary of the interventions and their stage in the development and delivery process. These include committed, unfunded priorities for the next five years and our longer-term development priorities. The Delivery Plan sections are:



1.3.13 Many of these interventions support the GMSF Allocations directly, whilst others are intended to provide alternatives to private car travel more generally. The schemes demonstrate a clear plan for delivering strategic transport interventions for the first five years of the GMSF plan period, whilst also laying the foundations for longer term investment in sustainable transport across the length of the plan period.

1.3.14 Where relevant, each of the individual Locality Assessments will highlight elements of the Delivery Plan that are particularly relevant to each Allocation or the local area.

1.3.15 Our Five Year Transport Delivery Plan is supported by ten Local Implementation Plans (LIPs) covering the period 2020 to 2025. Each of the ten councils that make up Greater Manchester has its own LIP. The LIPs are designed to ensure local priorities are articulated in the Delivery Plan. The LIPs are included as an appendix to the Delivery Plan. They will be 'live' documents for a period of time and will be updated as councils develop and publish transport plans and strategies, or as new schemes are developed or delivered.

1.3.16 For more detail on the Greater Manchester Transport Strategy 2040 and Our Five Year Transport Delivery Plan visit the TfGM website.

1.4 Structure of this Note

1.4.1 This note sets out the process that was implemented to identify the sites considered as suitable for inclusion in the draft GMSF. It also sets out a summary of the Greater Manchester Accessibility Level (GMAL) model which is TfGM's tool for

assessing the accessibly of sites in public transport terms and which was used in assessing the transport requirements of the Allocations.

1.4.2 An associated exercise was carried out to assess the potential to introduce or extend bus services to the Allocations, and this note sets out the process implemented to assess the likely demand and revenue implications of these new services.

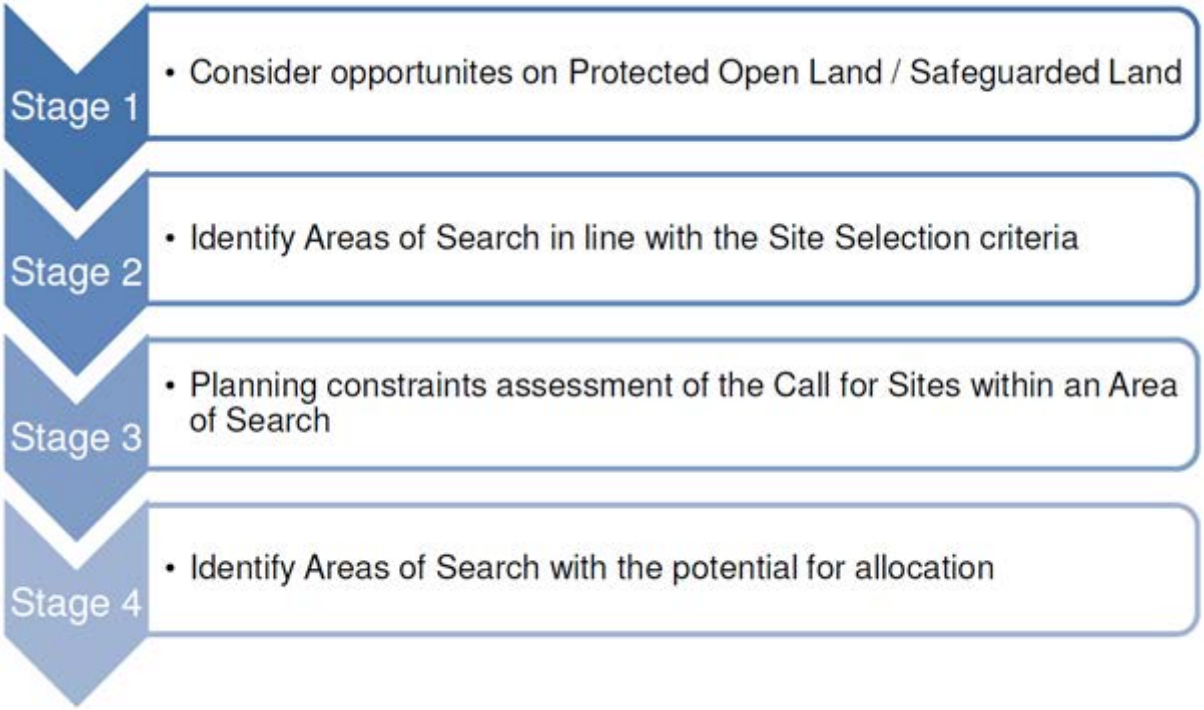
1.4.3 It then explains the approach to strategic modelling which was used to highlight the transport impacts of the Allocations on the transport network, and the process to identify, develop and categorise suggested mitigation schemes.

2. Site Selection

2.1 The Process

1.1.1 The process of identifying and selecting site allocations for the draft GMSF was led by the 10 Greater Manchester Authorities and provided the starting point for further investigation of the preferred sites through the Locality Assessments. It should be noted at the outset that a wide range of planning issues are considered when identifying sites for release, and transport is just one important aspect of this. A Site Selection methodology was developed that included seven criteria informed by the Vision, Objectives and Spatial Strategy in the GMSF 2019, and was used to guide the selection of sites for development within the green belt. A key objective for the process was to demonstrate a clear, consistent and transparent approach to the selection of sites in the GMSF.

1.1.2 The following stages set out the process used to identify the proposed allocations in the GMSF:



1.1.3 Stage One relates to land which is outside of the existing urban area but which is not in the green belt. This includes land which has been identified in Local Authority Local Plans as safeguarded land and/or protected open land (POL). This land is considered to be sequentially preferable to green belt. If stage one does not identify sufficient land to meet the need then it will be necessary to consider sites which are currently in the green belt as part of Stage two.

1.1.4 Stage Two is the identification of broad "Areas of Search" based on the Site Selection Criteria within which call for sites could be assessed. The Site Selection criteria reflect the priorities of the GMSF Spatial Strategy and objectives. The broad Areas of Search approach was chosen because of the volume of call for sites submitted and therefore it was necessary to undertake an initial high level sift to identify only those sites with the potential to meet the GMSF strategy. Sites which did not fall within an Area of Search were not considered to meet the strategy and were therefore excluded from the Site Selection process and not subject to any further assessment.

1.1.5 Based on the GMSF Spatial Strategy, plan objectives and guidance in the NPPF on green belt release, seven Site Selection Criteria were developed to identify the most sustainable sites in the green belt.

- Criterion 1 – Land which has been previously developed and/or land which is well served by public transport.
- Criterion 2 – Land that is able to take advantage of the key assets and opportunities that genuinely distinguish Greater Manchester from its competitors.
- Criterion 3 – Land that can maximise existing economic opportunities which have significant capacity to deliver transformational change and / or boost the competitiveness and connectivity of Greater Manchester and genuinely deliver inclusive growth.
- Criterion 4 – Land within 800 metres of a main town centre boundary or 800m from the other town centres' centroids.
- Criterion 5 – Land which would have a direct significant impact on delivering urban regeneration.
- Criterion 6 – Land where transport investment (by the developer) and the creation of significant new demand (through appropriate development densities), would support the delivery of long-term viable sustainable travel options and deliver significant wider community benefits.
- Criterion 7 – Land that would deliver significant local benefits by addressing a major local problem/issue.

1.1.6 Stage Three is an assessment of the sites within the identified Areas of Search to determine whether development in the Areas of Search would be appropriate, weighing the likely benefits against key planning constraints.

1.1.7 Stage four of the assessment identified proposed allocations within the Areas of Search. These Areas of Search were those which were considered to have no other significant constraints precluding development. Because the Areas of Search were derived from the Site Selection Criteria, it is considered that allocations within them represent the best fit for delivering the GMSF Spatial Strategy.

1.1.8 The Locality Assessments are not proposed to take the place of Transport Assessments (TA) which are a required part of individual Planning Applications. The Locality Assessments are intended to give a high-level assessment of how the site may impact on the surrounding transport network, in the absence of any detailed proposals for the configuration and phasing of a site. As such, they are intended to

highlight any significant 'show stoppers' that would suggest the site was not suitable for further consideration.

2.2 Greater Manchester Accessibility Levels

1.2.1 In order to support analysis of public transport accessibility and to assist in service development, TfGM has developed the Greater Manchester Accessibility Levels (GMAL) model, which provides a detailed and accurate measure of accessibility for any given location in the City Region for public transport (bus, rail and Metrolink), as well as flexible transport services such as Local Link.

1.2.2 GMAL provides a score of a location of between 1 to 8, where 1 represents the lowest level of accessibility and 8 represents the highest.

1.2.3 The GMAL measure reflects:

- Walking time from the point-of interest to the public transport access points;
- The number of services (bus, Metrolink and Rail) available within the catchment;
- The level of service at the public transport access points - i.e. average waiting time; and
- The operating areas of Local Link (flexible transport) services.

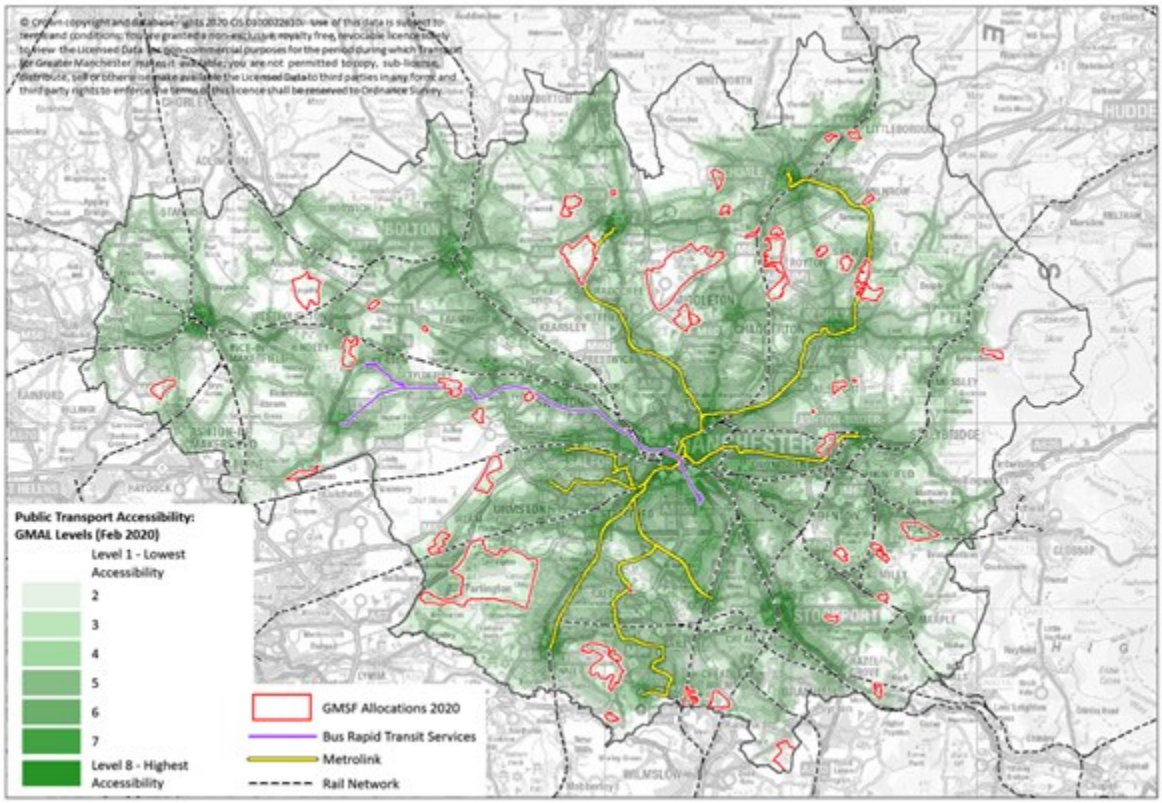
1.2.4 It does not consider:

- The speed or utility of accessible services;
- Crowding, including the ability to board services; or,
- Ease of interchange.

1.2.5 The map below displays the public transport accessibility of allocations within the Greater Manchester Spatial Framework. A representation of the Rail, Metrolink (including the Trafford Park Line completed in March 2020) and Bus Rapid Transit (Vantage bus services) corridors are provided for reference, as well as an indication of public transport accessibility through GMAL.

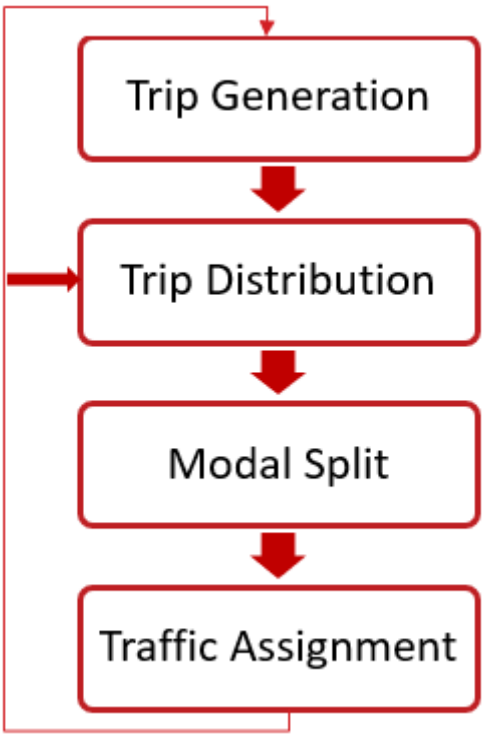
1.2.6 This accessibility data should be considered correct as of February 2020, providing a stable representation of the public transport network before changes in services associated with Covid-19. Since March 2020, public transport services have been under continuous review subject to the requirements of demand, social distancing

and funding. There have been a range of changes made regarding service frequencies across public transport networks, and while there was an initial reduction in services, much of this has now been restored, and this would still represent the areas best served by public transport within a stable service pattern.



3. Approach to Strategic Modelling

2.1 The GMSF Locality Assessments have been produced using data provided from TfGM's Variable Demand Model (GMVDM). This model is a mathematical representation of the transport network, which works by determining all of the origins and destinations of trips within a given area, matching these two together in order to generate a set of journeys, assigning these journeys to a mode (for example, car, bus, or cycling) and then assigning these trips to a route. The model runs numerous 'loops' in order to identify the best path (by generalised cost). This approach is summarised in the diagram below.



2.2 For this project, SYSTRA updated the model in order to produce a number of different scenarios to permit comparison and evaluation.

2.3 TfGM provided the Base Model to SYSTRA representing how the transport network operates at present (in 2017). SYSTRA made some refinements to the Base Model to add detail in the vicinity of some allocations. GMVDM is a strategic model and, as such, does have limitations in terms of investigating localised transport issues.

2.4 SYSTRA then produced a Reference Scenario, including the Existing Land Supply and committed transport infrastructure for two assessment years – 2025 and 2040. This facilitated an understanding of how the transport network was likely to operate in

the future, with the existing land supply identified in the GMSF, but without the introduction of the Allocations proposed in the plan.

2.5 Future trip generation to/from the site (i.e. how many people and vehicles will enter or leave the site) was estimated by applying a set of Greater Manchester-wide trip rates derived from an industry database known as TRICS (Trip Rate Information Computer System) to the agreed development quantum for each site. TRICS is a national system for trip generation analysis which allows users to establish potential levels of trip generation for a wide range of development types and scenarios. Trip rates were based on the Trafford Park Metrolink business case and were given for three periods, AM(0700-1000), Inter-Peak (1000-1600) and PM (1600-1900), different rates were also used for town centre and out-of-centre areas. Where Office or Industry and Warehouse was a part of the land use mix, floorspace was converted into a number of jobs, using densities derived from the Homes and Community Agency Employment Density Guide.

2.6 The distribution of trips (i.e. where they are going to or coming from) was derived by selecting nearby zones with similar land use characteristics as a proxy and using the existing distribution in the model.

2.7 In order to assess the cumulative impact of Greater Manchester allocations on the network, two test model scenarios were undertaken, a 'constrained' and 'high side' assessment. The constrained forecasts could reduce the number of future highway trips due to congestion on the highway network. This constraining process is undertaken by the GMVDM.

2.8 In simple terms, the GMVDM takes the unconstrained input demand and adjusts it to reflect changes in the costs of travel over time, due to:

- increased congestion due to the underlying increase in car trips forecast by the National Trip End Model (NTEM) a UK wide forecast of population, employment, car ownership and trip rates, produced by the Department for Transport
- the inclusion of significant new developments causing additional local congestion
- changes in values of time and vehicle operating costs
- changes in public transport fares

- introduction of new public transport services or changes to journeys times / headways for existing services
- introduction of new road infrastructure

2.9 The model adjusts the input demand based on how the cost of travel changes from the base year to the future. For example, for a shopping trip undertaken by car which becomes more congested in future, changes might be:

- travel via a different route
- travel via a different mode, e.g. walk/cycle, bus, Metrolink
- travel to some different shops
- travel at a different time of day
- some combination of the above

2.10 The 'standard' development planning approach would generally not assume that future highway trips are constrained by congestion on the highway network. Discussions between SYSTRA and TfGM pointed towards a need to also look at such a 'high-side' scenario with the GMSF development scenario which does not take account of future congestion on the road network.

2.11 The outputs of these four Test Cases ("GMSF Constrained" and "GMSF High Side", for both 2025 and 2040) were used to assess and mitigate the impact of the GMSF Allocations on the Greater Manchester transport network.

2.12 Further iterations of the above process were necessary in the case of some sites. When the process was completed, a comparison was made of the input TRICS trip rates and the output GMVDM development traffic flows, to confirm that both were broadly comparable.

4. Approach to Technical Analysis

4.1 Background

3.1.1 For each of the Site Allocations originally examined, SYSTRA worked with representatives of the ten Greater Manchester Local Authorities, TfGM and site promoters to identify key parts of the transport network (e.g. key road links and

junctions) likely to be impacted by the site. This was achieved by a combination of both professional judgement and local knowledge.

3.1.2 In almost all cases the junctions in a road network reach capacity before the road links. Hence, much of the analysis focused on the identified critical junctions. For each of these, a local junction model was built which replicated the current operation of the junction. Signalised junctions were assessed in detail using industry-standard modelling software 'LINSIG Version 3'. Where possible, traffic signal information (i.e. signal phasing and timings) and lane geometry (alignment, profile and lane position) were provided by TfGM to ensure that the local junction models reflected (as far as possible), the operation of the junctions on the ground. 'Junctions 9' software was used to assess priority and roundabout junctions.

3.1.3 Junction performance was tested for the "Reference", "GMSF Constrained" and "GMSF High Side" scenarios for both 2025 and 2040. Site traffic impacts were measured relative to the Reference scenario. Where these impacts were considered to be significant, transport mitigation schemes were developed to address these. Through discussions with TfGM and the Combined Authority, it was agreed that where mitigation was required, it should mitigate the impacts back to the Reference Case scenario – i.e. the allocations should mitigate their own cumulative impact rather than seek to mitigate the impact of general traffic growth arising from the Existing Land Supply. It should be noted that mitigating back to this level of operation may not mean that the junction operates within capacity by 2040.

4.2 Approach to identifying Public Transport schemes

3.2.1 Public transport interventions have been identified which could support non-car trips to and from the draft Allocation. In some instances sites have been proposed close to current or planned Metrolink stops or current rail stations, and for a majority of sites the introduction of new or extended bus services have been proposed and outline costs developed.

3.2.2 In order to develop these proposals, SYSTRA Ltd's bus service experts and TfGM's Operational Planning team held a workshop to identify potential new and improved services for each site, including any existing proposals identified during the early stages of the planning process. The identified services were then defined in more

detail to understand the likely catchments and patronage levels. Patronage was based on TRICS outputs moderated in line with the actual levels of services proposed (e.g. slow and/or low frequency services are unlikely to achieve the patronage implied by the raw TRICS outputs). The patronage forecasts were used to estimate the likely revenue levels to be generated by the new or improved bus service associated with each site.

3.2.3 Services were also costed using detailed costing information available to TfGM through its specification of current socially necessary bus services, to establish whether they could operate without subsidy, and, where subsidy was likely to be necessary, to understand the likely cost per passenger. Services with an unacceptably high cost per passenger subsidy were reviewed in order to understand if any changes could be made that would reduce the subsidy, which led to a reduction in the specification of some services.

3.2.4 Services which, following review, still had an unacceptably high cost per passenger subsidy were deemed to be unviable and were not included in the Locality Assessments.

3.2.5 It should be noted that the working environment for buses is likely to be substantially different in the future, and this exercise was intended to be indicative of the type of bus service that may be possible when an Allocation is developed. The opportunity for bus service improvements will need to be reviewed at the time of submission of the planning application (within the Transport Assessment) as circumstances and opportunities for service improvement may have changed.

4.3 Mitigations and Scheme Development

3.3.1 A number of the site allocations have a body of pre-existing planning information associated with them. This body of work includes consideration of how they could best be linked into the transport network. Therefore, for some sites, there were pre-existing proposals for interventions in the form of link roads, new rail or Metrolink stations, or extensions to existing or proposed bus, cycle and walking routes. Where these schemes had a base level of detail (which would allow them to be coded into the model), they could be examined to consider the level of relief they provided to the traffic impacts. In other instances, it was for the Locality

Assessment technical teams to identify possible interventions and off-site mitigations. Typical local mitigations that were considered included:

- priority junctions (both new priority junctions and modification of existing junctions)
- signalised junctions (both new signalised junctions, modification of existing signalised junctions and conversion of priority junctions to signalised arrangement)
- roundabouts (both mini and standard, modification of existing roundabouts and signalisation of standard roundabouts)
- carriageway construction (single and dual carriageway)
- installation of pedestrian / cycle crossings (pelican, toucan, puffin and zebra).

3.3.2 In addition, the team considered the introduction of new bus services, extensions to or increases in frequency for existing bus services, and the possible introduction of Demand Responsive Transport.

3.3.3 In parallel to the identification and costing of local mitigations, a costing exercise was undertaken to identify broad costs for each intervention to understand how these could be delivered and the extent to which they offered value for money. SYSTRA and other third-party consultants have pro-actively engaged with the Local Authorities and other stakeholders such as TfGM and Highways England throughout the assessment process and based on their inputs the list of transport interventions has been refined and consolidated.

3.3.4 In the case of certain allocations, it was necessary to undertake the process described above more than once. In the case of some larger and/or more complex sites, it was necessary to test the effectiveness of the identified mitigations via the GMVDM and to further check that traffic reassignment did not generate additional problems.

3.3.5 Each of the Locality Assessments has considered the full range of mitigations and interventions, from public transport, to highway schemes, to sustainable modes. Some of the sites allocated for development have proven to be more complex than others; due either to their size and composition, their proximity to other sites or their interaction with congested sections of the Strategic Road Network. In these instances, is has been necessary to complete several iterations of the process set out above. For example, mitigations developed for a site may not fully address the

issues identified, and further mitigations and/or reductions in development quantum have been considered in order to identify the correct level of scale. This has in some cases necessitated several rounds of strategic modelling.

3.3.6 In some instances, it was not possible to full identify interventions which could suitably mitigate the impact of the site on the network. Where this is the case, this became a contributing factor in decisions to either reduce the scale or remove the site completely from the GMSF (Appendix 1 gives a full list of the final GMSF Allocations). In other instances, the proposed intervention made a contribution to mitigating the site, but could not fully ameliorate the impact. In these instances, care has been taken to ensure that the Allocation is not proposed for delivery in the early part of the Plan period, in order to allow further work to be done to improve the transport network, and ensure that the Allocation can be brought forward safely and sustainably.

3.3.7 Mitigations have been grouped in one of four categories depending on their size and significance:

Necessary strategic interventions

3.3.8 These comprise significant interventions that have potential to have strategic benefits – i.e. benefits to the wider network not just the local network. There is a consensus that the intervention is required to support the implementation of a specific site and that the site could not come forward without it

Supporting strategic interventions

3.3.9 These comprise significant interventions; similar in magnitude to those defined in the previous category. These interventions are considered highly desirable and may be required in order to deliver the GMSF at a Plan level but are not necessarily linked to the delivery of any one Allocation.

Necessary local interventions

3.3.10 These are essential for a site to come forward, but do not have a wider strategic impact on the transport network. They are comprised of three main types:

- Site Access – Direct connections between the external road network and the site.

- Local Mitigation – Local transport mitigation measures proposed to address direct impacts of the site. These might comprise road network improvements, localised public transport improvements and measures to support the use of active modes.
- SRN Mitigation – Highway mitigation measures specifically intended to address identified issues on the Strategic Road Network arising from an Allocation.

Supporting local interventions

3.3.11 Site Access, Local Mitigation and SRN mitigation which are considered highly desirable but are not essential to the delivery of any one Allocation.

3.3.12 It is important to note that the interventions developed are intended to demonstrate only that significant transport impacts of the Allocation can be appropriately ameliorated. As such they are indicative only and are not intended to act as a definitive proposal for the mitigation of any Allocation, which would be developed as part of a Transport Assessment submitted as part of a planning application at a later date.

3.3.13 All of the interventions set out in the Locality Assessments are included in Greater Manchester's Five Year Transport Delivery Plan (or are covered within the associated Local Implementation Plans (LIP) for each local authority). This sets out those transport schemes which will be implemented or developed further across the next five-years in order to deliver on Greater Manchester's wider economic, social and environmental objectives for transport as set out in 2040 Transport Strategy.

3.3.14 The focus of the main Transport Delivery Plan is on those GMSF schemes that have strategic benefits, while the LIP documents enable the local interventions to be incorporated into the local sustainable transport and highway programmes.

3.3.15 In all cases, we would expect significant developer funding to enable the delivery of both the strategic and local schemes, and where appropriate other sources of public funding will be sought to help ensure delivery over the plan period. Funding and delivery priorities of the Delivery Plan, over the next 3-5 years, will be reflected in the Greater Manchester Infrastructure Programme (GMIP).

3.3.16 Further iterations of the Delivery Plan will be published at regular intervals, and as sites come forward for development, we would expect to see interventions necessary to ensure new Allocations can be delivered sustainably to be reflected in those iterations. TfGM, the Local Authorities, Highway England and site promoters will work together to ensure that schemes which are brought forward support the City Region's commitment to the Right Mix vision and the ambition to enable more people to walk, cycle and use public transport.

5. Conclusion

4.2 The completion of Locality Assessments on the proposed GMSF Allocations has ensured that each site has been subject to a thorough, robust and consistent evaluation of its likely contribution to transport impacts in Greater Manchester. The sites that have been selected for inclusion in the latest version of the GMSF have been found to be suitable from a transport perspective, and satisfy the requirements of National Planning Policy Framework in that they do not place an unacceptable impact on highway safety or severe impact on the road network. Where necessary, illustrative mitigation schemes have been developed, and their effectiveness in reducing traffic impacts has been demonstrated. Those schemes which have a strategic benefit and are likely to be needed in the next five-year period have been referenced in Our Five Year Transport Delivery Plan and form part of GMIP.

4.3 Nonetheless, it is clear that for some Allocations there is further work to be done in order to develop a solution that fully mitigates the site's impact on the transport network. In these instances care has been taken to ensure that the Allocation is not identified for delivery in the first five years of the Plan, to enable more work to be undertaken to ensure that the site can be delivered in a safe and sustainable matter at a later point in time.

6. GMSF Allocations List

Local Authority	2019 Ref	2019 Title	2020 Ref	2020 Title
Cross Boundary	GMA01.1	Northern Gateway Heywood Pilsworth	GMA1.1	Northern Gateway Heywood Pilsworth
Cross Boundary	GMA01.2	Northern Gateway Simister and Bowlee	GMA1.2	Northern Gateway Simister and Bowlee
Cross Boundary	GMA01.3	Whitefield	Withdrawn	Withdrawn
Cross Boundary	GMA02	Stakehill	GMA2	Stakehill
Cross Boundary	GMA03	Kingsway South	Withdrawn	Withdrawn
Bolton	GMA04	Bewshill Farm	GMA4	Bewshill Farm
Bolton	GMA05	Chequerbent North	GMA5	Chequerbent North
Bolton	GMA06	West of Wingates	GMA6	West of Wingates
Bury	GMA07	Elton Reservoir	GMA7	Elton Reservoir
Bury	GMA08	Seedfield	GMA8	Seedfield
Bury	GMA09	Walshaw	GMA9	Walshaw
Manchester	GMA10	Global Logistics	GMA10	Global Logistics
Manchester	GMA11	Roundthorn MediPark Extension	GMA3.1	Roundthorn MediPark Extension
Manchester	GMA12	Southwick Park	GMA11	Southwick Park
Oldham	GMA13	Ashton Road Corridor	GMA18	Land south of Coal Pit Lane (Ashton Road)
Oldham	GMA14	Beal Valley	GMA12	Beal Valley

Local Authority	2019 Ref	2019 Title	2020 Ref	2020 Title
Oldham	GMA15	Broadbent Moss	GMA14	Broadbent Moss
Oldham	GMA16	Cowlishaw	GMA16	Cowlishaw
Oldham	GMA17	Hanging Chadder	GMA17	Hanging Chadder
Oldham	GMA18	Robert Fletchers	GMA15	Chew Brook Vale (Robert Fletchers)
Oldham	GMA19	South of Rosary Road	GMA19	South of Rosary Road
Oldham	GMA20	Spinners Way	Withdrawn	Withdrawn
Oldham	GMA21	Thornham Old Road	Withdrawn	Withdrawn
Oldham	GMA22	Woodhouses	GMA13	Bottom Field Farm (Woodhouses)
Rochdale	GMA23	Bamford and Norden	GMA20	Bamford and Norden
Rochdale	GMA24	Castleton Sidings	GMA21	Castleton Sidings
Rochdale	GMA25	Crimble Mill	GMA22	Crimble Mill
Rochdale	GMA26	Land north of Smithy Bridge	GMA23	Land north of Smithy Bridge
Rochdale	GMA27	Newhey Quarry	GMA24	Newhey Quarry
Rochdale	GMA28	Roch Valley	GMA25	Roch Valley
Rochdale	GMA29	Trows Farm	GMA26	Trows Farm
Salford	GMA30	Land at Hazelhurst Farm	GMA27	Land at Hazelhurst Farm

Local Authority	2019 Ref	2019 Title	2020 Ref	2020 Title
Salford	GMA31	East of Boothstown	GMA28	East of Boothstown
Salford	GMA32	North of Irlam Station	GMA29	North of Irlam Station
Salford	GMA33	Port Salford Extension	GMA30	Port Salford Extension
Stockport	GMA34	Bredbury Park Extension	GMA31	Bredbury Park Extension
Stockport	GMA35	Former Offerton High School	GMA32	Former Offerton High School
Stockport	GMA36	Gravel Bank Road/Unity Mill	Withdrawn	Withdrawn
Stockport	GMA37	Heald Green	GMA33	Heald Green 1 (West)
Stockport	GMA38	High Lane	GMA35	High Lane
Stockport	GMA39	Hyde Bank Meadows	GMA36	Hyde Bank Meadows
Stockport	GMA40	Griffen Farm/Stanley Green	GMA34	Heald Green 2 (East)
Stockport	GMA41	Woodford Aerodrome	GMA37	Woodford Aerodrome
Tameside	GMA42	Ashton Moss West	GMA38	Ashton Moss West
Tameside	GMA43	Godley Green Garden Village	GMA39	Godley Green Garden Village
Tameside	GMA44	South of Hyde	GMA40	South of Hyde

Local Authority	2019 Ref	2019 Title	2020 Ref	2020 Title
Trafford	GMA45	New Carrington	GMA41	New Carrington
Trafford	GMA46	Timperley Wedge	GMA3.2	Timperley Wedge
Wigan	GMA47	Land South of Pennington	Withdrawn	Withdrawn
Wigan	GMA48	M6 Jctn 25	GMA42	M6 Junction 25
Wigan	GMA49	North of Mosley Common	GMA43	North of Mosley Common
Wigan	GMA50	Pocket Nook	GMA44	Pocket Nook
Wigan	GMA51	West of Gibfield	GMA45	West of Gibfield

Greater Manchester Spatial Framework

Locality Assessment:

Ashton Moss West (GMA38)

Publication Version 2: November 2020

Identification Table	
Client	Tameside Metropolitan Borough Council / TfGM
Allocation	Ashton Moss West
File name	GMA38 Tameside - Ashton Moss West LA 021020
Reference number	GMA38 (2020 GMSF) previously GMA42 (2019 GMSF)

Approval					
Version	**Role**	**Name**	**Position**	**Date**	**Modifications**
0	Author	Ruairidh MacVeigh	Consultant	20/08/20	Base report
	Checked by	Kelly Chiu	Principal Consultant	01/09/20	
	Approved by	Chris Cox	Associate	13/09/20	
1	Author	C Norfield	TfGM	30/09/20	Consistency edits
	Checked by	S Pateman	TMBC	30/09/20	
	Approved by	G Holland	TMBC	30/09/20	

Table of contents

List of figures

List of tables

Allocation Data	
Allocation Reference No.	GMA38 (2020 GMSF) previously GMA42 (2019 GMSF)
Allocation Name	Ashton Moss West
Authority	Tameside Metropolitan Borough Council
Ward	Droylsden East
Allocation Proposal	160,000sqm - B1b (research & development), B1c (light industry) and B2 (general industrial)
Allocation Timescale	0-5 years ☐ 6-15 years ☒ 16 + years ☐

Glossary

"2025 GMSF Constrained" - is the 2025 forecast case in which the model adjusts the input demand based on how the cost of travel changes from the base year to the future. For example, for a shopping trip undertaken by car which becomes more congested in future, changes might be travel via a different route, mode, location or time of day.

"2040 GMSF Constrained" - as above, but for a 2040 forecast year

"2025 GMSF High-Side"- is the 2025 forecast case in which the model does not adjust the input demand based on how the cost of travel changes. In this scenario congestion does not lead to a reassignment of traffic, and therefore road traffic flow will generally be higher.

"2040 GMSF High-Side" - as above, but for a 2040 forecast year

"2025 Reference Case" - is the Do Minimum scenario which includes delivery of all transport schemes already committed and assumed to be completed by 2025

"2040 Reference Case"- is the Do Minimum scenario which includes delivery of all transport schemes already committed and assumed to be completed by 2040

AADT - Annual average daily traffic, is a measure used in transportation planning to quantify how busy the road is

Bee Network - is a proposal for Greater Manchester to become the very first city-region in the UK to have a fully joined-up cycling and walking network: the most comprehensive in Britain covering 1,800 miles.

Bus Rapid Transit - is a bus-based public transport system designed to improve capacity and reliability relative to a conventional bus system. Typically, a BRT system includes roadways that are dedicated to buses, and gives priority to buses at junctions where buses may interact with other traffic

Existing Land Supply - these are allocations across the county that have been identified by each local planning authority across Greater Manchester and are available for development

Greater Manchester Variable Demand Model (GMVDM) - the multi-modal transport model for Greater Manchester. This transport model provides estimates of future year transport demand as well as the estimates of travel behaviour changes and new patterns that the Plan is likely to produce. These include

changes in choices of routes, travel mode, time of travel and changes in journey destinations for some activities such as work and shopping.

Local Road Network (LRN) - All other roads comprise the Local Road Network. The LRN is managed by the local highways authorities

National Trip End Model (NTEM) - is a Department for Transport forecast that ensures that measures of population, jobs and trips made by various mode are consistent across the whole of Great Britain.

Rapid transit services - refers to high frequency, high capacity metro style transport services including Metrolink and Bus Rapid Transit.

Strategic Road Network (SRN) - The Strategic Road Network comprises motorways and trunk roads, the most significant 'A' roads. The SRN is managed by Highways England.

"TfGM" - Transport for Greater Manchester, the Passenger Transport Executive for Greater Manchester

Urban Traffic Control (UTC) - is a specialist form of traffic management that, by coordinating traffic signals in a centralised location, minimises the impact of stop times on the road user.

1. Allocation Location and Overview

1.1.1 This Locality Assessment (LA) is one of a series being prepared for proposed allocations within Greater Manchester in order to confirm the potential impacts on both the local and strategic network, as well as identifying possible forms of mitigation or the promotion of sustainable alternatives to reduce this impact.

1.1.2 The Ashton Moss West allocation is located in the Greater Manchester borough of Tameside, consisting of around 160,000sqm B1b (research & development), B1c (light industry) and B2 (general industrial) land use.

1.1.3 For the purposes of the testing the impact of the allocation through the strategic model, a total of 175,000sqm have been assumed to be built out by 2040. The GM transport modelling suite has a 2040 forecast year, as such it uses 2040 trajectory data as proxy for 2037 full build-out, this is not considered to materially impact on the analysis or conclusions of this report.

1.1.4 All phasing plans information contained in this Locality Assessment is indicative only and has only been used to understand the likely intervention delivery timetable. Final trajectory information and the final allocation proposal is contained in the GMSF Allocation Topic Paper.

1.1.5 The allocation is bounded to the west by existing residential developments, to the north by the Huddersfield Railway between Ashton-under-Lyne and Manchester, to the east by the M60 motorway and to the south by A6140 Lord Sheldon Way. The existing land use of the allocation is predominantly open land with some established retail uses, stables, TV masts, as well as a private dwelling.

1.1.6 The southeast boundary of the site is adjacent to the A6140 Lord Sheldon Way, a dual-carriageway urban road with a mixture of 30mph and 40mph speed limits that connects Guide Bridge with the M60 and the northern suburbs of Ashton-under-Lyne. The A6140 Lord Sheldon Way also hosts the Ashton Metrolink Line between Ashton-under-Lyne and Manchester.

1.1.7 The site lies within three of the 2011 Census mid-layer super output area, Tameside 010, Tameside 013 and Tameside 014.

1.1.8 Note that the allocation boundaries shown in **Figure 1 and 2** were correct at the time of writing, for definitive boundary information refer to the GMSF allocation maps. The reference number of Ashton Moss West has been updated from GMA42 to GMA38 since production of these images.

Figure 1. Allocation Location: Regional Context

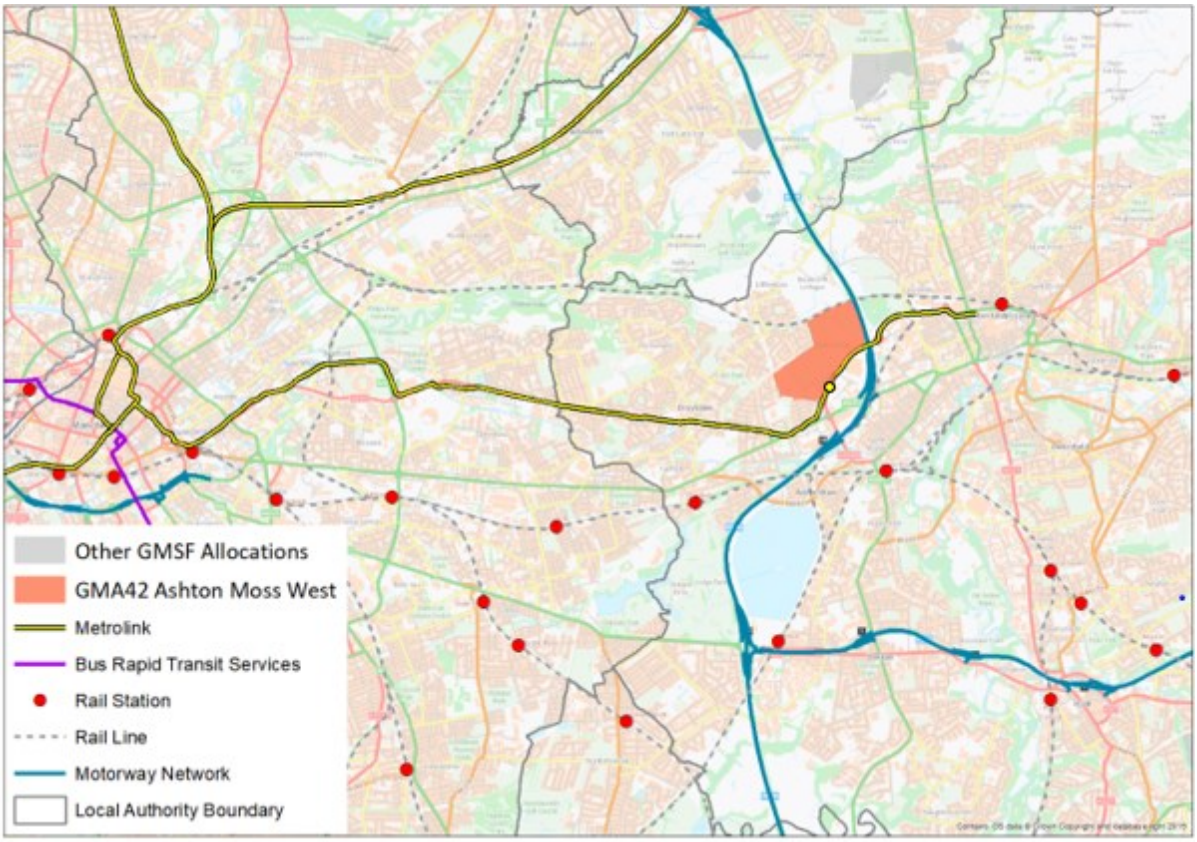
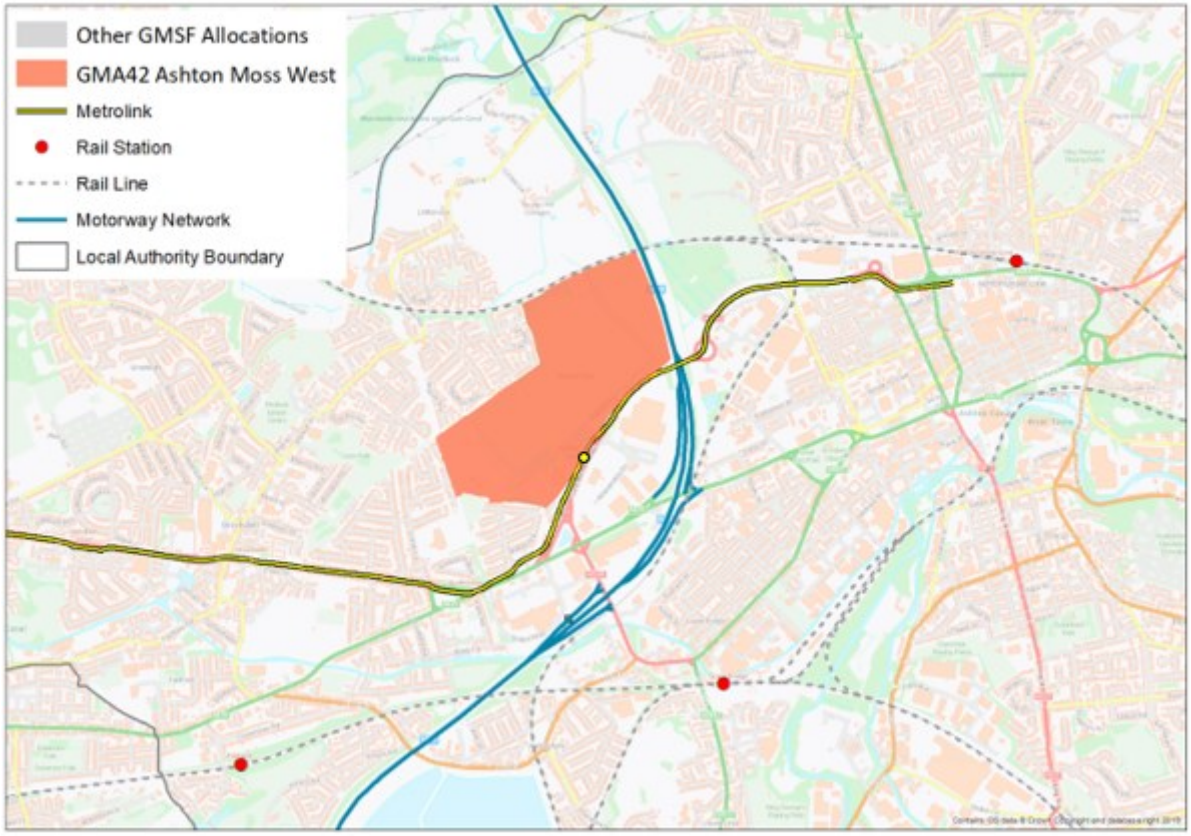


Figure 2. Allocation Location: Local Context



2. Justification for Allocation Selection

2.1.1 The Site Selection process has been led by the 10 Greater Manchester Authorities, including Tameside Metropolitan Borough Council, and provided the starting point for the investigation of the preferred sites through the Locality Assessments.

2.1.2 Detail of the Site Selection process, including the criteria used to identify the sites, and how this was used to select the most sustainable sites is considered within the GMSF Spatial Strategy and accompanying Topic Papers.

3. Key Issues from Consultation

3.1.1 The Greater Manchester Plan for Homes, Jobs and Environment (Spatial Framework) consultation ran from 14th January to 18th March 2019. The comments made during the 2019 GMSF consultation relate to the following key transport themes; roads, public transport, air quality and active travel:

- Transport remains a key area of concern should development of the site for employment and/or residential come forward;
- Traffic congestion results in roads being at a standstill during rush hours and gridlocked at weekends. Congestion extends into Ashton-under-Lyne, towards Manchester via Manchester Road and Droylsden, on the M60 and M67 and across Tameside;
- Development will have a knock-on impact on existing businesses leading to a possible reduction in revenue;
- Concern that roads are dangerous for families to walk beside and for horse riders to use;
- Additional concern over the national increase in the number of road traffic accidents (RTAs) between vehicles and horse riders;
- Development will put unsustainable pressure on existing roads, raise air pollution and increase the number of cars and HGV's in the area and those using public transport including the Metrolink;
- Concern over the loss of local recreational space particularly for those with mobility issues and access to alternative recreational spaces e.g. Daisy Nook;
- Metrolink has had a negative impact on local businesses and jobs as it provides easy access into Manchester; and
- Support was noted for the site's proximity to M60 Junction 23, access to public transport (rail, bus and Metrolink stations) and ongoing investment in the transport interchange in Ashton-under-Lyne town centre.

3.1.2 A full summary of all consultation responses is available on the GMCA GMSF website.

3.1.3 Based on its siting, the Ashton Moss West allocation is in a sustainable location, with access to the motorway network and public transport, and is in close proximity to Snipe Retail Park and an established employment area. This will, therefore, create a logical extension to the urban area and deliver a well-connected business park which will support communities with economic activity and be able to compete at a GM level.

4. Existing Network Conditions and Allocation Access

4.1 Vehicular Access

4.1.1 The A6140 Lord Sheldon Way is a dual carriageway urban road with a 40mph speed limit on the section immediately bounding the proposed Ashton Moss West allocation, but reduces to 30mph north of the allocation near the Ashton Moss Leisure Park roundabout, and south adjacent to the junction with the A635 Manchester Road. This road is a main thoroughfare to the north of Ashton-under-Lyne town centre, and forms part of a wider bypass between the A635 (W) towards Manchester and the A670 (E) towards Mossley and Greenfield.

4.1.2 Junctions on the A6140 Lord Sheldon Way are fully signalised with dedicated cycling and pedestrian crossing facilities, and the carriageway is fully lit, has wide footpaths, and supports dedicated cycle lanes (off-carriageway).

4.1.3 The nearest junction to the Ashton Moss West allocation is the A6140 Lord Sheldon Way / Alexandria Drive four-arm signalised junction, which provides dedicated left-turn slips from the existing employment development opposite the A6140 Lord Sheldon Way from the proposed allocation. The Ashton Metrolink Line, and adjacent Ashton Moss tram stop, are also integrated into the junction, and crosses the northbound carriageway as its alignment changes from paralleling the carriageway (south of the junction) to running along the central reservation (north of the junction).

4.1.4 Alexandria Drive is a single-carriageway access road with a mini-roundabout that provides entry to the Ashton Moss Metrolink stop Park & Ride (P&R) facility and to Rayner Lane.

4.1.5 Rayner Lane is a single-carriageway gravel road which provides access to a residential property to the northeast of the proposed Ashton Moss West allocation, and southwest to access Mockridge Nurseries garden centre. Rayner Lane is also a designated Public Right of Way (PRoW), and is classified as a bridleway, allowing for use by cyclists.

4.1.6 South of the Ashton Moss West allocation is a large, triangular junction that connects the A6140 Lord Sheldon Way to the A635 Manchester Road. The northern junction is a four-arm signalised crossroads that provides access to the Sheldon Arms pub and restaurant, the Travelodge Ashton-under-Lyne and Notcutts Ashton Park garden centre. While the southern junction is a four-arm signalised crossroads between the A6140 Lord Sheldon Way and the A635 Manchester Road, and the western junction is a four-arm signalised crossroads between the A6140 Lord Sheldon Way to the north, the A635 Manchester Road to the east and west, and the Snipe Retail Park to the south. All of these junctions are fully signalised with dedicated cycling and pedestrian crossing facilities, and the carriageway is fully lit, has wide footpaths, and supports dedicated cycle lanes (sharing the footpaths).

4.1.7 The A635 Manchester Road passes 1km south of the Ashton Moss West allocation, and comprises an urban dual carriageway with sections of 30mph and 40mph speed limits, forming the main arterial route between Ashton-under-Lyne and Manchester city centre.

4.1.8 The M60 is an urban motorway that forms part of the Manchester orbital motorway network, and comprises six lanes at the section adjacent to the Ashton Moss West allocation. M60 Junction 23 is split across two bridges carrying the A6140 Lord Sheldon Way (S) and the A635 Manchester Road (E), with the southern bridge (A6140) forming the southbound on and off-ramp, while the northern bridge (A635) forms the northbound on and off-ramp, as well as an additional free-flow on-ramp for southbound movements from Ashton-under-Lyne town centre directly onto the motorway.

4.2 Accidents and Collision Overview

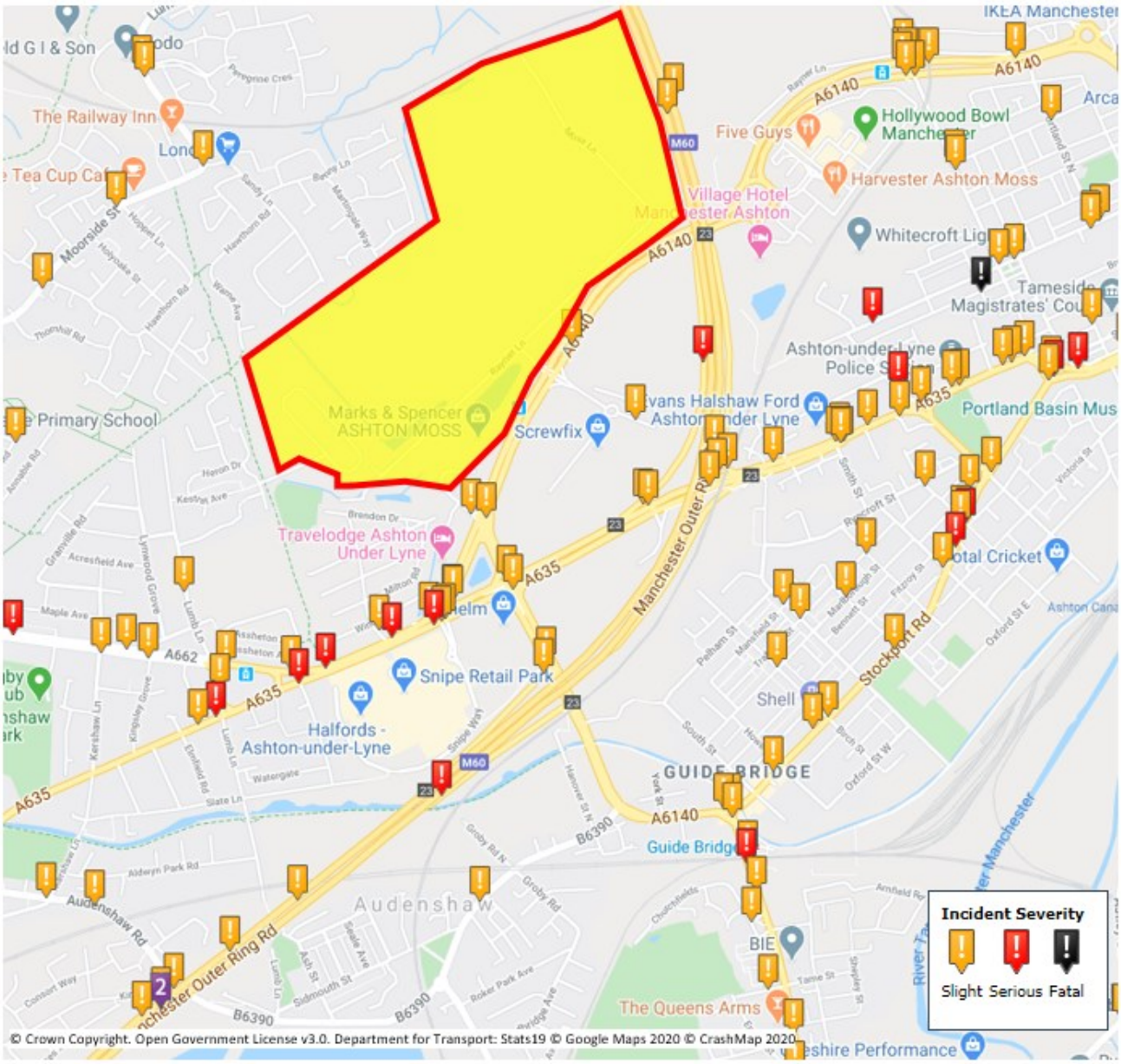
4.2.1 **Table 1** and **Figure 3** show the number of vehicle collisions over the last 5 years in a 1km area surrounding the Ashton Moss West allocation. There have been a total of 83 accidents over the last 5 years with one fatal incident in February 2016.

Table 1. Collision data within 1km of Ashton Moss West

Fatal	Serious	Slight	Total
1	16	66	83

4.2.2 Note that the allocation boundaries shown in **Figure 3** were correct at the time of writing, for definitive boundary information refer to the GMSF allocation maps.

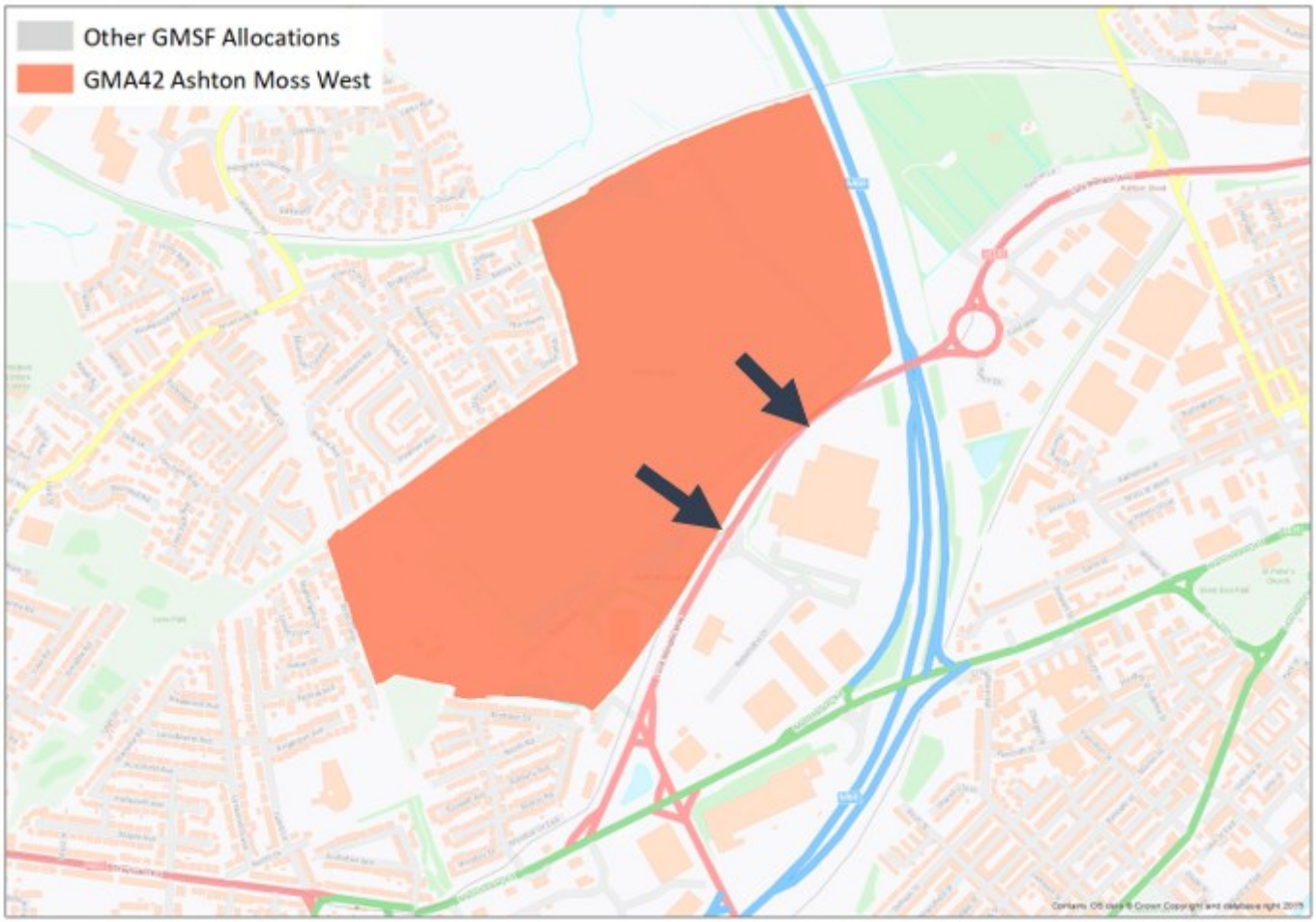
Figure 3. Collision data within 1km of Ashton Moss West



5. Proposed Access to the Allocation

5.1.1 **Figure 4** shows the indicative allocation access arrangements. Note that the allocation boundaries shown in **Figure 4** were correct at the time of writing, for definitive boundary information refer to the GMSF allocation maps. The reference number of Ashton Moss West has been updated from GMA42 to GMA38 since production of these images.

Figure 4. Indicative Allocation Access Arrangements



5.1.2 Based on the proposed size of the Ashton Moss West allocation, access would comprise of two primary vehicular accesses directly onto the A6140 Lord Sheldon Way. The main access into the Ashton Moss West allocation would utilise the existing Alexandria Drive access to the Ashton Moss Metrolink P&R facility and Rayner Lane, with the carriageway widths modified to suitably accommodate HGV movements, while also integrating junction facilities for the Ashton Moss P&R and Rayner Lane.

5.1.3 As this road is to form the primary access for HGV trips into the allocation, the existing mini-roundabout on Alexandria Drive will likely be replaced by a conventional four-arm priority junction that allows for access onto Rayner Lane and into the P&R facility, possibly including a ghost-island right-turn for traffic entering the P&R facility in order to ensure safe movements into the allocation and to avoid potential queuing across the Metrolink line and the wider A6140 Lord Sheldon Way junction.

5.1.4 The second primary access point would be located approximately 350m northeast of the existing Alexandria Drive junction, and would comprise a left-in/left-out priority junction. This access would allow extra capacity for traffic entering and leaving the allocation, while also avoiding interruptions to traffic flow on the A6140 Lord Sheldon Way caused by Metrolink services crossing the Alexandria Drive junction.

5.1.5 It is recognised that the implementation of the second access point as a left-in/left-out junction option limits the movement of some vehicular trips into and out of the allocation via this access. Consideration was therefore also given to a three-arm signalised junction allowing for all movements to and from the A6140 Lord Sheldon Way. This solution is not generally preferred due to the cost and potential traffic implications along the A6140 Lord Sheldon Way route, including implications for the Metrolink route. It remains possible for southbound trips exiting the allocation to utilise this access via a U-Turn manoeuvre at the Ashton Moss Leisure Park roundabout, which is situated 300m northeast of the proposed left-in/left-out access – however it is anticipated the majority of southbound traffic would utilise the primary access to the south.

5.1.6 As this junction is to form a priority access onto the A6140 Lord Sheldon Way, it may need to be accompanied by the introduction of a reduction of the speed limit at this location to 30mph in order to ensure safe merging for development traffic, especially HGVs. This reduction would also have benefits to the safety of pedestrians on this route including those accessing the nearby Metrolink services.

5.1.7 The Ashton Moss West allocation generally benefits from being located immediately adjacent to the Ashton Moss Metrolink stop, allowing for sustainable public transport alternatives to both the centre of Ashton-under-Lyne and Manchester city centre. There are also local bus stops located along both the A6140 Lord Sheldon Way and the A635 Manchester Road, which are all within a walkable distance. This highlights the part change in function for the A6140 Lord Sheldon Way that

arises as a result of the development, whereas previously this route formed a distributor road with little direct interaction for pedestrians and other non-motorised road users.

5.1.8 The need for a permeable network for pedestrian and cyclist priority within the allocation, and to connect to nearby routes, is required and is explored further within **Section 6** of this report.

5.1.9 In consideration of the size of the allocation and the proposed development quantum, the north access (left-in/left-out) junction will also double as the secondary (emergency) access in the event that the main access via Alexandria Drive were obstructed. While there are multiple surrounding roads that could potentially alternatively (or additionally) be used as a secondary vehicular access, these comprise mainly of residential streets with narrow carriageways and on-street parking, therefore making them unsuitable for use by HGVs.

6. Multi-modal Accessibility

6.1 Overview

6.1.1 The current accessibility of the Ashton Moss West allocation using Greater Manchester's Accessibility Level model (GMAL) has been identified as comprising areas of level 4, 5 and 6 for accessibility giving it an above average rating. Note that the GMAL rating is based on pre-COVID-19 pandemic figures and therefore may not be representative of the latest transport accessibility rating.

6.1.2 Greater Manchester Accessibility Levels (GMAL) are a detailed and accurate measure of the accessibility of a point to both the conventional public transport network (i.e. bus, Metrolink and rail) and Greater Manchester's Local Link (flexible transport service), taking into account walk access time and service availability. The method is essentially a way of measuring the density of the public transport provision at any location within the Greater Manchester region. The GMAL methodology is derived from the Public Transport Accessibility Level (PTAL) approach developed by the London Borough of Hammersmith and Fulham, but modified to consider flexible transport service provision (Local Link) and to reflect local service provision levels (different accessibility levels) within Greater Manchester.

6.1.3 The accessibility index score is categorized into eight levels, 1 to 8, where level 8 represents a high level of accessibility and level 1 a low level of accessibility.

6.2 Walking and Cycling

6.2.1 The A6140 Lord Sheldon Way provides wider than standard footpaths both north and south of the allocation, with full lighting and signalised pedestrian crossing control, as well as dedicated cycle lanes (off-carriageway) both towards Ashton-under-Lyne and Manchester.

6.2.2 Cycling routes in the Ashton Moss area have been improved substantially in recent years during phase 1 of Greater Manchester's Cycle City Ambition Grant (CCAG). The CCAG routes have included links to the Velodrome, Audenshaw, Clayton Vale, Manchester, Littlemoss and Northern Droylsden. The Ashton Canal Links Scheme provides links from Audenshaw south to the Ashton Canal towpath cycle route, and also onward to the Fallowfield Loop, and new cycle routes have been introduced from Ashton Moss to Katherine Street, which connects to the Ashton-under-Lyne Cycle hub and Guide Bridge Station.

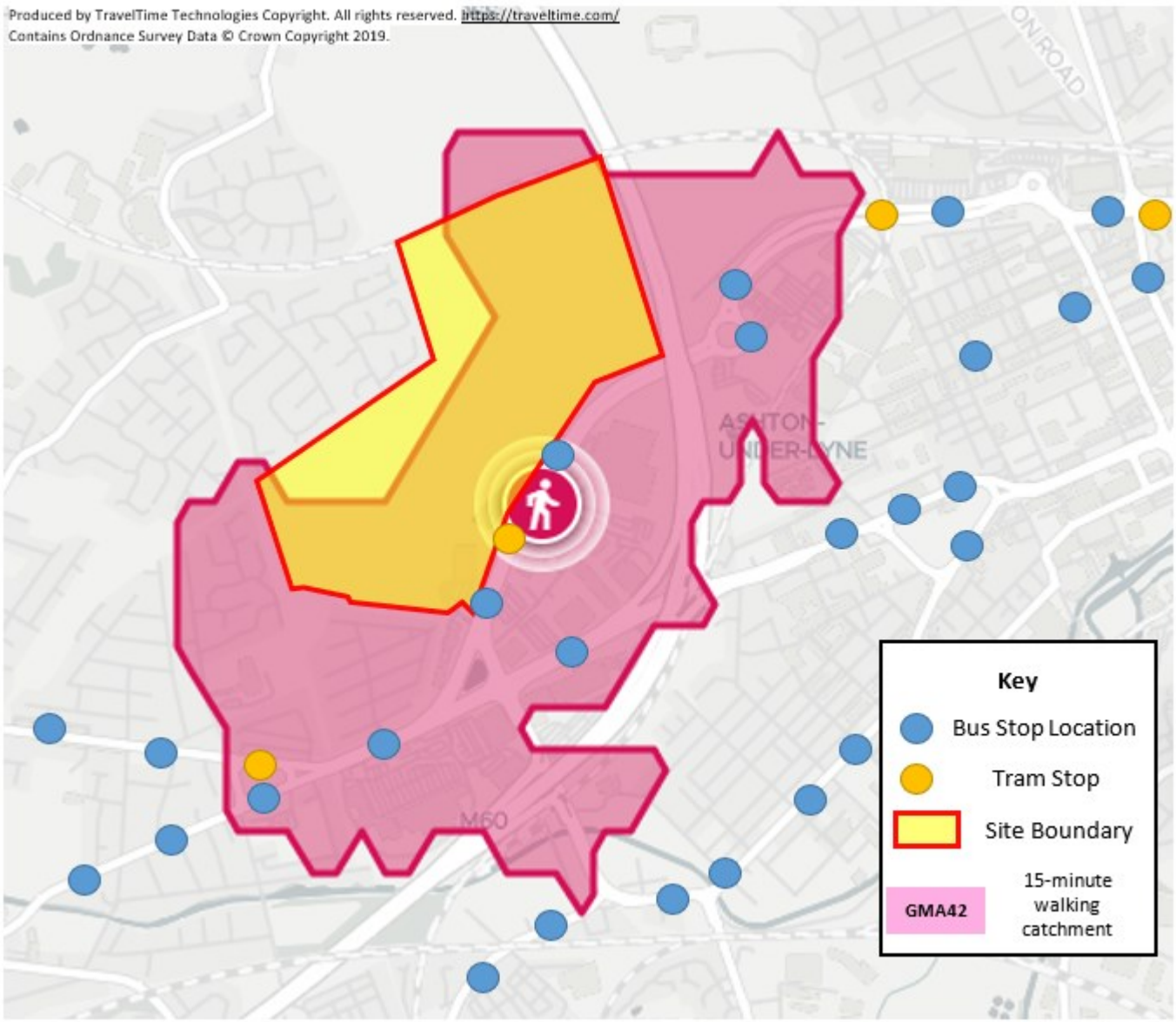
6.2.3 There are multiple Public Rights of Way (PRoW) that both cross and bound the proposed Ashton Moss West allocation, with Rayner Lane being designated a bridleway, while Moss Lane is designated as a footpath, and also provides a foot crossing over the Huddersfield railway to the north of the allocation. This, provide opportunity for the integration of these routes into the allocation to provide dedicated pedestrian and cycle routes away from traffic. However, the surface conditions of some footpaths are of poor quality and therefore require positive upgrading to make them suitable for regular use by allocation users.

6.2.4 Furthermore, the former trackbed of the Ashton Moss Junction line between Droylsden and Denton, which bounds the allocation to the west, has been converted for use as a dedicated footpath and cycleway between Droylsden and the A635 Manchester Road at Audenshaw.

6.2.5 **Figure 5** shows the current level of accessibility for the Ashton Moss West allocation using the Travel Time Platform online database, which illustrates the 15 minute walking time from the proposed access via the local road network and any available pedestrian through-routes.

6.2.6 Note that the allocation boundaries shown in **Figure 5** were correct at the time of writing, for definitive boundary information refer to the GMSF allocation maps. The reference number of Ashton Moss West has been updated from GMA42 to GMA38 since production of these images.

Figure 5. 15 minute walking catchment with public transport provision



6.3 Public Transport

6.3.1 The Ashton Metrolink Line runs immediately south of the proposed allocation, with the Ashton Moss Metrolink stop located on the proposed allocation boundary, operating the following route:

- Ashton Metrolink: Ashton-under-Lyne to Eccles (average frequency: 10 minutes)

6.3.2 Bus services are found at multiple points along the A6140 Lord Sheldon Way, and are operated by Stagecoach and Diamond Bus Northwest across the following routes:

- Route 7: Ashton-under-Lyne to Stockport (average frequency: 30 minutes)

- Route 217: Ashton-under-Lyne to Wythenshawe Hospital (average frequency: 60 minutes)

6.3.3 The A6140 Lord Sheldon Way and A635 Manchester Road feature several bus stops both along the proposed site boundary and within close proximity to the allocation, and provide peak time services every 30 minutes to Ashton-under-Lyne and Stockport and every 60 minutes to Ashton-under-Lyne and Manchester.

6.3.4 Connections to the National Rail network can be found at Guide Bridge (1.6km south) and Ashton-under-Lyne station (2.2km east), and provide the following services:

- Guide Bridge:
  - Manchester Piccadilly to Glossop (average frequency: 30 minutes)
  - Manchester Piccadilly to Rose Hill Marple (average frequency: 60 minutes)
- Ashton-under-Lyne:
  - Manchester Victoria to Stalybridge (average frequency: 30 minutes)
  - Stalybridge to Southport (average frequency: 60 minutes)

6.3.5 **Table 2** identifies the **current** accessibility of public transport for the future residents of the Ashton Moss West allocation, exploring the proximity, and the frequency of travel during peak hours – the distances to each of these modes are based on the shortest available walking route rather than their direct distance from the site itself.

Table 2. Accessibility of and proximity to Public Transport

Mode	Nearest stop/ station	Distance (km)	Peak hour frequency (mins)
Metrolink	Ashton Moss	0.1	6
Bus	Ashton Moss Metrolink	0.1	30/60
Rail	Guide Bridge	1.6	30/60
Rail	Ashton-under-Lyne	2.2	30/60

6.4 Proposed

6.4.1 In consideration of the provision of existing pedestrian and cycling infrastructure in the adjacent residential streets, our main recommendation in this regard is that a permeable network for pedestrian and cyclist priority within the development is required, including sufficient secure cycle parking for all businesses and tenants.

6.4.2 Given the location of the allocation and its close proximity to the Moorside, Droylsden, Guide Bridge and Ashton-under-Lyne local areas, the internal walking and cycle network should be linked to high quality routes connecting through to these areas, including the proposed Bee Network. Existing PRoWs that either pass near or cross the proposed allocation should be positively upgraded, with both PRoWs and the internal pedestrian/cycle network of the site being constructed to the standards set out by the Bee Network.

6.4.3 Furthermore, the allocation benefits from being located on a proposed section of the Bee Network, which intends to improve cycling and walking facilities and infrastructure along primary routes across Greater Manchester. With regard to the Ashton Moss West allocation, a section of the Bee Network is to be located on Rayner Lane, before continuing east along the A6140 Lord Sheldon Way into the centre of Ashton-under-Lyne, and should therefore be integrated into this site so as to provide suitable pedestrian and cycle access towards both Ashton-under-Lyne to the east and Droylsden to the west.

6.4.4 Under the Mayors Cycling and Walking Challenge Fund (MCF), there are cycle schemes proposed for Rayner Lane, linking the Ashton Moss Metrolink stop to footpaths/cyleways along the former trackbed of the Ashton Moss Junction line and also a providing a link across the site to Littlemoss. An additional MCF scheme, Manchester Road Link Bridge, proposes the construction of a cycle/pedestrian bridge over the A635 Manchester Road and Ashton Metrolink Line at the southern end of the former trackbed of Ashton Moss Junction line, providing a link between this dedicated footpath and cycleway to the Snipe Retail Park and the Ashton canal Links scheme via Slate Lane.

6.4.5 Furthermore, as a response to the COVID-19 pandemic, the Emergency Active Travel fund – an active travel grant provided by the Department for Transport – is intended to introduce improved cycle and pedestrian infrastructure to encourage and promote the use of sustainable transport

alternatives. In Tameside, proposals are to introduce additional cycle lanes on the A635 Manchester Road and the A6140 Lord Sheldon Way that will be incorporated into the Bee Network plans in the area, and would help enhance connections to Ashton-under-Lyne town centre and St Petersfield.

6.4.6 With regard to public transport, the Ashton Moss West allocation has been identified as potentially benefiting from either the diversion of existing or the creation of a new bus service within the allocation itself, as due to the size of the allocation many businesses and tenants of the development are likely to be a significant distance from the nearest public transport mode at the boundary. Of the local bus services operating in the area, we consider that Route 217, operated by Diamond Bus Northwest between Ashton-under-Lyne to Wythenshawe Hospital, should be extended into the proposed allocation with a frequency of up to 10 minutes. This service now runs every 60 minutes to Ashton-under-Lyne. Therefore, this service appears to be a suitable candidate for extension into the Ashton Moss West allocation. Introduction of this service within the allocation should be done at the earliest opportunity in order to allow initial businesses and tenants a sustainable transport alternative.

6.4.7 While no final design as to the layout and connection of each land parcel within the Ashton Moss West allocation has been determined at this stage, the above considerations as to public transport provision are based on the internal road network being able to allow public transport vehicles the ability to loop within the allocation to avoid the need to reverse. However, in the event that a looping spine road within the allocation is unavailable, bus connectivity should be ensured through the inclusion of bus gates.

6.4.8 Furthermore, proposals have been made as part of the TfGM New Stations Feasibility Study as to the potential for creating a new train station on the Huddersfield line on the northern edge of the allocation, providing services west to Manchester Victoria and east to Ashton-under-Lyne and Stalybridge. While the principles of such a facility have not been explored in detail by the rail industry, the allocation's boundary with the railway should be safeguarded for potential use by a station until the need for, and precise location of, such a facility can be determined. It is recommended that further stages of consultation with Network Rail and other statutory stakeholders will be necessary prior to the allocation coming forward to establish the need and feasibility of such a facility, as well as the precise location to be protected.

6.4.9 It is anticipated that this feasibility work could be undertaken post allocation, and a decision made on including provision within the allocation layout at that time. Given the limited footprint taken up by such a facility, there are unlikely to be material implications on the quantum of development that can be delivered in the allocation if land were to be safeguarded for such a facility, and the allocation does not have a dependency on such a facility coming forward to support access by sustainable means, given the available alternative provision, including Metrolink.

7. Parking

7.1.1 Tameside Council set out car parking standards for employment-based developments, which represent the maximum number of parking spaces permitted for new developments. Tameside Council discourages developments that result in higher levels of parking, particularly in urban areas where public transport is available. Standards for disabled, cycle and motorcycle parking represent the minimum number of parking spaces required, and do not preclude provision at a higher rate if appropriate. Each space should be a minimum of 4.8 metres by 2.4 metres with 6.1 metres of manoeuvring space for those spaces that are entered at right angles. Disabled spaces should have an additional hatched strip between spaces that is a minimum of 1.2 metres in width.

7.1.2 Car, disabled, cycle and motorcycle parking standards are set out in the Unitary Development Plan and are shown in **Table 3** below:

Table 3. Employment Parking Standards – Tameside Council

Type of Development	Maximum standard for car parking provision (excluding disabled	Minimum standard for car parking provision for disabled people	Minimum standard for cycle parking provision	Minimum standard for motorcycle parking provision
B1 Business: 2 standalone developments	1 space per 35sqm	Up to 200 spaces: individual space for each disabled employee plus 2 spaces or 5% of the total capacity, whichever is greater Over 200 spaces: 6 spaces plus 2% of total capacity	1 space per 400sqm, minimum of 2 spaces	1 space per 1,400sqm, minimum of 2 spaces
B1 Business: 2 business parks	1 space per 40sqm	As above	As above	As above
B2 General Industry	1 space per 60sqm	As above	1 space per 700sqm, minimum of 2 spaces	1 space per 800sqm, minimum of 2 spaces

8. Allocation Trip Generation and Distribution

8.1.1 Future trip generation to/from the site (i.e. how many people and vehicles will enter or leave the site) was estimated by applying a set of GM-wide trip rates to the agreed development quantum for each site. The distribution of trips (i.e. where they are going to or coming from) was derived by selecting nearby zones with similar land use characteristics as a proxy and using the existing distribution in the model. These figures are illustrated in the following tables:

Table 4. Development Quantum

Industrial	B1b (research & development), B1c (light industry) and B2 (general industrial)	0	160,000sqm
Total		0	160,000sqm

Table 5. Allocation Traffic Generation*

Year	AM Peak Hour 0800 0900 Departures	AM Peak Hour 0800 0900 Arrivals	PM Peak Hour 1700 1800 Departures	PM Peak Hour 1700 1800 Arrivals
2025 GMSF Constrained	0	0	0	0
2025 GMSF High-Side	0	0	0	0
2040 GMSF Constrained	306	536	485	162
2040 GMSF High-Side	410	671	485	217

*Units are in PCU (passenger car units/hr)

Table 6. Allocation HGV Traffic Generation*

Year	AM Peak Hour 0800 0900 Departures	AM Peak Hour 0800 0900 Arrivals	PM Peak Hour 1700 1800 Departures	PM Peak Hour 1700 1800 Arrivals
2025 GMSF Constrained	0	0	0	0
2025 GMSF High-Side	0	0	0	0
2040 GMSF Constrained	29	21	17	16
2040 GMSF High-Side	30	21	17	16

*Units are in PCU (passenger car units/hr)

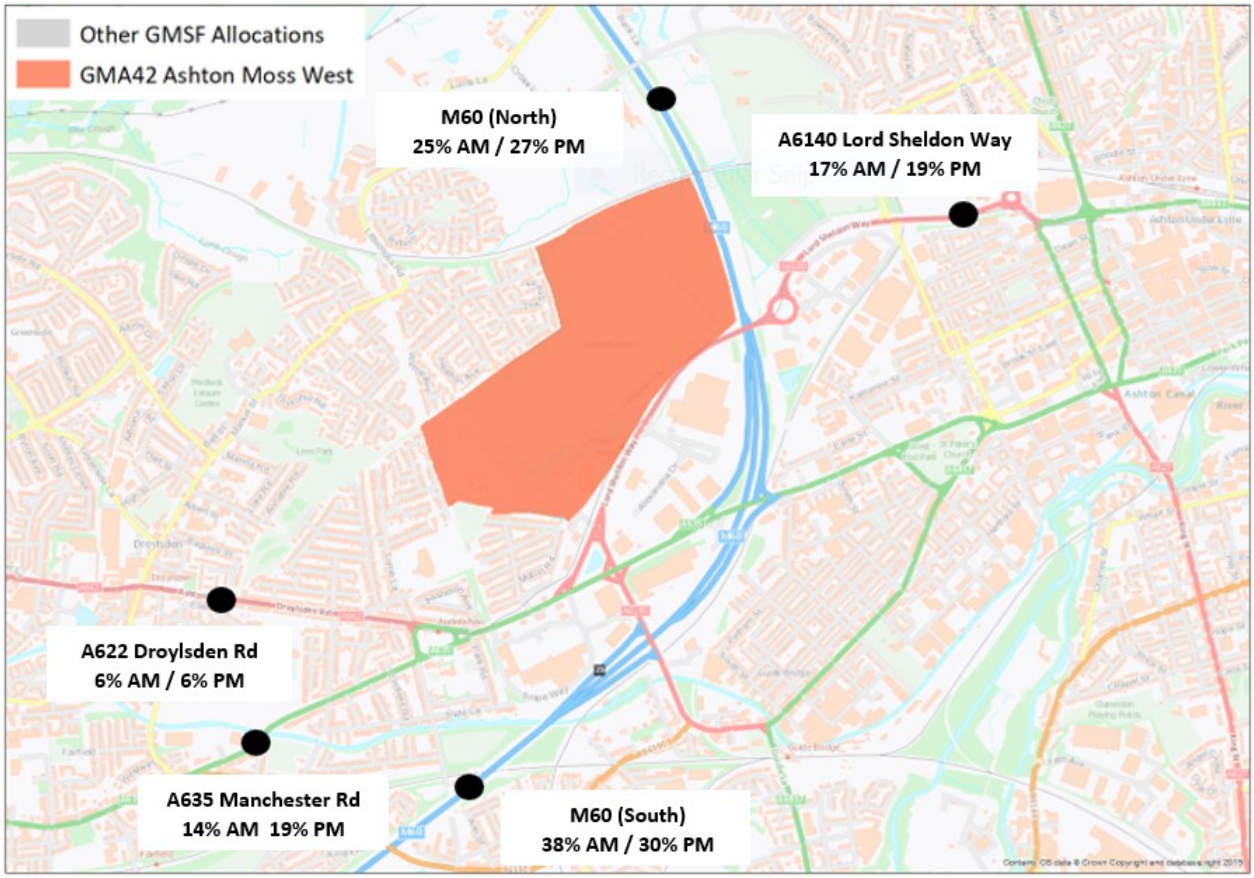
8.1.2 Due to this allocation being employment-based, and given the range of proposed land uses, trip generation from this site has been assessed as being likely to largely follow conventional peak hour weekday operations of AM and PM Peak (typically 7am to 9am / 4pm to 6pm). The likelihood of impacts arising in unconventional peak hours, including in the middle of the day or during the late evening/early morning cannot be ruled out, however at these times the highway network has more capacity and resilience and is therefore unlikely to present significant highway issues not otherwise considered here.

8.1.3 During development of the Locality Assessment consideration was further given to whether the allocation would have material traffic implications during weekend peak hours (typically 11am to 2pm). A separate review of the industry standard TRICS traffic survey database for employment land uses was therefore undertaken. This assessment, however, did not give rise to a body of evidence on weekend traffic rates that is robust and that could be used to confirm this for the range of potentially eventual land uses. While any operations outside of the conventional AM and PM Peak hours will need to be assessed at the Transport Assessment stage there is no evidence at this stage to suggest the development of the allocation would give rise to significant traffic implications during weekend peak hours.

Table 7. Allocation Traffic Distribution, 2040 GMSF High-Side (Origin/Destination Combined)

Route	AM Peak Hour 0800 0900	PM Peak Hour 1700 1800
A635 Manchester Rd (W)	14%	19%
A622 Droylsden Rd (NW)	6%	6%
M60 (N)	25%	27%
A6140 Lord Sheldon Way (NE)	17%	19%
M60 (S)	38%	30%

Figure 6. Allocation Traffic Distribution, 2040 GMSF High-Side (Origin/Destination Combined)



8.1.4 Note that the allocation boundaries shown in **Figure 6** were correct at the time of writing, for definitive boundary information refer to the GMSF allocation maps. The reference number of Ashton Moss West has been updated from GMA42 to GMA38 since production of these images.

9. Existing Highway Network Review

9.1 Existing Network

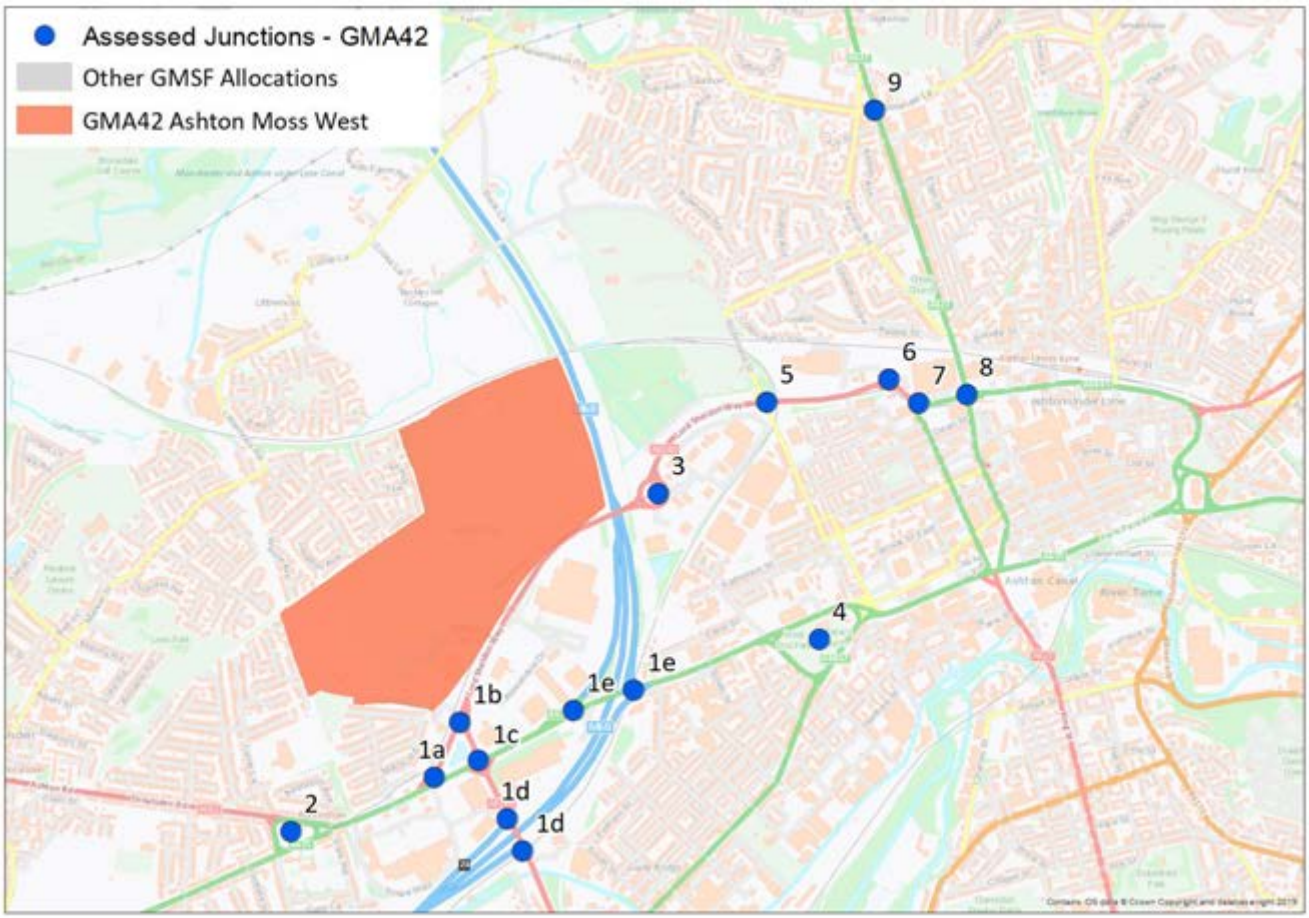
9.1.1 The A6140 Lord Sheldon Way runs north to south to the east of the GMA42 - Ashton Moss West allocation, providing a main thoroughfare to the north and west of Ashton-under-Lyne. SYSTRA identified a number of junctions in proximity to the site where additional traffic could have an impact on their operation based on existing conditions.

1. A635 Manchester Road / A6140 Lord Sheldon Way / Snipe Way / M60 Junction 23 (measured individually)
    - 1a: A635 Manchester Road / A6140 Lord Sheldon Way / Snipe Way

- 1b: A6140 Lord Sheldon Way / Notcutts / A6140
- 1c: A635 Manchester Road / A6140 Lord Sheldon Way
- 1d: M60 J23 (South) / A6140 Lord Sheldon Way
- 1e: M60 J23 (North) / A635 Manchester Road

2. Snipe Gyratory (Audenshaw Metrolink)
3. A6140 Lord Sheldon Way / Ashton Moss Leisure Park roundabout
4. Chester Square / St Peters Gyratory (All Arms)
5. Richmond Street / A6140 Lord Sheldon Way
6. A6140 Lord Sheldon Way / Ikea Roundabout
7. A6140 Lord Sheldon Way / A627 Cavendish Street
8. A6140 Lord Sheldon Way / A627 Oldham Road / A6043 Wellington Road
9. A627 Oldham Road / Wilshaw Lane / Newmarket Road

Figure 7. Assessed Junctions



9.1.2 Note that the allocation boundaries shown in **Figure 7** were correct at the time of writing, for definitive boundary information refer to the GMSF allocation maps. The reference number of Ashton Moss West has been updated from GMA42 to GMA38 since production of these images.

10. Treatment of Cumulative Impacts

10.1.1 The constrained and high side model runs take account of traffic associated with all GMSF allocations. The level of trip generation arising from other GMSF allocations are however dispersed and no other specific development has been identified as having any particular implications for the assessed areas of Ashton-under-Lyne, largely due to the distance of other allocations from Ashton Moss West.

10.1.2 With regard to potential cross-boundary cumulative impacts, it is expected that due to a majority of trips generated by the allocation being routed via the M60 Motorway (as outlined in **Table 7**), there is likely to be little interaction with Ashton Moss West trips and other GMSF allocation trips from the Oldham, Stockport and Manchester local authorities on the local road network.

11. Allocation Access Assessment

11.1.1 This access arrangement has been developed to illustrate that there is a practical option for allocation access in this location and to develop indicative cost estimations. It is assumed that a detailed design consistent with Greater Manchester's best practice Streets for All highway design principles will be required at the more detailed planning application stage.

11.1.2 Due to the role of the proposed highway network within the site, which will have a role in local traffic distribution, the full traffic impact of all GMSF flows are recorded below, and not just those pertaining to the allocation. While the assessments below reflect that the Alexandria Drive Access will exhibit some congestion issues in the GMSF 2040 High Scenarios, the residual capacity available in the proposed Left-in/Left-out to A6140 Lord Sheldon Way will enable this to be accommodated through a reassignment of traffic to this access. This highlights the importance of the internal highway network within the allocation providing for access to both junctions for all parts of the development.

Table 8. Allocation Access Junction Capacity Analysis

Junction	Reference Case AM	Reference Case PM	GMSF High AM	GMSF High PM	Flows AM	Flows PM
Alexandria Drive Access Junction	39%	70%	96%	110%	844	443
Left-in/Left-out A6140 Lord Sheldon Way Access Junction	N/A	N/A	45%	68%	237	255

11.1.3 It should be noted that the above allocation access arrangements are indicative and therefore the junction illustrated in **Appendix 1** may be subject to change at the detailed planning stage.

12. Impact of Allocation Before Mitigation on the Local Road Network

12.1.1 This section looks at the impact on the network at the junctions highlighted in **Section 9**. Signalised junctions were assessed in detail using industry-standard modelling software LINSIG version 3. Traffic signal information was obtained from TfGM Urban Traffic Control (UTC) in order to ensure that the local junction models reflected (as far as possible), the operation of the junctions on the ground. Junctions 9 software was used to assess priority and roundabout junctions.

12.1.2 In order to understand a worst case impact of the GMSF, the 'high side' runs from the GMVDM were used to derive 'with GMSF' development flows for 2040. These flows were then entered into junction based models for the junctions identified in **Section 9**. Flows from a 2040 reference case scenario (including the existing land supply in the respective local authorities) were also extracted to provide a comparison between the operation of those junctions in the 2040 reference case and the 2040 'with GMSF' development scenarios.

12.1.3 The 'with GMSF' scenario has been assessed against a Reference Case which assumes background growth and includes the housing and employment commitments from the local authorities. These assessments were then used to identify the junctions where there was considered to be a substantial impact, relative to the operation of the junction in the 2040 reference case, and hence where mitigation was considered to be required in order to bring GMSF allocations forward.

12.1.4 For the purposes of the GMSF, where mitigation is required, this should mitigate the impacts back to the reference case scenario. It should be noted that mitigating back to this level of impact may not mean that the junction operates within capacity by 2040, and any subsequent mitigation schemes developed based on impacts caused through development trips from this allocation are only designed to mitigate the impact of GMSF traffic only, and are not intended to solve pre-existing congestion on the local network.

12.1.5 **Table 9** below provides a comparison between the operation of the in scope local road network junctions in the 2040 reference case and the 2040 'high side' scenarios, as well as the site development flows through each respective junction. The table shows a comparison between the ratio of flow to capacity on the worst performing arm at each junction as well as the total allocation flows through the junction.

12.1.6 For reference, a figure of between 85% and 99% illustrates that the junction is nearing its operational capacity, and a figure of 100% or over illustrates that flows exceed the operational capacity at the junction.

Table 9. Results of 2040 Local Junction Capacity Analysis Before Mitigation

Junction	Reference Case AM	Reference Case PM	GMSF High AM	GMSF High PM	Allocation Flows AM	Allocation Flows PM
2. Snipe Gyratory (Audenshaw Metrolink)	97%	97%	98%	98%	228	172
3. A6140 Lord Sheldon Way / Ashton Moss Leisure Park roundabout	30%	62%	47%	69%	293	272
4. Chester Square / St Peters Gyratory (All Arms)	86%	94%	88%	95%	66	14

Junction	Reference Case AM	Reference Case PM	GMSF High AM	GMSF High PM	Allocation Flows AM	Allocation Flows PM
5. Richmond Street / A6140 Lord Sheldon Way	69%	86%	71%	86%	153	96
6. A6140 Lord Sheldon Way / Ikea Roundabout	24%	53%	24%	53%	39	34
7. A6140 Lord Sheldon Way / A627 Cavendish Street	46%	74%	85%	82%	39	34
8. A6140 Lord Sheldon Way / A627 Oldham Road / A6043 Wellington Road	77%	73%	78%	78%	31	29
9. A627 Oldham Road / Wilshaw Lane / Newmarket Road	128%	130%	128%	131%	13	14

13. Transport Interventions Tested on the Local Road Network

13.1.1 As illustrated in **Section 12**, the Ashton Moss West allocation is expected to result in notable increases in congestion at multiple Local Road Network (LRN) junctions across the surrounding area.

13.1.2 However, based on the constrained physical situation of these junctions – which would require the filing of Compulsory Purchase Orders (CPO) on surrounding structures and land holders – major infrastructural changes required to accommodate traffic associated with this allocation have not been determined at this time. Additionally, the potential number of development trips routed via certain LRN junctions may not be substantial enough to warrant contributions from the developer of the Ashton Moss West allocation.

13.1.3 As stated in **Section 6**, the Emergency Active Travel Fund seeks to implement improved cycling and pedestrian infrastructure in order to encourage increased use of sustainable transport alternatives. Aside from the improvement of cycle lanes on the A635 Manchester Road and A6140 Lord Sheldon Way, as well as MCF proposals for a new pedestrian bridge across the A635 Manchester Road to the Snipe Retail Park, proposals are to enhance the cycle provision at the Chester Square / St Peters Gyratory in central Ashton, which will be considered instead of a previously proposed mitigation scheme to widen the carriageways that form the roundabout gyratory – it is likely that these schemes could see contribution from the Ashton Moss West developer.

13.1.4 Therefore, in line with the proposals made as part of the MCF and Emergency Active Travel fund, we recommend that improvements to traffic congestion on the LRN should be made through the promotion and encouragement of sustainable transport alternatives including walking, cycling and public transport access.

13.1.5 However, further assessment may be warranted at the Transport Assessment stage, as well as widening the scope of the assessed junctions.

Table 10. Approach to Mitigation

Junction	Mitigation Approach
2. Snipe Gyratory (Audenshaw Metrolink)	Isolated impact, but not substantial for this site – no mitigation proposed
3. A6140 Lord Sheldon Way / Ashton Moss Leisure Park roundabout	Isolated impact, but not substantial for this site – no mitigation proposed
4. Chester Square / St Peters Gyratory (All Arms)	Isolated impact, but not substantial for this site – mitigation considered however sustainable transport alternatives are preferred by Tameside Council.
5. Richmond Street / A6140 Lord Sheldon Way	Isolated impact, but junction appears to operate within capacity in 2040 High side scenario therefore no mitigation proposed

6. A6140 Lord Sheldon Way / Ikea Roundabout	Isolated impact, but not substantial for this site – no mitigation proposed
7. A6140 Lord Sheldon Way / A627 Cavendish Street	Isolated impact, but not substantial for this site – no mitigation proposed
8. A6140 Lord Sheldon Way / A627 Oldham Road / A6043 Wellington Road	Isolated impact, but not substantial for this site – no mitigation proposed
9. A627 Oldham Road / Wilshaw Lane / Newmarket Road	Isolated impact, but not substantial for this site – no mitigation proposed

14. Impact of interventions on the Local Road Network

14.1.1 In light of the above conclusions no specific local network interventions were tested beyond those considered separately in the next section that are integrated with the M60 Junction 23 interchange.

15. Impact and Mitigation on the Strategic Road Network

15.1 Overview

15.1.1 This chapter covers impacts where traffic generated by the GMSF allocations meets the Strategic Road Network (SRN). Junctions at the interface between the LRN and the SRN have been assessed using a similar approach to that described in the preceding chapters. Wider issues relating to the SRN mainline are being assessed separately as described below.

15.1.2 Because the M60 Junction 23 is physically split between separate north and south access points to the A635 Manchester Road and A6140 Lord Sheldon Way routes respectively, and due to the interlinked functions of the LRN, this section also considers parts of the local network which functionally work together with M60 Junction 23.

15.1.3 SYSTRA is currently consulting with Highways England on behalf of TfGM and the Combined Authority in relation to the wider impacts of the GMSF allocations on the SRN.

15.1.4 This consultation is ongoing and it is expected that it will allow Highways England to gain a strategic understanding of where there is an interaction between network stress points and GMSF allocation demand which will facilitate further discussion and transfer of information between TfGM and Highways England (yet to be defined) in reaching agreement and/or common ground relating to the acceptability of GMSF allocations in advance of Examination in Public (EiP).

15.2 Impact of Allocation Before Mitigation on the Strategic Road Network

15.2.1 Based on the proposed build out of the allocation, and its proximity to the SRN, the Ashton Moss West allocation has been considered likely to result in material implications on the operation of the SRN and adjoining local network that will require mitigation measures. The assessed results for the following component parts of this network are summarised in **Table 11** below:

Table 11. Strategic Junction Capacity Analysis Before Mitigation

Junction	Reference Case AM	Reference Case PM	GMSF High AM	GMSF High PM	Allocation Flows AM	Allocation Flows PM
1a. A635 Manchester Road / A6140 Lord Sheldon Way / Snipe Way	69%	75%	65%	67%	227	172
1b. A6140 Lord Sheldon Way / Notcutts / A6140	67%	98%	70%	106%	963	607
1c. A635 Manchester Road / A6140 Lord Sheldon Way	121%	120%	114%	115%	736	435
1d. M60 J23 (South) / A6140 Lord Sheldon Way	87%	108%	87%	103%	431	251
1e. M60 J23 (North) / A635 Manchester Road	100%	106%	100%	108%	305	184

15.3 Specific SRN Junction Mitigation Measures

15.3.1 Due to the constrained nature of the M60 Junction 23 / A635 Manchester Road / A6140 Lord Sheldon Way interchange, in regard to the presence of existing structures and land ownership concerns, the ability to implement mitigation schemes that do not require significant infrastructural change (including grade-separation of the A635 Manchester Road across the A6140 Lord Sheldon Way) has been limited. The development of large-scale mitigation schemes is currently beyond the scope of this GMSF study, and will require further review at the Transport Assessment stage.

15.3.2 Notwithstanding this, a series of local intervention measures have been considered to resolve the interaction of traffic between the local and strategic road networks and the proposed allocation. This comprises interventions at several of the subsidiary junctions where the A6140 Lord Sheldon Way and A635 Manchester Road routes interact with the surrounding M60 Junction 23.

15.3.3 These mitigation schemes have been developed based on the information presented in **Section 12**, with significant trips from the allocation being routed across this junction both to the M60 North and M60 South. This scheme therefore seeks to improve traffic flow between the proposed Ashton Moss West allocation and M60 motorway that could be implemented on existing land adjacent to the A6140 Lord Sheldon Way / A635 Manchester Road routes without presenting significant land ownership concerns.

15.3.4 The results of this mitigation are supplied in **Table 12** below.

15.4 Impact of Interventions on the SRN

Table 12. Strategic Junction Capacity Analysis After Mitigation

Junction	Reference Case AM	Reference Case PM	GMSF High AM	GMSF High PM	Allocation Flows AM	Allocation Flows PM
1b. A6140 Lord Sheldon Way / Notcutts / A6140	26%	49%	23%	38%	963	607
1c. A635 Manchester Road / A6140 Lord Sheldon Way	91%	83%	87%	80%	610	384
1e. M60 J23 (North) / A635 Manchester Road	102%	99%	95%	83%	305	184

16. Final List of Interventions

16.1.1 It should also be noted that the interventions listed in **Table 13** may not be the definitive solution to addressing the impact of the allocations but have been developed to demonstrate that a solution is possible at the location. The exact form of the required mitigation will be confirmed, and its detailed design developed as part of the statutory planning process, should the allocation within GMSF be approved. Site promoters will need to develop detailed design solutions – consistent with Greater Manchester's best practice Streets for All highway design principles – at the planning application stage.

16.1.2 In addition to the interventions identified in this report, it will be necessary for investment in the wider transport network to continue in order to deliver the aspirations of the 2040 Transport Strategy and enable all new development to be supported by a robust and sustainable transport network.

Table 13. Final List of Interventions

Mitigation	Description
Allocation Access	
Alexandria Drive Access Junction (existing mini-roundabout only)	Signalised Junction assumed.
Left-in/Left-out Lord Sheldon Way Access Junction	Priority Junction assumed. See **Appendix 1**
Necessary Local Mitigations	
Enhancement of Bus Service 217	Extension of existing bus service (Route 217) into the centre of the Ashton Moss West allocation at earliest possible opportunity to provide competitive sustainable transport alternative.
Walking and cycling measures	Assumed full permeability of cycle and pedestrian access, as well as direct connections to PRoW either bounding or near the development. Improvement of walking/cycling facilities on the A6140 Lord Sheldon Way and A635 Manchester Road, including proposed MCF and Emergency Active Travel Fund schemes. All pedestrian and cycle networks internal to the site, as well as connecting PRoW, should be built or upgraded to the standards outlined in the Bee Network, as well as providing connections to the nearest section of the Bee Network
SRN Interventions	**SRN / Local Network scheme package – works largely physically located on local road network**
1b A6140 Lord Sheldon Way / Notcutts / A6140	Provision of A6140 Lord Sheldon Way segregated left turn lane to Notcutts Garden Centre and amended traffic signal phasing to improve priority for Metrolink and A6140 Lord Sheldon Way flows. See **Appendix 3**
1c A635 Manchester Road / A6140 Lord Sheldon Way / A635 Signalised Crossroads	A6140 Lord Sheldon Way additional southbound direct lane (for left turning traffic). Optimised traffic signal timings. See **Appendix 2**

1e M60 J23 (North) / A635 Manchester Road	Implementation of a restriction on right turning traffic exiting the access from Scapa Group Ltd and associated simplification of traffic signal phasing.

Necessary Local Mitigations

Enhancement of Bus Service 217

16.1.3 Due to the size of the proposed Ashton Moss West allocation, bus services should be introduced so as to provide a competitive public transport alternative for employees and visitors to the site.

16.1.4 The introduction of public transport services within the Ashton Moss West allocation should be done at the earliest possible opportunity so as to allow for the provision of sustainable transport alternatives to the first new employers and tenants. Promotion of sustainable transport alternatives will also help to answer concerns regarding increased pollution from added vehicular trips on the local road network.

Walking and cycling measures

16.1.5 In order to promote and encourage sustainable transport modes, as well as providing safe and efficient accessibility for non-vehicular traffic, the development is to both provide ease of access for pedestrian and cyclist traffic into and out of the site, as well as connecting and improving Public Rights of Way that either directly connect or pass near the proposed allocation. This is to include upgrading of the local PRoW routes to meet the standards of the proposed Bee Network and, wherever possible, connect directly to sections of the Bee Network.

16.1.6 Furthermore, pedestrian and cycle facilities in the areas surrounding the Ashton Moss West allocation should be improved wherever possible in order to allow for safe accessibility by non-vehicular users to all parts of the development and also the adjacent residential, employment and retail areas.

16.1.7 This scheme also includes improvements to cycling facilities on the A6140 Lord Sheldon Way and A635 Manchester Road as required by the Emergency Active Travel fund, as well as MCF improvements, including a proposed overbridge scheme across the A635 Manchester Road between the former trackbed of the Ashton Moss Junction line and the Snipe Retail Park and the

Ashton Canal Links scheme via Slate Lane, which will be built to meet Streets for All standards and provide safe access for pedestrian and cycle traffic, and the upgrades to Rayner Lane. Promotion of sustainable transport alternatives will also help to answer concerns regarding increased pollution from added vehicular trips on the local road network.

SRN Interventions

16.1.8 The A635 Manchester Road / A6140 Lord Sheldon Way / Snipe Way / M60 Junction 23 junction system operates over operational capacity in the Reference Case. Consequently, mitigation options have been produced. Due to the size and physical constraints on the junction, mitigation options considered have extended to minor improvements on certain arms or the restriction of certain turning movements in order to allow for a strategy of revised signal timing and reducing the overall number of traffic signal phases for better traffic conditions and overall length of the combined cycle.

16.1.9 A series of individual mitigations have been considered which are capable of each being delivered independently, but together would support an overall improvement of access between the allocation and M60 Junction 23.

Junction 1b -A6140 Lord Sheldon Way / Notcutts / A6140

16.1.10 The scheme supports improvement of the junction through provision of a dedicated left turn filter lane at the Sheldon Arms pub and Notcutts Garden Centre junction (**see Appendix 2**). The A6140 Lord Sheldon Way northbound left-turn to Notcutts movement is separated in the traffic signal phasing from the straight ahead movement allowing for re-signalisation and a reduction in the complexity of the traffic signal phasing, removing a conflict between A6140 Lord Sheldon Way northbound straight ahead movements and the Metrolink.

16.1.11 This left-turn lane will occupy what is currently the left-and-ahead lane in the existing alignment, while two ahead lanes will be provided through the creation of a new ahead lane that occupies part of the wide central reservation. Traffic signalling will remain integrated with the adjacent Metrolink, and allows for left-turn movements to occur on alternate phases to the trams / A6140 Lord Sheldon Way ahead movements which also accommodate pedestrian signalling integrated into the western arm of the junction.

Junction 1c A635 Manchester Road / A6140 Lord Sheldon Way / A635 Signalised Crossroads

16.1.12 The scheme supports mitigation of the allocation flows via the addition of a dedicated left-turn lane on the A6140 Lord Sheldon Way northern approach arm at its junction with the A635 Manchester Road on the eastern side of the junction system (**Appendix 2**). This dedicated lane is intended to remove left-turn movements from the ahead lanes, allowing for increased ahead movement capacity across two dedicated ahead lanes.

Junction 1e M60 J23 (North) / A635 Manchester Road

16.1.13 A third mitigation scheme for the A635 Manchester Road / A6140 Lord Sheldon Way / M60 J23 interchange more directly addresses the traffic capacity constraints to the northern part of Junction 23. This would comprise the conversion of the current site access into the Scapa Group development to a limited movement junction providing for left-in/left-out movement and right turn entry movements only. Right-turn and ahead exiting movements from the site would be banned to allow for a simplification of the traffic signalling through a reduction in the number of signal stages and reallocation of capacity to queuing traffic at this location.

16.1.14 The benefit of this mitigation scheme arises via rationalisation of the number of traffic signal stages which allows for increased signal time to be provided to the main tidal flows and thus improvement capacity at this junction and an overall reduction of delay, including at off peak times. This option would present specific localised implications for traffic exiting the Scapa Group site, requiring some egressing traffic to travel west to return via the Audenshaw gyratory for eastbound travel. Potentially, this issue could be off-set via introduction of either a safe U-Turn movement on the A635 Manchester Road or right turn site exit on the A6140 Lord Sheldon Way. Either option would need further exploration and consideration of the impacts on the traffic signals at the subsequent junction (1c above), nonetheless were neither deliverable the overall benefits would still significantly outweigh the limited disbenefit.

17. Strategic Context – GM Transport Strategy Interventions

Site Specific

17.1.1 Further to the site-specific interventions outlined within this report, Tameside Council and TfGM have jointly considered measures to support sustainable travel and to contribute towards the

achievement of Greater Manchester's 'Right Mix' ambition. These are set out in the GM Transport Strategy 2040 and the 5-Year Transport Delivery Plan.

17.1.2 The Right Mix initiative forms part of the Greater Manchester Transport Strategy 2040, and it proposes that by 2040, 50% of trips are to be undertaken by sustainable modes and no net increase in motor-vehicle traffic. The Right Mix vision is comprised of evidence-based targets which will be adjusted over time in order to reflect the progress of meeting such targets, and the interventions set out for walking, cycling and public transport for the Ashton Moss West allocation will contribute to the Right Mix target of reducing growth in motor vehicle traffic in Greater Manchester.

Tameside

17.1.3 Work has recently completed on the redevelopment of Ashton-under-Lyne Interchange, providing passengers with much-improved facilities and a modern, accessible gateway to the town. The improved facilities include a covered concourse and waiting area, electronic information for bus, Metrolink and rail, high-quality accessible toilets, baby changing and 'Changing Places' facilities, retail units, CCTV and secure cycle parking spaces. The facility has been designed to accommodate more bus services while the centralised concourse will reduce walking time for passengers.

17.1.4 TfGM is also conducting a study into the feasibility of opening new rail stations at Dewsnap and Gamesley within High Peak, as well as potentially introducing a Metro/Tram-Train service on the Glossop line. If constructed, these stations would provide the opportunity to improve linkages to the Regional Centre, while a Metro/Tram-Train operation would present increased frequency similar to that of the Metrolink.

17.1.5 Furthermore, a number of walking and cycling schemes in the area have gained programme entry into Mayors Challenge Fund (MCF):

- Manchester Road Link Bridge – a new bridge proposed across the A635 Manchester Road and the Ashton Metrolink Line.
- Hill Street – improving the quiet roads between the A6727 Cavendish Street and the A6017 Stockport Road.

- Ashton Streetscape – the next stage of the ongoing public realm works to the north of Ashton-under-Lyne town centre designed to improve the links between the new developments in the town centre.
- Ashton Town Centre South - Cycle routes will be established into and through the town centre, and the environment will be enhanced to give pedestrians priority, reducing speed limits and removing unnecessary street furniture.

17.1.6 Tameside Borough is also expected to benefit from two sections of the Quality Bus Transit Corridor (QBT) scheme, which is anticipated to see a general improvement to service reliability and facilities such as shelters along major bus corridors north to Oldham and Rochdale, and south to Stockport, as well as Real Time Information (RTI), although RTI may be delivered as an online service through phone apps or online browsers rather than information presented at the stops themselves.

17.1.7 Proposals have also been made to extend the Ashton Metrolink Line to Stalybridge, possibly as a Metro/Tram-Train arrangement, and that this could be complimented by additional capacity at existing Park & Ride (P&R) facilities serving Metrolink stops along this route.

18. Phasing Plan

18.1.1 All phasing plan information contained in this Locality Assessment is indicative only and has only been used to understand the likely intervention delivery timetable. Final trajectory information and the final allocation proposal is contained in the GMSF Allocation Topic Paper.

18.1.2 The initial Locality Assessments were based on information on allocations consolidated by TfGM based on inputs from each of the local authorities. This initial exercise focused on the development quanta to be delivered at the end of the plan period.

18.1.3 During the course of the Locality Assessment work in late 2019 / early 2020, the local authorities provided input on their expected phasing of the sites focusing on the milestone years of 2025 and 2040. The expected 2025 development quanta were tested along with those for 2040 to assess their deliverability in terms of transport network capacity. In some cases, the development phasing was amended by the local authorities as a result of the technical analysis undertaken. All other schemes will require implementation between 2025 and 2040, with a more precise

implementation timeframe for these schemes being ascertained as part of the planning application process.

18.1.4 Based on the proposed forecast, none of the development is expected to come forward before 2025, while full delivery is expected to come forward before 2040.

Table 14. Allocation Phasing

Allocation Phasing	2020 25	2025 30	2030 2037	2038+	Total
Ashton Moss West Allocation	0	120,000sqm	40,000sqm	0	**160,000sqm**
Total	0	120,000sqm	40,000sqm	0	**160,000sqm**

Table 15. Indicative intervention delivery timetable

Mitigation	2020 2025	2025 2030	2030 2037
Allocation Access			
Alexandria Drive Access Junction (existing mini-roundabout only)		✓	
Left-in/Left-out Lord Sheldon Way Access Junction		✓	
Necessary Local Mitigations			
Walking and cycling measures		✓	
Enhancement of bus service 217		✓	
SRN Interventions			
1b A6140 Lord Sheldon Way / Notcutts / A6140		✓	
1c A635 Manchester Road / A6140 Lord Sheldon Way / A635 Signalised Crossroads		✓	

19. Infrastructure Costings

19.1.1 The costs of the necessary infrastructure assessed within this report are subject to further consideration through the GMSF process and are being considered with regards to the overall viability of the necessary supporting requirements.

20. Summary & Conclusion

20.1.1 GMSF allocation Ashton Moss West is a development consisting of 160,000sqm of employment floorspace located on what is currently open land to the west of Ashton-under-Lyne.

20.1.2 Assessments undertaken have considered the potential impact of this development on the surrounding road network, and have concluded that this allocation has the potential to present increased congestion at existing areas of concern raised in consultation considered in **Section 3**.

20.1.3 In response to potential concerns regarding congestion at key junctions, mitigation has been considered at the A635 Manchester Road / A6140 Lord Sheldon Way / Snipe Way / M60 Junction 23 interchange comprising three localised interventions to successive junctions between the SRN and the allocation. These schemes were developed and tested to address the network congestion impacts at both the strategic and local road networks level and also to identify appropriate sustainable solutions. These schemes have only been developed in outline detail to inform viability and allocations policy.

20.1.4 Further detailed work will be necessary to identify the specific interventions required to ensure the network works effectively based on transport network conditions at the time of the planning application. All final design solutions should be consistent with Greater Manchester's best practice Streets for All highway design principles.

20.1.5 At this stage, the modelling work is considered to be a 'worst case' scenario as it does not take full account of the extensive opportunities for active travel and public transport improvements in the local area, and that junctions which are considered to operate over capacity in the 2040 model years, both with and without mitigation, are attributed not to the introduction of development trips, but to the cumulative impact of wider growth. The objective of mitigation scenarios is to suitably accommodate the proposed development trips for this allocation, rather than fully amending wider traffic concerns.

20.1.6 However, the mitigation schemes proposed should be considered in conjunction with continued investment into sustainable transport alternatives, including pedestrian, cycling and public transport, in order to reduce the overall number of additional vehicles being introduced onto the local road network. This, combined with the mitigation schemes, could potentially resolve a number of issues raised in relation to the Ashton Moss West allocation regarding pollution and safety.

20.1.7 This is an initial indication that the allocation is deliverable and to inform viability, and that further detailed work will be necessary to identify the specific interventions required to ensure the network works effectively based on transport network conditions at the time of the planning application. In summary, this assessment gives an initial indication that the allocation is deliverable, however, significant further work will be needed to verify and refine these findings, particularly in relation to connections to the SRN, as the allocation moves through the planning process. The allocation will also need to be supported by continuing wider transport investment across GM.

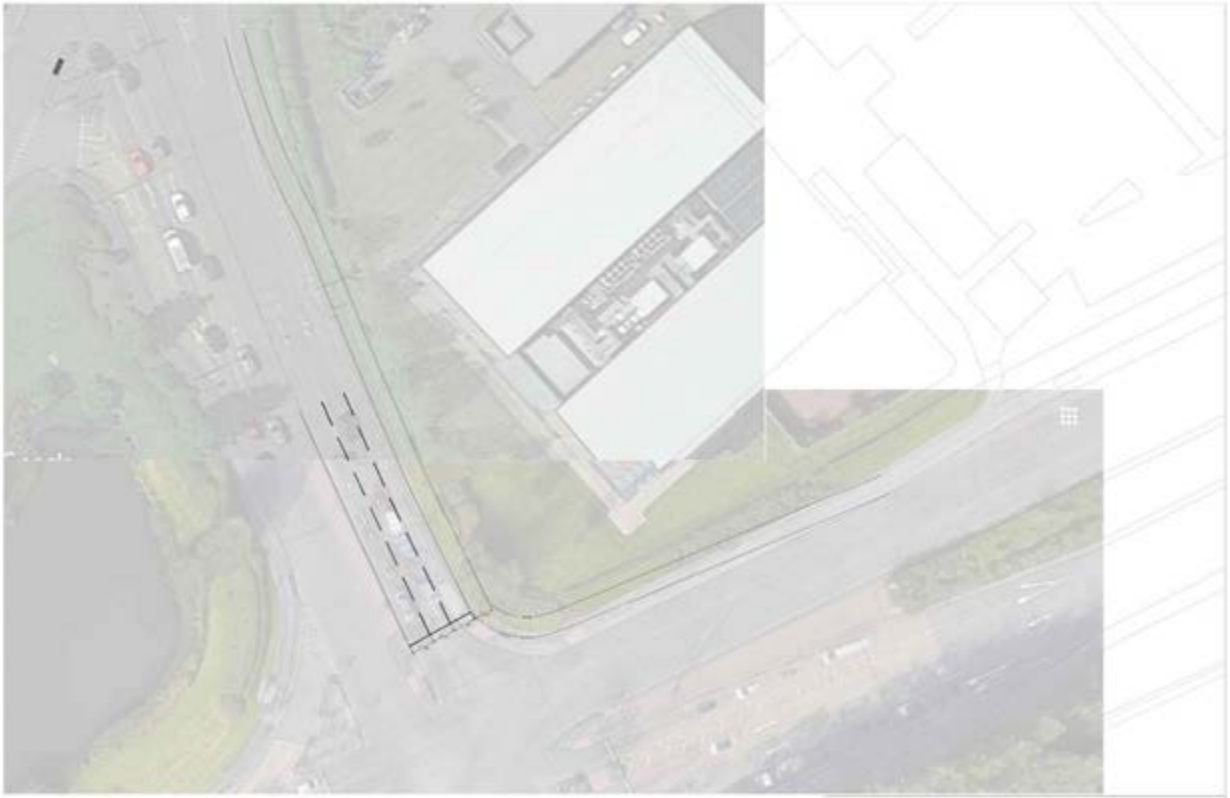
Appendix 1 - Indicative Left-In/Left-Out Arrangement (A6140 Lord Sheldon Way)

[Illustrative/Typical Layout]

Appendix 2 - Mitigation (A6140/A635 Manchester Road)

[Illustrative/Typical layout]

GM42: ASHTON MOSS WEST - A6140 / A635 MANCHESTER ROAD
INDICATIVE DESIGN PROPOSAL - ADDITIONAL LEFT TURN LANE

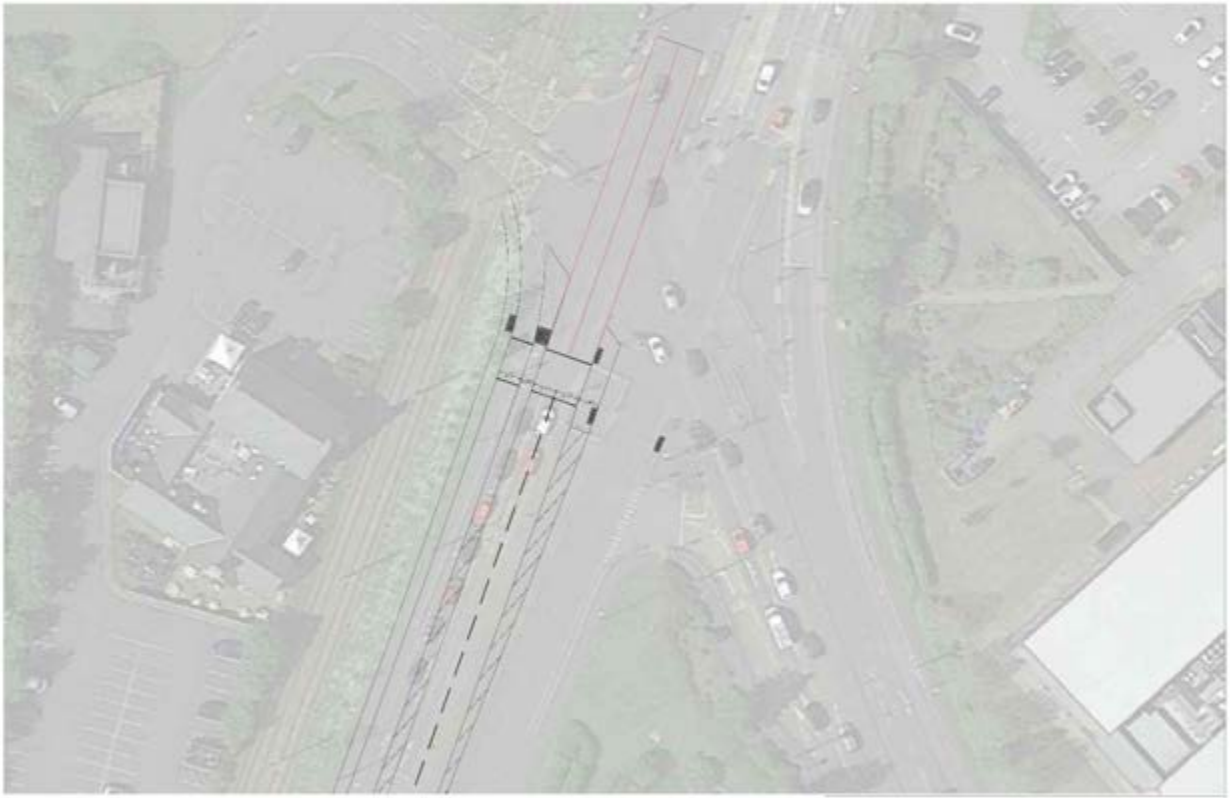


Please note that this design is based on indicative measurements taken from OS map with guidance from Google Maps. This design is subject to further improvement.

Appendix 3 - Mitigation (A6140 Lord Sheldon Way)

[Illustrative/Typical layout]

GM42: ASHTON MOSS WEST - LORD SHELDON WAY
INDICATIVE DESIGN PROPOSAL - SEGREGATED LEFT TURN



Please note that this design is based on indicative measurements taken from OS map with guidance from Google Maps. This design is subject to further improvement.

Greater Manchester Spatial Framework

Locality Assessment:

Godley Green Garden Village (GMA39)

Publication Version 2: November 2020

Identification Table	
Client	Tameside Metropolitan Borough Council
Allocation	Godley Green Garden Village
File name	GMA39 Tameside - Godley Green Garden Village LA 021020
Reference number	GMA39 (2020 GMSF) previously GMA43 (2019 GMSF)

Approval					
Version	**Role**	**Name**	**Position**	**Date**	**Modifications**
0	Author	Ruairidh MacVeigh	Consultant	28/08/2020	Base report
	Checked by	Kelly Chiu	Senior Consultant	02/09/2020	
	Approved by	Chris Cox	Associate	10/09/2020	
1	Author	C Norfield	TfGM	30/09/20	Consistency edits
	Checked by	S Pateman	TMBC	02/10/20	
	Approved by	G Holland	TMBC	02/10/20	

Table of contents

List of figures

List of tables

Allocation Data	
Allocation Reference No.	GMA39 (2020 GMSF) previously GMA43 (2019 GMSF)
Allocation Name	Godley Green Garden Village
Authority	Tameside Metropolitan Borough Council
Ward	Hyde Godley
Allocation Proposal	GMSF Plan Period: 1,188 dwellings. With further Post-GMSF period development to a total of 2,350 dwellings
Allocation Timescale	0-5 years ☐ 6-15 years ✓ 16 + years ✓

Glossary

"2025 GMSF Constrained" - is the 2025 forecast case in which the model adjusts the input demand based on how the cost of travel changes from the base year to the future. For example, for a shopping trip undertaken by car which becomes more congested in future, changes might be travel via a different route, mode, location or time of day.

"2040 GMSF Constrained" - as above, but for a 2040 forecast year

"2025 GMSF High-Side"- is the 2025 forecast case in which the model does not adjust the input demand based on how the cost of travel changes. In this scenario congestion does not lead to a reassignment of traffic, and therefore road traffic flow will generally be higher.

"2040 GMSF High-Side" - as above, but for a 2040 forecast year

"2025 Reference Case" - is the Do Minimum scenario which includes delivery of all transport schemes already committed and assumed to be completed by 2025

"2040 Reference Case"- is the Do Minimum scenario which includes delivery of all transport schemes already committed and assumed to be completed by 2040

AADT - Annual average daily traffic, is a measure used in transportation planning to quantify how busy the road is

Bee Network - is a proposal for Greater Manchester to become the very first city-region in the UK to have a fully joined-up cycling and walking network: the most comprehensive in Britain covering 1,800 miles.

Bus Rapid Transit - is a bus-based public transport system designed to improve capacity and reliability relative to a conventional bus system. Typically, a BRT system includes roadways that are dedicated to buses, and gives priority to buses at junctions where buses may interact with other traffic

Existing Land Supply - these are allocations across the county that have been identified by each local planning authority across Greater Manchester and are available for development

Greater Manchester Variable Demand Model (GMVDM) - the multi-modal transport model for Greater Manchester. This transport model provides estimates of future year transport demand as well as the estimates of travel behaviour changes and new patterns that the Plan is likely to produce. These include

changes in choices of routes, travel mode, time of travel and changes in journey destinations for some activities such as work and shopping.

Local Road Network (LRN) - All other roads comprise the Local Road Network. The LRN is managed by the local highways authorities

National Trip End Model (NTEM) - is a Department for Transport forecast that ensures that measures of population, jobs and trips made by various mode are consistent across the whole of Great Britain.

Rapid transit services - refers to high frequency, high capacity metro style transport services including Metrolink and Bus Rapid Transit.

Strategic Road Network (SRN) - The Strategic Road Network comprises motorways and trunk roads, the most significant 'A' roads. The SRN is managed by Highways England.

"TfGM" - Transport for Greater Manchester, the Passenger Transport Executive for Greater Manchester

Urban Traffic Control (UTC) - is a specialist form of traffic management that, by coordinating traffic signals in a centralised location, minimises the impact of stop times on the road user.

1. Allocation Location and Overview

1.1.1 This Locality Assessment (LA) is one of a series being prepared for proposed allocations within Greater Manchester in order to confirm the potential impacts on both the local and strategic network, as well as identifying possible forms of mitigation or the promotion of sustainable alternatives to reduce this impact.

1.1.2 The Godley Green Garden Village allocation is located in the Greater Manchester borough of Tameside and is proposed to consist of 1,188 dwellings within the GMSF plan period (up to 2037), with a final proposed total buildout of 2,350 dwellings beyond the current GMSF plan period (post 2037). The proposed allocation is to comprise several individual villages occupying various land parcels that will also include their own local centres.

1.1.3 For the purposes of the testing the impact of the allocation through the strategic model, a total of 1,188 dwellings have been assumed to be built out by 2040. The GM transport modelling suite has a 2040 forecast year, as such it uses 2040 trajectory data as proxy for 2037 full build-out, this is not considered to materially impact on the analysis or conclusions of this report.

1.1.4 All phasing plans information contained in this Locality Assessment is indicative only and has only been used to understand the likely intervention delivery timetable. Final trajectory information and the final allocation proposal is contained in the GMSF Allocation Topic Paper.

1.1.5 The allocation is bounded by the A560 Mottram Old Road to the south, by the Manchester to Glossop railway to the east, the former trackbed of the Cheshire Lines Committee railway to the north, and existing residential developments to the west. The existing land use of the allocation is predominantly open land, although there are some remote farm buildings and existing dwellings present.

1.1.6 At present, only Green Lane and Brookfold Lane provide highway infrastructure within the allocation, and proposed access arrangements are to include two access points directly onto the A560 Mottram Old Road; one access to the east near the Hattersley Viaduct, and one access to the west within the vicinity of the existing Green Lane junction. The A560 Mottram Old Road is a single-carriageway interurban road with footpaths, streetlighting and a 40mph speed limit.

1.1.7 The allocation lies within the 2011 Census mid-layer super output area of Tameside 022 and partly within Tameside 028. The scale of residential development (1,512 homes by 2040) is expected to result in an approximate 56% increase in housing over the existing number of households in the area (2,679). The final buildout (post-GMSF) of 2,350 homes is expected to result in an approximate 87% increase in housing over the existing number of dwellings in the area.

1.1.8 Note that the allocation boundaries shown in **Figure 1 and 2** were correct at the time of writing, for definitive boundary information refer to the GMSF allocation maps. Since the modelling analysis has been undertaken for this report, the site at Gravel Bank Road /Unity Mill has been removed from the GMSF. The reference number of Godley Green Garden Village has been updated from GMA43 to GMA39 since production of these images.

Figure 1. Allocation Location – Regional Context

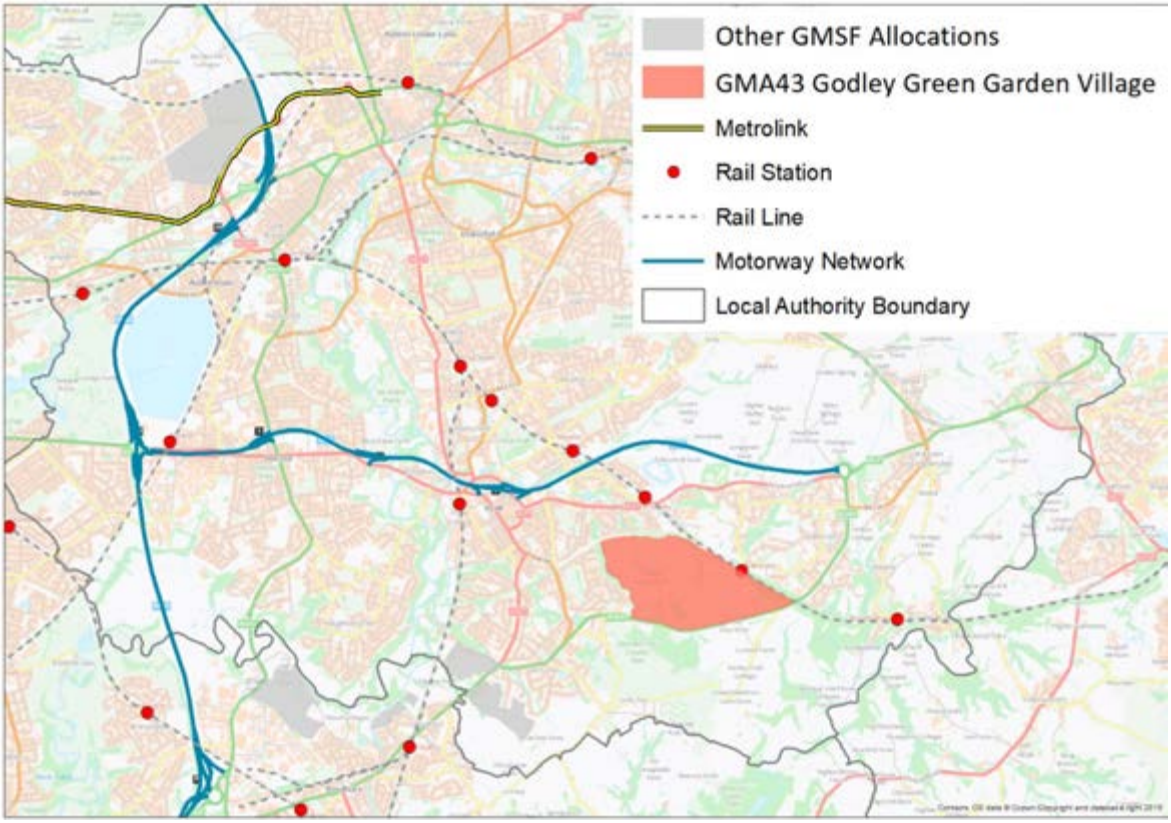
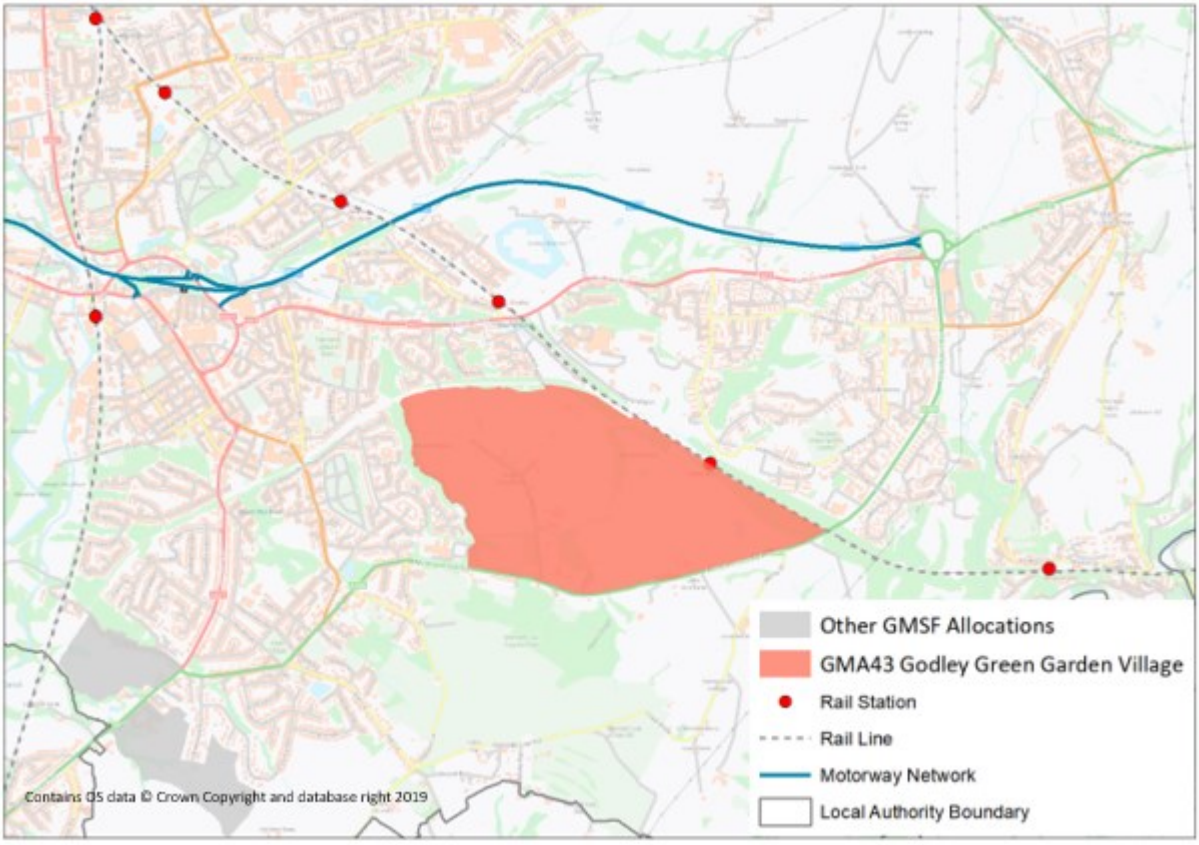


Figure 2. Allocation Location – Local Context



2. Justification for Allocation Selection

2.1.1 The Site Selection process has been led by the 10 Greater Manchester Authorities, including Tameside Metropolitan Borough Council, and provided the starting point for the investigation of the preferred sites through the Locality Assessments.

2.1.2 Detail of the Site Selection process, including the criteria used to identify the sites, and how this was used to select the most sustainable sites is considered within the GMSF Spatial Strategy and accompanying Topic Papers.

3. Key Issues from Consultation

3.1.1 The Greater Manchester Plan for Homes, Jobs and Environment (Spatial Framework) consultation ran from 14th January to 18th March 2019. The comments made to the strategic allocation proposed at this location during the 2019 GMSF consultation relate to the following key transport themes; roads, public transport, air quality and active travel:

- Existing highway congestion around Hyde, Mottram and the M60/M67 motorway network, with most prominent congestion being on the A57 east of Hattersley towards Woodhead;
- Inadequate and poor public transport, particularly on weekends;
- Hattersley station requires significant redevelopment, although Network Rail has the opportunity to improve existing facilities at the station;
- Loss of PRoW is a concern;
- Routing of the Trans Pennine Trail (TPT), Godley Turntable:
    - Crossing styles for the A560 Mottram Old Road and aspirations to remove some of the current on road section of the TPT along the A560 Mottram Old Road.
    - Challenges of accessing the TPT at Brookfold Lane particularly for horse riders.
    - Allocation Policy Point 15, bridge should be fully accessible for all users.
    - Appropriate signage to/from the station and to/from TPT; and
- Road safety and speeding.

3.1.2 A full summary of all consultation responses is available on the GMCA GMSF website.

4. Existing Network Conditions and Allocation Access

4.1 Vehicular Access

4.1.1 The A560 Mottram Old Road is a single-carriageway interurban road with a 40mph speed limit and provides access to multiple private farms, dwellings and businesses. The A560 Mottram Old Road not only provides a major link between Hattersley and Stockport, but also forms an alternative route from the A57 Hyde Road to Stockport Road that bypasses the centre of Hyde.

4.1.2 Green Lane is an unpaved gravel farm access that leads north across the former trackbed of the Cheshire Lines Committee railway before connecting to the wider local road network via St Pauls Hill Road. St Pauls Hill Road is a two-way residential street with footpaths, full street lighting and a 20mph speed limit. This road also presents carriageway width restrictions and on-street parking.

4.1.3 Brookfold Lane is an unpaved gravel farm access that leads north beneath the former trackbed of the Cheshire Lines Committee railway before connecting to the wider local road network via Almond Way and Station Road. Almond Way and Station Road are both two-way residential streets

with footpaths, full street lighting and a 20mph speed limit. These roads also present restrictions due to narrow carriageway width and on-street parking.

4.2 Accidents and Collision Overview

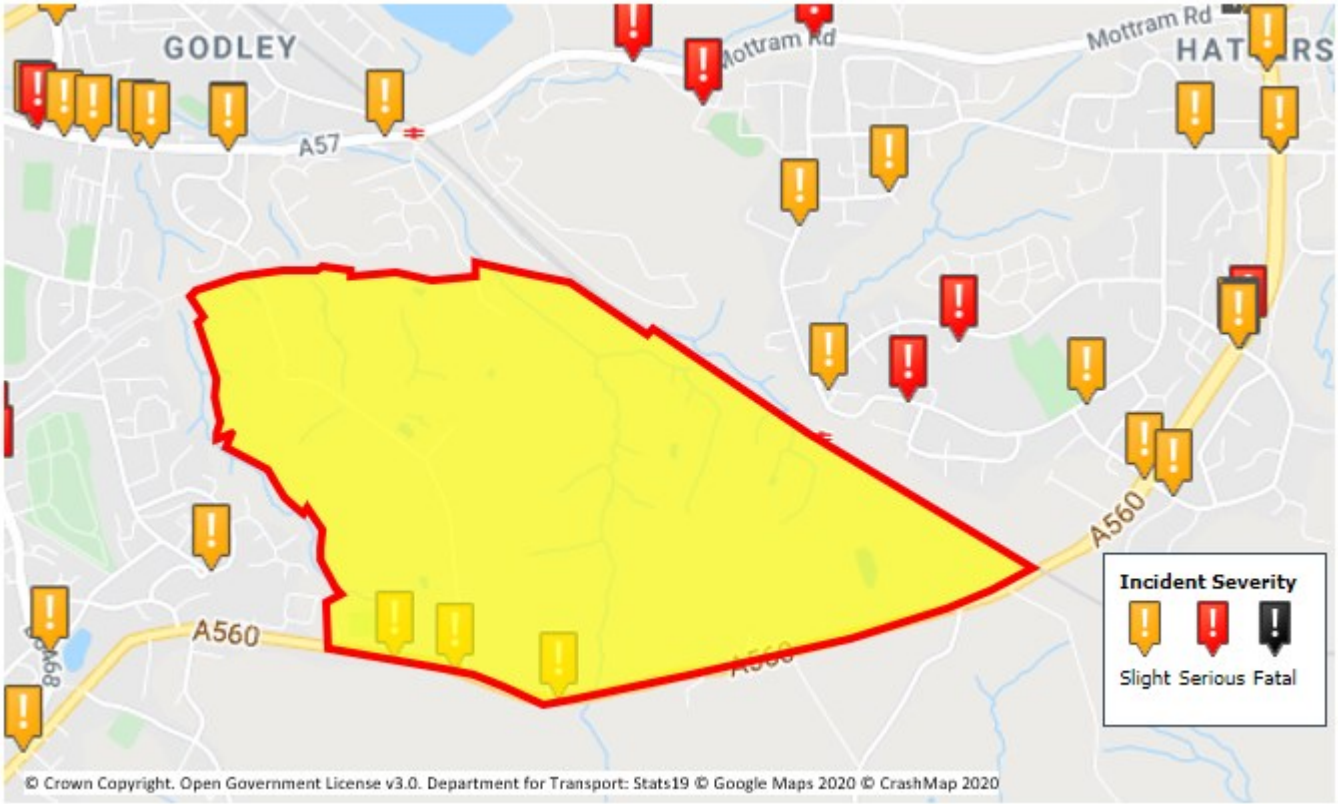
4.2.1 **Table 1** and **Figure 3** show the number of vehicle collisions over the last 5 years in a 1km area surrounding the Godley Green Garden Village site. There have been a total of 32 accidents over the last 5 years with no fatal incidents reported.

Table 1. Collision data within 1km of Godley Green Garden Village

Fatal	Serious	Slight	Total
0	7	25	32

4.2.2 Note that the allocation boundaries shown in **Figure 3** were correct at the time of writing, for definitive boundary information refer to the GMSF allocation maps.

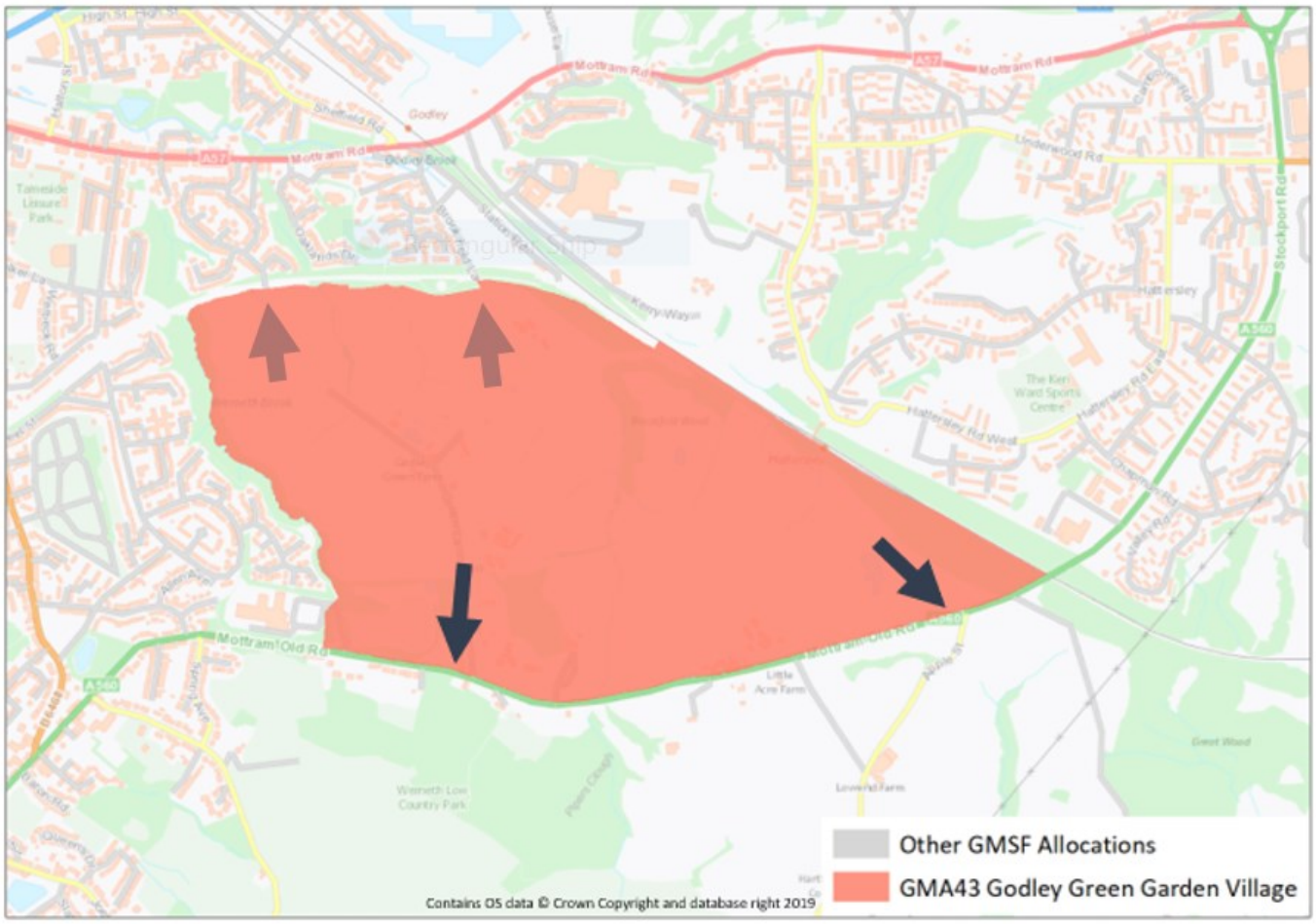
Figure 3. Collision data within 1km of Godley Green Garden Village



5. Proposed Access to the Allocation

5.1.1 **Figure 4** shows the indicative allocation access arrangements. Note that the allocation boundaries shown in **Figure 4** were correct at the time of writing, for definitive boundary information refer to the GMSF allocation maps. The reference number of Godley Green Garden Village has been updated from GMA43 to GMA39 since production of these images.

Figure 4. Allocation Access Arrangements



5.1.2 Based on the current situation of the proposed allocation, the ideal primary access arrangement, in consideration of the development quantum and suitability of surrounding roads, would be directly onto the A560 Mottram Old Road via two new accesses between the Hattersley Viaduct and the Alder Community High School.

5.1.3 Due to the proposed development quantum of the Godley Green Garden Village allocation, accesses onto the A560 Mottram Old Road have been considered to match the most prominent traffic flows to and from the allocation. Based on trip distribution figures outlined in **Section 8**, it is expected that more traffic will be routed north from the allocation towards the M67 motorway at Hattersley roundabout, and thus an outline design concept for a standard roundabout junction for the eastern access has been considered (**Appendix 2**), with the intention of also integrating access onto Apple Street – a narrow single-track road diverging south to serve multiple dwellings. For the western access, due in part to the distribution of trips, combined with space constraints caused by topography and nearby existing dwellings, the proposal for this access is to take the form of a three-arm signalised junction **(Appendix 1)**. In both cases, clear pedestrian/cycle footways and crossing facilities should be included.

5.1.4 While considerations has been given to the provision of a third access either onto Green Lane or Brookfold Lane to the north of the allocation, these have been discounted on the basis that, in both instances, the carriageway width out of the allocation would be constricted by the existing bridges over and under the Cheshire Lines Committee railway trackbed, which would require expensive rebuilding or modification to suit high volumes of development traffic. Furthermore, the access onto Green Lane would route development traffic through St Pauls Hill Road, a residential street constrained by narrow widths and the presence of on-street parking, thereby making it unsuitable for use as a primary or secondary vehicular access.

5.1.5 Notwithstanding this, in consideration of the allocation's proposed size and quantum, access arrangements for non-motorised site users should be made through Brookfold Lane and Green Lane to enable access by foot, bicycle and other means of active travel. In this regard, improvement of pedestrian/cycle facilities along Brookfold Lane, specifically to Bee Network standards, should be undertaken so as to allow for enhanced access to Godley Station to serve the northern portion of the site. The role of these accesses should also provide an alternate routing for emergency vehicle's into each land parcel in the event that the primary access is obstructed – these are both illustrated in **Figure 4** as faded arrows.

6. Multi-modal Accessibility

6.1 Overview

6.1.1 The current accessibility of the Godley Green Garden Village allocation using Greater Manchester's Accessibility Level model (GMAL) has been identified as comprising areas of level 2, 3, 4 and 5 for accessibility, giving it a low to average rating. Note that the GMAL rating is based on pre-COVID-19 pandemic figures and therefore may not be representative of the latest transport accessibility rating.

6.1.2 Greater Manchester Accessibility Levels are a detailed and accurate measure of the accessibility of a point to both the conventional public transport network (i.e. bus, Metrolink and rail) and Greater Manchester's Local Link (flexible transport service), taking into account walk access time and service availability. The method is essentially a way of measuring the density of the public transport provision at any location within the Greater Manchester region. The GMAL methodology is derived from the Public Transport Accessibility Level (PTAL) approach developed by the London Borough of Hammersmith and Fulham, but modified to consider flexible transport service provision (Local Link) and to reflect local service provision levels (different accessibility levels) within Greater Manchester.

6.1.3 The accessibility index score is categorized into eight levels, 1 to 8, where level 8 represents a high level of accessibility and level 1 a low level of accessibility.

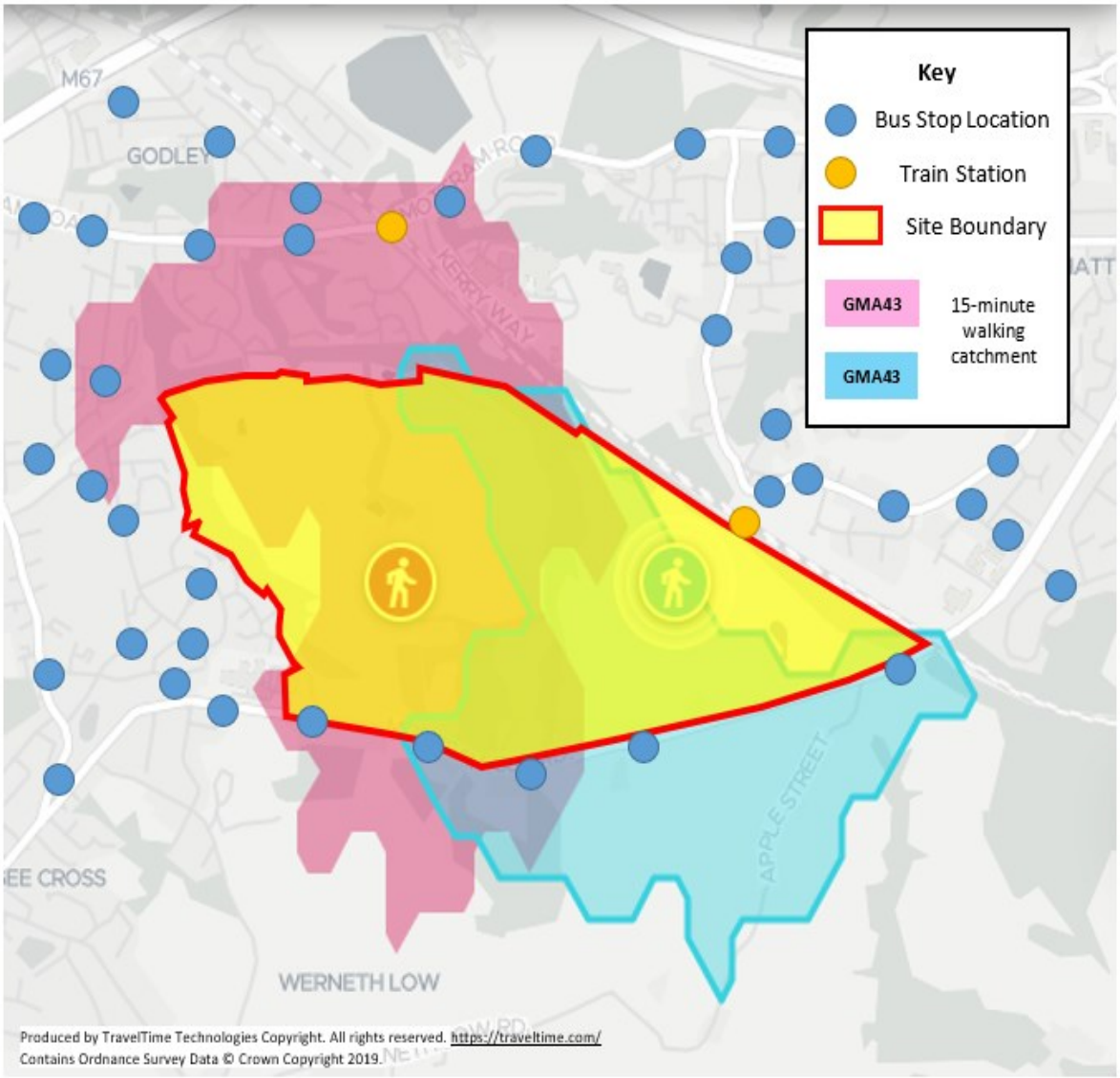
6.2 Walking and Cycling

6.2.1 The main local destinations likely to generate walking and cycling trips are Hyde Town Centre to the northwest of the site (2.2km), the local shops at Gee Cross (1.7km), Pinfold Primary School (1.7km), Alder Community High School (0.9km), Tesco Extra superstore at Hattersley (2.2km), Hyde Leisure Pool (2.5km), Discovery Academy (3km), Active Ken Ward (1.4km), Werneth Low Country Park Visitor Centre (1.7km), and Haughton Thornley Medical Centre (2km).

6.2.2 **Figure 5** shows the current level of accessibility for the Godley Green Garden Village allocation using the Travel Time Platform online database, which illustrates the 15 minute walking time from the proposed allocation access via the local road network and any available pedestrian through-routes – the positions chosen from which walking trips would originate in **Figure 5** are based on the potential centres of the Godley Green Garden Village allocation in the event it comes forward as two villages.

6.2.3 Note that the allocation boundaries shown in **Figure 5** were correct at the time of writing, for definitive boundary information refer to the GMSF allocation maps. The reference number of Godley Green Garden Village has been updated from GMA43 to GMA39 since production of these images.

Figure 5. 15 minute walking catchment with public transport provision



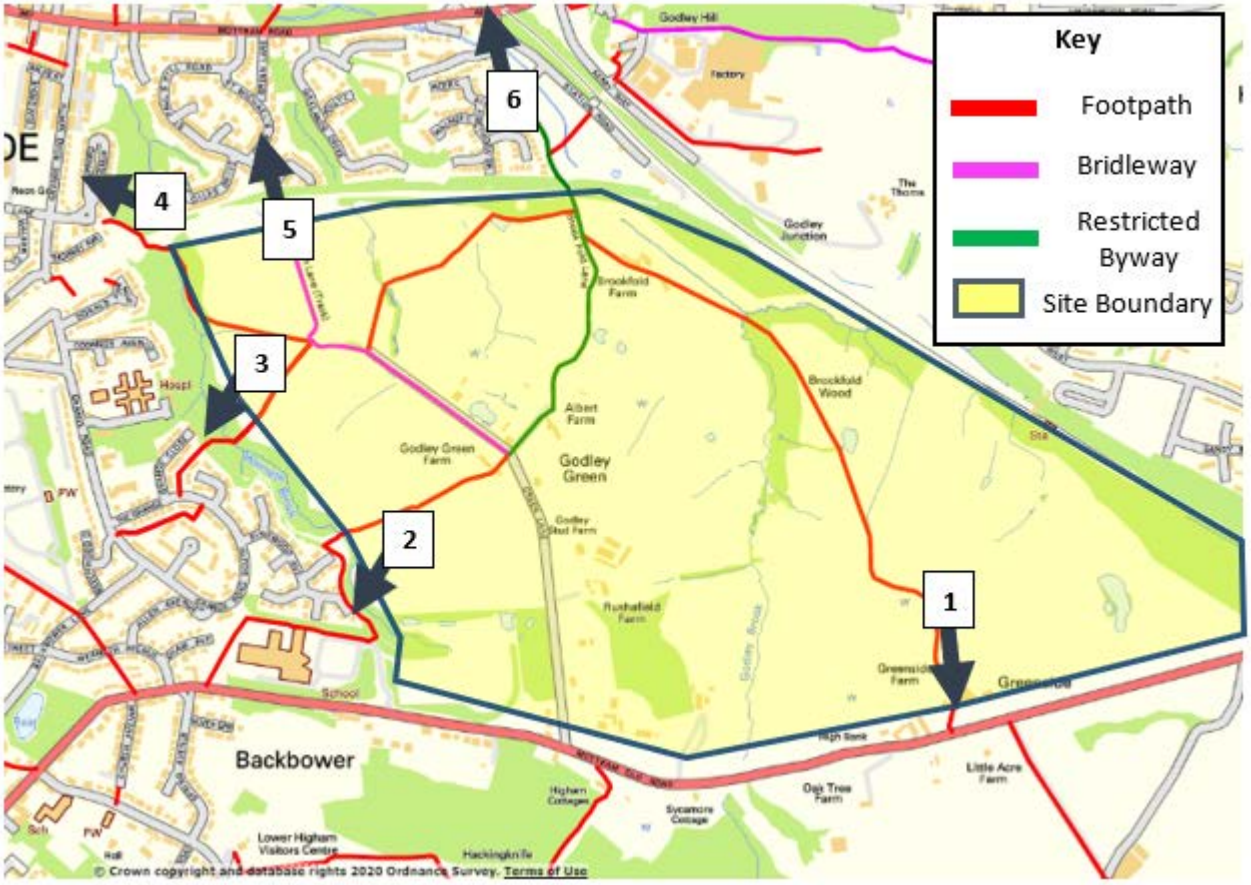
6.2.4 The A560 Mottram Old Road provides the main access to the allocation from the south however in terms of pedestrian access the route comprises narrower than standard width footpaths for parts of the route both east and west of the allocation. Although the A560 Mottram Old Road route provides full streetlighting, there are no crossings or facilities for cyclists, so localised improvements may be required in the vicinity of the new access.

6.2.5 North of the allocation, both Brookfold Lane and Green Lane are designated as Public Rights of Way (PRoW), Green Lane as a bridleway, and Brookfold Lane as a restricted byway. In both instances, the carriageway is comprised of gravel with no segregated access for non-vehicular users until it reaches existing residential streets at St Pauls Hill Road and Almond Way, respectively – dedicated pedestrian and cycle facilities on these residential streets are again limited to standard width footpaths and limited crossing/cycling infrastructure.

6.2.6 As shown in **Figure 6**, there are multiple PRoW that cross the proposed Godley Green Garden Village allocation. This potentially allows for easy integration of these routes into the allocation to provide dedicated traffic-free pedestrian and cycle routes.

6.2.7 Note that the allocation boundaries shown in **Figure 6** were correct at the time of writing, for definitive boundary information refer to the GMSF allocation maps. The reference number of Godley Green Garden Village has been updated from GMA43 to GMA39 since production of these images.

Figure 6. Allocation Location with Pedestrian/Cycle Access Arrangements



6.2.8 National Cycle Route 62 (NCN62) runs through the proposed Godley Green Garden Village allocation on Green Lane, linking Mottram with Hyde, Reddish and Stockport via the former trackbed of the Cheshire Lines Committee railway. Therefore, NCN62 should be integrated into the Godley Green Garden Village allocation in order to allow high quality dedicated traffic-free cycling and pedestrian connections into Hyde, Reddish and Stockport.

6.2.9 The allocation benefits from being located on a proposed section of the Bee Network, which intends to improve cycling and walking facilities and infrastructure along primary routes across Greater Manchester. With regard to the Godley Green Garden Village allocation, a section of the Bee Network passes across the proposed allocation along what is currently Green Lane, before continuing east along the A560 Mottram Old Road to Hattersley, and should therefore be integrated into this allocation so as to provide suitable pedestrian and cycle access towards both Hattersley and Hyde. Furthermore, the former trackbed of the Cheshire Lines Committee railway is also to form part of the Bee Network, providing direct off-road routes for pedestrians and cyclists

west through the centre of Hyde towards Reddish and Stockport – this should also be integrated into the allocation.

6.3 Public Transport

6.3.1 The A560 Mottram Old Road and the adjacent residential areas in Gee Cross are served by multiple bus routes operated by Stagecoach and Stotts Coaches, which include the following:

- Route 341: Hyde to Glossop (average frequency: 120 minutes)
- Route 346: Ashton to Gee Cross (average frequency: 15 minutes)

6.3.2 There are also frequent bus and rail operations serving Hattersley, but these are severed from the allocation due to the presence of the railway cutting and the current lack of suitable crossing points. In terms of bus services, these are operated by Stagecoach, and include the following:

- Route 201: Manchester City Centre to Mottram (average frequency: 10 minutes)

6.3.3 The proposed allocation is also located immediately adjacent to Hattersley railway station, and approximately 300m south of Godley station, both of which are served by Northern Trains on the following route:

- Manchester Piccadilly to Hadfield/Glossop (average frequency: 30 minutes)

Table 2. Accessibility of and proximity to Public Transport

Mode	Nearest Stop/ Station	Distance (km)	Peak Hour Frequency (Mins)
Bus	Apple Street/Green Lane	0.1	120
Bus	Hattersley Station	1.1	10
Rail	Hattersley	1.4	30
Rail	Godley	0.5	30

6.3.4 **Table 2** identifies the **current** accessibility of public transport for the future residents of the Godley Green Garden Village allocation, exploring the proximity, and the frequency of travel during peak hours – the distances to each of these modes are based on the shortest available walking route rather than their direct distance from the allocation itself.

6.3.5 In terms of local pedestrian access to existing public transport facilities, there are local bus stops situated at several locations along the A560 Mottram Old Road, which are within a walkable distance for some parts of the allocation.

6.3.6 The Apple Street bus stop on the A560 Mottram Old Road is located adjacent to the proposed eastern allocation access onto the A560 Mottram Old Road, and the Green Lane bus stop is located adjacent to the proposed western allocation access, both of which are easily accessible from some parts of the allocation. These stops however currently provide infrequent and inconsistent services throughout the day into Hyde, approximately every two hours.

6.4 Proposed

6.4.1 In consideration of the provision of existing pedestrian and cycling infrastructure in the adjacent residential streets, our main recommendation is that a permeable network for pedestrian and cyclist priority within the development is required, including sufficient secure cycle parking for all dwellings and proposed centres.

6.4.2 Given the location of the allocation and its close proximity to the Gee Cross, Godley, Hyde and Hattersley local areas, the internal walking and cycle network should be linked to high quality routes connecting through to these areas, including the proposed Bee Network. Existing PRoW that either pass near or cross the proposed allocation should be positively upgraded, with both PRoW and the internal pedestrian/cycle network of the allocation being constructed to Bee Network standards. Widening of pedestrian footpaths should also be undertaken along the entire length of the A560 Mottram Old Road between Hattersley Viaduct and Gee Cross, with these improvements again being to Bee Network standards.

6.4.3 The allocation provides an opportunity to better link these areas together via connections through the allocation which may provide a more appropriate option for an east-west walking/cycling route than direct upgrades to Hattersley Viaduct, which currently presents width restrictions and therefore limited opportunity to improve pedestrian/cycling access across the structure.

6.4.4 Furthermore, in consideration of the allocation's proximity to Hattersley railway station, direct connections between Godley Green Garden Village and Hattersley are required. A proposal is being developed for a wider pedestrian, cycle and equine (multi-user and accessible to all) bridge to be located to the east of the existing structure, which will allow for direct access both to the station and to the centre of Hattersley for allocation residents and visitors and will encourage the use of public transport services at Hattersley rail station. This bridge and walking and cycling provision will be constructed to Streets for All standards.

6.4.5 In addition to this proposal, there are earlier works (separate to the GMSF) planned to improve the passenger facilities at Hattersely station, these improvements are being funded through the TfGM Growth Deal programme in order to improve rail infrastructure across the city-region. This scheme involves enhancing the ticket office and exploring the potential of expanding the car parking facilities and has a proposed completion date of Spring 2021.

6.4.6 The footbridge and associated cycle and pedestrian links on the Godley Green side of the railway will be necessary to support the Godley Green Garden Village allocation and should be provided as early as possible in the development phasing of the allocation. This, combined with the Growth Deal improvements at Hattersley station, will encourage the use of the rail services and integration of the surrounding land uses and local transport networks in with the station. This should also include provision and integration of bus facilities provided on the Godley Green side of the station.

6.4.7 Detailed contributions as to the cost of delivering this scheme will require further consideration at the detailed planning stage, including the portion of the costs of this scheme are to be allocated to the Godley Green Garden Village allocation. Walking and cycling routes connecting to Hattersley and Godley railway stations should be formed through the Godley Green Garden Village allocation in such a way that it is capable of bringing as much of the allocation within the recommended 800m walk to public transport catchment as is possible, while managing a balance that ensures the service remains direct and frequent.

6.4.8 With regard to bus services, the allocation has been identified as potentially benefiting from either the diversion of existing or the creation of a new bus service within the allocation itself, as due to the size of the allocation many residences and other aspects of the development are likely to be significant distance from the nearest public transport mode at the boundary. Of the local bus services operating in the area, we consider that Route 346, operated by Stagecoach between

Ashton-under-Lyne and Gee Cross, should be extended into the proposed allocation with a frequency of up to every 10 minutes. This service now runs every 15 minutes to Hyde, with the evening and Sunday services continuing down to serve Gee Cross. Therefore, this service appears to be a suitable candidate for extension into the Godley Green Garden Village allocation and potentially further into Hattersley. Introduction of this service within the allocation should be done at the earliest opportunity in order to allow initial residents a sustainable transport alternative.

6.4.9 While no final design as to the layout and connection of each land parcel within the Godley Green Garden Village allocation has been determined at this stage, the above considerations as to public transport provision are based on each land parcel being connected by through road networks. However, in the event each land parcel is served by its own individual road network, bus connectivity should be explored through the inclusion of bus gates.

6.4.10 Direct integration of bus services with Hattersley station and a new direct pedestrian/cycle footbridge with the Godley Green Garden Village allocation could potentially see a significant increase in passenger numbers on the Manchester to Glossop/Hadfield railway, and thus consideration should be given as to the possibility of increasing the frequency and capacity of services on this route. This would be subject to discussions at between TfGM, Network Rail and the incumbent train operating company (Northern Trains) as it is not envisioned to be required in the earliest phases of delivery, or necessarily within the plan period and may be a requirement that arises for the longer term.

7. Parking

7.1.1 It is not necessary to consider in detail the parking standards for residential units relevant to the site at this stage of assessment as there are no particular constraints on achieving likely minimum parking standards that may be in application at the time the site is brought forward. Accommodation of Electric Vehicle (EV) parking, while an important factor in developing more efficient transport connections for the allocation, should be considered at the detailed design stage, potentially as an integration of specific house design.

7.1.2 A broad assumption has been made that a maximum of 2 spaces per dwelling is likely to be proportionate however other alternative local policy requirements are likely to be equally deliverable and can be considered at the planning application stage.

7.1.3 National Planning Policy Framework (NPPF) is clear that such standards should only be set where there is a clear and compelling justification that they are necessary. This may be either for managing the local road network conditions, or for optimising the density of development in city and town centres and other locations that are well served by public transport (in accordance with chapter 11 of NPPF).

8. Allocation Trip Generation and Distribution

8.1.1 Future trip generation to/from the allocation (i.e. how many people and vehicles will enter or leave the site) was estimated by applying a set of GM-wide trip rates to the agreed development quantum for each site. The distribution of trips (i.e. where they are going to or coming from) was derived by selecting nearby zones with similar land use characteristics as a proxy and using the existing distribution in the model. These figures are illustrated in the following tables:

Table 3. Development Quantum

Residential	Houses	0	1,061	608
Residential	Apartments	0	451	230
Total		0	1,512	838

Table 4. Allocation Traffic Generation *

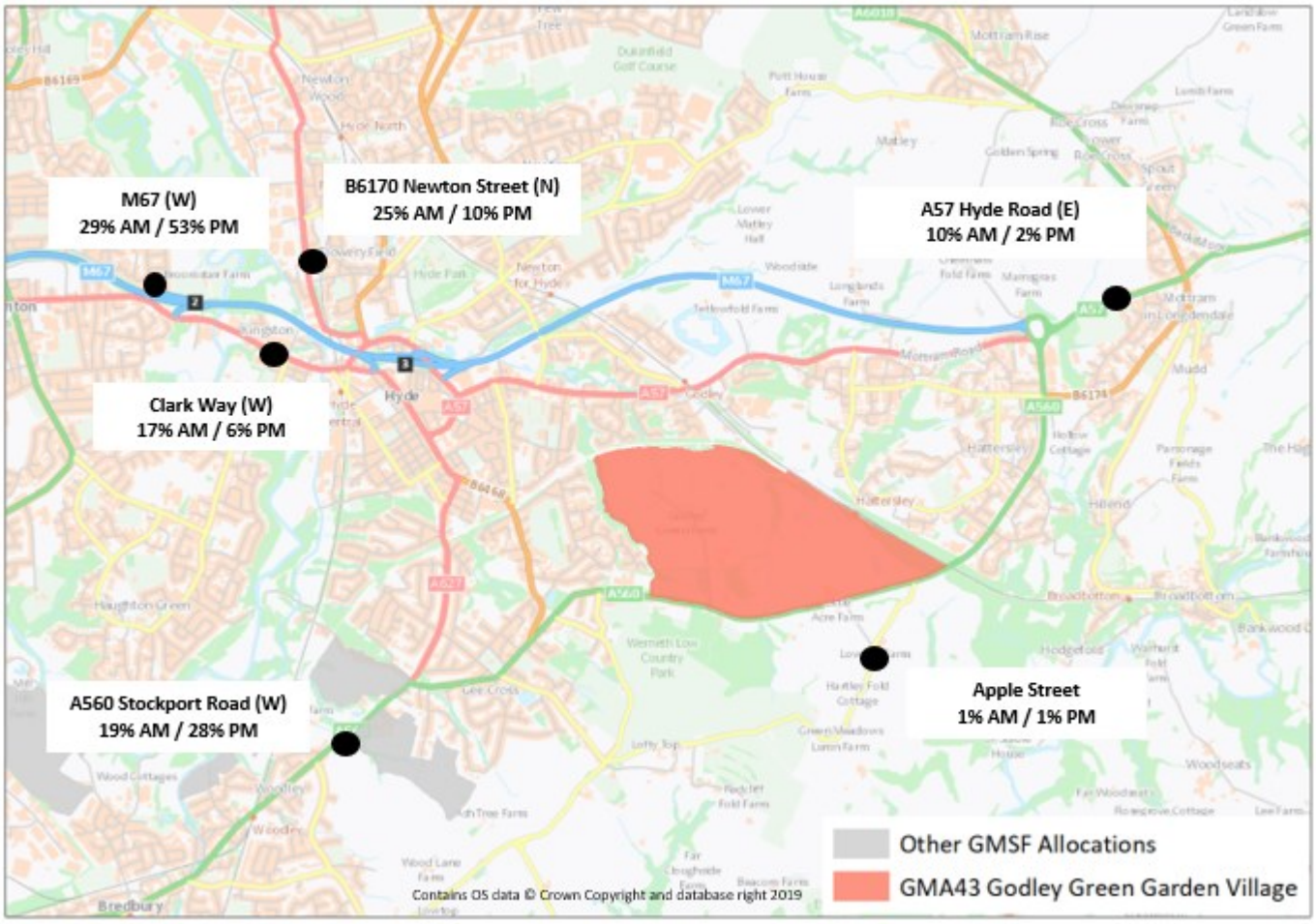
YEAR	AM Peak Hour 0800 0900 Departures	AM Peak Hour 0800 0900 Arrivals	PM Peak Hour 1700 1800 Departures	PM Peak Hour 1700 1800 Arrivals
2025 GMSF Constrained	0	0	0	0
2025 GMSF High-Side	0	0	0	0
2040 GMSF Constrained	310	90	166	365
2040 GMSF High-Side	352	131	215	365
2040+ Post-GMSF trips (2,350 dwellings)	898	313	407	776

*Units are in PCU (passenger car units/hr)

Table 5. Allocation Traffic Distribution, 2040 GMSF High-Side (Origin/Destination Combined)

Route	AM Peak Hour 0800 0900	PM Peak Hour 1700 1800
M67 Motorway (W)	29%	53%
A57 Hyde Road (E)	10%	2%
Apple Street	1%	1%
A560 Stockport Road (W)	19%	28%
Clark Way (W)	17%	6%
B6170 Newton Street (N)	25%	10%

Figure 7. Allocation Traffic Distribution, 2040 GMSF High-Side (Origin/Destination Combined)



8.1.2 Note that the allocation boundaries shown in **Figure 7** were correct at the time of writing, for definitive boundary information refer to the GMSF allocation maps. Since the modelling analysis has been undertaken for this report, the site at Gravel Bank Road /Unity Mill has been removed from the GMSF. The reference number of Godley Green Garden Village has been updated from GMA43 to GMA39 since production of these images.

9. Existing Highway Network Review

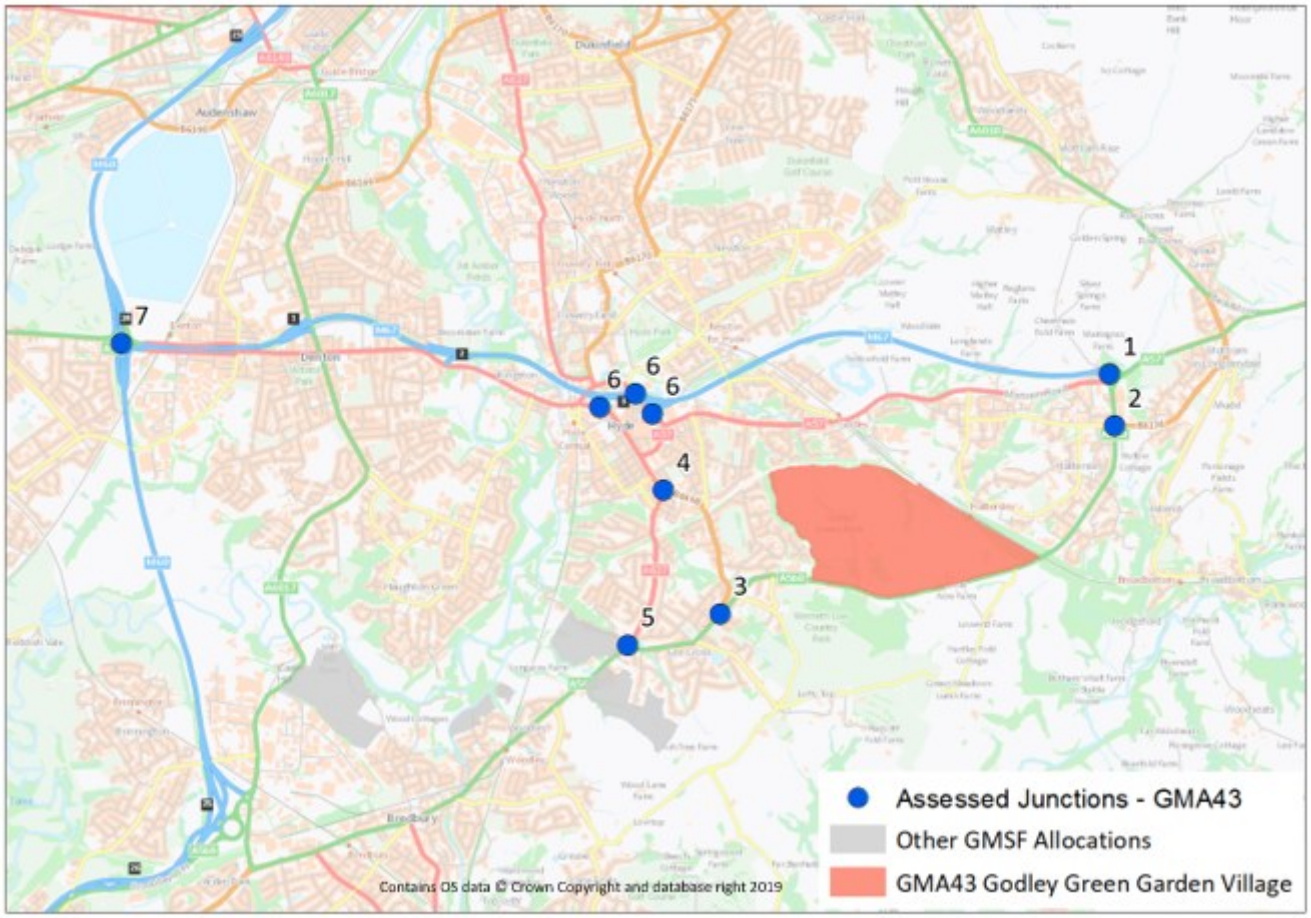
9.1 Existing Network

9.1.1 The A560 Mottram Old Road runs west to east to the south of the Godley Green Garden Village allocation, providing an alternative route that avoids the centre of Hyde for through traffic between Mottram and Stockport. SYSTRA identified a number of junctions in proximity to the site where additional traffic could have an impact on their operation based on existing conditions.

1. M67/A57 Hyde Road/A560 roundabout
2. A560 Stockport Road/ Ashworth Lane/ Underwood Road
3. A560 Stockport Road (Mottram Old Road) / B6468 Stockport Road
4. Market Street/ A627 Dowson Road
5. A560 Stockport Road/ A627 Dowson Road
6. M67 Junction 3 / Clark Way
7. M60 Junction 24 Denton Island

9.1.2 It should be noted that two signalised junctions in the centre of Hyde – Market Street/Union Street and Clark Way/Mottram Road – were not assessed as predicted development trips across these junctions were not as severe as those across the junctions listed above, therefore there was no need to review these junctions at this stage. However, at the Transport Assessment stage, it may be necessary to widen the scope of assessed junctions to include these locations.

Figure 8. Assessed Junctions



9.1.3 Note that the allocation boundaries shown in **Figure 8** were correct at the time of writing, for definitive boundary information refer to the GMSF allocation maps. Since the modelling analysis has been undertaken for this report, the site at Gravel Bank Road /Unity Mill has been removed from the GMSF. The reference number of Godley Green Garden Village has been updated from GMA43 to GMA39 since production of these images.

10. Treatment of Cumulative Impacts

10.1.1 The constrained and high side model runs take account of traffic associated with all GMSF allocations. Within a 2km buffer of the Godley Green Village allocation are the Gravel Bank Road / Unity Mill and Land South of Hyde allocations. Therefore, at the local level, the transport impacts of the allocation need to be considered cumulatively with the Gravel Bank Road / Unity Mill and Land South of Hyde allocations. Note that Gravel Bank Road / Unity Mill has since been removed from the GMSF, so the modelled cumulative impact will be a slight overestimate. The impact of this should however be minimal since Gravel Bank Road / Unity Mill was not a large allocation.

10.1.2 Within the GMSF plan period, the Godley Green Village allocation is expected to deliver 1,188 dwellings, which will generate approximately 483 to 580 two-way vehicle trips during the morning and evening peak hours, while beyond the plan period, the allocation is proposed to deliver 2,350 dwellings and generate approximately 529 to 1,057 two-way vehicle trips during the morning and evening peak hours.

10.1.3 The Gravel Bank Road / Unity Mill is expected to generate approximately 105 to 122 two-way vehicle trips during the morning and evening peak hours, and the Land South of Hyde allocation is forecast to generate approximately 180 to 212 two-way vehicle trips during the morning and evening peak hours. The combined impact of these trips could have a more significant impact on the network than that of the site by itself; hence the combined impact has been assessed. Note that Gravel Bank Road / Unity Mill has since been removed from the GMSF, so the modelled cumulative impact will be a slight overestimate. The impact of this should however be minimal since Gravel Bank Road / Unity Mill was not a large allocation.

11. Allocation Access Assessment

11.1.1 This access arrangement has been developed to illustrate that there is a practical option for access in this location and to develop indicative cost estimations. It is assumed that a detailed design consistent with Greater Manchester's best practice Streets for All highway design principles will be required at the more detailed planning application stage.

11.1.2 Due to the role of the proposed highway network within the allocation, which will have a role in local traffic distribution, the full traffic impact of all GMSF flows are recorded below, and not just those pertaining to the allocation.

Table 6. Allocation Access Junction Capacity Analysis

Junction	GMSF High AM	GMSF High PM	Post GMSF Flows AM	Post GMSF Flows PM	GMSF Flows AM	GMSF Flows PM	Post GMSF Flows AM	Post GMSF Flows PM
Western access (Signalised Junction)	19%	23%	22%	26%	149	139	232	216
Eastern access (Standard Roundabout)	22%	28%	28%	36%	352	442	547	688

11.1.3 It should be noted that the above allocation access arrangements are indicative and therefore the junctions illustrated in **Appendix 1** and **2** may be subject to change at the detailed planning stage.

12. Impact of Allocation Before Mitigation on the Local Road Network

12.1.1 This section looks at the impact on the network at the junctions highlighted in **Section 9**. Signalised junctions were assessed in detail using industry-standard modelling software LINSIG version 3. Traffic signal information was obtained from TfGM Urban Traffic Control (UTC) in order to ensure that the local junction models reflected (as far as possible), the operation of the junctions on the ground. Junctions 9 software was used to assess priority and roundabout junctions.

12.1.2 In order to understand a worst case impact of the GMSF, the 'high side' runs from the GMVDM were used to derive 'with GMSF' allocation flows for 2040. These flows were then entered into junction based models for the junctions identified in **Section 9**. Flows from a 2040 reference case scenario (including the existing land supply identified in the respective local authorities) were also extracted to provide a comparison between the operation of those junctions in the 2040 reference case and the 2040 'with GMSF' development scenarios.

12.1.3 The ‘with GMSF’ scenario has been assessed against a Reference Case which assumes background growth and includes the housing and employment commitments from the local authorities. These assessments were then used to identify the junctions where there was considered to be a substantial impact, relative to the operation of the junction in the 2040 reference case, and hence where mitigation was considered to be required in order to bring GMSF allocations forward.

12.1.4 For the purposes of the GMSF, where mitigation is required, this should mitigate the impacts back to the reference case scenario. It should be noted that mitigating back to this level of impact may not mean that the junction operates within capacity by 2040, and any subsequent mitigation schemes developed based on impacts caused through development trips from this allocation are only designed to mitigate the impact of GMSF traffic only, and are not intended to solve pre-existing congestion on the local network.

12.1.5 **Table 7** below provides a comparison between the operation of the ‘in scope’ local road network junctions in the 2040 reference case and the 2040 ‘high side’ scenarios, as well as the allocation flows through each respective junction. The table shows a comparison between the ratio of flow to capacity on the worst performing arm at each junction as well as the total development flows through the junction.

12.1.6 For reference, a figure of between 85% and 99% illustrates that the junction is nearing its operational capacity, and a figure of 100% or over illustrates that flows exceed the operational capacity at the junction.

Table 7. Results of 2040 Local Junction Capacity Analysis Before Mitigation

Junction	Reference Case AM	Reference Case PM	GMSF High AM	GMSF High PM	GMSF Flows AM	GMSF Flows PM	Post GMSF Flows AM	Post GMSF Flows PM
2. A560 Stockport Road / Ashworth Lane / Underwood Road	54%	53%	57%	54%	159	274	248	428
3. A560 Stockport Road (Mottram Old Road) / B6468 Stockport Road	10%	22%	13%	23%	144	198	225	351
4. Market Street / A627 Dowson Road	81%	79%	82%	80%	108	87	168	262
5. A560 Stockport Road / A627 Dowson Road	13%	15%	20%	19%	87	159	135	210

13. Transport Interventions Tested on the Local Road Network

13.1.1 Both in isolation and in consideration of the potential cumulative impact with the Gravel Bank Road / Unity Mill (note that Gravel Bank Road / Unity Mill has since been removed from the GMSF, so the modelled cumulative impact will be a slight overestimate) and Land South of Hyde allocations, the Godley Green Garden Village is expected by 2040 (as outlined in **Section 12**) to result in congestion increases at multiple Local Road Network (LRN junctions) across the surrounding area. However, increases in congestion experienced on surrounding LRN junctions, in consideration of the development quantum proposed, is not substantial as most trips generated by the allocation are routed via the Strategic Road Network, including the M67 and A57 Hyde Road.

13.1.2 Furthermore, based on the constrained physical situation of these junctions – which would require the filing of Compulsory Purchase Orders (CPO) on surrounding structures and land holders – major infrastructural changes required to accommodate traffic associated with this allocation have not been determined at this time.

13.1.3 Therefore, in line with the proposals made as part of the Mayors Cycling and Walking Challenge Fund (MCF), including the Bee Network, we recommend that improvements to traffic congestion on the LRN should be made through the promotion and encouragement of sustainable transport alternatives including walking, cycling and public transport access.

13.1.4 To reduce peak hour congestion in the centre of Hyde, proposals have been considered for the closure of Market Street between Hyde town hall and market square to through traffic – with the exception of buses and cycles – which will therefore route more traffic via the Hyde bypass. This proposal to close off Market Street to through traffic would affect both Market Street / A627 Dowson Road and a number of other junctions in the centre of Hyde.

13.1.5 However, further assessment may be warranted at the Transport Assessment stage, as well as widening the scope of the assessed junctions.

Table 8. Approach to Mitigation

Junction	Mitigation Approach
2. A560 Stockport Road/ Ashworth Lane/ Underwood Road	Isolated impact, but not substantial for this site – no mitigation proposed
3. A560 Stockport Road (Mottram Old Road) / B6468 Stockport Road	Isolated impact, but not substantial for this site – no mitigation proposed
4. Market Street/ A627 Dowson Road	Isolated impact, but not substantial for this site – no mitigation proposed
5. A560 Stockport Road/ A627 Dowson Road	Isolated impact, but not substantial for this site – no mitigation proposed

14. Impact of Interventions on the Local Road Network

14.1.1 In light of the above conclusions no specific local network interventions were tested.

15. Impact and Mitigation on the Strategic Road Network

15.1 Overview

15.1.1 This chapter covers those impacts where traffic generated by the GMSF allocations meets the Strategic Road Network (SRN). Junctions at the interface between the Local Road Network (LRN) and the SRN have been assessed using a similar approach to that described in the preceding chapters. Wider issues relating to the SRN mainline are being assessed separately as described below.

15.1.2 SYSTRA is currently consulting with Highways England on behalf of TfGM and the Combined Authority in relation to the wider impacts of the GMSF allocations on the SRN.

15.1.3 This consultation is ongoing and it is expected that it will allow Highways England to gain a strategic understanding of where there is an interaction between network stress points and GMSF allocation demand which will facilitate further discussion and transfer of information between

TfGM and Highways England (yet to be defined) in reaching agreement and/or common ground relating to the acceptability of GMSF allocations in advance of Examination in Public (EiP).

15.2 Impact of Allocation Before Mitigation on the Strategic Road Network

15.2.1 Based on the proposed buildout of the allocation, and its distance from the nearest section of the SRN, the Godley Green Garden Village allocation has been considered – both in isolation and with the cumulative impacts of the Gravel Bank Road / Unity Mill (note that Gravel Bank Road / Unity Mill has since been removed from the GMSF, so the modelled cumulative impact will be a slight overestimate) and Land South of Hyde allocations – likely to result in material implications on the operation of the SRN that will require mitigation measures. The impact of the Godley Green Garden Village allocation and other cumulative GMSF impacts are illustrated in **Table 9**.

Table 9. Strategic Junction Capacity Analysis Before Mitigation

Junction	Reference Case AM	Reference Case PM	GMSF High AM	GMSF High PM	GMSF Flows AM	GMSF Flows PM	Post GMSF Flows AM	Post GMSF Flows PM
1. M67/A57 Hyde Road/A560 roundabout	172%	126%	172%	130%	159	267	248	417
6. M67 Junction 3 / Clark Way	79%	91%	80%	91%	82	47	128	73
7. M60 Junction 24 Denton Island	137%	130%	141%	136%	217	246	339	384

15.3 Specific SRN Junction Mitigation Measures

15.3.1 The A57 / M67 corridor east of Hyde and north of the allocation forms the main strategic road access route to the Godley Green Garden Village allocation and has been established through strategic modelling to be the primary route that vehicular traffic accessing the allocation will utilise (accessed via the A560 Mottram Old Road).

15.3.2 The A57 has been noted by Highways England for its significant levels of congestion through the centre of Mottram, and thus they have proposed the introduction of a new bypass that will run between the existing M67/A57 roundabout (M67 Junction 4) to Woolley Lane at Woolley Bridge. To accommodate this new bypass, the M67/A57 roundabout is to be modified extensively to include widening of the northern circulatory and the introduction of signalised control on the M67 and bypass arms of the junction, as well as changes to the lane designations that favour the highest turning movements between the M67, the proposed Mottram Bypass, and the A560 Mottram Old Road.

15.3.3 Notwithstanding the status of this planned improvement it was requested by Highways England that the SRN needs of the Godley Green Garden Village allocation be considered without a reliance being placed on the delivery of this scheme. This avoids a dependency being placed of the scheme to support the allocation. Consequently, a reduced scheme for the M67/A57 roundabout has been considered in this Locality Assessment as a contingency scheme that would be capable of mitigating the developments traffic impacts. This is only required if the Highways England scheme were not to go ahead.

15.3.4 A version of this roundabout improvement scheme is included in **Appendix 3** which follows the general principals of the improvements otherwise planned to be introduced by Highways England at the roundabout. The scheme is intended to be future compatible with the bypass scheme in such a way that were it delivered first then it would not introduce significant unnecessary or short-lived improvements were the Highways England scheme to be delivered later.

15.3.5 Considerations as to mitigation at the M60 Junction 24 Denton Island form part of the wider planned Trans-Pennine Upgrade, which is currently being investigated by Highways England's Major Projects and the Department for Transport. The Trans-Pennine Upgrade study does not account for the GMSF due to the lack of any planning status, although it is included in the Highways England Risk Register for the project.

15.3.6 As a result of the above issues and existing Highways England/WSP study, three mitigation options have been shortlisted, based on their projected building costs and their ability to mitigate the congestion at this location:

- Mitigation Option 2: At Grade Right Turn from M60 (S) to M67 (E)
- Mitigation Option 4: 3rd Tier Free Flow M67 to M60 (N)
- Mitigation Option 5: 3rd Tier Free Flow M67 to A57

15.3.7 Based on the results of the WSP study, Option 4 was considered to deliver the highest benefits both in terms of cost effectiveness and journey time improvements, followed by Option 2 and finally Option 5 – these options have been assessed by SYSTRA as part of this Locality Assessment.

15.3.8 Regardless, if the Trans-Pennine upgrade isn't introduced then the option for an additional lane would be implemented instead. However, there are concerns that the mitigation suggested (WSP Option 2) will not achieve the solution required and could make the situation worse. The exact form of the required mitigation will be confirmed and its detailed design developed as part of the planning application process, should the allocation within GMSF be approved.

15.3.9 With regard to M67 Junction 3, existing proposals have been considered for the closure of Market Street between Hyde town hall and market square to through traffic – with the exception of buses and cycles – which will therefore route more traffic via the Hyde bypass. This proposal to close off Market Street to through traffic would affect both M67 Junction 3 and a number of other junctions on the bypass. Impacts for this mitigation proposal will require further review at the Transport Assessment stage.

15.3.10 The results of this mitigation are supplied in **Table 10** below.

15.4 Impact of Interventions on the SRN

Table 10. Strategic Junction Capacity Analysis After Mitigation

Junction	Reference Case AM	Reference Case PM	GMSF High AM	GMSF High PM	Allocation Flows AM	Allocation Flows PM
1. M67/A57 Hyde Road/A560 roundabout	45%	65%	45%	62%	8	8
7. M60 Junction 24 Denton Island (Option 2)	111%	84%	131%	92%	217	246
7. M60 Junction 24 Denton Island (Option 4)	91%	77%	88%	83%	217	246
7. M60 Junction 24 Denton Island (Option 5)	80%	73%	81%	90%	217	246

16. Final List of Interventions

16.1.1 It should be noted that the interventions listed in **Table 11** may not be the definitive solution to addressing the impact of the allocation, but have been developed to demonstrate that a solution is possible at the location. The exact form of the required mitigation will be confirmed and its detailed design developed as part of the planning application process, should the allocation within GMSF be approved. Site promoters will need to develop detailed design solutions – consistent with Greater Manchester's best practice Streets for All highway design principles – at the planning application stage.

16.1.2 In addition to the interventions identified in this report, it will be necessary for investment in the wider transport network to continue in order to deliver the aspirations of the 2040 Transport Strategy and enable all new development to be supported by a robust and sustainable transport network.

Table 11. Final List of Interventions

Mitigation	Description
Allocation Access	
A560 Mottram Old Road Western access (Signalised Junction)	Signalised Junction assumed. See **Appendix 1**
A560 Mottram Old Road Eastern access (Standard Roundabout)	Standard Roundabout assumed. See **Appendix 2**
Supporting Strategic Interventions	
Improvement of M60 Junction 24 Denton Island	Three indicative mitigation schemes proposed for potential improvement of this junction. See **Appendix 4**
Package of measures along the A560 Stockport Road (including possibility of Ashton-Stockport QBT)	Intervention required to examine the A560 corridor and develop a multi-modal solution. The Ashton-Stockport QBT route is as yet undefined and could make up part of this package of measures.
Necessary Local Mitigations	
Provision of bus services within the allocation	Extension of existing bus service (Route 346) into the centre of the Godley Green Garden Village allocation at the earliest possible opportunity to provide competitive sustainable transport alternative

Provision of a direct pedestrian/cycle access bridge to the vicinity of Hattersley rail station	Creation of a new wider bridge to the east of the existing structure built to Streets for All standards for use by cycling, pedestrian and equine users allowing for direct access to the rail station and the centre of Hattersley.
Walking and cycling measures	Assumed full permeability of cycle and pedestrian access, as well as direct connections to PRoWs either bounding or near the development and improvement of walking/cycling facilities on the A560 Mottram Old Road. All pedestrian and cycle networks internal to the site, as well as connecting PRoWs, should be built or upgraded to the standards outlined in the Bee Network, as well as providing connections to the nearest section of the Bee Network
SRN Interventions	
Improvement of M67/A57 Hyde Road/A560 roundabout	An indicative scheme was developed as a potential improvement scheme at this location. See **Appendix 3**

Supporting Strategic

M60 Junction 24 Denton Island

16.1.3 Improvement work at M60 Junction 24 Denton Island has been considered in a joint study by WSP and Highways England as part of the Network Need Study, and has resulted in three mitigation options being considered based on their cost effectiveness and ability to reduce journey times at this location.

16.1.4 Based on further analysis undertaken by SYSTRA of the three mitigation schemes considered by WSP, all schemes were demonstrated to offer benefits sufficient to mitigate the traffic impacts of GMSF development. The choice of a preferred option is a matter for Highways England following further assessment and stakeholder consultation stages. Potential contributions as to the cost of delivering this scheme should be considered at the detailed planning stage, specifically whether a

proportion of the costs of this scheme are to be allocated to the Godley Green Garden Village site developer.

Package of measures along the A560 Stockport Road

16.1.5 As explained in **Section 10** Godley Green Garden Village has some cumulative implications for congestion on the local road network. Improvement strategies for the A560 corridor should be investigated in collaboration with Stockport Council in order to develop a multi-modal solution, in line with the recommendations set out in **Section 13**. Currently, the alignment of the proposed Ashton-Stockport Quality Bus Transit (QBT) route is as yet undefined and could make up part of this package of measures.

Necessary Local Mitigations

Provision of bus services within the allocation

16.1.6 Due to the size of the proposed Godley Green Garden Village allocation, bus services should be introduced to serve one or more of the proposed land parcels that are to form the overall allocation so as to provide a competitive public transport alternative for residents and visitors to the allocation.

16.1.7 The introduction of public transport services within the Godley Green Garden Village allocation should be done at the earliest possible opportunity so as to allow for the provision of sustainable transport alternatives to the first new residents. Promotion of sustainable transport alternatives will also help to answer concerns regarding increased pollution from added vehicular trips on the local road network.

<u>Provision of a direct pedestrian/cycle access bridge to the vicinity of Hattersley train station</u>

16.1.8 In order to serve the Godley Green Garden Village allocation, a proposal is being developed to provide direct connections between Godley Green and Hattersley next to the railway station. This scheme is to be located east of the existing structure, and will include a wider bridge built to Streets for All standards – for use by cycling and pedestrian traffic – and will allow for direct access both to the station and to the centre of Hattersley for allocation residents and visitors.

Walking and cycling measures

16.1.9 In order to promote and encourage sustainable transport modes, as well as providing safe and efficient accessibility for non-vehicular traffic, the development is to both provide ease of access for pedestrian and cyclist traffic into and out of the allocation, as well as connecting and improving Public Rights of Way that either directly connect or pass near the proposed allocation. This is to include upgrading of the local PRoW routes to meet the standards of the proposed Bee Network and, wherever possible, connect directly to sections of the Bee Network.

16.1.10 Furthermore, pedestrian and cycle facilities in the areas surrounding the Godley Green Garden Village allocation should be improved wherever possible in order to allow for safe accessibility by non-vehicular users to all parts of the development and adjacent residential, employment and retail areas.

16.1.11 This scheme also includes widening of footpaths along the A560 Mottram Old Road so that they meet Streets for All standards and provide safe access for pedestrian, cycle and horse-rider traffic. Promotion of sustainable transport alternatives will also help to answer concerns regarding increased pollution from added vehicular trips on the local road network.

SRN Interventions

M67/A57 Hyde Road/A560 roundabout

16.1.12 The M67/A57 Hyde Road/A560 roundabout junction is a five-arm roundabout operating above its operational capacity in both the Reference Case and 'with GMSF scenarios'. In its current arrangement, the majority of flows are between the M67 western arm and A57 eastern arm, as this forms part of a through east-west corridor between Manchester and Sheffield via the Pennines. Matters of congestion are compounded by less than suitable road infrastructure through the villages of Mottram and Hollingworth. In light of this, as both the M67 and A57 (east) form part of the Strategic Road Network (SRN), mitigation measures have been considered at this junction to increase capacity.

16.1.13 Highways England is committed to deliver an improvement to this junction as part of the delivery of the Mottram Moor Link Road – a dual carriageway link from the M67 terminal roundabout to a junction at A57(T). Should, for any unforeseen reason this scheme not proceed, then a scaled down, proportionate improvement has been identified that would deliver improvements to the

roundabout circulatory and M67 western arm that would be based upon Highways England's scheme.

16.1.14 Potential contributions as to the cost of delivering this scheme should be considered at the detailed planning stage, specifically whether the costs of this scheme are to be allocated to the GMA43– Godley Green Garden Village site developer.

17. Strategic Context – GM Transport Strategy Interventions

Site Specific

17.1.1 Further to the site-specific interventions outlined within this report, Tameside Council and TfGM have jointly considered measures to support sustainable travel and to contribute towards the achievement of Greater Manchester's 'Right Mix' ambition. These are set out in the GM Transport Strategy 2040 and the 5-Year Transport Delivery Plan.

17.1.2 The Right Mix initiative forms part of the Greater Manchester Transport Strategy 2040, and it proposes that by 2040, 50% of trips are to be undertaken by sustainable modes and no net increase in motor-vehicle traffic. The Right Mix vision is comprised of evidence-based targets which will be adjusted over time in order to reflect the progress of meeting such targets, and the interventions set out for walking, cycling and public transport for the Godley Green Garden Village allocation will contribute to the Right Mix target of reducing growth in motor vehicle traffic in Greater Manchester.

Tameside

17.1.3 Work has recently completed on the redevelopment of Ashton-under-Lyne Interchange, providing passengers with much-improved facilities and a modern, accessible gateway to the town. The improved facilities include a covered concourse and waiting area, electronic information for bus, Metrolink and rail, high-quality accessible toilets, baby changing and 'Changing Places' facilities, retail units, CCTV and secure cycle parking spaces. The facility has been designed to accommodate more bus services while the centralised concourse will reduce walking time for passengers.

17.1.4 TfGM is also conducting a study into the feasibility of opening new rail stations at Dewsnap and Gamesley within High Peak, as well as potentially introducing a Metro/Tram-Train service on the

Glossop line. If constructed, these stations would provide the opportunity to improve linkages to the Regional Centre, while a Metro/Tram-Train operation would present increased frequency similar to that of the Metrolink.

17.1.5 Furthermore, a number of walking and cycling schemes in Tameside have gained programme entry into Mayors Cycling and Walking Challenge Fund (MCF):

- Ashton West retail centre link – a walking and cycling bridge
- Tameside Hill Street – walking and cycling links to existing CCAG scheme
- Ashton streetscape
- Ashton south scheme
- Warrington Street

17.1.6 Tameside Borough is also expected to benefit from two sections of the Quality Bus Transit Corridor (QBT) scheme, which is anticipated to see a general improvement to service reliability and facilities such as shelters along major bus corridors north to Oldham and Rochdale, and south to Stockport, as well as Real Time Information (RTI), although RTI may be delivered as an online service through phone apps or online browsers rather than information presented at the stops themselves.

17.1.7 Proposals have also been made to extend the Ashton Metrolink Line to Stalybridge, possibly as a Metro/Tram-Train arrangement, and that this could be complimented by additional capacity at existing Park & Ride (P&R) facilities serving Metrolink stops along this route.

17.1.8 A long-term aspiration for Tameside Council is the refurbishment of Hattersely Viaduct, the structure carries the A560 Mottram Old Road over the Manchester to Glossop railway line, which requires major works to ensure is long-term continued use. The Council also has aspirations to widen the structure to provide additional segregated cycle and pedestrian facilities across it.

18. Phasing Plan

18.1.1 All phasing plan information contained in this Locality Assessment is indicative only and has only been used to understand the likely intervention delivery timetable. Final trajectory information and the final allocation proposal is contained in the GMSF Allocation Topic Paper.

18.1.2 The initial Locality Assessments were based on information on allocations consolidated by TfGM based on inputs from each of the local authorities. This initial exercise focused on the development quanta to be delivered at the end of the plan period.

18.1.3 During the course of the Locality Assessment work in late 2019 / early 2020, the local authorities provided input on their expected phasing of the allocations focusing on the milestone years of 2025 and 2040. The expected 2025 development quanta were tested along with those for 2040 to assess their deliverability in terms of transport network capacity. In some cases, the development phasing was amended by the local authorities as a result of the technical analysis undertaken. All other schemes will require implementation between 2025 and 2040, with a more precise implementation timeframe for these schemes being ascertained as part of the planning application process.

18.1.4 Based on the proposed forecast, none of the development is expected to come forward before 2025, while 64% of the development quantum (1,512 dwellings) for the Godley Green Garden Village site is expected to come forward by 2040 (1,188 by 2037). The full development quantum is expected to come forward following the end of the current GMSF plan period after 2040.

18.1.5 However, it has been noted that with regards the Godley Green Garden Village allocation in particular that development phasing assumptions are fluid and could be subject to a quicker pace of delivery along an accelerated timeline, this arises due to there being active interest from the site developers in making rapid progress through planning. At this stage therefore, the below phases represents a conservative assessment of the pace of delivery.

18.1.6 Note that the GM modelling suite has a 2040 forecast year, as such it uses 2040 data as a proxy for 2037 full build out, this will not materially impact on the analysis.

Table 12. Allocation Phasing

Allocation Phasing	2020 25	2025 30	2030 2037	2038+	Total
Godley Green Garden Village full allocation	0	432	756	1,162	**2,350**
Total	0	432	1,188	2,350	**2,350**

Table 13. Indicative intervention delivery timetable

Mitigation	2020 2025	2025 2030	2030 2037
Allocation Access			
A560 Mottram Old Road Western access (Signalised Junction)	✓		
A560 Mottram Old Road Eastern access (Standard Roundabout)	✓		
Supporting Strategic Interventions			
Improvement of M60 Junction 24 Denton Island		✓	
Package of measures along the A560 Stockport Road (including possibility of Ashton-Stockport QBT)		✓	
Necessary Local Mitigations			
Provision of bus services within the allocation		✓	
Provision of a direct pedestrian/cycle access bridge to the vicinity of Hattersley train station		✓	
Walking and cycling measures		✓	
SRN Interventions			
Improvement of M67/A57 Hyde Road/A560 roundabout		✓	

19. Infrastructure Costings

19.1.1 The costs of the necessary infrastructure assessed within this report are subject to further consideration through the GMSF process and are being considered with regards to the overall viability of the necessary supporting requirements.

20. Summary & Conclusion

20.1.1 GMSF allocation Godley Green Garden Village is a development located on what is currently open land adjacent to the A560 Mottram Old Road and the railway between Manchester and Glossop.

20.1.2 Assessments undertaken have considered the potential impact of this development on the surrounding road network, both in isolation and in cumulative impact with allocations Gravel Bank Road / Unity Mill and Land South of Hyde. Both in isolation and cumulatively, the development has the potential to present increased congestion at existing areas of concern (note that Gravel Bank Road / Unity Mill has since been removed from the GMSF, so the modelled cumulative impact will be a slight overestimate). Furthermore, not all of the proposed site buildout is anticipated to be delivered before the end of the current GMSF plan period.

20.1.3 In response to potential concerns regarding congestion at key junctions, mitigation schemes have been considered at the M67/A57 Hyde Road/A560 roundabout (**Mitigation Option 1 in Appendix 3**) and the M60 Junction 24 Denton Island (**Mitigation Option 2 in Appendix 4**). These have been tested, and illustrate significant improvements to traffic flows only across these junctions, both with and without the cumulative impact of the GMSF allocations. These schemes have only been developed in outline detail to inform viability and allocations policy. The proposed improvements at the M67/A57 Hyde Road/A560 roundabout are also only necessary were Highways England's planned scheme for the A57 Mottram Bypass not be delivered.

20.1.4 Based on the information contained within this report, we conclude that the traffic impacts of the site are considered to be less than severe subject to the implementation of mitigation at the identified locations. The "High-Side" modelling work indicates that in general other junctions within the vicinity of the site will either operate within capacity in 2040 with GMSF development, or that in some cases junctions operating over capacity in the future year would not be materially worsened by development traffic.

20.1.5 At this stage, the modelling work is considered to be a 'worst case' scenario as it does not take full account of the extensive opportunities for active travel and public transport improvements in the local area, and that junctions which are considered to operate over capacity in the 2040 model years, both with and without mitigation, are attributed not to the introduction of development trips, but to the cumulative impact of wider growth. The objective of mitigation scenarios is to suitably accommodate the proposed development trips for this allocation, rather than fully addressing wider traffic concerns.

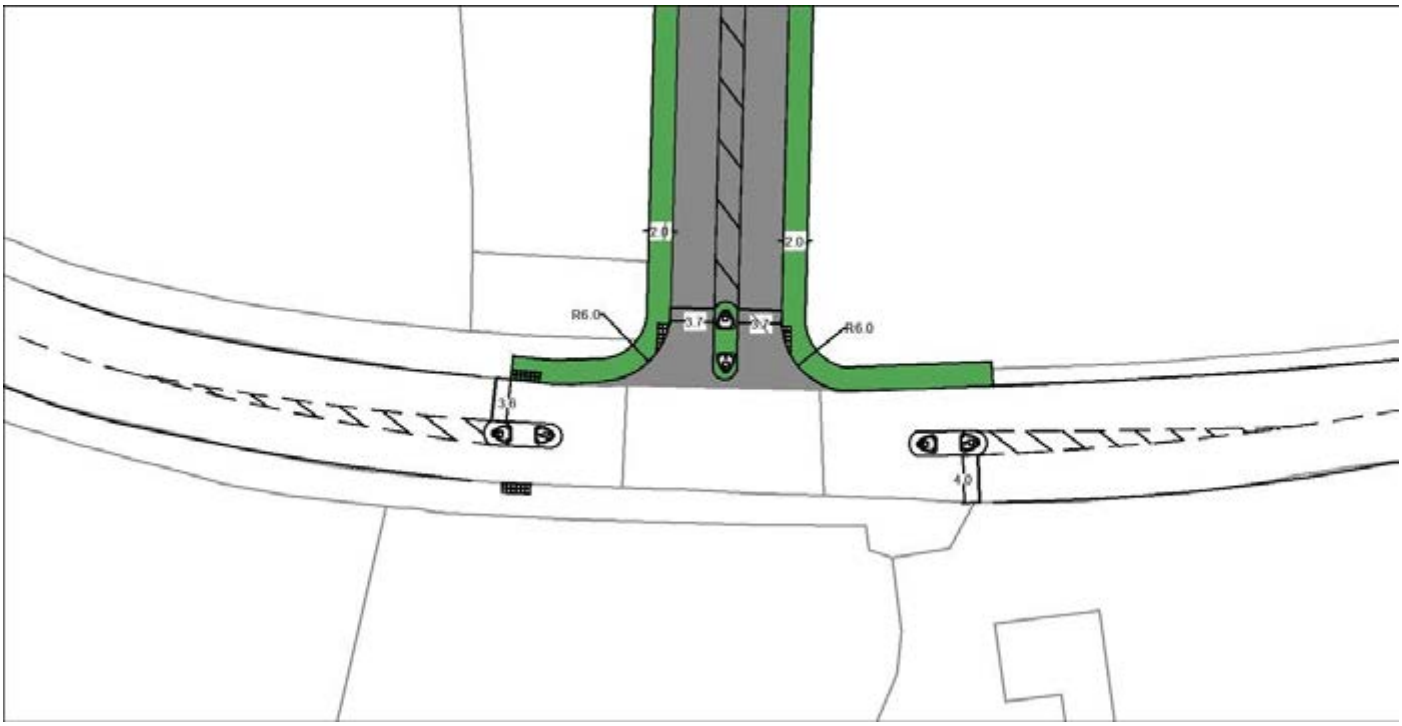
20.1.6 Further detailed work will be necessary to identify the specific interventions required to ensure the network works effectively based on transport network conditions at the time of the planning application. All final design solutions should be consistent with Greater Manchester's best practice Streets for All highway design principles.

20.1.7 However, the mitigation schemes proposed should be considered in conjunction with continued investment into sustainable transport alternatives, including pedestrian, cycling and public transport, in order to reduce the overall number of additional vehicles being introduced onto the local road network. This, combined with the mitigation schemes, could potentially resolve a number of issues raised regarding pollution and safety in relation to the Godley Green Garden Village allocation.

20.1.8 This is an initial indication that the allocation is deliverable and to inform viability, and that further detailed work will be necessary to identify the specific interventions required to ensure the network works effectively based on transport network conditions at the time of the planning application. In summary, this assessment gives an initial indication that the allocation is deliverable, however, significant further work will be needed to verify and refine these findings, particularly in relation to connections to the SRN, as the allocation moves through the planning process. The allocation will also need to be supported by continuing wider transport investment across GM.

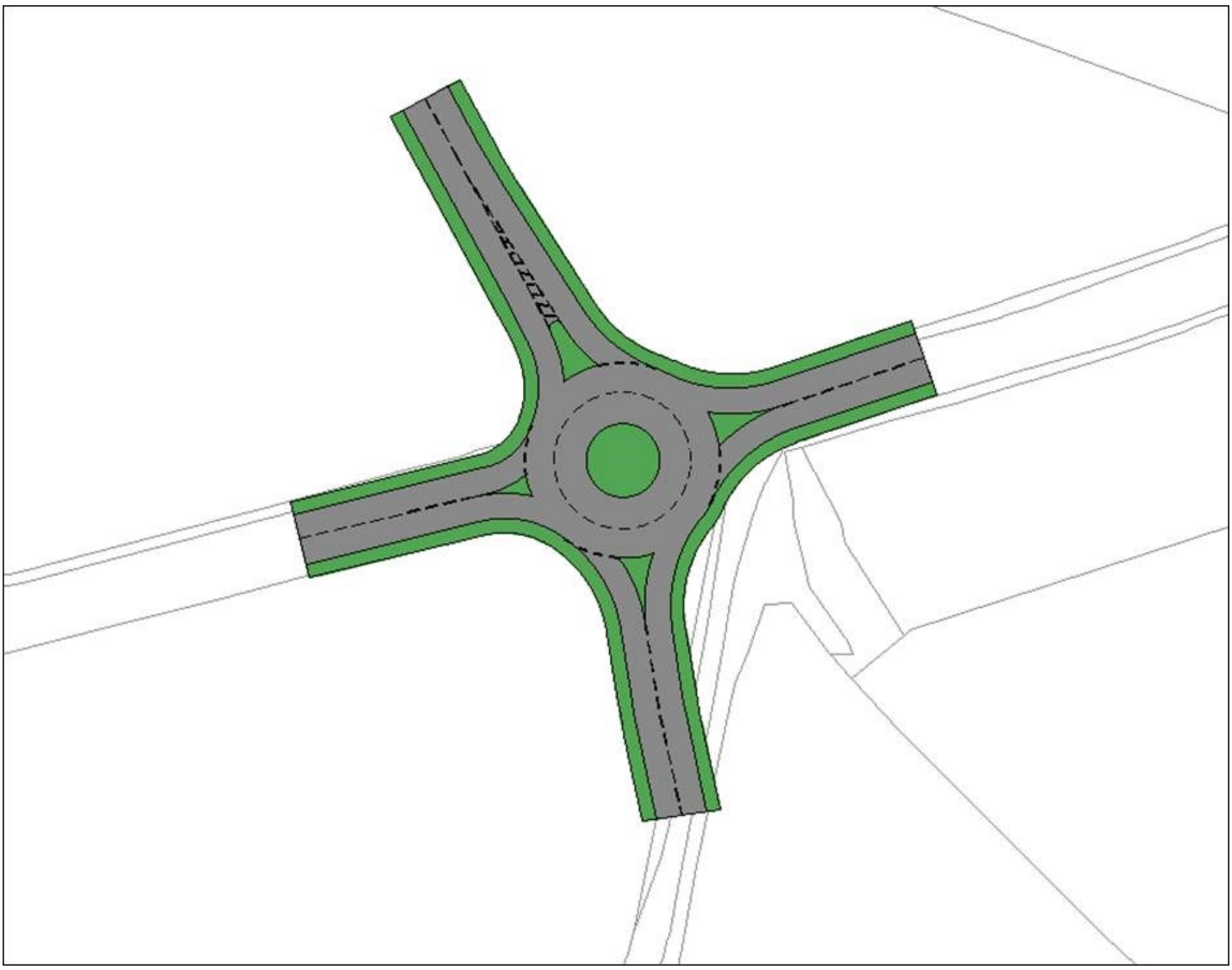
Appendix 1 –Illustrative Site Access Arrangement (Western Access)

[Illustrative/Typical Layout]



Appendix 2 –Illustrative Site Access Arrangement (Eastern Access)

[Illustrative/Typical Layout]



Appendix 3 –Illustrative Mitigation Options For M67/A57 Hyde Road/A560 Roundabout

Option 1 (M67/A57 Hyde Road/A560 Roundabout)

[Illustrative/Typical Layout]

Option 2 – Alternative ‘Back-Up’ Scheme Proposal

[Illustrative/Typical Layout]

GM43/44 - TAMESIDE SITES
INDICATIVE MITIGATION PROPOSAL - M67 J4 ROUNDABOUT

Please note that this design is based on indicative measurements taken from OS map in addition to guidelines from Google Maps.

Appendix 4 –Mitigation Option (M60 Junction 24 Denton Island)

[Illustrative/Typical Layouts]

Figure 4-1 - OPTION 2: Right turn cut through M60 northbound

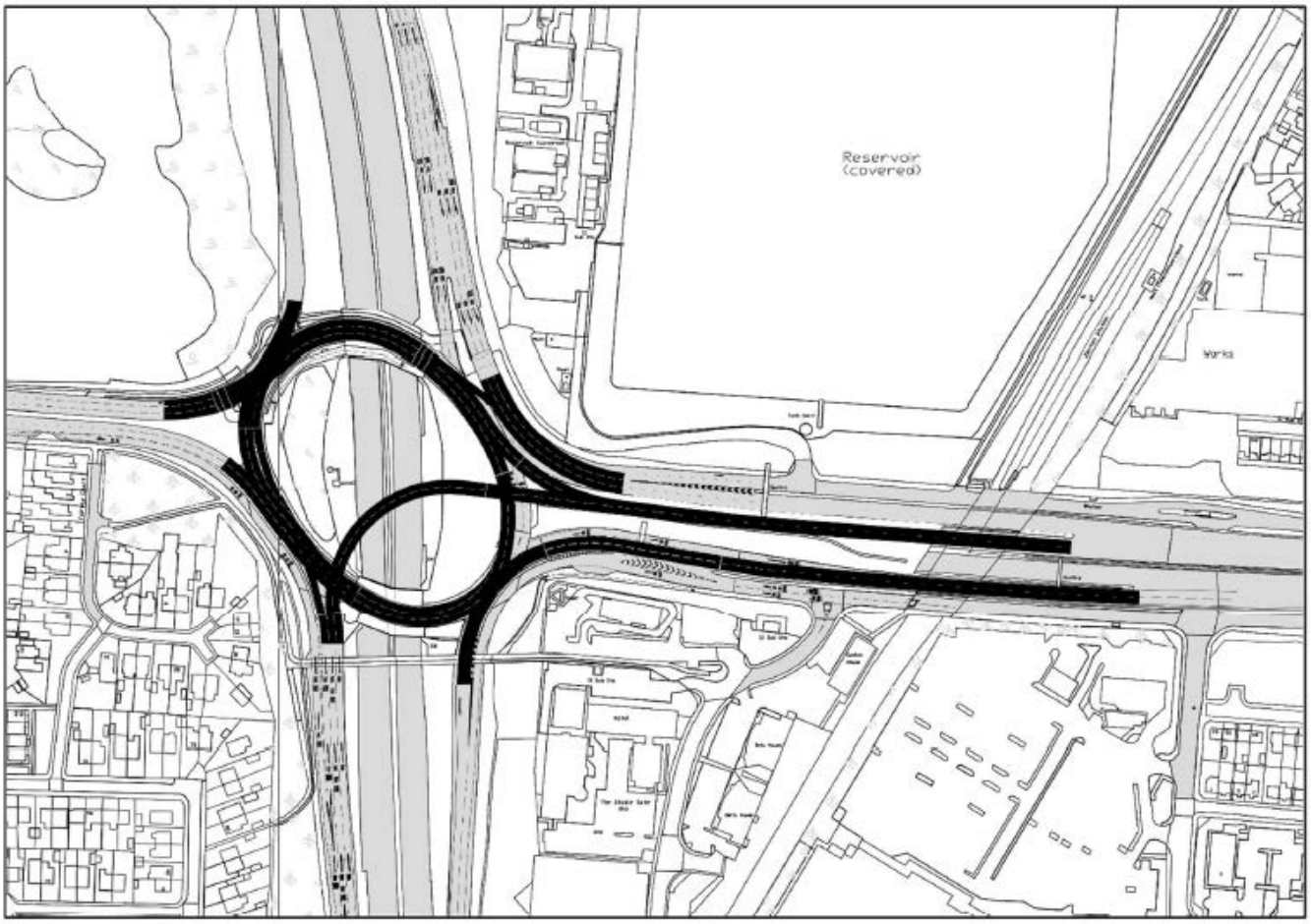
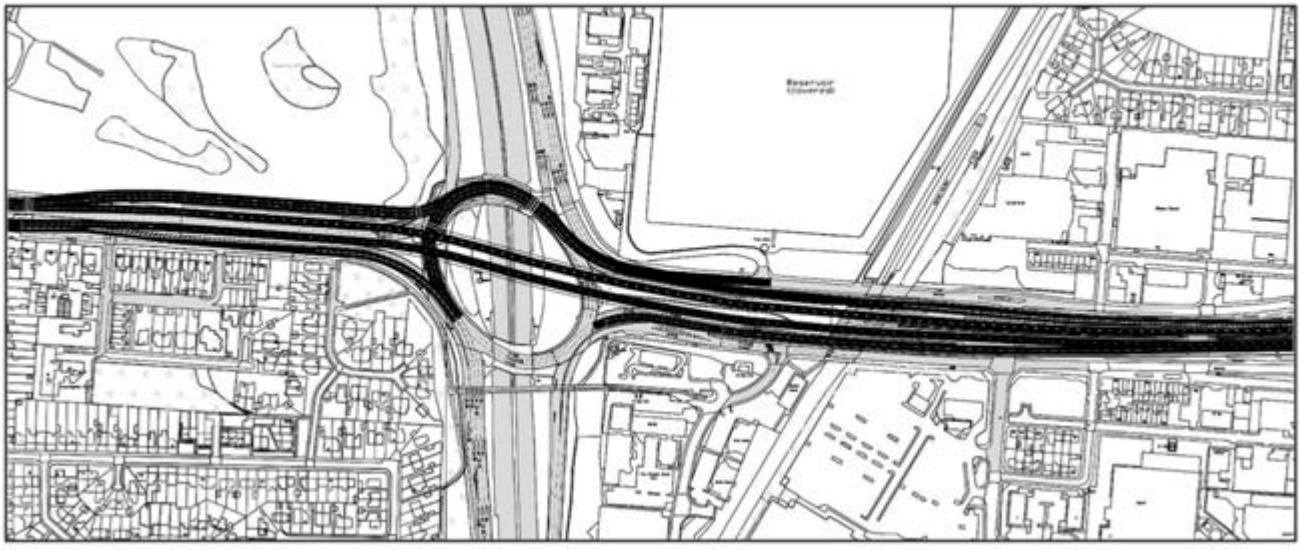


Figure 4-2 – OPTION 4: Right turn grade separated flyover M67 westbound

Figure 4-3 – OPTION 5: A57 to M67 grade separated flyover



Greater Manchester Spatial Framework

Locality Assessment:

Land South of Hyde (GMA40)

Publication Version 2: November 2020

Identification Table	
Client	Tameside Metropolitan Borough Council
Allocation	Land South of Hyde
File name	GMA40 Tameside - Land South of Hyde LA 021020
Reference number	GMA40 (2020 GMSF) previously GMA44 (2019 GMSF)

Approval					
Version	**Role**	**Name**	**Position**	**Date**	**Modifications**
2	Author	Ruairidh MacVeigh	Consultant	10/08/20	Base report
	Checked by	Kelly Chiu	Principal Consultant	20/08/20	
	Approved by	Chris Cox	Associate	10/09/20	
3	Author	C Norfield	TfGM	30/09/20	Consistency edits
	Checked by	S Pateman	TMBC	02/10/20	
	Approved by	G Holland	TMBC	02/10/20	

Table of contents

List of figures

List of tables

Allocation Data	
Allocation Reference No.	GMA40 (2020 GMSF) previously GMA44 (2019 GMSF)
Allocation Name	Land South of Hyde
Authority	Tameside Metropolitan Borough Council
Ward	Hyde Werneth
Allocation Proposal	442 Dwellings
Allocation Timescale	0-5 years ☐ 6-15 years ☒ 16 + years ☐

Glossary

"2025 GMSF Constrained" - is the 2025 forecast case in which the model adjusts the input demand based on how the cost of travel changes from the base year to the future. For example, for a shopping trip undertaken by car which becomes more congested in future, changes might be travel via a different route, mode, location or time of day.

"2040 GMSF Constrained" - as above, but for a 2040 forecast year

"2025 GMSF High-Side"- is the 2025 forecast case in which the model does not adjust the input demand based on how the cost of travel changes. In this scenario congestion does not lead to a reassignment of traffic, and therefore road traffic flow will generally be higher.

"2040 GMSF High-Side" - as above, but for a 2040 forecast year

"2025 Reference Case" - is the Do Minimum scenario which includes delivery of all transport schemes already committed and assumed to be completed by 2025

"2040 Reference Case"- is the Do Minimum scenario which includes delivery of all transport schemes already committed and assumed to be completed by 2040

AADT - Annual average daily traffic, is a measure used in transportation planning to quantify how busy the road is

Bee Network - is a proposal for Greater Manchester to become the very first city-region in the UK to have a fully joined-up cycling and walking network: the most comprehensive in Britain covering 1,800 miles.

Bus Rapid Transit - is a bus-based public transport system designed to improve capacity and reliability relative to a conventional bus system. Typically, a BRT system includes roadways that are dedicated to buses, and gives priority to buses at junctions where buses may interact with other traffic

Existing Land Supply - these are allocations across the county that have been identified by each local planning authority across Greater Manchester and are available for development

Greater Manchester Variable Demand Model (GMVDM) - the multi-modal transport model for Greater Manchester. This transport model provides estimates of future year transport demand as well as the estimates of travel behaviour changes and new patterns that the Plan is likely to produce. These include changes in choices of routes, travel mode, time of travel and changes in journey destinations for some activities such as work and shopping.

Local Road Network (LRN) - All other roads comprise the Local Road Network. The LRN is managed by the local highways authorities

National Trip End Model (NTEM) - is a Department for Transport forecast that ensures that measures of population, jobs and trips made by various mode are consistent across the whole of Great Britain.

Rapid transit services - refers to high frequency, high capacity metro style transport services including Metrolink and Bus Rapid Transit.

Strategic Road Network (SRN) - The Strategic Road Network comprises motorways and trunk roads, the most significant 'A' roads. The SRN is managed by Highways England.

"TfGM" - Transport for Greater Manchester, the Passenger Transport Executive for Greater Manchester

Urban Traffic Control (UTC) - is a specialist form of traffic management that, by coordinating traffic signals in a centralised location, minimises the impact of stop times on the road user.

1. Allocation Location and Overview

1.1.1 This Locality Assessment (LA) is one of a series being prepared for proposed allocations within Greater Manchester in order to confirm the potential impacts on both the local and strategic network, as well as identifying possible forms of mitigation or the promotion of sustainable alternatives to reduce this impact.

1.1.2 The Land South of Hyde allocation is located in the Greater Manchester borough of Tameside, consisting of around 442 dwellings. This allocation is comprised of two land parcels to the north and south of the A560 Stockport Road in Hyde, nearby the suburb of Gee Cross.

1.1.3 For the purposes of the testing the impact of the allocation through the strategic model, a total of 442 dwellings have been assumed to be built out by 2040.

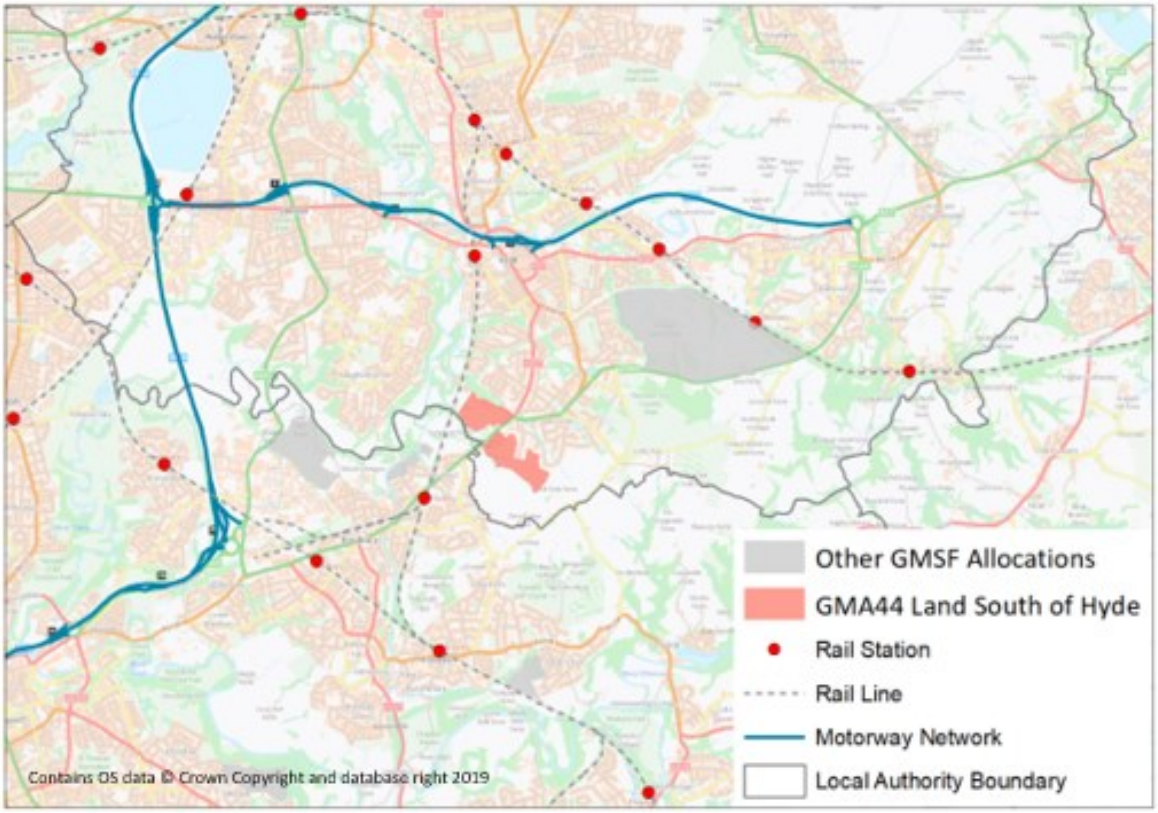
1.1.4 The two land parcels of the allocation are bounded by the A560 Stockport Road. The existing land use of the allocation is predominantly open land, although there are a number of farm buildings present.

1.1.5 No highway infrastructure is present within the developable area of the allocation, however, access arrangements are expected to directly connect with the A560 Stockport Road. The A560 Stockport Road is a single-carriageway urban road with footpaths, streetlighting and a 40mph speed limit.

1.1.6 The allocation lies within the 2011 Census mid-layer super output area of Tameside 030. The scale of residential development (442 homes) is proposed to add an extra 14% of the existing number of households in the area (3,148).

1.1.7 Note that the allocation boundaries shown in **Figure 1 and 2** were correct at the time of writing, for definitive boundary information refer to the GMSF allocation maps. Since the modelling analysis has been undertaken for this report, the site at Gravel Bank Road /Unity Mill has been removed from the GMSF. The reference number of Land South of Hyde has been updated from GMA44 to GMA40 since production of these images.

Figure 1. Allocation Location



1.1.8 An indicative site concept plan is shown below:

Figure 2. Indicative Site Promoter Concept Plan

2. Justification for Allocation Selection

2.1.1 The Site Selection process has been led by the 10 Greater Manchester Authorities, including Tameside Council, and provided the starting point for the investigation of the preferred sites through the Locality Assessments.

2.1.2 Detail of the Site Selection process, including the criteria used to identify the sites, and how this was used to select the most sustainable sites is considered within the GMSF Spatial Strategy and accompanying Topic Papers.

3. Key Issues from Consultation

3.1.1 The Greater Manchester Plan for Homes, Jobs and Environment (Spatial Framework) consultation ran from 14th January to 18th March 2019. The comments made during the 2019 GMSF consultation relate to the following key transport themes; roads, public transport, air quality and active travel:

- Existing levels of congestion on the A560, M67 and M60 during the peak hours, with specific concern being in the centre of Bredbury, the centre of Hyde, and at junctions along the M67 corridor, primarily M60 Junction 24/M67 Junction 1 Denton Island, M67 Junction 3 and M67 Junction 4;
- While there is a frequent bus connection between Hyde and Stockport, rail provision into the centre of Manchester is comparatively poor with only an hourly service from Woodley Station;
- Road safety concerns raised by speeding along the A560 Stockport Road, with traffic calming measures being considered;
- While the A560 provides dedicated cycle lanes, these do not continue along the carriageway into the centre of Hyde, and thus cyclists are required to share with traffic; and
- Beyond the A560, there is poor walking infrastructure to surrounding residential areas in Gee Cross and Woodley – this also includes bridleways and other dedicated cycling infrastructure beyond the A560 itself.

3.1.2 The A560 Stockport Road has current concerns regarding speeding and the need for the implementation of effective traffic calming measures, while sustainable transport alternatives, primarily cycle and pedestrian access into the centre of Hyde and towards Stockport are in need of improvement to increase their appeal to potential residents / employees of GMSF allocations.

3.1.3 A full summary of all consultation responses is available on the GMCA GMSF website.

4. Existing Network Conditions and Allocation Access

4.1 Vehicular Access

4.1.1 The existing vehicular access to the allocation is predominantly via the A560 Stockport Road which forms a single-carriageway urban road with a 40mph speed limit. The A560 Stockport Road provides access to multiple private farms, dwellings and businesses – including the Polebank Hall

care home, an Audi car dealership and the Joshua Bradley wedding venue, pub and restaurant – and is the main corridor between Hyde, Bredbury and Stockport.

4.1.2 The allocation can also presently be accessed from local roads including Bowlacre Road and Apethorn Lane.

4.1.3 Bowlacre Road forms a two-way residential street with full streetlighting and footpaths, but is subject to carriageway width restrictions and on-street parking.

4.1.4 Apethorn Lane is a two-way residential street with full streetlighting, but has inconsistent footpath placement, carriageway width restrictions and notable on-street parking.

4.2 Accidents and Collision Overview

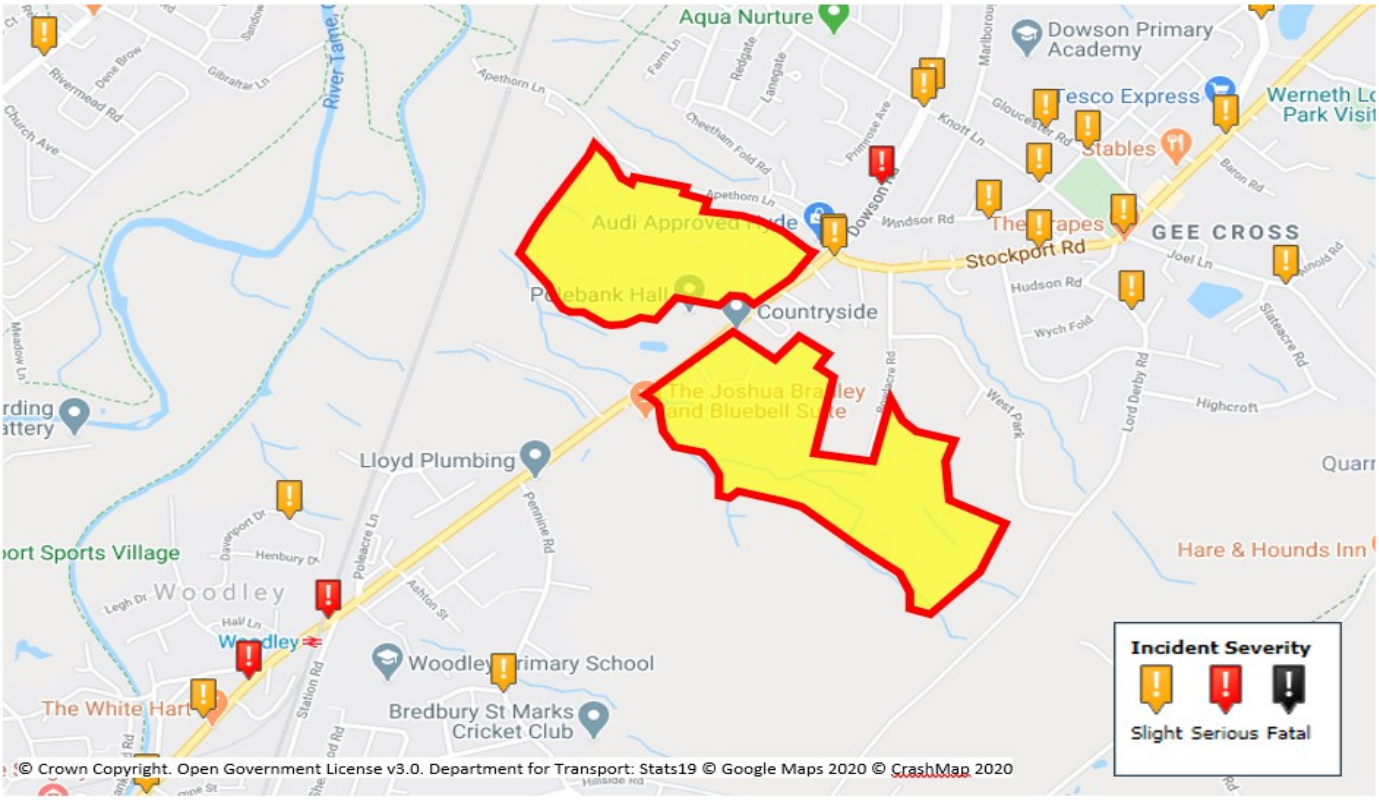
4.2.1 **Table 1** and **Figure 3** show the number of vehicle collisions over the last 5 years in a 1km area surrounding the Land South of Hyde allocation. There have been a total of 19 accidents over the last 5 years with no fatal incidents.

Table 1. Collision data within 1km of Land South of Hyde

Fatal	Serious	Slight	Total
0	3	16	19

4.2.2 Note that the allocation boundaries shown in **Figure 3** were correct at the time of writing, for definitive boundary information refer to the GMSF allocation maps.

Figure 3. Collision data within 1km of Land South of Hyde



5. Proposed Access to the Allocation

5.1.1 Based on the indicative concept plan (**Figure 2**) for the Land South of Hyde allocation, access into the allocation would comprise of primary vehicular access to each parcel directly onto the A560 Stockport Road. Due to the width of the carriageway at this location, these access arrangements will take the form of three-arm priority junctions with ghost-island right turn facilities, as well as integrating suitable cycle and pedestrian crossing facilities. This could be combined with reducing the speed limit on the A560 Stockport Road to 30mph in order to assist in traffic calming on this road.

5.1.2 As the proposed access arrangement to the south allocation is in close proximity to the existing Hilda Road access, indicative access arrangements for the southern parcel have been considered to include the severing of the existing Hilda Road access onto the A560 Stockport Road, and reintegration of access to Hilda Road to be served off the new access into the south parcel (**Appendix 1**). This is not necessarily the only solution that is possible and the retention of a direct access to Hilda road may be explored further at delivery stage. The option considered in this report however demonstrates that there are no fundamental obstacles preventing an access being formed, notwithstanding its close proximity to Hilda Road.

5.1.3 For the primary access to both land parcels, the introduction of a roundabout option had also been considered, whereby both lands could be accessed from the same new junction. While this option has perceived benefits in the provision of traffic calming measures to the A560 Stockport Road, it offers few further benefits over priority junctions. Due to physical constraints upon achieving the necessary geometry, that cannot be resolved at this stage, a roundabout option has not been assumed to be delivered therefore options of priority junctions have been reviewed.

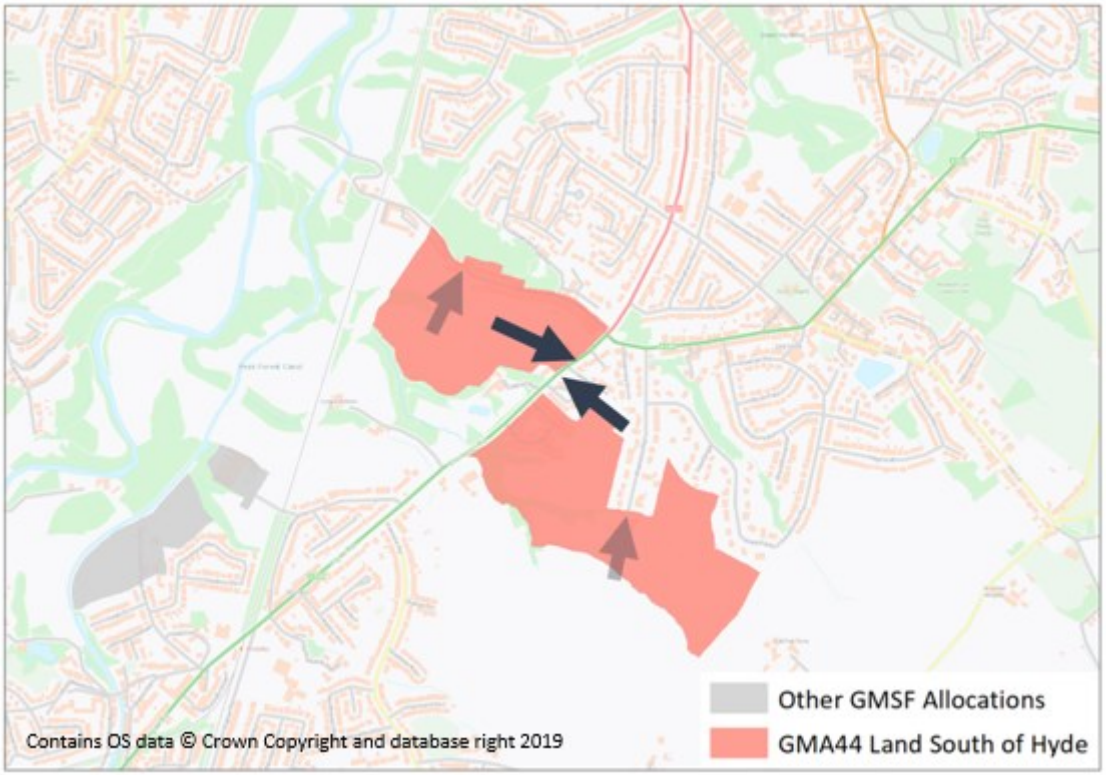
5.1.4 In consideration of the size of the two land parcels and their proposed quantum, secondary access arrangements are necessary, as a minimum for emergency access purposes. For the northern parcel this could be made onto Apethorn Lane at a pre-existing clearing approximately 385m from its junction with the A560 Stockport Road. While this could potentially be used as a secondary access suitable for all vehicles, this would only be possible through the widening of Apethorn Lane, which due to the presence of existing residences would be expensive to implement. Consequently, this access is proposed to form only a walking / cycling and emergency access to the allocation.

5.1.5 For the southern land parcel, secondary access arrangements could be made onto Bowlacre Road. Again, due to the current width restrictions of Bowlacre Road, and the presence of existing dwellings, widening this road for use as an all vehicle secondary access would be expensive to implement. Furthermore, the indicative concept plan from the site promoter, considers that some of the allocation's residences may be accessed via an existing farm track on the southeast boundary of the southern parcel. In this regard, part of this farm track could be upgraded for use as a secondary access, with allocation trips loading onto Lord Derby Road, but this would have to be considered at the detailed planning stage.

5.1.6 The secondary accesses could also provide an alternate routing into each land parcel for all vehicles in the event the primary access is obstructed – these are both illustrated in **Figure 4** as faded arrows.

5.1.7 Note that the allocation boundaries shown in **Figure 4** were correct at the time of writing, for definitive boundary information refer to the GMSF allocation maps. Since the modelling analysis has been undertaken for this report, the site at Gravel Bank Road /Unity Mill has been removed from the GMSF. The reference number of Land South of Hyde has been updated from GMA44 to GMA40 since production of these images.

Figure 4. Indicative Allocation Access Arrangements



6. Multi-modal Accessibility

6.1 Overview

6.1.1 The current accessibility of the Land South of Hyde allocation using Greater Manchester's Accessibility Level model (GMAL) has been identified as comprising areas of level 4 and 5 for accessibility, giving it an average rating. Note that the GMAL rating is based on pre-COVID-19 pandemic figures and therefore may not be representative of the latest transport accessibility rating.

6.1.2 Greater Manchester Accessibility Levels (GMAL) are a detailed and accurate measure of the accessibility of a point to both the conventional public transport network (i.e. bus, Metrolink and rail) and Greater Manchester's Local Link (flexible transport service), taking into account walk access time and service availability. The method is essentially a way of measuring the density of the public transport provision at any location within the Greater Manchester region. The GMAL methodology is derived from the Public Transport Accessibility Level (PTAL) approach developed by the London Borough of Hammersmith and Fulham but modified to consider flexible transport service provision (Local Link) and to reflect local service provision levels (different accessibility levels) within Greater Manchester.

6.1.3 The accessibility index score is categorized into eight levels, 1 to 8, where level 8 represents a high level of accessibility and level 1 a low level of accessibility.

6.2 Walking and Cycling

6.2.1 The main local destinations likely to generate walking and cycling trips are Hyde Town Centre to the northeast of the allocation (2.2km), the local shops at Gee Cross (0.8km), Dowson Primary Academy (0.8km), Gee Cross Holy Trinity Primary School (1.2km) and The Village Nursery & Pre-school - Gee Cross (0.5km).

6.2.2 The A560 Stockport Road provides standard width footpaths both north and south of the allocation, with full lighting and pedestrian crossing islands, as well as cycle lanes south towards Stockport.

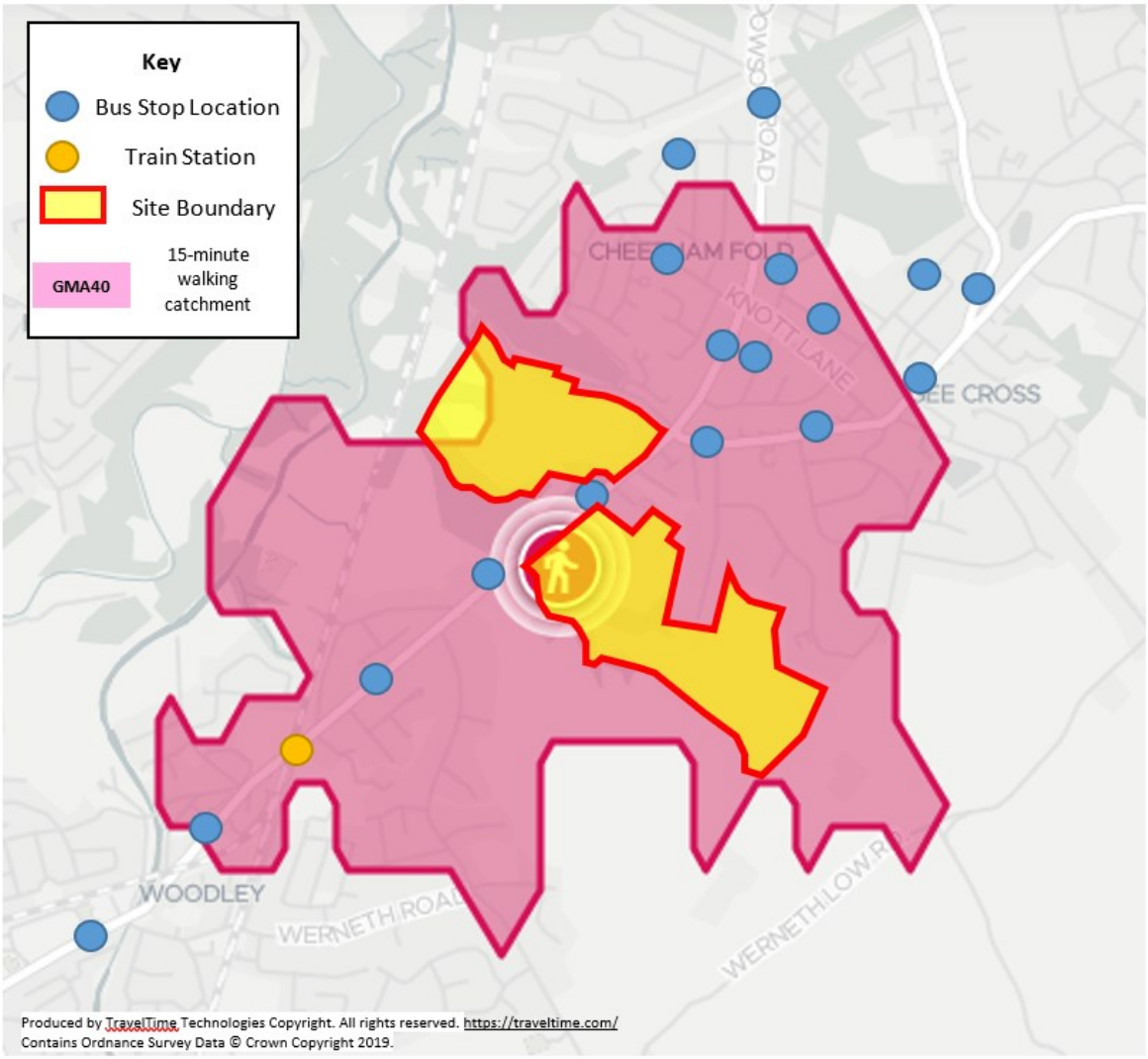
6.2.3 The main concern regarding the cycle lanes on the A560 Stockport Road are on-street parking and carriageway width constraints on the approach to Woodley Station. The bridge across Woodley Station presents serious carriageway width restrictions, and thus only one footway is provided at this point, which is also of a width below Streets for All standards.

6.2.4 There is an existing Public Right of Way (PRoW) that runs west to east from the A560 Stockport Road to Bowlacre Road and Lord Derby Road, which provides an off-road walking route towards Werneth Low – the surface conditions of this footpath are of poor quality and therefore require positive upgrading to make it suitable for regular use by allocation users.

6.2.5 **Figure 5** shows the current level of accessibility for the Land South of Hyde allocation using the Travel Time Platform online database, which illustrates the 15 minute walking time from the proposed access via the local road network and any available pedestrian through-routes.

6.2.6 Note that the allocation boundaries shown in **Figure 5** were correct at the time of writing, for definitive boundary information refer to the GMSF allocation maps. The reference number of Land South of Hyde has been updated from GMA44 to GMA40 since production of these images.

Figure 5. 15 minute walking catchment with public transport provision



6.2.7 National Cycle Network 62 (NCN62) runs within close proximity of the northern parcel – opposite the railway – linking Stockport and Reddish with Hyde and Gamesley. While this offers an attractive route away from traffic, the current surface conditions of the route itself, especially between Gibraltar Lane and Apethorn Lane (north of the Land South of Hyde allocation), require improvement, as they are currently comprised of gravel that can become difficult and unsafe to negotiate in damp weather.

6.2.8 The allocation benefits from sitting adjacent to a proposed section of the Bee Network, which intends to improve cycling and walking facilities and infrastructure along primary routes across Greater Manchester. With regard to the Land South of Hyde allocation, a section of the Bee Network passes to the north of the northern parcel, and should therefore be integrated into this allocation so as to provide suitable pedestrian and cycle access towards both Hyde and Stockport. Furthermore, the internal walking network for the allocation, as well as connecting PRoW, should

be upgraded to a standard that reflects those being implemented by the Bee Network in order to suitably accommodate both pedestrian and cycle users.

6.2.9 There are local bus stops situated along the A560 Stockport Road which are all within a walkable distance. The allocation has been identified as potentially benefiting from the Ashton-Stockport Quality Bus Transit (QBT) corridor, which is anticipated to see a general improvement to service reliability and facilities such as shelters along its route (yet to be determined), as well as Real Time Information (RTI), although RTI may be delivered as an online service through phone apps or online browsers rather than information presented at the stops themselves.

6.3 Public Transport

6.3.1 The A560 Stockport Road, as a main arterial route between Hyde and Stockport, is served by frequent bus routes operated by Stagecoach, which includes the following:

- Route 330: route Stockport to Ashton-under-Lyne (average frequency: 10 minutes)

6.3.2 The two former Tameside College bus stops on the A560 Stockport Road are located immediately adjacent to the proposed accesses onto the A560 Stockport Road and are easily accessible. This stop provides peak time services, via the 330, to Ashton-under-Lyne and Stockport every 10 minutes.

6.3.3 The allocation also benefits from the presence of Woodley railway station located less than 1km west of both land parcels, which provides half-hourly services to Manchester Piccadilly and Rose Hill Marple (Mondays to Saturdays).

6.3.4 **Table 2** identifies the **current** accessibility of public transport for the future residents of the Land South of Hyde allocation, exploring the proximity, and the frequency of travel during peak hours – the distances to each of these modes are based on the shortest available walking route rather than their direct distance from the allocation itself.

Table 2. Accessibility of and proximity to Public Transport

Mode	Nearest Stop/ Station	Distance (km)	Peak Hour Frequency (Mins)
Bus	Former Tameside College	0.2	10
Rail	Woodley	0.8	30

6.4 Proposed

6.4.1 In consideration of the provision of existing pedestrian and cycling infrastructure in the adjacent residential streets, our main recommendation in this regard is that a permeable network for pedestrian and cyclist priority within the allocation is required, including sufficient secure cycle parking for all dwellings.

6.4.2 Given the location of the allocation and its close proximity to the Woodley and Gee Cross local areas, the internal walking and cycle network should be linked to high quality routes connecting through to these areas, including the proposed Bee Network. Existing PRoWs that either pass near or cross the proposed allocation should be positively upgraded, with both PRoWs and the internal pedestrian/cycle network of the allocation being constructed to the standards set out by the Bee Network.

6.4.3 Furthermore, as a section of the Bee Network passes immediately adjacent to the northern parcel, which proposes improvements to what is currently NCN62 between Reddish and Hyde. Pedestrian and cycle access to and from the allocation should be integrated into this network in order to allow for improved cycle and pedestrian routes into the centre of Hyde.

6.4.4 Regarding the existing cycle lanes on the A560 Stockport Road, considerations are currently being made by Tameside Council as to the extension of cycle lanes as part of works related to the improvement of sustainable transport alternatives in the wake of the COVID-19 pandemic. Contributions as to the extension of cycle lanes from the boundary of Hyde to the boundary of Stockport could be included as a contribution from the Land South of Hyde developer in order to make these works permanent.

6.4.5 As stated in **Section 5**, as part of the access arrangements, traffic calming measures could be implemented through the reduction of the speed limit on the A560 Stockport Road from 40mph to 30mph, thereby providing a safer on-street cycling route.

6.4.6 With regard to public transport, the Land South of Hyde allocation has been identified as potentially benefiting from the Ashton-Stockport Quality Bus Transit (QBT) corridor, the alignment of which is still under development. In the absence of the QBT running along the A560 Stockport Road, it is recommended that a package of measures to support bus access to the allocation is required. This includes, the improvement of bus stops to provide additional waiting space necessary to accommodate new journeys from the allocation and the provision of Bee Network standard pedestrian crossing points adjacent to the allocation to provide access to the bus stops on either side of the road.

7. Parking

7.1.1 It is not necessary to consider in detail the parking standards for residential units relevant to the allocation at this stage of assessment as there are no particular constraints on achieving likely minimum parking standards that may be in application at the time the allocation is brought forward. Accommodation of Electric Vehicle (EV) parking, while an important factor in developing more efficient transport connections for the allocation, should be considered at the detailed design stage, potentially as an integration of specific house design.

7.1.2 A broad assumption has been made that a maximum of 2 spaces per dwelling is likely to be proportionate however other alternative local policy requirements are likely to be equally deliverable and can be considered at the planning application stage.

7.1.3 National Planning Policy Framework (NPPF) is clear that such standards should only be set where there is a clear and compelling justification that they are necessary. This may be either for managing the local road network conditions, or for optimising the density of development in city and town centres and other locations that are well served by public transport (in accordance with chapter 11 of NPPF).

8. Allocation Trip Generation and Distribution

8.1.1 Future trip generation to/from the allocation (i.e. how many people and vehicles will enter or leave the allocation) was estimated by applying a set of GM-wide trip rates to the agreed quantum for each allocation. The distribution of trips (i.e. where they are going to or coming from) was derived by selecting nearby zones with similar land use characteristics as a proxy and using the existing distribution in the model.

Table 3. Development Quantum used in modelling

Residential	Houses	73	274
Residential	Apartments	44	168
Total		117	442

Table 4. Allocation Traffic Generation *

Year	AM Peak Hour 0800 0900 Departures	AM Peak Hour 0800 0900 Arrivals	PM Peak Hour 1700 1800 Departures	PM Peak Hour 1700 1800 Arrivals
2025 GMSF Constrained	34	10	18	39
2025 GMSF High-Side	35	13	21	39
2040 GMSF Constrained	111	33	62	132
2040 GMSF High-Side	131	49	80	132

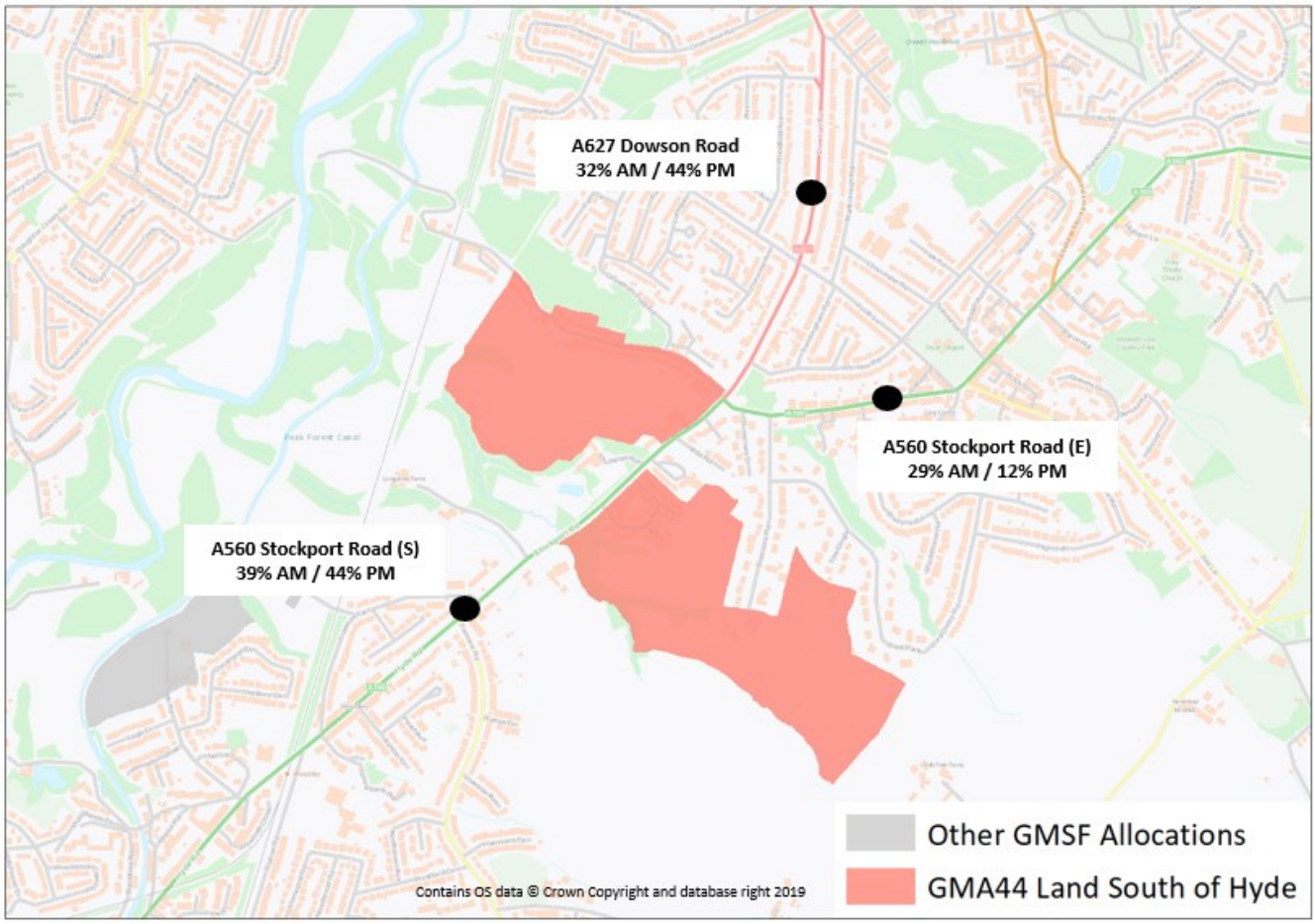
*Units are in PCU (passenger car units/hr)

Table 5. Allocation Traffic Distribution, 2040 GMSF High-Side (Origin/Destination Combined)

Route	AM Peak Hour 0800 0900	PM Peak Hour 1700 1800
A627 Dowson Road	32%	44%
A560 Stockport Road (East)	29%	12%
A560 Stockport Road (South)	39%	44%

8.1.2 Note that the allocation boundaries shown in **Figure 6** were correct at the time of writing, for definitive boundary information refer to the GMSF allocation maps. Since the modelling analysis has been undertaken for this report, the site at Gravel Bank Road /Unity Mill has been removed from the GMSF. The reference number of Land South of Hyde has been updated from GMA44 to GMA40 since production of these images.

Figure 6. Allocation Traffic Distribution, 2040 GMSF High-Side (Origin/Destination Combined)



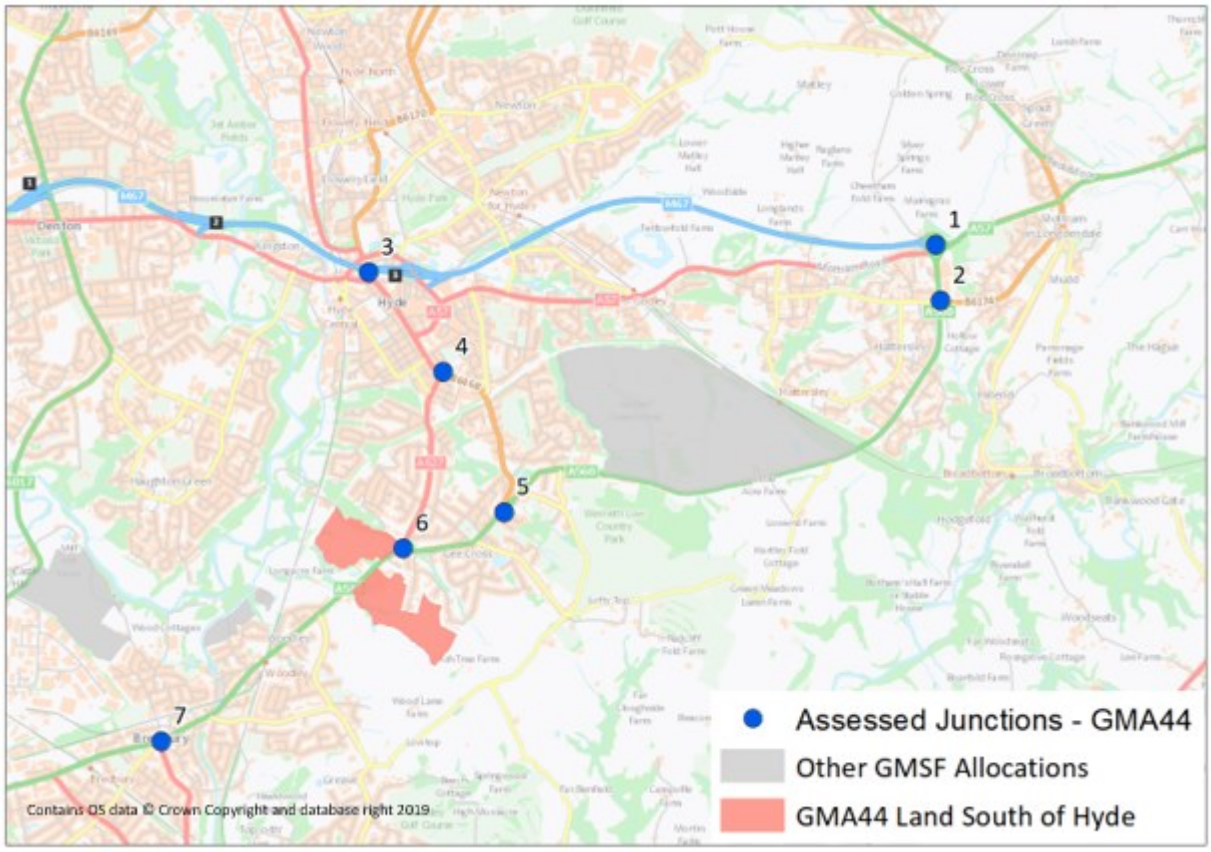
9. Existing Highway Network Review

9.1 Existing Network

9.1.1 The A560 Stockport Road runs north to south between the two land parcels of the of the Land South of Hyde allocation, connecting Hyde with Stockport. SYSTRA identified a number of junctions in proximity to the allocation where additional traffic could have an impact on their operation based on existing conditions.

1. M67/A57 Hyde Road/A560 roundabout
2. A560 Stockport Road/ Ashworth Lane/ Underwood Road
3. M67 Junction 3 / Clark Way
4. Market Street/ A627 Dowson Road
5. A560 Mottram Old Road/ B6468 Stockport Road
6. A560 Stockport Road/ A627 Dowson Road
7. A560 Stockport Road E/ A627 George Lane/ Redhouse Lane

Figure 7. Assessed Junctions



9.1.2 Note that the allocation boundaries shown in **Figure 7** were correct at the time of writing, for definitive boundary information refer to the GMSF allocation maps. Since the modelling analysis has been undertaken for this report, the site at Gravel Bank Road /Unity Mill has been removed from the GMSF. The reference number of Land South of Hyde has been updated from GMA44 to GMA40 since production of these images.

10. Treatment of Cumulative Impacts

10.1.1 The constrained and high side model runs take account of traffic associated with all GMSF allocations. Within a 2km buffer of the Land South of Hyde allocation are the Godley Green Garden Village, Bredbury Park Industrial Estate Expansion and the Gravel Bank Road / Unity Mill allocations. Therefore, at the local level, the transport impacts of the allocation need to be considered cumulatively with the GMSF allocations identified above. Note that Gravel Bank Road / Unity Mill has since been removed from the GMSF, so the modelled cumulative impact will be slight overestimate. The impact of this should however be minimal since Gravel Bank Road / Unity Mill was not a large allocation.

10.1.2 The Land South of Hyde allocation is forecast to generate approximately 180 to 212 two-way vehicle trips during the morning and evening peak hours. The Bredbury Park Industrial Estate Expansion is expected to generate approximately 558 to 352 two-way vehicle trips during the morning and evening peak hours, and the Gravel Bank Road / Unity Mill is expected to generate approximately 105 to 122 two-way vehicle trips during the morning and evening peak hours. Note that Gravel Bank Road / Unity Mill has since been removed from the GMSF, so the modelled cumulative impact will be a slight overestimate. The impact of this should however be minimal since Gravel Bank Road / Unity Mill was not a large allocation.

10.1.3 Within the GMSF plan period, the Godley Green Garden Village allocation is expected to deliver 1,188 dwellings, which will generate approximately 483 to 580 two-way vehicle trips during the morning and evening peak hours, while beyond the plan period, the allocation is proposed to deliver in totality 2,350 dwellings and generate approximately 529 to 1,057 two-way vehicle trips during the morning and evening peak hours. The combined impact of these trips could have a more significant impact on the network than that of the allocation by itself; hence the combined impact has been assessed.

11. Allocation Access Assessment

11.1.1 This access arrangement has been developed to illustrate that there is a practical option for access in this location and to develop indicative cost estimations. It is assumed that a detailed design consistent with Greater Manchester's best practice Streets for All highway design principles will be required at the more detailed planning application stage.

11.1.2 Due to the role of the proposed highway network within the allocation, which will have a role in local traffic distribution, the full traffic impact of all GMSF flows are recorded below, and not just those pertaining to the allocation.

Table 6. Allocation Access Junction Capacity Analysis

Junction	Reference Case AM	Reference Case PM	GMSF High AM	GMSF High PM	Allocation Flows AM	Allocation Flows PM
A560 Stockport Road (north access)	N/A	N/A	17%	42%	111	137
A560 Stockport Road (south access) + Realignment of Hilda Lane access	N/A	N/A	11%	15%	68	74

11.1.3 It should be noted that the above allocation access arrangements are indicative and therefore the junction illustrated in **Appendix 1** may be subject to change at the detailed planning stage.

12. Impact of Allocation Before Mitigation on the Local Road Network

12.1.1 This section looks at the impact on the network at the junctions highlighted in **Section 9**. Signalised junctions were assessed in detail using industry-standard modelling software LINSIG version 3. Traffic signal information was obtained from TfGM Urban Traffic Control (UTC) in order to ensure that the local junction models reflected (as far as possible), the operation of the junctions on the ground. Junctions 9 software was used to assess priority and roundabout junctions.

12.1.2 In order to understand a worst case impact of the GMSF, the 'high side' runs from the GMVDM were used to derive 'with GMSF' allocation flows for 2040. These flows were then entered into junction based models for the junctions identified in **Section 9**. Flows from a 2040 reference case scenario (including the existing land supply identified in the respective local authorities) were also extracted to provide a comparison between the operation of those junctions in the 2040 reference case and the 2040 'with GMSF' development scenarios.

12.1.3 The 'with GMSF' scenario has been assessed against a Reference Case which assumes background growth and includes the housing and employment commitments from the local authorities. These assessments were then used to identify the junctions where there was considered to be a substantial impact, relative to the operation of the junction in the 2040 reference case, and hence where mitigation was considered to be required in order to bring GMSF allocations forward.

12.1.4 For the purposes of the GMSF, where mitigation is required, this should mitigate the impacts back to the reference case scenario. It should be noted that mitigating back to this level of impact may not mean that the junction operates within capacity by 2040, and any subsequent mitigation schemes developed based on impacts caused through development trips from this allocation are only designed to mitigate the impact of GMSF traffic only, and are not intended to solve pre-existing congestion on the local network.

12.1.5 **Table 7** below provides a comparison between the operation of the in scope local road network junctions in the 2040 reference case and the 2040 'high side' scenarios, as well as the allocation flows through each respective junction. The table shows a comparison between the ratio of flow to capacity on the worst performing arm at each junction as well as the total allocation flows through the junction.

12.1.6 For reference, a figure of between 85% and 99% illustrates that the junction is nearing its operational capacity, and a figure of 100% or over illustrates that flows exceed the operational capacity at the junction. A summary of the 2025 local junction impacts are provided in **Appendix 3**.

12.1.7 In addition to these assessments, following a desk-based review of both the isolated and cumulative impact of the Land South of Hyde allocation and the Godley Green Garden Village, Bredbury Park Industrial Estate Expansion and Gravel Bank Road / Unity Mill allocations by 2040 (as outlined in **Section 10**), it has been noted that Land South of Hyde traffic has some cumulative implications for congestion caused by infrastructure capacity limitations on the A560 Stockport Road in the centre of Bredbury, Stockport. This location experiences queuing that backs up to several major junctions along the A560 corridor, including the A560 Stockport Road / A6017 Lower Bents Lane junction. Note that the allocation at Gravel Bank Road / Unity Mill has since been removed from the GMSF, so the modelled cumulative impact will be slight overestimate.

Table 7. Results of 2040 Local Junction Capacity Analysis Before Mitigation

Junction	Reference Case AM	Reference Case PM	GMSF High AM	GMSF High PM	Allocation Flows AM	Allocation Flows PM
2. A560 Stockport Road / Ashworth Lane / Underwood Road	65%	69%	67%	70%	8	8
4. Market Street / A627 Dowson Road	71%	68%	72%	75%	53	86
5. A560 Mottram Old Road / B6468 Stockport Road	10%	23%	14%	24%	31	26
6. A560 Stockport Road / A627 Dowson Road	43%	47%	44%	54%	105	112
7. A560 Stockport Road E / A627 George Lane / Redhouse Lane	67%	71%	67%	73%	70	96

13. Transport Interventions Tested on the Local Road Network

13.1.1 The volume of traffic arising from the development has been considered unlikely to have a substantial impact on local junctions operation by 2040 – notwithstanding the various operating context in each scenario (as outlined in **Section 12**).

13.1.2 For the A560 Stockport Road, in the centre of Bredbury, traffic issues have been identified as arising from a number of factors, including its urban location, which is constrained by surrounding structures and land use, together with traffic concerns being caused by junctions beyond the potential influence of allocation trips related to the Godley Green Garden Village and Land South of Hyde allocations. The proportional influence of Land South of Hyde traffic in this location is low as an overall percentage of traffic and mitigation of the limited additional flows arising from Godley Green Garden Village and Land South of Hyde traffic have not been identified to be proportionate, given infrastructural challenges in this location to increase capacity along this

corridor would be difficult and have not been identified as necessarily deliverable given the urban location.

13.1.3 Consequently, improvement strategies for the A560 Stockport Road in the centre of Bredbury should continue to be discussed in conjunction with Stockport Council in association with those that have been developed in connection with the Bredbury Park Industrial Estate Expansion and the Gravel Bank Road / Unity Mill allocations (note that Gravel Bank Road / Unity Mill has since been removed from the GMSF), which consider the potential impact of the Godley Green Garden Village and Land South of Hyde allocations. This should be subject to further cross-boundary discussions between Tameside and Stockport Councils.

13.1.4 In consideration of the provision of existing pedestrian and cycling infrastructure in the adjacent residential streets, our main recommendation in this regard is that a permeable network for pedestrian and cyclist priority within the allocation is required, including sufficient secure cycle parking for all dwellings.

14. Impact of interventions on the Local Road Network

14.1.1 In light of the above conclusions no specific local network interventions were tested.

15. Impact and Mitigation on the Strategic Road Network

15.1 Overview

15.1.1 This chapter covers those impacts where traffic generated by the GMSF allocations meets the Strategic Road Network (SRN). Junctions at the interface between the Local Road Network (LRN) and the SRN have been assessed using a similar approach to that described in the preceding chapters. Wider issues relating to the SRN mainline are being assessed separately as described below.

15.1.2 SYSTRA is currently consulting with Highways England on behalf of TfGM and the Combined Authority in relation to the wider impacts of the GMSF allocations on the SRN.

15.1.3 This consultation is ongoing and it is expected that it will allow Highways England to gain a strategic understanding of where there is an interaction between network stress points and GMSF allocation demand which will facilitate further discussion and transfer of information between

TfGM and Highways England (yet to be defined) in reaching agreement and/or common ground relating to the acceptability of GMSF allocations in advance of Examination in Public (EiP).

15.2 Impact of Allocation Before Mitigation on the Strategic Road Network

15.2.1 Based on the proposed buildout of the allocation, and its distance from the nearest section of the SRN, the Land South of Hyde allocation has been considered – with the cumulative impacts of the Godley Green Garden Village, Bredbury Park Industrial Estate Expansion and the Gravel Bank Road / Unity Mill allocations – likely to result in material implications on the operation of the SRN that will require mitigation measures. Note that that allocation at Gravel Bank Road / Unity Mill has since been removed from the GMSF, so the modelled cumulative impact will be a slight overestimate. The impact of this should however be minimal since Gravel Bank Road / Unity Mill was not a large allocation.

Table 8. Strategic Junction Capacity Analysis Before Mitigation

Junction	Reference Case AM	Reference Case PM	GMSF High AM	GMSF High PM	Allocation Flows AM	Allocation Flows PM
1. M67 / A57 Hyde Road / A560 roundabout	172%	126%	172%	130%	8	8
3. M67 Junction 3 / Clark Way	79%	90%	80%	90%	43	59

15.3 Specific SRN Junction Mitigation Measures

15.3.1 The A57 has been noted by Highways England for its significant levels of congestion through the centre of Mottram, and thus they have proposed the introduction of a new bypass that will run between the existing M67/A57 Hyde Road / A560 roundabout (M67 Junction 4) to Woolley Lane at Woolley Bridge. To accommodate this new bypass, the M67/A57 Hyde Road / A560 roundabout is to be modified extensively to include widening of the northern circulatory and the introduction of signalised control on the M67 and bypass arms of the junction, as well as changes to the lane designations that favour the highest turning movements between the M67, the proposed Mottram Bypass, and the A560 Stockport Road.

15.3.2 Notwithstanding the status of this planned improvement it was requested by Highways England that the SRN needs of the Land South of Hyde allocation be considered without a reliance being placed on the delivery of this scheme. This avoids a dependency being placed of the scheme to support the allocation. Consequently, a reduced scheme for the M67/A57 roundabout has been considered in this Locality Assessment as a contingency scheme that would be capable of mitigating the developments traffic impacts. This is only required if the Highways England scheme were not to go ahead.

15.3.3 A version of this roundabout improvement scheme is included in **Appendix 2** which follows the general principals of the improvements otherwise planned to be introduced by Highways England at the roundabout. The scheme is intended to be future compatible with the bypass scheme in such a way that were it delivered first then it would not introduce significant unnecessary or short-lived improvements were the Highways England scheme to be delivered later.

15.3.4 The results of this mitigation are supplied in **Table 9** below.

15.4 Impact of Interventions on the SRN

Table 9. Strategic Junction Capacity Analysis After Mitigation

Junction	Reference Case AM	Reference Case PM	GMSF High AM	GMSF High PM	Allocation Flows AM	Allocation Flows PM
1. M67/A57 Hyde Road/A560 roundabout	45%	65%	45%	62%	8	8

16. Final List of Interventions

16.1.1 It should be noted that the interventions listed in **Table 10** may not be the definitive solution to addressing the impact of the allocation, but have been developed to demonstrate that a solution is possible at the location. The exact form of the required mitigation will be confirmed and its detailed design developed as part of the planning application process, should the allocation within GMSF be approved. Site promoters will need to develop detailed design solutions – consistent with Greater Manchester's best practice Streets for All highway design principles – at the planning application stage.

16.1.2 In addition to the interventions identified in this report, it will be necessary for investment in the wider transport network to continue in order to deliver the aspirations of the 2040 Transport Strategy and enable all new development to be supported by a robust and sustainable transport network.

Table 10. Final List of Interventions

Mitigation	Description
Allocation Access	
A560 Stockport Road (north access)	Priority junction assumed
A560 Stockport Road (south access) + Realignment of Hilda Lane access	Priority junction assumed
Supporting Strategic Interventions	
Package of measures along the A560 Stockport Road (including possibility of Ashton-Stockport QBT)	Intervention required to examine the A560 corridor and develop a multi-modal solution. The Ashton-Stockport QBT route is as yet undefined and could make up part of this package of measures.
Improvement of M67/A57 Hyde Road/A560 roundabout	An indicative scheme was developed as a potential improvement scheme at this location. See Appendix **2**
Necessary Local Mitigations	
Walking and cycling measures	Assumed full permeability of cycle and pedestrian access, as well as direct connections to PRoW either bounding or near the allocation and improvement of walking/cycling facilities on A560 Stockport Road. All pedestrian and cycle networks internal to the allocation, as well as connecting PRoW, should be built or upgraded to the standards outlined in the Bee Network, as well as providing connections to the nearest section of the Bee Network
Bus improvements along the A560 Stockport Road adjacent to the allocation	Measures include: Bee Network standard pedestrian crossing adjacent to the development + associated footway works, build out of 2x bus stops to provide additional waiting space, necessary to accommodate new journeys from site, and removal of inset bus stop.

Supporting Strategic Interventions

Package of measures along the A560 Stockport Road

16.1.3 As explained in **Section 10** Land South of Hyde has some cumulative implications for congestion caused by infrastructure capacity limitations on the A560 Stockport Road in the centre of Bredbury, Stockport. Given infrastructural challenges in this location, to increase capacity along this corridor would be difficult and has not been identified as necessarily deliverable given the urban location.

16.1.4 Improvement strategies for the A560 corridor should be investigated in collaboration with Stockport Council in order to develop a multi-modal solution. Currently, the alignment of the proposed Ashton-Stockport QBT route is as yet undefined and could make up part of this package of measures.

M67/A57 Hyde Road/A560 roundabout

16.1.5 The M67/A57 Hyde Road/A560 roundabout junction is a five-arm roundabout operating above its operational capacity in both the Reference Case and 'with GMSF scenarios'. In its current arrangement, the majority of flows are between the M67 western arm and A57 eastern arm, as this forms part of a through east-west corridor between Manchester and Sheffield via the Pennines. Matters of congestion are compounded by less than suitable road infrastructure through the villages of Mottram and Hollingworth. In light of this, as both the M67 and A57 (east) form part of the SRN, mitigation measures have been considered at this junction to increase capacity.

16.1.6 Highways England is committed to deliver an improvement to this junction as part of the delivery of the Mottram Moor Link Road – a dual carriageway link from the M67 terminal roundabout to a junction at A57(T). Should, for any unforeseen reason this scheme not proceed, then a scaled down, proportionate improvement has been identified that would deliver improvements to the roundabout circulatory and M67 western arm that would be based upon Highways England's scheme. This is not required for the Land South of Hyde allocation which does not, alone, result in a significant volume of traffic to the junction but has been considered as required with regards the cumulative impacts of GMSF allocations as a whole, notably and in relation to the Godley Green Garden Village allocation.

Necessary Local Mitigations

Walking and cycling measures

16.1.7 In order to promote and encourage sustainable transport modes, as well as providing safe and efficient accessibility for non-vehicular traffic, the allocation is to both provide ease of access for pedestrian and cyclist traffic into and out of the allocation, as well as connecting and improving Public Rights of Way that either directly connect or pass near the proposed allocation . This is to include upgrading of the local PRoW routes to meet the standards of the proposed Bee Network and, wherever possible, connect directly to sections of the Bee Network.

16.1.8 Furthermore, pedestrian and cycle facilities in the areas surrounding the Land South of Hyde allocation should be improved wherever possible in order to allow for safe accessibility by non-vehicular users to all parts of the allocation, but also the adjacent residential, employment and retail areas.

16.1.9 The introduction of this mitigation scheme is expected to answer concerns regarding the suitability of the A560 Stockport Road, in its current arrangement, to provide safe access for non-vehicular traffic due to it being narrow with no footpaths. Promotion of sustainable transport alternatives will also help to answer concerns regarding increased pollution from added vehicular trips on the local road network.

Bus improvements along the A560 Stockport Road adjacent to the allocation

16.1.10 In order to encourage future residents of Land South of Hyde to use sustainable transport modes there is a need to provide a package of measures to support and improve access to the allocation by bus.

16.1.11 This includes, the improvement of bus stops to provide additional waiting space necessary to accommodate new journeys from the allocation and the provision of Bee Network standard pedestrian crossing points adjacent to the allocation to provide access to the bus stops on either side of the road.

16.1.12 Promotion of sustainable transport alternatives will also help to answer concerns regarding increased pollution from added vehicular trips on the local road network.

17. Strategic Context – GM Transport Strategy Interventions

Site Specific

17.1.1 Further to the site-specific interventions outlined within this report, Tameside Council and TfGM have jointly considered measures to support sustainable travel and to contribute towards the achievement of Greater Manchester's 'Right Mix' ambition. These are set out in the GM Transport Strategy 2040 the Our 5-Year Transport Delivery Plan.

17.1.2 The Right Mix initiative forms part of the Greater Manchester Transport Strategy 2040, and it proposes that by 2040, 50% of trips are to be undertaken by sustainable modes and no net increase in motor-vehicle traffic. The Right Mix vision is comprised of evidence-based targets which will be adjusted over time in order to reflect the progress of meeting such targets, and the interventions set out for walking, cycling and public transport for the Land South of Hyde allocation will contribute to the Right Mix target of reducing growth in motor vehicle traffic in Greater Manchester.

Tameside

17.1.3 Work has recently completed on the redevelopment of Ashton-under-Lyne Interchange, providing passengers with much-improved facilities and a modern, accessible gateway to the town. The improved facilities include a covered concourse and waiting area, electronic information for bus, Metrolink and rail, high-quality accessible toilets, baby changing and 'Changing Places' facilities, retail units, CCTV and secure cycle parking spaces. The facility has been designed to accommodate more bus services while the centralised concourse will reduce walking time for passengers.

17.1.4 TfGM is also conducting a study into the feasibility of opening new rail stations at Dewsnap and Gamesley within High Peak, as well as potentially introducing a Metro/Tram-Train service on the Glossop line. If constructed, these stations would provide the opportunity to improve linkages to the Regional Centre, while a Metro/Tram-Train operation would present increased frequency similar to that of the Metrolink.

17.1.5 The Trans-Pennine Trail (TPT) and the Peak Forest Canal cycle routes are in need of improvement to provide better all-weather surfacing in order to make the routes more acceptable and increase the number of potential users, thereby reducing the dependence of both existing and proposed developments on private motoring.

17.1.6 Tameside Borough is also expected to benefit from two sections of the Quality Bus Transit Corridor (QBT) scheme, which is anticipated to see a general improvement to service reliability and facilities such as shelters along major bus corridors north to Oldham and Rochdale, and south Stockport, as well as Real Time Information (RTI), although RTI may be delivered as an online service through phone apps or online browsers rather than information presented at the stops themselves.

18. Phasing Plan

18.1.1 For the purposes of the testing the impact of the allocation through the strategic model, a total of 442 dwellings have been assumed to be built out by 2040. The GM transport modelling suite has a 2040 forecast year, as such it uses 2040 trajectory data as proxy for 2037 full build-out, this is not considered to materially impact on the analysis or conclusions of this report.

18.1.2 All phasing plan information contained in this Locality Assessment is indicative only and has only been used to understand the likely intervention delivery timetable. Final trajectory information and the final allocation proposal is contained in the GMSF Allocation Topic Paper.

18.1.3 The initial Locality Assessments were based on information on allocations consolidated by TfGM based on inputs from each of the local authorities. This initial exercise focused on the development quanta to be delivered at the end of the plan period.

18.1.4 During the course of the Locality Assessment work in late 2019 / early 2020, the local authorities provided input on their expected phasing of the allocations focusing on the milestone years of 2025 and 2040. The expected 2025 development quanta were tested along with those for 2040 to assess their deliverability in terms of transport network capacity. In some cases, the development phasing was amended by the local authorities as a result of the technical analysis undertaken. All other schemes will require implementation between 2025 and 2040, with a more precise implementation timeframe for these schemes being ascertained as part of the planning application process.

18.1.5 Based on the proposed forecast, none of the development for the Land South of Hyde allocation is expected to come forward by 2025. The full development quantum is expected to come forward by 2038. Based on the full build total the land parcel splits included in **Table 11** below represent a proportionate split of the build out in that year. It is recognised that a scenario where one land parcel is delivered in its entirety first is alternatively possible.

Table 11. Allocation Phasing

Allocation Phasing	2020 25	2025 30	2030 2037	2037+	Total
Parcel 1	0	144	77	-	**221**
Parcel 2	0	144	77	-	**221**
Total	0	288	154	-	**442**

Table 12. Indicative intervention delivery timetable

Mitigation	2020 2025	2025 2030	2030 2037
Allocation Access			
A560 Stockport Road (north access)		✓	
A560 Stockport Road (south access) + Realignment of Hilda Lane access		✓	
Supporting Strategic Interventions			
Package of measures along the A560 Stockport Road (including possibility of Ashton-Stockport QBT)		✓	
SRN Improvement of M67/A57 Hyde Road/A560 roundabout		✓	
Necessary Local Mitigations			
Walking and cycling measures		✓	
Bus improvements along the A560 Stockport Road adjacent to the allocation		✓	
SRN Interventions			
No SRN interventions directly attributed to this site			

19. Summary & Conclusion

19.1.1 GMSF allocation Land South of Hyde is an allocation which is to be sited on two land parcels north and south of the A560 Stockport Road on what is currently open land.

19.1.2 Assessments undertaken have considered the potential impact of this allocation on the surrounding road network, both in isolation and in cumulative impact with allocations Godley Green Garden Village, Bredbury Park Industrial Estate Expansion and the Gravel Bank Road / Unity Mill (note that the allocation at Gravel Bank Road / Unity Mill has since been removed from the GMSF). Cumulatively, the allocation has the potential to present increased congestion at existing areas of concern raised in **Section 3**.

19.1.3 In response to potential concerns regarding congestion at key junctions, a mitigation scheme has been considered at the M67/A57 Hyde Road/A560 roundabout (**Mitigation Option 1 in Appendix 2**). This has been tested, and illustrates significant improvements to traffic flow across the junction, both with and without the cumulative impact of the GMSF allocations. The proposed improvements at the M67/A57 Hyde Road/A560 roundabout are also only necessary were Highways England's planned scheme for the A57 Mottram Bypass not be delivered.

19.1.4 Based on the information contained within this report, we conclude that the traffic impacts of the allocation are likely to be less than severe subject to the implementation of the above mitigation. The "High-Side" modelling work indicates that in general other junctions within the vicinity of the allocation are predicted to either operate within capacity in 2040 with GMSF development, or that in some cases junctions operating over capacity in the future year would not be materially worsened by development traffic. At this stage, the modelling work is considered to be a 'worst case' scenario as it does not take full account of the extensive opportunities for active travel and public transport improvements in the local area.

19.1.5 However, the mitigation scheme proposed should be considered in conjunction with continued investment into sustainable transport alternatives, including pedestrian, cycling and public transport, in order to reduce the overall number of additional vehicles being introduced onto the local road network. This, combined with the mitigation schemes, could potentially resolve a number of issues raised regarding pollution and safety in relation to the Land South of Hyde allocation.

19.1.6 This is an initial indication that the allocation is deliverable and to inform viability, and that further detailed work will be necessary to identify the specific interventions required to ensure the network works effectively based on transport network conditions at the time of the planning application. In summary, this assessment gives an initial indication that the allocation is deliverable, however, significant further work will be needed to verify and refine these findings, particularly in relation to connections to the SRN, as the allocation moves through the planning process. The allocation will also need to be supported by continuing wider transport investment across GM.

Appendix 1 – Allocation Access Arrangement With Hilda Lane Access (South Parcel)

[Illustrative/Typical Layout]

Appendix 2 –Mitigation Options (M67/A57 Hyde Road/A560 Roundabout)

[Illustrative/Typical Layout]

Option 1 – Highways England Scheme

Option 2 – Alternative ‘Back-Up’ Scheme Proposal

[Illustrative/Typical Layout]

GM43/44 - TAMESIDE SITES
INDICATIVE MITIGATION PROPOSAL - M67 J4 ROUNDABOUT

Please note that this design is based on indicative measurements taken from OS map in addition to guidelines from Google Maps.

Appendix 3 – 2025 Before Mitigation Junction Capacity Assessments

Table 13. Results of 2025 Junction Capacity Analysis Before Mitigation: Land South of Hyde

Junction	Reference Case AM	Reference Case PM	GMSF High AM	GMSF High PM	Allocation Flows AM	Allocation Flows PM
1. M67/A57 Hyde Road/A560 roundabout	86%	94%	86%	94%	2	2
2. A560 Stockport Road/ Ashworth Lane/ Underwood Road	43%	44%	44%	46%	2	2
3. M67 Junction 3 / Clark Way	54%	76%	48%	76%	5	15
4. Market Street/ A627 Dowson Road	41%	45%	42%	45%	23	22
5. A560 Mottram Old Road/ B6468 Stockport Road	8%	18%	8%	18%	3	2
6. A560 Stockport Road/ A627 Dowson Road	9%	10%	9%	10%	29	27
7. A560 Stockport Road E/ A627 George Lane/ Redhouse Lane	63%	65%	63%	65%	15	29