

Appendix E - Site Appraisals for preferred broad locations

Sustainability Appraisal – East of Wigan Road, Landgate

There are no key negatives once mitigation has been taken into account. Some negatives remain, however, such as the impact on potential priority species and habitats; the loss of agricultural land; the loss of neighbourhood amenity and waste. There are a range of key positives following mitigation and enhancement. These are housing; health support and provision; the ability to enhance the brownfield site; the ability to address flood problems; support for recreation especially greenheart access and the impact on areas of deprivation, particularly Landgate. Other positives arise from the potential provision of infrastructure that affects the wider air quality network and that, as a proposed mixed-use development, housing could support the local economy.

SA objective and sub criteria		Comments	Basic score	Mitigation / Enhancement Comments	Residual impact
1. Biodiversity	a) Designated sites	There are no designated sites within or close to the site. However, the site is within close proximity to a wildlife corridor and areas of natural / semi natural greenspace (Ponds, grassland).	×	Strengthen existing planting by incorporation of new native planting and development of landscape buffer zones.	0
	b) Species	Priority habitats present: managed greenspace. Priority habitats probable: ponds and lodges. Priority habitats potential: woodland, acid grassland. Priority species probable: common toad, dunnock, song thrush, house sparrow, bats. Priority species potential: great crested newt, bullfinch, skylark, lapwing, tree sparrow, corn bunting, grey partridge, linnet, water vole, and brown hare. Impacts depend on scheme details.	×	Mitigation and enhancement will be required which will have to be developed as part of any overall development plan for the site.	×
2. Air quality	a) Air quality assessment	The development could increase the number of car trips generated by new residential and employment units. However, there is a rail service at Bryn, and buses are frequent along the A49 to and from Ashton and Wigan. The overall impact on air quality would therefore probably be moderate, but could extend towards Ashton and Wigan town centres. Combined with development at South Lancashire Industrial Estate, the impacts would be enhanced.	×	Opportunity to improve/enhance tree cover as part of any development to assist with air quality. Also possibility to improve access and promotion of sustainable transport in the area.	0/×
	b) Potential for	This site could support delivery of a bypass for Ashton and Bryn			✓✓

	proposed infrastructure to mitigate or enhance	from the A58 towards Junction 25. If this was delivered, Ashton Town Centre could benefit from reduced congestion and improved air quality. (Mitigation required as well). Walking and cycling could be encouraged too, particularly linking to the Greenway network, but major centres are probably too far to discourage car trips in favour of these modes.			
3. Soil and minerals	a) Brownfield / greenfield proportion	Site majority brownfield	✓	Existing trees and ponds in the lower lying parts of the site to the north could be retained and enhanced, as amenity features in development proposals. Scheme landscape proposals could also incorporate additional green infrastructure.	✓✓
	b) Impact on 'agricultural' land	Slowly permeable seasonally wet acid loamy and clayey soils. Drainage is impeded with low fertility. The majority of the site is classified as Grade 3b agricultural land.	✗	Top soil could be conserved and put to alternative use on/off site.	✗?
4. Water	a) Flood risk	Site and surrounding areas are in flood zone 1. However, 16% of the site is identified as being of intermediate / high vulnerability to surface water flooding. The location contains a number of smaller tributary watercourses and these should be protected as part of development proposals.	✗	Areas vulnerable to flooding can be designated as public open space/water compatible uses only. Surface water can be attenuated to reflect at least existing run-off.	✓✓
	b) Water supply	No water supply issues	0	Development should ensure it is as water efficient as possible.	0
	c) Waste water	No waste water issues	0	Use of sustainable drainage systems should be encouraged.	0
	Other comments	Although water supply can be provided (at a cost), the overall impact on water resources in the context of rising demand and climate change needs to be considered.			

<p style="text-align: center;">5. Landscapes</p>	<p>Qualitative assessment against SA objective and sub-criteria</p>	<p>Elevated enclosed farmland, a large part of which was restored through land reclamation. Although the site is a gateway to Wigan Flashes, impacts are not expected to be detrimental to the surrounding landscape setting. There is some local intrinsic value though. Hedgerows have been lost and field sizes consequently enlarged, giving the site an open appearance.</p> <p>The land slopes away from a localised “crown” in the south-west towards the north and south. However, the main fall is towards the east where there are ponds. There is more tree vegetation in the lower lying parts of the site.</p>	<p style="text-align: center;">0</p>	<p>Re-introduce new hedges and hedgerow trees to improve character of area. Existing woodland blocks should be retained and managed.</p>	<p style="text-align: center;">0</p>
<p style="text-align: center;">6. Built environment</p>	<p>Historic designations</p>	<p>There are no known historic designations. However, the route of a Roman road has been identified running north to south between Bryn Road and Yewdale Road. Land Gate Farm is potentially of historic interest (subject to further investigation).</p>	<p style="text-align: center;">0/x</p>	<p>The possibility of a Roman road running through the site could be incorporated as a feature within any future development scheme. An archaeology study will be required in order to provide further details. Site design and layout will need to accommodate and enhance any as-yet unidentified heritage assets.</p>	<p style="text-align: center;">0</p>

<p style="text-align: center;">7. Community safety</p>	<p>Qualitative assessment completed to identify area characteristics and potential issues</p>	<p>Proximity to Town Centre - This should not be problematic. The area is some distance from the nearest town centre (Ashton). Cross Border Offending - The area is fairly close to the border with Lancashire but a direct road route involves travelling some distance and it is unlikely that cross-border offenders would head in this direction. Major Traffic Routes - Wigan Road passes by to the South-West of this site but does not pose a particularly high threat of crime and disorder. The road does link to the M6 motorway to the north and whilst this poses some threat it would seem more likely that any travelling offenders would either head further north towards Wigan Town Centre or that a suitable target would be reached before arriving at this site (it is approximately 1.3km from the motorway exit). Vulnerable Localities Index - The score here is generated almost entirely by the Landgate SOA and is slightly above the Borough average. The one area notably above the average is the number of Single Parents with Dependent Children (almost double the Borough average) suggesting provision of youth services in this area would be a priority. The direct offence measures are relatively low.</p>	<p style="text-align: center;">0</p>	<p>Little to mitigate. Development would need to consider community safety.</p>	<p style="text-align: center;">0</p>
<p style="text-align: center;">8. Neighbourhood quality</p>	<p>a) Amenity considerations</p>	<p>Employment development could have a moderate impact on amenity for residents. Therefore, mitigation measures will be required to address this. Vehicular access could be an issue.</p>	<p style="text-align: center;">xx</p>	<p>Mitigation could be achieved through design solutions such as landscape buffer zones and acoustic bunds or barriers between employment and residential areas. The incorporation of sustainable transport alternatives could help to manage adverse</p>	<p style="text-align: center;">x</p>

				impacts arising from development.	
	b) Environmental gain	The site is not derelict or in need of reclamation. Site development could have a neutral or potentially negative impact in terms of environmental impact. The natural environment could be perceived as less attractive as a result of built development, with diminished environmental quality.	×	Mitigation could be achieved by incorporating natural and new environmental features in the layout and design of scheme proposals.	0/×
9. Waste	Comments	Housing development will inevitably lead to increased waste production	×	Requiring site waste management plans on new development sites will have marginal positive impact	×
10. Health	Comments	Approximately 600 additional residents would require access to GP and dental services. There are three small areas of allotments (one non-statutory, two private) on site although the Allotment Strategy does identify Ashton/Bryn township as an area for targeted provision. The site lies wholly within Greenheart. The nearest GP is currently accepting new patients. Access to an NHS dentist currently accepting new patients is reasonable. Access to fresh food within walking distance is good. The health impact of additional traffic generated by new residents on existing residents in the immediate surrounding areas would be severe as access to the location is directly from Landgate estate to the north where existing incidences of poor health are high.	0	Potential to provide gateway to Greenheart. Access from A49 or B5207 to minimise health impact. Potential for investment in doctor and dental services. Ensure residential travel plan is in place and appropriate green space and trees are provided on approaches to the site.	✓✓

11. Recreation	Impact on existing recreational space and opportunity for enhancement	<p>Most of the site is currently unused for formal recreation. Site development presents an opportunity to create quality open space that could link to surrounding areas.</p> <p>Site is within/adjacent to Greenheart. Three areas of amenity greenspace, one area of semi-natural greenspace, four ponds, two small areas of woodland and two outdoor sports facilities. Two Public Rights of Way through or adjacent to the site and one on road quiet cycle route, also part of greenway network. A Township Park (Three Sisters) is adjacent to the site but separated from it by a railway line. An 'other' park (Edmund Collins) is also adjacent but separated by the A49.</p>	✗	<p>Potential for areas of amenity greenspace, semi-natural greenspace, ponds, woodland to be retained. Outdoor sports facilities and allotments could be retained or relocated. Public Rights of Way could be retained and enhanced. Potential to provide gateway to Greenheart. Three Sisters and Edmund Collins Park could benefit from enhanced investment. An increase in population would create demand making other sports and cultural facilities in the area more sustainable.</p>	✓✓
12. Housing	Contribution to housing delivery targets	Assuming a density of 30 dwellings per hectare on a developable area of 10.00 hectares, the broad site option could potentially contribute approximately 300 dwellings towards meeting the borough's housing requirement.	✓✓✓	<p>Envisage potential for mix of housing types, including smaller and family homes.</p> <p>Brownfield.</p>	✓✓✓
	Provision of affordable / sustainable homes	<p>Subject to economic viability considerations the broad site option has the potential to deliver around 75 affordable units as part of the overall housing development.</p> <p>Proximity to Junction 25 of M6 motorway, and close to Primary employment Area at South Lancs. Industrial Estate.</p> <p>Would represent an urban extension/linking of existing residential development at Bryn and Landgate.</p>	✓✓✓	<p>Affordability problems are high in this location compared to the borough as a whole. The location has a historically strong housing market with high levels of demand.</p> <p>The delivery of affordable housing is therefore a very important objective.</p> <p>Opportunities for environmental improvements/amenity mitigation that will be needed if the remainder is developed for employment uses and associated access infrastructure.</p>	✓✓✓

13. Education	Education facilities / capacity	The development is likely to yield around 65 primary and 45 secondary school pupils. There is sufficient capacity at local primary and secondary schools to accommodate this.	0	None required	0
14. Community	Index of Multiple Deprivation - <i>potential to address the inequality gap</i>	Site is adjacent to areas with high levels of deprivation (11-20%), but there are also lots of areas in the vicinity that only fall within the 40-60% most deprived. High levels of deprivation in the adjoining Landgate estate. Moderate to low levels in the surrounding areas, but moderate in one area.	✓	Potential for contribution to measures to improve the outcomes of the residents on the Landgate estate and potentially as far as Bryn area.	✓✓
15. Energy	a) Capacity	Gas: no capacity issues Electricity: Spare Capacity not available as at 2011/12. Approved schemes to increase capacity	✗	Development needs to ensure it is as energy efficient as possible in order to retain future capacity. Reliant on infrastructure investment	0/✗
	Renewables: Qualitative assessment	Solar potential is reliant on construction of dwellings. Wind power probably unfeasible in area of dwellings (6.3m/s at 45m)			
16. Accessibility	a) Sustainable transport accessibility	There are 5 bus services on A49 (high frequency route). Nearest rail station is at Bryn, within 800m of site. A footpath crosses the site. Adjacent Three Sisters Recreation area offers connectivity to various cycling and walking routes. Adjacent A49 cycle facilities.	✓✓	New, upgraded / promoted walking and cycling links will offer more attractive sustainable access to key locations. New bus service and promotion of existing bus / rail services likely to encourage increase in patronage.	✓✓
	b) Existing peak time congestion	Junctions approaching or over capacity: AM Peak – None PM Peak – None Average speeds < 10mph: None	0	New link road if managed well and complementary to sustainable transport / community mitigation should prevent negative traffic impact.	✓
	Improvements / mitigation suggestions	New link road proposed through site connecting A49-South Lancashire Industrial Estate -A58 (opportunity to capture Bryn Rd / Bryn Cross for cycle / pedestrian community); new bus service provided utilising new link road; promotion of existing bus services and Bryn station services. Existing walking and cycling routes to be upgraded / promoted and new walking and cycling links to be provided / promoted to serve key local destinations.			

17. Sustainable economy	a) 'Appropriate' employment provision in deprived areas	Site proposed for mixed use development	0	A well designed mixed use site should assist wider area.	✓
	b) Local food production	Site development could include the provision of allotments and/or gardens			✓
	Other Comments	<p>The location is proposed mixed use and is located within the deprived community of Landgate (within the top 30% most deprived)</p> <p>The key employment locations in close proximity to Junction 25 of the M6 are within easy cycling distance and easily accessible by public transport and quality housing development may help long term sustainability of these areas.</p> <p>Provision of higher quality housing could attract businesses to these employment areas looking to accommodate highly skilled staff to the area.</p>			
18. Economy and employment	Attractiveness for employment development / raising Wigan's economic profile	Located just 800 metres from Junction 25 of the M6 motorway, the site is attractive to the market as an employment destination.	✓✓	The site could be marketed particularly for storage and distribution uses.	✓✓
	Owner constraints	Although the site has several private owners, these are probably solvable issues.			

Sustainability Appraisal – South of Hindley

Following mitigation, there are no key negatives. Nevertheless, some negatives remain specifically focused on biodiversity due to the presence of sites of biological importance and priority species and habitats. Air quality issues being another negative as the surrounding areas are defined as air quality management areas (congestion is a linked negative impact). There are a range of key positives. Firstly the site being brownfield leads to improvement; whilst housing, recreation, support for health and the ability to respond to flood issues are also key positives. Other positives arise in sustainable travel support, improvement of landscape character, education provision. As a proposed mixed-use development, housing could support the local economy.

SA objective and sub criteria		Comments	Basic score	Mitigation / Enhancement Comments	Residual impact
1. Biodiversity	a) Designated sites	Several Sites of Biological Importance are within, adjacent to or in close proximity to the site including abandoned railway, fields, reservoirs and reedbed. Also close to a major wildlife corridor. Increased recreational pressure.	xx	An appropriate level of mitigation/compensation or enhancement can only be determined once the scale of impact has been assessed. Avoid direct impacts upon Sites of Biological Importance. Requirement for buffer zones and sensitive design.	x
	b) Species	Priority habitats present: pond, managed greenspace, acid grassland, heath, hedgerow. Priority habitats probable: reedbed. Priority habitats potential: woodland, marshy grassland, river. Priority species present: great crested newt, common toad, lapwing, and yellow wagtail. Priority species probable: water vole, dunnock, starling, song thrush, skylark, house sparrow, bats. Priority species potential: grass snake, willow tit, bullfinch, corn bunting, grey partridge, linnet, reed bunting, tree sparrow, yellowhammer, brown hare. Impacts will depend upon scheme details.	xx	Mitigation and enhancement will be required which will have to be developed as part of any overall development plan for the site. Presence of protected species will need to inform any design.	x
2. Air quality	a) Air quality assessment	Site runs in parallel to the A577 and A58. Much of which are designated as Air Quality Management Areas. New housing and employment here could create significant amounts	xx	Development could preserve/enhance tree cover to assist with tackling air quality. Sustainable travel access and promotion	x

		of traffic on an already congested network; worsening pollution levels and human exposure in this area. The impact would be heightened by the development of the 'Northleigh' strategic site. A focus on sustainable modes of transport would offset the impact to a degree.		would also help mitigate air quality impacts.	
	b) Potential for proposed infrastructure to mitigate or enhance	New link road proposed through site connecting A58-A578 (opportunity to capture existing A577 for sustainable transport / community), new bus service to serve the site serving key destinations. Promotion of existing bus and Hindley station services (sustainable P&R). Existing walking and cycling routes (inc NCN 55) to be upgraded / promoted and new walking and cycling links to be provided / promoted to serve key local destinations (inc NCN 55). Likely to have network wide beneficial impacts for air quality			✓
3. Soil and minerals	a) Brownfield / greenfield proportion	Site majority brownfield	✓✓	Retain and improve existing tree cover and elements of open space within any new development	✓✓
	b) Impact on 'agricultural' land	Slowly permeable seasonally wet acid loamy and clayey soils. Drainage is impeded with low fertility. Large parts classified as Grade 4 agricultural land. Grade 3b land at eastern part of site (Hindley Green) and at the western side.	0/x	Top soil could be conserved and put to alternative use on/off site.	0
4. Water	a) Flood risk	Majority of the site is within flood zone 1. It is immediately adjacent to flood zone 3 at its western point with some residential currently at risk. 4% of the total site area is identified as being vulnerable to surface water flooding.	0	Areas vulnerable to flooding can be designated as public open space/water compatible uses only. Surface water can be attenuated to reflect at least existing run-off.	✓✓
	b) Water supply	No water supply issues	0	Development should ensure it is as water efficient as possible.	0

	c) Waste water	No waste water issues	0	Use of sustainable drainage systems should be encouraged.	0
	Other comments	A public sewer crosses this site and UU will not permit building over it. UU will require an access strip width in accordance with the minimum distances specified in the current issue of 'Sewers for Adoption', for maintenance or replacement. This site must be drained on a separate system, with only foul drainage connected into the foul sewer. Surface water should discharge to the watercourse/soakaway/ surface water sewer and may require the consent of the Environment Agency. If surface water is allowed to be discharged to the public surface water sewerage system UU may require the flow to be attenuated to a maximum discharge rate determined by United Utilities.			
5. Landscapes	Qualitative assessment against SA objective and sub-criteria	As the strategic site is extensive, there are subtle differences at various parts of the site. However, the entire area has been substantially affected by past industrial activity associated with coal mining, and is in parts derelict or otherwise underused, neglected, unmanaged and unkempt in appearance. Former use has largely been lost and little remains to reflect industrial heritage. The exception to this is a small ungraded spoil heap adjacent to Leyland Park which affords excellent views of the surrounding area (perhaps this should be retained). Overall, there is a general lack of character and sensitivity in the area, so negative impacts on landscape objectives are likely to be minor. It should be noted that the site is overlooked by residential areas and has intrinsic value for recreation, leisure and wildlife.	×	Consider potential for the whole area to part of an open space project. There is potential for the colliery spoil heap to provide a vantage point and heritage link. Footpath linkages should be incorporated into any detailed design. There may be potential to improve landscape character with appropriate development, particularly where the area abuts the Greenheart Regional Park to the south	✓

<p style="text-align: center;">6. Built environment</p>	<p>Historic designations</p>	<p>There are no known historic designations. Leyland Park is of potential historic, together with existing farmsteads such as Tack Farm, Alder Farm, Hall Lane Farm, Scowcroft Farm and Close Lane Farm. The existing farmsteads provide positive reminders of Wigan's agricultural origins</p>	<p style="text-align: center;">×</p> <p>General design and sustainability principles should be applied in scheme proposals.</p> <p>Further studies should be undertaken into the assets. Such studies will establish the relative value of the heritage assets.</p> <p>Adverse impacts will be prevented provided the setting of the agricultural buildings and farmsteads is respected in future development proposals. A desk top archaeology study should also be undertaken to assist with this process.</p>	<p style="text-align: center;">0</p>
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<p style="text-align: center;">7. Community safety</p>	<p>Qualitative assessment completed to identify area characteristics and potential issues</p>	<p>Proximity to Town Centre - This should not be problematic. The area does not immediately border the nearest town centre (Hindley) and is unlikely to provide any through-traffic to it.</p> <p>Cross Border Offending - The area is not particularly close to any notable borders and is unlikely to suffer from cross-border offending.</p> <p>Major Traffic Routes - The closest main road to this area appears to be Atherton Road although it would appear that the Candidate site is sufficiently far from the main road to prevent any casual offending from travelling offenders.</p> <p>Liverpool Road passes close by to the west but it seems unlikely that access/egress will be made from this direction.</p> <p>Vulnerable Localities Index - The area is well below the Borough average (only The Bell scores lower of the Candidate sites) and only one of the indices scores above average. This is the 0-15 count and is only marginally above average (1.12 times), and in the absence of any issues under the other indices this is unlikely to present any problems on its own.</p>	<p style="text-align: center;">0</p>	<p style="text-align: center;">Little to mitigate.</p>	<p style="text-align: center;">0</p>
<p style="text-align: center;">8. Neighbourhood quality</p>	<p>a) Amenity considerations</p>	<p>Although the area has a 'rural' feel to it, housing development on the western side of the site is unlikely to have a significant adverse impact on the amenity of adjacent occupiers.</p> <p>Employment expansion at the east of the site may have an adverse amenity impact on a small number of local people/residents nearby.</p> <p>Mitigation measures would be needed to address the impacts.</p> <p>A new link road could potentially have an effect in terms of traffic noise generation, but this may not be of a significant level to be of concern to existing residents.</p>	<p style="text-align: center;">0/x</p>	<p style="text-align: center;">Mitigation could be achieved by promoting sustainable transport alternatives. The approach could help to manage impacts arising from development.</p>	<p style="text-align: center;">0/x</p>

	b) Environmental gain	The site is currently unkempt, poorly managed and inaccessible in large parts. Development presents opportunities for a high level of environmental gain through reclamation and remediation as well as landscape design improvements.	✓✓	Mitigation could be achieved by incorporating existing natural and new environmental features in the layout and design of scheme proposals. The approach should help to manage impacts arising from development.	✓✓
9. Waste	Comments	Housing development will inevitably lead to increased waste production.	✗	Requiring site waste management plans on new development sites will have marginal positive impact	✗
10. Health	Comments	Approximately 4,000 additional residents would require access to GP and dental services. The site is immediately adjacent to Greenheart. The nearest GP is currently accepting new patients. Access to an NHS dentist currently accepting new patients is very poor. The Allotment Strategy identifies Hindley and Abram as target areas for new allotment provision although there are no allotments currently on the site. Access to fresh food within walking distance is reasonable. The health impact of additional traffic generated by new residents on existing residents in the immediate surrounding area would be moderate as multiple access points to the site are possible taken directly from Park Road or via existing estates where current incidences of poor health are low. Access to the location is unlikely to be through the area of highest deprivation (Borsdane Avenue).	✗	Potential to provide gateway to Greenheart. Priority target area for allotment provision. Potential for investment in doctor and dental services. Potential to create local shopping centre in Hindley Green. Ensure residential travel plan is in place and appropriate green space and trees are provided on approaches to the site.	✓✓

<p>11. Recreation</p>	<p>Impact on existing recreational space and opportunity for enhancement</p>	<p>Immediately adjacent to Greenheart with some natural/semi-natural greenspace, much of which is poorly accessible although, ten public rights of way cross or are adjacent to the site including one traffic free cycle route with rough surface and part of the greenway network. Leyland Park (township park with water features and outdoor sports facilities) is within the site and 2 other outdoor sports facilities on/near Park Lane. Also some small areas of woodland. Although development would result in the loss of some locally valued recreational space, there would be improved cycling and walking links and enhanced provision of formal open space, allotments and playing fields. Development would also discourage anti-social behaviour such as motorbike scrambling, which is prevalent on the site.</p>	<p>✗</p>	<p>Potential for areas of amenity greenspace, semi-natural greenspace and woodland to be retained. Outdoor sports facilities could be retained or relocated. Public Rights of Way could be retained and enhanced. Potential to provide gateway to Greenheart. Leyland Park to be retained and could benefit from enhanced investment. An increase in population would create demand making other sports and cultural facilities in the area more sustainable.</p>	<p>✓✓</p>
<p>12. Housing</p>	<p>Contribution to housing delivery targets</p>	<p>Assuming a density of 36.7 dwellings per hectare on a developable area of 54.51 hectares, the broad site option could potentially contribute approximately 2,000 dwellings towards meeting the borough's housing requirement.</p>	<p>✓✓✓</p>	<p>Envisage potential for mix of housing types, including smaller and family homes.</p> <p>Brownfield.</p>	<p>✓✓✓</p>
	<p>Provision of affordable / sustainable homes</p>	<p>Subject to economic viability considerations the broad site option has the potential to deliver around 500 affordable units as part of the overall housing development.</p> <p>Located in proximity to Primary Employment Areas at West of Leigh Road (immediately south) and Swan Lane (0.6km to the north east).</p> <p>Parts of the broad site option that are derelict land/land in need of remediation.</p> <p>Development would represent urban extension of the existing residential development at Hindley, south of the A577 Atherton Road.</p>	<p>✓✓✓</p>	<p>Straddles two Wards. The western part of the broad site option is within the Hindley Ward where affordability problems are moderate to high compared to the borough as a whole. The eastern part is within the Hindley Green Ward where affordability problems are moderate compared to the borough as a whole.</p> <p>Delivering affordable housing is therefore an important objective in this location.</p> <p>Opportunities to deliver remediation and environmental</p>	<p>✓✓✓</p>

				improvement as part of the comprehensive master planning process.	
13. Education	Education facilities / capacity	The development is likely to yield around 420 primary and 300 secondary school pupils. The development will require the provision of a new 1.5 form entry primary school or equivalent and an additional 170 secondary places.	xx	The provision of a new 1.5-form entry primary school and the modification and/or extension of existing secondary schools will address capacity issues	✓
14. Community	Index of Multiple Deprivation - <i>potential to address the inequality gap</i>	Some populated areas adjacent to the location fall within the 30% most deprived.	0	Limited potential for contribution to measures to improve the outcomes of the residents in areas of deprivation.	0
15. Energy	a) Capacity	Gas: no capacity issues Electricity: Spare Capacity as at 2011/12	0	Development needs to ensure it is as energy efficient as possible in order to retain future capacity.	0
	Renewables: Qualitative assessment	Solar potential is reliant on construction of dwellings. Wind power probably unfeasible in area of dwellings (6.2m/s at 45m)			
16. Accessibility	a) Sustainable transport accessibility	The vast majority of the site > 400m away from existing bus stops. 7 bus services on A577 (at least 1 every 10-20 mins), 2 bus services on A578 (at least 1 every 10-20 mins) and 2 bus services on A58 (at least 1/hr). Nearest rail station is at Hindley 2.1km, no direct bus services. 6 footpaths cross the site. NCN 55 on southern edge of the site, advisory / quiet cycle route link (Park Rd) to Hindley town centre.	0/x	New, upgraded / promoted walking and cycling links will offer more attractive sustainable access to key locations. New bus service and promotion of existing bus / rail services likely to encourage increase in patronage.	✓
	b) Existing peak time congestion	Junctions approaching or over capacity: AM Peak – A577/A578; A577/Askwith Rd; A577/A58. PM Peak - A577/A578; A577/Askwith Rd; A577/A58 Average speeds < 10mph: AM Peak – A577 Westbound (Borsdane Ave to Hindley Crossroads). PM Peak – A58 North & Southbound approaches to Hindley Crossroads; A577 Eastbound (Higher Ince to Hindley Crossroads)	xxx	New link road if managed well and complementary to sustainable transport / community mitigation should reduce negative traffic impact.	x?

	Improvements / mitigation suggestions	New link road proposed through site connecting A58-A578 (opportunity to capture existing A577 for sustainable transport / community), new bus service to serve the site serving key destinations. Promotion of existing bus and Hindley station services (sustainable P&R). Existing walking and cycling routes (inc NCN 55) to be upgraded / promoted and new walking and cycling links to be provided / promoted to serve key local destinations (inc NCN 55).			
17. Sustainable economy	a) 'Appropriate' employment provision in deprived areas	Site proposed for mixed use development	0	A well designed mixed use site should assist wider area.	✓
	b) Local food production	Site development could include the provision of allotments and/or gardens			✓
	Other Comments	The location is proposed for mixed use development and is located in close proximity to many deprived communities, including some within the top 20% most deprived in England e.g. Bickershaw and Tamer West. Key employment locations on Leigh Road and at Swan Lane Industrial Estate are in close proximity and within easy walking and cycling distance and quality housing development may help the long term sustainability of these areas.			
18. Economy and employment	Attractiveness for employment development / raising Wigan's economic profile	Some accessibility issues affect the attractiveness of the site though it is well placed in relation to other developments	✓	Accessibility issues could be tackled through infrastructure improvements, which is a key objective of the Core Strategy.	✓
	Owner constraints	Complex site in multiple ownership – possible ransom strips			

Sustainability Appraisal – East of Atherton

Following mitigation there are no key negatives. However, some negatives remain for biodiversity (species) due to the presence of priority species and their habitats; as well as landscapes due to the loss of landscape character. Key positives are seen in the use of brownfield land, the ability to support and enhance recreation provision, housing and the support for deprived communities especially in the adjoining Shakerley area. The ability of infrastructure investment at this site to impact on the wider network’s air quality issues is another key positive. Other positives are environmental gain due to the existing poor management of the land, sustainable travel and health outcomes. As a proposed mixed-use development, housing could support the local economy.

SA objective and sub criteria		Comments	Basic score	Mitigation / Enhancement Comments	Residual impact
1. Biodiversity	a) Designated sites	There is an area of woodland and natural / semi-natural greenspace immediately south of the site.	×	Mitigation including new native planting and management of semi-natural greenspace would reduce impacts.	0
	b) Species	Priority habitats present: hedgerow, open mosaic/acid grassland. Priority habitats probable: river. Priority habitats potential: pond, woodland. Priority species probable: dunnock, house sparrow, lapwing, skylark, song thrush, starling, water vole. Priority species potential: bats, bullfinch, corn bunting, grey partridge, linnet, reed bunting, tree sparrow, yellowhammer. Impacts dependant upon scheme details.	×	Mitigation and enhancement will be required which will have to be developed as part of any overall development plan for the site. Presence of protected species will need to inform any design	×
2. Air quality	a) Air quality assessment	There would be some concern with increased amounts of trips generated from new residents and employment (low amenity uses). This could affect existing air quality on an already congested network (where there is human exposure to poor air quality). However, there are excellent rail links, and a quality bus corridor, which could reduce the impact from increased vehicle trips.	0/×	Ensuring development makes best use of current links and also improves provision and promotion of other sustainable travel modes will be crucial in ensuring limited impact on air quality.	0

	b) Potential for proposed infrastructure to mitigate or enhance	Potential new bus service to link the guided busway with Atherton station via site. Promotion of existing bus (including the guided busway) and Atherton station services (sustainable park & ride). Existing walking and cycling routes to be upgraded / promoted and new walking and cycling links to be provided / promoted to serve key local destinations. This would have a network wide air quality impact.			✓
3. Soil and minerals	a) Brownfield / greenfield proportion	Majority Brownfield	✓✓	Retain/enhance tree cover.	✓✓
	b) Impact on 'agricultural' land	<p>Slowly permeable seasonally wet acid loamy and clayey soils. Drainage is impeded with low fertility.</p> <p>Classified mainly as non-agricultural with part of the site classified as grade 3b agricultural land. However, Wigan's open space survey shows large areas of farmland (mostly grass) that could potentially be used for low grade agriculture.</p> <p>There are records of historic landfill within the boundary of the site; therefore contamination is likely to be an issue for future development.</p>	0	Potential contamination on site could be cleaned up through site enhancement	0
4. Water	a) Flood risk	Site is within flood zone 1. However, brooks run either side of the site and so climate change will have an impact on flood risk in the area. The area at Hindsford Brook to the east of the site is vulnerable to surface water flooding	0	<p>Areas vulnerable to flooding can be designated as public open space/water compatible uses only.</p> <p>Surface water can be attenuated to reflect at least existing run-off.</p>	0/✓
	b) Water supply	No water supply issues	0	Development should ensure it is as water efficient as possible	0
	c) Waste water	No waste water issues	0	Use of sustainable drainage systems should be encouraged.	0
	Other comments	This site must be drained on a separate system, with only foul drainage connected into the foul sewer. Surface water should discharge to the watercourse/soakaway/ surface water sewer and may require the consent of the Environment Agency. If surface water is allowed to be discharged to the public surface water sewerage system UU may require the flow to be attenuated to a maximum discharge rate determined by United Utilities.			

<p style="text-align: center;">5. Landscapes</p>	<p>Qualitative assessment against SA objective and sub-criteria</p>	<p>The area retains a form of agricultural character, but has been adversely affected by urban/suburban pressure and disturbance, resulting in generally low-grade farmland. This landscape type could be considered amongst the least sensitive of the borough's landscapes. However, such areas do form an important function in breaking up large and dense areas of housing to form green areas in a largely urban landscape. Development of the site would be significant and could affect the ability of the area to perform this function. Although the site has a sense of 'openness', and local intrinsic value, it is fairly untidy, poorly managed and part of the site has been subject to previous reclamation (source: Landscape character Assessment 2009).</p>	<p style="text-align: center;">xx</p>	<p>Mitigation measures should ensure a sense of openness is retained as part of open space and landscaping schemes.</p>	<p style="text-align: center;">x</p>
<p style="text-align: center;">6. Built environment</p>	<p>Historic designations</p>	<p>There are no known historic designations.</p>	<p style="text-align: center;">0/x</p>	<p>Adverse impact need not arise from development provided sustainable development principles and clear guidelines are established and incorporated into scheme proposals.</p> <p>Further study should be made of Shams Farm to establish its potential in terms of historic interest.</p>	<p style="text-align: center;">0/?</p>

<p style="text-align: center;">7. Community safety</p>	<p>Qualitative assessment completed to identify area characteristics and potential issues</p>	<p>Proximity to Town Centre - This should not be problematic. The area is fairly close to Tyldesley town centre but as long as any new street network does not provide a through-route to the town centre this should not provide any crime and disorder issues.</p> <p>Cross Border Offending - The area is close to the border with Bolton but this area is not a high crime area. In all likelihood Wigan is likely to be a greater exporter of offending than importer at this location.</p> <p>Major Traffic Routes - Both Bolton Road and Tyldesley Road provide 'A' Road routes close to the site and there is some potential for travelling offenders to access the area via these roads. However, it is not expected that the potential would be great.</p> <p>Vulnerable Localities Index - The greatest crime and disorder threat at this site would be posed by its proximity to the Shakerley Super Output Area (SOA), one of the most deprived in the Borough and with an above average risk against all the individual factors comprising the VLI and with an overall risk a third higher than that of the Borough average. The Burglary risk is the highest of the factors and is more than double the Borough average. Due to this it is recommended that any access to this site is routed through Hindsford to the south (Hindsford Brook may provide a natural barrier to access via Shakerley in any event). There are also a high number of young people in this area and investment in provision for young people should be considered in any planning</p>	<p style="text-align: center;">×</p>	<p>Access issues would be a priority for any development</p>	<p style="text-align: center;">0/×</p>
<p>8. Neighbourhood quality</p>	<p>a) Amenity considerations</p>	<p>Vehicular access could have a moderate adverse impact on the amenity of the street scene and adjacent occupiers.</p>	<p style="text-align: center;">0/×</p>	<p>Mitigation could be achieved by promoting sustainable transport alternatives. Scheme</p>	<p style="text-align: center;">0</p>

		Employment uses should not have too great an impact on adjacent occupiers, and could be mitigated.		proposals could incorporate amenity buffer zones, acoustic bunds or barriers, for example, to improve the relationship between employment and residential parts of the development. The approach would help to manage or reduce impacts arising from development.	
	b) Environmental gain	Open space is currently unkempt, poorly managed and ground conditions are poor. Development presents the opportunity to achieve moderate levels of environmental gain through improvements to ground conditions, better quality open space and improved permeability.	✓	Mitigation could be achieved by incorporating existing natural and new environmental features into the layout and design of scheme proposals. The approach should help to manage impacts arising from development.	✓
9. Waste	Comments	Housing development will inevitably lead to increased waste production	✗	Requiring site waste management plans on new development sites will have marginal positive impact	✗
10. Health	Comments	Approximately 1,300 additional residents would require access to GP and dental services. The nearest GP is currently accepting new patients. Access to an NHS dentist currently accepting new patients is good. Access to fresh food within walking distance is poor. The health impact of additional traffic generated by new residents on existing residents in the immediate surrounding areas would be severe if access is taken directly from the Shakerley estate to the east as existing incidences of poor health are high on this estate. The impact would be moderate if access is taken from the area to the west where incidences of poor health are moderate.	✗✗	Do not provide vehicular access from Shakerley estate without major mitigation. Potential for investment in doctor and dental services. Potential to create local shopping centre at Shakerley. Ensure residential travel plan is in place and appropriate green space and trees are provided on approaches to the site.	✓

<p>11. Recreation</p>	<p>Impact on existing recreational space and opportunity for enhancement</p>	<p>Site is primarily agricultural land but also 'woodland scrub' and natural/semi-natural greenspace at the southern end of the site - this is not great quality, but nevertheless would be lost with development. The site is well used for informal recreation, but development would provide improved permeability and better quality open space and allotments on roughly a third of the developed area. One existing woodland area. No other open space designations. Three Public Rights of Way through or adjacent to the site, one bridleway which is also a traffic free cycle route with rough surface. Within 1.2km catchment of township park (Central Park, Atherton).</p>	<p>0</p>	<p>Potential for area of woodland and Public Rights of Way to be retained. A well designed development has the potential to contribute positively to the open space provision in this area. Central Park, Atherton could benefit from investment. An increase in population would create demand making other sports and cultural facilities in the area more sustainable.</p>	<p>✓✓</p>
<p>12. Housing</p>	<p>Contribution to housing delivery targets</p>	<p>Assuming a density of 35 dwellings per hectare on a developable area of 17.50 hectares, the broad site option could potentially contribute approximately 600 dwellings towards meeting the borough's housing requirement.</p>	<p>✓✓✓</p>	<p>Envisage potential for mix of housing types, including smaller and family homes.</p>	<p>✓✓✓</p>

	Provision of affordable / sustainable homes	<p>Subject to economic viability considerations, the broad site option has the potential to deliver around 150 affordable units as part of the overall housing development.</p> <p>Proximity to A577 Tyldesley Road and A579 Bolton Road. Primary Employment Areas are Chanter's Industrial Estate immediately adjacent to the south and Gibfield 1.6km to the west. Relative proximity to both Atherton and Tyldesley town centres and the protected route of the Leigh Guided Busway.</p> <p>Development would infill existing residential development east of Atherton and to the west at Shakerley.</p> <p>Proximity of employment development and potential new access infrastructure (potential A579/A577 link road) will require amenity mitigation as a component of future housing development.</p>	✓✓✓	<p>Affordability problems are moderate to high in this location compared to the borough as a whole.</p> <p>Delivering affordable housing is therefore an important objective in this location.</p> <p>Opportunities to design in environmental improvements/amenity mitigation/buffer zone measures arising from proximity of employment development and potential new access infrastructure.</p>	✓✓✓
13. Education	Education facilities / capacity	The development is likely to yield around 150 primary and 100 secondary school pupils. The development will result in a marginal capacity issue at primary schools and require the provision of an additional 120 secondary places.	✗	The modification and/or extension of existing primary and secondary schools will address capacity issues.	0

14. Community	Index of Multiple Deprivation - <i>potential to address the inequality gap</i>	Parts of Shakerley immediately adjacent to the site fall within the top 10% most deprived. There is also a substantial amount of moderate deprivation in surrounding areas (within top 21-30%), with some areas of lower deprivation (40-60%) to the immediate west of the site. Other areas of very high deprivation are also within the vicinity of the area and may also benefit from employment opportunities (for example Hag Fold East). High levels of deprivation in the adjoining Shakerley estate and moderate levels in the adjoining areas. Moderate levels in the surrounding areas.	✓✓	Potential for contribution to measures to improve the outcomes of the residents on the Shakerley estate through support for community infrastructure.	✓✓
15. Energy	a) Capacity	Gas: no capacity issues Electricity: Spare Capacity as at 2011/12	0	Development needs to ensure it is as energy efficient as possible in order to retain future capacity.	0
	Renewables: Qualitative assessment	Solar potential is reliant on construction of dwellings. Wind power probably unfeasible in area of dwellings (6.3m/s at 45m)			
16. Accessibility	a) Sustainable transport accessibility	4 bus services on A579 (high frequency route), 10 bus services on A577 (possible combined high frequency route) and 3 bus services on Lancaster Ave (at least 1/hr). Guides busway services 0.5km Nearest rail station is at Atherton 0.5km, 4 direct bus services. 2 footpaths cross the site. Traffic free cycle route to the north west of the site linking to Shakerley / Tyldesley.	✓✓	New, upgraded / promoted walking and cycling links will offer more attractive sustainable access to key locations. Potential new bus service and promotion of existing bus / rail services likely to encourage increase in patronage.	✓✓
	b) Existing peak time congestion	Junctions approaching or over capacity: AM Peak – A579/Carr Bank St; A577/Hamilton St; A577/Shakerley Rd PM Peak – A577/A579 (Church St/Mealhouse Lane); A579/Carr Bank St; A577/Hamilton St; A577/Shakerley Rd Average speeds < 10mph: PM Peak – A579 (Carr Bank St to York St) Northeast bound & Southwest bound	✗	Sustainable transport / community mitigation may prevent negative traffic impact.	0

	Improvements / mitigation suggestions	Potential new bus service to link the guided busway with Atherton station via site. Promotion of existing bus (including the guided busway) and Atherton station services (sustainable park & ride). Existing walking and cycling routes to be upgraded / promoted and new walking and cycling links to be provided / promoted to serve key local destinations.			
17. Sustainable economy	a) 'Appropriate' employment provision in deprived areas	Site proposed for mixed use development	0	A well designed mixed use site should assist wider area.	✓
	b) Local food production	Site development could include the provision of allotments and/or gardens			✓
	Other Comments	The site is proposed for mixed use development and is located adjacent to deprived communities including those within the top 10% most deprived in England (Shakerley and Hag Fold East) and those within the top 30% (Hindsford South, Atherton Centre and Atherton East). Quality housing development may help to reduce inequalities in the borough.			
18. Economy and employment	Attractiveness for employment development / raising Wigan's economic profile	Chanters Industrial Estate is a successful employment location which experiences high occupation and competition when plots become available. The success of this adjoining site suggests that the provision of additional employment land in this location will be quickly occupied for industrial use.	✓	Development would need to build on the success of current sites in the locality.	✓
	Owner constraints	Although the site has several private owners, these are probably solvable issues.			

Sustainability Appraisal – Garrett Hall, Astley

The site is greenfield which determines a key negative to development despite mitigation. Other negatives are seen in biodiversity (species), air quality and congestion (which are linked), the affect on agricultural land and landscape impacts. Key positives arise in recreation provision and housing. Another positive is the potential for proposed infrastructure improvements to have a network-wide effect on air quality, which is linked in to sustainable travel support. Impacts on crime may be marginally positive; as are the impact on biodiversity (sites).

SA objective and sub criteria		Comments	Basic score	Mitigation / Enhancement Comments	Residual impact
1. Biodiversity	a) Designated sites	The value for biodiversity is limited although hedgerows on the site are considered priority habitat.	0	Retention and planting of new hedgerows and native planting to site boundaries. Potential to increase biodiversity in any new development.	✓
	b) Species	Priority habitats present: hedgerow, pond. Priority species present: great crested newt. Priority species probable: common toad, house sparrow, lapwing, skylark, song thrush, starling, water vole, dunnock. Priority species potential: bats, bullfinch, corn bunting, grey partridge, linnet, reed bunting, tree sparrow, yellowhammer. Impacts depend on scheme details.	xx	Mitigation and enhancement will be required which will have to be developed as part of any overall development plan for the site. Presence of protected species will need to inform any design.	x
2. Air quality	a) Air quality assessment	The site is close to the East Lancashire Road (A580) and the A577 parts of which are Air Quality Management Areas. Unless local employment opportunities are improved, residents will need to travel for work, and car travel is currently the most attractive mode of transport. However, proximity to the A580 could reduce traffic emissions from inner areas of the borough by diverting traffic to areas with less exposure.	xx	Ensuring development makes best use of current links and also improves provision and promotion of other sustainable travel modes will be crucial in ensuring limited impact on air quality.	x
	b) Potential for proposed infrastructure to mitigate or enhance	The location has good accessibility by both road and public transport. Public transport accessibility will be improved on construction of the proposed Leigh Salford Manchester Busway along the northern boundary of the site.			✓
a n d	a) Brownfield /	Site is greenfield. Impact would	xxx	Retain hedgerows and	xxx

	greenfield proportion	be permanent loss of greenfield. Not easy to mitigate.		replant new tree cover	
	b) Impact on 'agricultural' land	Slowly permeable seasonally wet acid loamy and clayey soils. Drainage is impeded with low fertility. Classified as grade 3b agricultural land. There are large areas of farmland (mostly grazing / grass) that could potentially be used for agriculture.	×	Good quality top soil could be conserved and put to alternative use on/off site.	×
4. Water	a) Flood risk	Honksford brook runs east to west through the middle of the site and it is this section of the site that falls within flood zones 2 (1.11% of total site area) and 3 (4.69% of total site area). This area of the site is also identified as being of intermediate and high vulnerability to surface water flooding. Avoidance of these areas reduces the risk/impact.	×	The size of the site means that development in flood zone 3a can be avoided. Areas vulnerable to flooding are to be designated as public open space/water compatible uses only. Surface water runoff can be maintained to current levels.	0
	b) Water supply	United Utilities report some moderate capacity / servicing / cost issues for both the existing employment area and safeguarded land. For example, reinforcement required or identification that certain uses may cause capacity issues.	×	Can be mitigated at cost	0
	c) Waste water	There are moderate capacity / servicing / cost issues on the existing primary employment areas. However, the safeguarded land part of the key site has no issues with waste water at present.	×	Can be mitigated at cost	0
	Other comments	A public sewer crosses this site and UU will not permit building over it. UU will require an access strip width in accordance with the minimum distances specified in the current issue of 'Sewers for Adoption', for maintenance or replacement. This site must be drained on a separate system, with only foul drainage connected into the foul sewer. Surface water should discharge to the watercourse/soakaway/ surface water sewer and may require the consent of the Environment Agency. If surface water is allowed to be discharged to the public surface water sewerage system UU may require the flow to be attenuated to a maximum discharge rate determined by United Utilities.			

<p style="text-align: center;">5. Landscapes</p>	<p>Qualitative assessment against SA objective and sub-criteria</p>	<p>Falls into the character 'undulating enclosed farmland', much of which is fragmented. The area retains some agricultural character, although it has been adversely affected by urban/suburban pressure and disturbance, resulting in generally low-grade farmland. In general such landscape character types could be considered amongst the least sensitive of the borough's landscapes. However, such areas do form an important function in breaking up large and dense areas of housing to form green oasis in a largely urban landscape. Development of the site would be significant and could affect the ability of these areas to perform this function. The site also has local intrinsic value; however, there is some potential to improve the use of the area for informal recreation (source: Landscape character Assessment 2009).</p>	<p style="text-align: center;">××</p>	<p>Intrusion of further development could critically affect the viability of the remaining area and should therefore be extremely carefully considered. Should including public open space and woodland planting as part of development.</p>	<p style="text-align: center;">×</p>
<p style="text-align: center;">6. Built environment</p>	<p>Historic designations</p>	<p>Garret Hall is located at the western edge of the site and is a Grade II Listed Building.</p>	<p style="text-align: center;">×</p>	<p>Potential adverse impact on the site and setting of Garrett Hall could be avoided provided development proposals are so designed to respect and enhance these aspects. This will require careful attention to maintaining views in and around the heritage asset. The wider landscape setting is important and should also be given careful consideration in scheme proposals.</p>	<p style="text-align: center;">0/✓</p>

<p style="text-align: center;">7. Community safety</p>	<p>Qualitative assessment completed to identify area characteristics and potential issues</p>	<p>Proximity to Town Centre -This should not be problematic. The area is some distance from the nearest town centre (Tyldesley). Cross Border Offending - The area is close to the border with Salford although it is one of the more affluent areas of that Borough and does not pose a great cross border threat. Major Traffic Routes - Both Chaddock Lane (to the South) and Mossley Common Road (to the North East) connect to the A580 East Lancashire Road within a few hundred metres and this makes the area susceptible to travelling offenders who will find easy access from and egress to this main thoroughfare. Known prolific offenders (based outside the borough) have targeted housing estates in this area and in similar locations along the A580 in the past and measures would need to be taken to make any proposed housing here less attractive to offenders to counter this risk. Vulnerable Localities Index - The score here is generated almost entirely by the Mossley Common/Sale Lane SOA and is broadly in line with the Borough average. The one area of concern is Burglary offences that are around 1½ times more likely in this area than in the Borough as a whole.</p>	<p style="text-align: center;">×</p>	<p>Access issues would be a priority for any development</p>	<p style="text-align: center;">0/×</p>
<p style="text-align: center;">8. Neighbourhood quality</p>	<p>a) Amenity considerations</p>	<p>Vehicular access would be likely to have a minor impact on the amenity of the street scene and adjacent occupiers. There is a school 0.5km to the south-west of the site centre.</p>	<p style="text-align: center;">0/×</p>	<p>Mitigation could be achieved by promoting sustainable transport alternatives. The approach could help to manage impacts arising from development.</p>	<p style="text-align: center;">0/×</p>
	<p>b) Environmental gain</p>	<p>Site is not in particular need of reclamation and does not present an eyesore. Development would not create poorer quality environments, but much of the 'natural' feel to the area could be affected.</p>	<p style="text-align: center;">0</p>	<p>Mitigation could be achieved by incorporating existing natural and new environmental features in the layout and of proposals.</p>	<p style="text-align: center;">0</p>

9. Waste	Comments	Housing development will inevitably lead to increased waste production	✗	Requiring site waste management plans on new development sites will have marginal positive impact	✗
10. Health	Comments	Approximately 1,600 additional residents would require access to GP and dental services. The nearest GP is currently accepting new patients. Access to an NHS dentist currently accepting new patients is reasonable. Access to fresh food within walking distance is reasonable. The health impact of additional traffic generated by new residents on existing residents in the immediate surrounding areas would be severe where access is taken directly from Mosley Common Road to the east where the existing incidences of poor health are high. Impact would be low where access is taken from other surrounding areas where incidences of poor health are low.	✗	Potential for investment in doctor and dental services. Potential to improve local centre at Sale Lane. Ensure residential travel plan is in place and appropriate green space and trees are provided on approaches to the site.	✓
11. Recreation	Impact on existing recreational space and opportunity for enhancement	Currently unused for formal recreation. Site development presents opportunities for improved provision / permeability of open space, play facilities and allotments on a local basis. No open space designations on site. Adjacent to cemetery. Greenway network adjacent to site to north. Two Public Rights of Way adjacent to the site, one bridleway adjacent to site which is also a traffic free cycle route with rough surface to the south. This site is outside the catchment area for all categories of park.	✓	A well designed development has the potential to contribute positively to the open space provision in this area. An opportunity to address gap in park provision in Tyldesley. An increase in population would create demand making other sports and cultural facilities in the area more sustainable.	✓✓✓
12. Housing	Contribution to housing delivery targets	Assuming a density of 30 dwellings per hectare on a developable area of 22.1 hectares, the broad site option could potentially contribute approximately 663 dwellings towards meeting the borough's housing requirement.	✓✓✓	Potential for a range of house types and tenures.	✓✓✓

	Provision of affordable / sustainable homes	The location has the potential to deliver up to 166 affordable units as part of the overall housing development.	✓✓✓	Affordability problems are high and the housing market is historically strong in this location compared to the borough as a whole. Therefore, affordable housing delivery is a very important objective in this location.	✓✓✓
13. Education	Education facilities / capacity	The development is likely to yield around 140 primary and 100 secondary school pupils. The development will require the provision of around 90 primary and 110 secondary places.	✗	The modification and/or extension of existing primary and secondary schools will address capacity issues.	0
14. Community	Index of Multiple Deprivation - <i>potential to address the inequality gap</i>	There are relatively high levels of deprivation in areas immediately adjacent to the site as Mosley Common/ Sale Lane falls within the top 20% most deprived areas. However, the general area surrounding the site has moderate, low or very low levels of deprivation.	0	Potential for contribution to measures to improve the outcomes of the residents through supporting community infrastructure on the Mosley Common estate and Sale Lane.	0/✓
15. Energy	a) Capacity	Gas: no capacity issues Electricity: Spare Capacity as at 2011/12	0	Development needs to ensure it is as energy efficient as possible in order to retain future capacity.	0
	Renewables: Qualitative assessment	Solar potential is reliant on construction of dwellings. Wind power probably unfeasible in area of dwellings (6.2m/s at 45m)			
16. Accessibility	a) Sustainable transport accessibility	Leigh Salford Manchester Busway within 400 metres. 6 bus services on A577 (at least 1/hr), 3 bus services on A5082 (at least 1/hr) and 5 bus services on A572 (at least 1/hr). Nearest rail stations are Atherton & Walkden both 2.8km. Direct bus service to Atherton. Direct bus service to Walkden. 10 footpaths cross the site. Traffic free cycle route across the site linking Mosley Common to Tyldesley. LSM east-west linear path (NCN 55) on northern edge of the site.	✓✓	New, upgraded / promoted walking and cycling links will offer more attractive sustainable access to key locations. Promotion of existing bus services and provision of Leigh Salford Manchester busway likely to encourage increase in patronage	✓✓✓

	b) Existing peak time congestion	Junctions approaching or over capacity: AM Peak – A577/A5082 (Hough Lane); A577/A580. PM Peak – A577/A5082(Hough Lane); A577/A580; A577/A5082 (Mort Lane) Average speeds < 10mph: PM Peak – A577 (Mosley Common) Southeast bound to A580	×	Despite sustainable transport improvements / promotion, there will be an increase in number of peak time car borne trips.	×
	Improvements / mitigation suggestions	Promotion of existing bus (and Leigh Salford Manchester busway) and potentially further afield to Atherton & Walkden rail stations services. Existing walking and cycling routes to be upgraded / promoted and new walking and cycling links to be provided / promoted to serve key local destinations.			
17. Sustainable economy	a) 'Appropriate' employment provision in deprived areas	Site not proposed for employment	n/a	Not applicable	n/a
	b) Local food production	Site development could include the provision of allotments and/or gardens			✓
	Other Comments	Whilst the site is not proposed for employment development it is located within a community within the top 20% most deprived in England (Mosley Common / Sale Lane). The key employment location at Chaddock Lane, Astley is adjacent and within easy walking and cycling distance and quality housing development may help the long term sustainability of this area. Abuts Primary Employment Areas at Parr Brow to the east and Chaddock Lane to the south and is situated on the line of the protected route of the Leigh Salford Manchester Busway. Close proximity to the A580 East Lancashire Road.			
18. Economy and employment	Attractiveness for employment development / raising Wigan's economic profile	Site not proposed for employment	n/a	Not applicable	n/a
	Owner constraints	Not applicable			

Sustainability Appraisal – Golborne and Lowton combined

There are key negative impacts on soil and minerals due to the loss of greenfield land which is classified as best and most versatile agricultural land. This would be either difficult or impossible to mitigate. Increases in traffic could be mitigated. Other negatives have been identified in air quality, waste water (due to an accumulation of development), loss of landscape character and waste. Key positives will be seen in terms of recreation as surrounding infrastructure is supported and enhanced, as well as housing as it would be an attractive area to develop and live in. Other positives arise from the potential for infrastructure which may address network-wide air quality issues as well as health support and sustainable travel and community (deprivation) issues.

SA objective and sub criteria		Comments	Basic score	Mitigation / Enhancement Comments	Residual impact
1. Biodiversity	a) Designated sites	There are no designated sites within or close to the site. However, there are a number of Tree Preservation Orders and there is the potential for a combined impact on the Manchester Mosses Special Area of Conservation.	×	Mitigation measures should help to minimise impacts. Retain Tree Preservation Order trees.	0/×
	b) Species	Species present or likely to be present at these sites is unknown due to a lack of surveys. Surveys at Pocket Nook reveal some protected species and habitats.	×	Mitigation as part of development could enhance habitats, but will need to be informed by survey results and be developed as part of specific development proposals. Species mitigation will be required.	×
2. Air quality	a) Air quality assessment	Access to the locations will be predominantly via the East Lancashire Road rather than through the borough. Air quality would only be marginally affected in along major routes into the borough and minimally in residential areas. However, travel is likely to be by private vehicle. The extent of impacts is dependant upon which strategic sites are brought forward.	×	Incorporating tree cover along the major routes into the borough and within the development will help offset decrease in air quality arising from increased use of private vehicles. Improved bus services to residential estates would assist.	×
	b) Potential for proposed infrastructure to mitigate or enhance	There is potential for infrastructure associated with development in the location that may assist with air quality – notably the through roads for Stone Cross and Pocket Nook as well as improved bus services. Such investment would contribute to network-wide improvements; improving air quality if modal shift can be secured.			✓✓?

3. Soil and minerals	a) Brownfield / greenfield proportion	All sites are majority greenfield, so assume a negative impact.	xxx	Retain existing tree cover and hedgerow screening off the East Lancashire Rd.	xx
	b) Impact on 'agricultural' land	Slowly permeable seasonally wet slightly acid loamy and clayey soils, with seasonally wet pastures and woodlands. Grassland with some arable woodland. Drainage is impeded with moderate fertility. All strategic sites are used for agriculture to varying extents, with some land classified as grade 3b and 4.	xx	Top soil could be conserved and put to alternative use on/off site.	xx
4. Water	a) Flood risk	Flood risk varies across the different parts of the broad location. Minor concerns at Pocket Nook and Stone Cross Lane.	x	Mitigation and avoidance of developing in areas at risk of flooding should ensure that impacts are minimal.	0
	b) Water supply	Some potential capacity issues identified in this area with a number of assets on site which will require buffer zones.	x	Buffer zones required to protect United Utilities assets	0
	c) Waste water	United Utilities reports that current wastewater infrastructure is at capacity in the Rothwell's Farm area. Mining subsidence may affect the integrity of the water infrastructure	x	With and accumulation of development, significant investment will be required to improve the sewerage infrastructure and the wastewater pumping station at the A580 East Lancashire Road before new development commences.	x
	Other comments	Although water supply can be provided (at a cost), the overall impact on water resources could remain negative in the context of rising demand and climate change. Strategic sites also fall within groundwater protection zones to varying extents and significance.			
5. Landscapes	Qualitative assessment against SA objective and sub-criteria	Undulating enclosed farmland. The East Lancashire Road corridor characterises the area, with the A580 visually dominant. However, the open space acts as a buffer from densely populated areas.	xx	Any development should consider sensitive landscaping and planting of trees to restore areas of woodland to the area.	x

6. Built environment	Historic designations	Comment is given in respect of known historic designations within the individual appraisals for those sites that collectively make up this broad location, i.e. Stonecross Lane, Pocket Nook Lane and Rothwell's Farm.	0/✗	Provided development scheme proposals are designed using sustainable principles that take account of buildings of interest and integrate these in the schemes, while in so doing revealing their character and setting, then any development may be positive.	0/✓
7. Community safety	Qualitative assessment completed to identify area characteristics and potential issues	Proximity to Town Centre – Town centres close by. Cross Border Offending - Cross boundary crime may be an issue. Major Traffic Routes – A580 provides a major traffic route Vulnerable Localities Index – Some areas of concern.	✗	Development would clearly have to consider access issues and security.	0/✗
8. Neighbourhood quality	a) Amenity considerations	The local area is presently adversely affected by traffic congestion, particularly at peak times. New housing development would result in a substantial increase in congestion therefore impacting further on the amenity of surrounding communities in Lowton and Golborne. There will be localised adverse amenity impact on those residents who appreciate the openness of the area at present.	✗✗	Mitigation could be achieved by promoting sustainable transport alternatives. This could help to manage impacts arising from the development of the component sites that make up the broad location.	0/✗
	b) Environmental gain	Most sites within the broad location are not in need of improvement. Built development would be likely to affect the environmental quality of the area even with mitigation measures secured.	✗	Mitigation could be achieved by incorporating existing natural and new environmental features in the layout and design of scheme proposals. The approach should help to manage adverse environmental impacts arising from development.	0/✗
9. Waste	Comments	Housing development will inevitably lead to increased waste production	✗	Requiring site waste management plans on new development sites will have marginal positive impact.	✗

10. Health	Comments	<p>Approximately 5,800 additional residents would require access to GP and dental services. The nearest GPs are currently accepting new patients. Access to a NHS dentist currently accepting new patients is very poor. Access to fresh food may be problematic in some localities. The health impact of additional traffic (generated by new residents) on existing residents in the immediate surrounding areas would be severe where access is through dense urban areas with existing severe health problems (especially the Derby Road estate) and minimal in other localities where incidences of poor health are few.</p>	✗	<p>Potential for gateway improvements to Greenheart at several locations. Potential for investment in doctor and dental services. Potential for new local shopping centres in some locations. Ensure residential travel plans are in place and appropriate green space and trees are provided on all approaches to the sites.</p>	✓
11. Recreation	Impact on existing recreational space and opportunity for enhancement	<p>Some sites could present opportunities for enhanced formal recreation facilities, whilst others are limited. Overall, a neutral impact can be assumed until further detail comes forward. Overall development would have little impact on existing recreational space designations.</p>	0	<p>Potential for gateway improvements to Greenheart and minimal loss of existing designated open space. Potential to secure improvements for Pennington Flash Country Park and The Bonk township park. Potential to create a local park facility in Lowton. An increase in population would create demand, making other sports and cultural facilities in the area more sustainable.</p>	✓✓
12. Housing	Contribution to housing delivery targets	<p>The collective contribution for the location (comprising Stonecross Lane, Pocket Nook Lane and Rothwell's Farm) on a developable area of 92.91 hectares could potentially contribute approximately 2644 dwellings towards meeting the borough's housing requirement.</p> <p>Taken as a whole, a mix of house types, sizes and styles is envisaged, to include higher value, aspirational housing to help better balance the borough's housing stock.</p>	✓✓	<p>Potential for a range of general market housing types and tenures.</p> <p>Development would need to be carefully considered and phased so as to minimise any impact on comparatively weaker markets in central areas.</p>	✓✓✓

		<p>Extensive development here could draw demand from weaker housing markets in the central parts of the borough unless measures were implemented to address this.</p> <p>Proximity to A580 East Lancashire Road, with access into Salford and Manchester would make this location attractive to persons employed or seeking employment there. Development would constitute urban extensions of existing development at Golborne and Lowton, with the A580 to the south acting as a constraint to further development to the south.</p>			
	Provision of affordable / sustainable homes	<p>Subject to economic viability considerations the broad site option has the potential to deliver around 661 affordable units.</p> <p>Proximity of parts of the cumulative location to the A580 East Lancs. Road and adjacent employment uses is likely to require amenity mitigation measures.</p>	✓✓✓	<p>Affordability problems are variable, when considering the three component sites that make up this cumulative location. While the Stonecross Lane and Pocket Nook Lane sites are located in areas where the affordability problem is high compared to the borough as a whole, Rothwell's Farm experiences a lower affordability problem. Taken cumulatively, therefore, affordable housing delivery is considered a very important objective in the context of the borough as a whole.</p> <p>Opportunities to design-in environmental enhancements and amenity mitigation measures.</p> <p>May be opportunities for provision of low carbon technologies and higher standards</p>	✓✓✓

				of sustainability in design.	
13. Education	Education facilities / capacity	The development is likely to yield around 550 primary and 400 secondary school pupils. With no existing capacity at local primary schools, the development will require the provision of three 1-form entry primary schools or equivalent. There is sufficient capacity at local secondary schools.	xxx	The provision of 3 new 1-form-entry primaries schools or equivalent will address capacity issues.	0
14. Community	Index of Multiple Deprivation - <i>potential to address the inequality gap</i>	Levels of deprivation in this area are mainly moderate or low, although there are small pockets where levels are higher. There are opportunities to tackle deprivation directly, or through local contributions, depending upon scheme details. Mainly low or very low levels of deprivation in the adjoining areas and surrounding areas with the exception of Derby Road estate.	x	Potential for contribution to measures to improve outcomes for residents on the Derby Road estate, and slightly further afield through support of local community infrastructure.	✓
15. Energy	a) Capacity	Gas supply in local area – no capacity issues Electricity: Spare capacity exists.	0	Development needs to ensure it is as energy efficient as possible in order to retain future capacity.	0
	Renewables: Qualitative assessment	Solar potential is reliant on the construction of dwellings. Wind power unfeasible overall.			
16. Accessibility	a) Sustainable transport accessibility	Some existing high frequency bus services provision for Rothwell's Farm (including lower frequency service to Newton-le-Willows rail station) and Stone Cross but Pocket Nook is mainly too remote from existing bus network. Some existing cycle network provision on edges of Pocket Nook site.	0	Incorporating and promoting new and/or upgraded walking and cycling links will offer more attractive sustainable access to key locations across the area. New bus services and promotion of existing bus / rail services likely to encourage increase in patronage but ability to exploit Newton-le-Willows rail, LSM Busway and 'New Golborne Station' may be limited.	✓
	b) Existing peak time	Considerable morning peak hour congestion on southbound	xxx	Increase in number of peak time car borne	xx

	congestion	approaches to A580 across the location with the reverse happening during the evening peak.		trips will be generated by the broad location to / from A580. Mitigated by sustainable transport improvements / promotion and potential traffic relief from new road links	
	Improvements / mitigation suggestions	There is potential for new through-roads for Stone Cross and Pocket Nook; with the relieved network earmarked for community / sustainable transport (or vice versa). New bus services to serve Stone Cross and Pocket Nook sites. Promotion of existing bus services and Newton-le-Willows rail services. New walking and cycling links to be provided / promoted across the broad location.			
17. Sustainable economy	a) 'Appropriate' employment provision in deprived areas	Site not proposed for employment	n/a	Not applicable	n/a
	b) Local food production	Site development could include the provision of allotments and/or gardens			✓
	Other Comments	The A580 East Lancashire Road Corridor is a key transport link to the Manchester and Liverpool City Regions. Provision of higher quality housing within the broad location could attract businesses to the employment areas located along this corridor looking to accommodate highly skilled staff to the area.			
18. Economy and employment	Attractiveness for employment development / raising Wigan's economic profile	Site not proposed for employment	n/a	Not applicable	n/a
	Owner constraints	Not applicable			

Sustainability Appraisal – Standish combined

The key negative impact is the inability of this location to make a meaningful contribution to addressing the inequality gap, so community scores particularly poorly. Similarly, a key negative is identified for congestion where development will exacerbate problems. As the majority of locations are greenfield, there is a key negative impact on soil and minerals; and due to a loss of character there is a negative impact for landscape too. Other negative impacts are seen in biodiversity, loss of agricultural land, effects on neighbourhood quality and waste. Key positives are seen on housing due to the attraction of the area and the ability for development across a wide area to help address air quality issues. Other positives are seen in supporting health infrastructure and outcomes, as well as recreation provision.

SA objective and sub criteria		Comments	Basic score	Mitigation / Enhancement Comments	Residual impact
1. Biodiversity	a) Designated sites	There are three Sites of Biological Importance within the broad location and a number of others in close proximity. There are numerous Tree Preservation Orders and potential priority habitats.	XX	With mitigation, enhancement or compensation, impacts may be reduced, although some element of disturbance would likely remain.	X
	b) Species	Great crested newts have been recorded in numerous ponds and there are records for a range of species including water vole and bats on/in close proximity. Detailed surveys required including of birds and hedgerows.	XX	With mitigation, enhancement or compensation, impacts may be reduced, although some element of disturbance would likely remain.	X
2. Air quality	a) Air quality assessment	Increase in car borne trips as well as access from motorway through Shevington Moor is likely to worsen air quality along major routes to this location.	X	Incorporating tree cover along the major routes into the Borough and within the development will help offset increase in air quality as a result of increasing use by private vehicle. Improve public transport, walking and cycling access and promotion between this location and Wigan as well as across wider network will help.	0/X
	b) Potential for proposed infrastructure to mitigate or enhance	Ability to take network wide approach to air quality issues if all locations developed with positive impact if shift away from car use secured.			✓✓

3. Soil and minerals	a) Brownfield / greenfield proportion	This depends upon which sites are brought forward. As most sites are majority greenfield, we can assume an overall negative impact.	xxx	Difficult to mitigate but retaining footpaths and tree cover as appropriate would help.	xx
	b) Impact on 'agricultural' land	<p>Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils, with seasonally wet pastures and woodlands. Grassland with some arable woodland. Drainage is impeded with moderate fertility.</p> <p>A mix of classifications including Grade 3a best and most versatile and grade 3b agricultural land. Development would likely lead to the loss of Grade 3a best and most versatile agricultural land.</p>	x	Top soil could be conserved and put to alternative use on/off site.	x
4. Water	a) Flood risk	These sites are within flood zone 1. However, there are areas within the sites identified as being of intermediate / high vulnerability to surface water flooding but this is not a large proportion of either site.	0/x	Areas vulnerable to flooding can be designated as public open space/water compatible uses only. Surface water runoff can be maintained through mitigation. Run off into watercourses can also be controlled in terms of quality.	0
	b) Water supply	No water supply issues	0	Development should ensure it is as water efficient as possible.	0
	c) Waste water	No waste water issues	0	Use of sustainable drainage systems should be encouraged.	0
	Other comments	Although water supply can be provided (at a cost), the overall impact on water resources in the context of rising demand and climate change needs to be considered.			

5. Landscapes	Qualitative assessment against SA objective and sub-criteria	Elevated enclosed farmland formed by 2 spurs of high land to the north of the Borough projecting in a southerly direction, generally towards the urban areas of Wigan. These visually dominate areas of elevated rural landscape and consist of large-scale mainly arable fields which soften and contrast with the adjoining heavily developed areas of Wigan to the south. If any development takes place on these spurs, this attribute would be lost or reduced in terms of its present quality.	xxx	Mitigation measures may soften the impact but there will be unavoidable changes to the character of the area.	xx
6. Built environment	Historic designations	There is one known heritage asset at Rectory Farmhouse – Grade II Listed, immediately north of Rectory Lane. 'The Owls at Standish' restaurant, to the south of Rectory Lane and buildings at Robin Hill Farm East and Robin Hill Farm West are of local interest.	0/x	Considered cumulatively, development on this scale will have an impact on the built environment of Standish as a whole. However, provided schemes are so designed to incorporate sustainable development principles, led through detailed master-planning and with effective community involvement, Standish could benefit.	0
7. Community safety	Qualitative assessment completed to identify area characteristics and potential issues	Proximity to Town Centre – Standish Town Centre in area but does not have significant crime rates Cross Border Offending – Access for cross boundary offences is not expected to be a particular problem Major Traffic Routes – Proximity to M6 motorway and other local routes Vulnerable Localities Index - Unlikely to be affected by crime associated with deprived areas as surrounding areas are fairly affluent.	0	Accessibility to the major transport network appears to be a vulnerability. Site design would need to consider security.	0

8. Neighbourhood quality	a) Amenity considerations	Standish is presently adversely affected by traffic congestion, particularly at peak times. New housing development would result in a substantial increase in congestion therefore impacting further on the amenity of surrounding communities. Residential development would be unlikely to present significant adverse amenity impacts in other respects. However, those local residents who presently value the openness of the sites may perceive the loss of openness itself as a negative amenity impact.	xx	Adverse impacts can be mitigated by incorporating sustainability principles into the design and layout of scheme proposals. This should be coupled with active community consultation and engagement at an early stage, and subsequently through the scheme development process	x
	b) Environmental gain	Small amount of neglect (former golf course and buildings). The natural environment would be less attractive as the result of development	x	Some mitigation could be achieved by incorporating existing natural and new environmental features in scheme design and layout proposals.	x
9. Waste	Comments	Housing development will inevitably lead to increased waste production	x	Requiring site waste management plans on new development sites will have marginal positive impact	x
10. Health	Comments	Approximately 9,000 additional residents would require access to GP and dental services. The nearest GP is currently accepting new patients. Access to an NHS dentist currently accepting new patients is very poor. Access to fresh food within walking distance from some locations is poor. The health impact of additional traffic generated by new residents on existing residents in the immediate surrounding areas would be low as access is directly from main roads or via existing estates where existing incidences of poor health are few.	x	Potential for additional local shopping centre or improved links to Standish town centre. Potential for investment in doctor and dental services. Ensure residential travel plans are in place and appropriate green space and trees are provided on all approaches to the sites	✓

<p>11. Recreation</p>	<p>Impact on existing recreational space and opportunity for enhancement</p>	<p>North of Rectory Lane more suitable for development than other Standish sites due to absence of open space designations and current lack of public access. Almond Brook slightly more suitable than Rectory Lane south as there are fewer open space designations. Almond Brook is outside the catchment area for all categories of park. The Rectory Lane sites are within the 3.2km catchment for a principal park (Haigh Country Park) and the 1.2km catchment for a township park (Ashfield Park).</p>	<p>✘</p>	<p>Potential for some of the open space designations to be retained but the former uses would be lost. Other land could be found to offset the recreation land lost to development. Potential to provide further park space on Almond Brook site. Haigh Country Park and Ashfield Park could benefit from investment. An increase in population would create demand making other sports and cultural facilities in the area more sustainable.</p>	<p>✓</p>
<p>12. Housing</p>	<p>Contribution to housing delivery targets</p>	<p>Assuming a density of just below 30 dwellings per hectare on a developable area of 102.72 hectares, the broad site option could potentially contribute around 2,900 dwellings towards meeting the borough's housing requirement</p>	<p>✓✓✓</p>	<p>Envisage potential for mix of housing types, including smaller and family homes.</p> <p>Majority greenfield locations.</p>	<p>✓✓✓</p>
	<p>Provision of affordable / sustainable homes</p>	<p>Subject to economic viability considerations the broad site option has the potential to deliver around 770 affordable units as part of the overall housing development.</p> <p>Historically strong housing market in this part of the borough and anticipated high development values are positive factors in support of potential affordable housing delivery.</p> <p>The level of potential development here will place pressure on existing infrastructure and services. Extensive development here could draw demand from weaker housing markets in the central parts of the borough unless measures were implemented to address this.</p> <p>Like for like development costs are anticipated to be lower than for equivalent brownfield.</p>	<p>✓✓✓</p>	<p>Affordability problems in this cumulative location are high compared to the borough as a whole.</p> <p>The delivery of affordable housing is therefore a very important objective in this cumulative location.</p>	<p>✓✓✓</p>

13. Education	Education facilities / capacity	The development is likely to yield around 650 primary and 460 secondary school pupils. The development will require the provision of a new 2-form entry and a new 1 form entry primary school or equivalent and an additional 210 secondary places.	×××	The provision of a new 2-form entry primary school and new 1-form entry primary school and the modification / extension of existing secondary schools could address capacity issues	0
14. Community	Index of Multiple Deprivation - <i>potential to address the inequality gap</i>	Very low or low levels of deprivation in all adjoining areas and moderate in only one area. Very low or low levels in the surrounding areas.	×××	Even with provision of some affordable homes, there is little to no potential for contribution to measures to improve the outcomes of the residents in areas of deprivation.	×××
15. Energy	a) Capacity	Gas: no capacity issues Electricity: Spare Capacity not available as at 2011/12. Approved schemes to increase capacity	×	Development needs to ensure it is as energy efficient as possible in order to retain future capacity. Reliant on infrastructure investment	0/×
	Renewables: Qualitative assessment	Solar potential is reliant on construction of dwellings			
16. Accessibility	a) Sustainable transport accessibility	Existing bus services are within walking distance of all locations although none are high. All three locations have direct bus services to Gathurst and Appley Bridge stations but these are some distance away. Some modest existing cycle network provision at two of the locations.	0/✓	New, upgraded / promoted walking and cycling links will offer more attractive sustainable access to key locations across the area New bus services and promotion of existing bus / rail services likely to encourage increase in patronage but ability to exploit a 'New Standish Station' may be limited.	✓
	b) Existing peak time congestion	Considerable peak hour congestion on approaches to Standish crossroads.	×××	Despite sustainable transport improvements / promotion, substantial number of peak time car borne trips will be generated by the broad location to / from Standish crossroads.	××

	Improvements / mitigation suggestions	New bus services as well as increased support for current services would be required. Access to rail services is available but of limited attraction. Existing walking and cycling routes to be upgraded / promoted and new walking and cycling links to be provided / promoted to serve key local destinations. Ability to take a network-wide approach if all locations developed.			
17. Sustainable economy	a) 'Appropriate' employment provision in deprived areas	Site not proposed for employment	n/a	Not applicable	n/a
	b) Local food production	Site development could include the provision of allotments and/or gardens			✓
	Other Comments	Standish is one of the borough's most affluent areas; therefore development here would not reduce inequalities in the borough.			
18. Economy and employment	Attractiveness for employment development / raising Wigan's economic profile	Site not proposed for employment	n/a	Not applicable	n/a
	Owner constraints	Not applicable			