#### South Cambridgeshire Strategic Housing Land Availability Assessment (SHLAA) Report August 2013

#### Appendix 7i: Assessment of 2011 'Call for Sites' SHLAA sites

## **Index of New Settlements & Site Assessment Proforma**

Site Number	Site Address	Site Capacity
Site 057	Bourn Airfield, Bourn	3,500 dwellings
Site 135	Land at Six Mile Bottom	10,000 dwellings
Site 194	Land north of A428, Cambourne	2,626 dwellings
Site 231	Land north of Waterbeach	12,750 dwellings
Site 231A (Council's variation of site 231)	Land north of Waterbeach	8,000 - 9,000 dwellings
Site 238	Bourn Airfield, Bourn	3,000 dwellings
Site 242	Land north west of B1050, Station Road, Longstanton (Northstowe Reserve)	897 dwellings
Site 248	Hanley Grange, east of A1301 and west of A11	5,000 dwellings
Site 251	Land at Heathfield (north of Duxford Airfield)	962 dwellings
Site 261	Land at Barrington Quarry	3,250 dwellings
Site 265	Land to the north of the A428, Cambourne	2,500 dwellings
Site 273	Southwell Farm, Station Road, Longstanton (part of Northstowe Reserve)	66 dwellings
Site 274	Land generally to the north and north east of Northstowe adjoining the Cambridgeshire Guided Busway	1,800 dwellings
Site 275	Old East Goods Yard, Station Road, Oakington	16 dwellings

# South Cambridgeshire Local Development Framework Strategic Housing Land Availability Assessment (SHLAA) Site Assessment Proforma

Proforma Created	July 2012
Proforma Last Updated	August 2013. Incorporating more recent information that informed the allocation of the site in the Proposed Submission Local Plan including information published in the July 2013 Sustainability Appraisal and its audit trail.
Location	Bourn
Site name / address	Bourn Airfield, Bourn
Category of site:	A new settlement
Description of	New Village to the east of Cambourne with 3,500 dwellings,
promoter's	employment, retail, commercial uses, outdoor, outdoor recreation and
proposal	park & ride
Site area	141.7 ha (the promoter's site is the same as the Major Development
(hectares)	Site area included in the Proposed Submission Local Plan. A larger
Updated August	area for which it is proposed to prepare an Area Action Plan is also
2013	identified, which is 282 ha)
Site Number	057
Site description & context	The site lies to the west of the settlements of Highfields and Caldecote, immediately south of the A428 trunk road (linking Cambridge with Bedford), to the north of the small settlement of Bourn, and to the east of the new settlement of Cambourne. By virtue of the historic use of the site as an airfield it is essentially devoid of natural vegetation and accordingly is very open in nature. The only developed parts on the site comprise aircraft hangers, industrial buildings and outside storage areas.
Comment on local	Site 238 considers same site but as an extension to Cambourne.
Current or last use of the site	Civil Aviation Authority Licensed Airfield for pilot training and private aircraft /Storage/Market/Agricultural
Is the site	ancian / Otorage/ivial Net/Agricultural
Previously Developed Land?	Yes, partly
Allocated for a non-residential use in the current development plan?	No
Planning	Bourn Airfield was constructed for Bomber Command in 1940 as a
history	satellite airfield for nearby Oakington. The airfield remained in RAF

	hands until being passed on to Maintenance Command in 1947. By 1948 the station was closed. The last sections were sold off for agricultural use in 1961.  2004, Local Plan – not included as a potential housing site.
	2007, Local Development Framework – not included as a potential housing site.
	Planning applications There have been a number of planning applications for creating a new settlement on this site. The last one was refused in 1994 (S/0144/94/O) which was for 3,000 dwellings. In 1992 a new settlement comprising 3,000 dwellings, industrial development, shopping and leisure facilities, education, social and recreation facilities was proposed (S/1635/92/O and S/1636/92/O). In 1989 a new settlement comprising of 3,000 dwellings was refused to include 50 acre business park, district shopping centre with superstore, community facilities, leisure facilities (including swimming pool and golf course), landscaping, public open space, community nature reserve drain (S/1109/89/O).
	There have been over the years a number of planning applications on the site for buildings and uses relating to its use as an airfield. In 1998 part of the main runway was given approval for use as open storage of dies (S/0225/98/F).
Source of site (Updated August 2013)	The Major Development Site was suggested through the Call for Sites. The larger AAP area was proposed in a representation by the promoter to the Issues & Options 1 consultation.

Tier 1: Strategic Considerations	
Green Belt	The site is not within the Green Belt.
Is the site subject to any other considerations that have the potential to make the site unsuitable for development?	No
Tier 1 conclusion:	The site lies to the west of the settlements of Highfields and Caldecote, immediately south of the A428 to the north of the small settlement of Bourn, and to the east of the new settlement of Cambourne. By virtue of the historic use of the site as an airfield it is essentially devoid of natural vegetation and accordingly is very open in nature. The only developed parts on the site comprise aircraft

	hangers, industrial buildings and outside storage areas.
Does the site warrant further assessment?	Yes

#### **Tier 2: Significant Local Considerations**

Designations and Constraints		
Heritage considerations?	<ul> <li>Non-statutory archaeological site – Excavations to the north and west have identified extensive evidence of late prehistoric and Roman settlement. There is also evidence for Roman burials within the airfield. Further information would be necessary in advance of any planning application for this site.</li> <li>Setting of Listed Buildings. Adverse effect on open rural functional setting of Listed Building – Great Common Farmhouse 79 Broadway (Grade II) of development along western edge beyond runway.</li> <li>Adverse effect on open rural functional setting of Listed Buildings – barns to the north of The Grange (Grade II) along south-western edge beyond runway. Possible reduced site within north and east of indicated area.</li> </ul>	
Environmental and wildlife designations and considerations?	<ul> <li>Tree Preservation Orders –TPO present in hedge lines throughout the site with a significant woodland in the south east boundary (just off site).</li> <li>Public Rights of Way – no public rights of way across the site or immediately adjoining it.</li> <li>Presence of protected species - Greatest impact likely to be as a result of loosing grassland habitats currently found within the airfield strips. Great crested newts are known to be in the vicinity and may also be adversely affected.</li> <li>Agricultural land of high grade - Agricultural Land Classifications Grade 2 (majority of northern part of site) and 3 (quarter of site - southern section)</li> </ul>	
Physical considerations? (Updated August 2013)	<ul> <li>Land contamination – this site is previously military land/airfield and will require investigation. This can be dealt with by condition.</li> <li>Air quality issues – Despite this proposal not being adjacent to an Air Quality Management Area, it is of a significant size and therefore, there is a potential for an increase in traffic and static emissions that could affect local air quality. More information is required for this location, particularly details for air quality assessment and a low emission strategy.</li> <li>Noise issues - East of the major development site is bounded by an Industrial estate on Bourn Airfield with medium to large sized industrial type units / uses including industrial and warehouse type uses. The Environmental Health Service has had to take enforcement action in the past due to statutory noise and odour nuisances caused to existing residential premises. The proposal</li> </ul>	

would bring sensitive premises closer if the industrial units were to remain. These are unlikely to be considered compatible uses. Noise from activities and vehicular movements are material considerations with significant negative impact potential in terms of health and well being and a poor quality living environment and possible noise nuisance. Current noise has not been quantified. If noise is an issue it is unlikely that mitigation measures on the proposed development site alone can provide an acceptable ambient noise environment. Noise insulation / mitigation abatement measures could be required off-site at the industrial units but there is uncertain as to whether these would be effective. Such mitigation measures are likely to require the full cooperation of the business operators and section 106 planning / obligation requirements may be required and there are no guarantees that these can be secured. Without mitigation any detrimental economic impact on existing businesses should also be considered prior to allocation.

- Environmental Health concerns about the site in 2012 relate to the former ThyssenKrupp manufacturing processes on the site. Note that the site is not currently in active use. The replacement of the existing industrial type uses with lower noise impact employment development more compatible with residential as required by the local plan policy proposed, with additional noise mitigation as appropriate and consideration of measures to mitigate traffic noise impacts from the A428 on future residential would address these concerns, through master planning and detailed design.
- Noise issues The North of the site is bounded by the busy
  A428. Traffic noise will need assessment in accordance with
  PPG 24 and associated guidance. The impact of existing noise
  on any future residential in this area is a material consideration in
  terms of health and well-being and providing a high quality living
  environment. However residential use is likely to be acceptable
  with careful noise mitigation. Noise likely to influence the design
  / layout and number / density of residential premises.
- Topography issues not significant, generally a level site

## Townscape and landscape impact?

The proposed development lies in the Bedfordshire and Cambridgeshire Claylands Landscape Character Area. The site lies south of the A428 and approximately 500m to the east of the new village of Cambourne and 500m west of the village of Highfields. Broadway runs along the east side of the development towards the village of Bourn, 2km to the south of the site.

The site is a former airfield and is fairly level, high plateau between 60 and 70m AOD. South of the site the land falls away to Bourn and the marked valley of Bourne Brook at about 35m AOD.

To the north and south of the site the land is fairly open and rolling, cut by the valleys of several small streams. The field pattern is of

irregular medium and large scale fields separated by mature hedgerows and hedgerow trees. There are many areas of mature Oak and Ash woodland present.

The site is relatively open and devoid of physical features that would restrict its development. There are two lines of protected trees that cut partially into the southern edges of the site, but they would not in any way prejudice development and could reasonably be accommodated within a wider scheme.

A new village on the site would have a significant effect on the local landscape, as although it would sit within a defined site, screened by existing vegetation, the scale of the development and likely mix of buildings would still be seen above the horizon, particularly from the A428 viewed towards Bourn, and the development would begin to link Upper Cambourne and Highfields visually.

However, the landscape impacts would be reduced due to the level terrain, the lack of higher land locally with views to the site, and the screening effect of mature hedgerows and woodlands and developing woodlands surrounding the site and lining many of the local roads and rights of way.

It should be possible to mitigate sufficiently the adverse impact on the setting of listed buildings near the site by having a reduced development towards the northern edge and in the south western part of the site.

#### Can any issues be mitigated? (Updated August 2013)

The replacement of the existing industrial type uses with lower noise impact employment development more compatible with residential as required by the local plan policy proposed, with additional noise mitigation as appropriate and consideration of measures to mitigate traffic noise impacts from the A428 on future residential would address concerns about noise impacts, through master planning and detailed design.

The mitigation of noise from the A428 and from traffic generated on the site could be mitigated by careful design and consideration of the layout and numbers of houses and density.

A new village must appear settled in the landscape, with distinct, rural separation between Cambourne and Highfields. This will require substantial landscape buffers between the settlements and a carefully designed structural landscape within the new development. The site is large enough to provide for the proposed level of development on the major development site as well as providing substantial mitigation through landscape buffers and structural landscaping.

#### Infrastructure

The Highways Agency has advised that development on sites along the A428 corridor is likely to be largely Cambridge-centric but St Neots is also likely to attract a significant amount of trips. For instance rail connectivity via St Neots is likely to be an attractive alternative to Cambridge. Even a modest residual demand between these sites and St Neots could be critical.

Conversely, there is some scope for these large sites to enhance the overall transport sustainability of Cambourne and other local settlements through better integration, with the potential to offset some of the new demand. The capacity to accommodate new development on this corridor is directly related to this scope, which will need to be demonstrated by the promoters.

Highway Authority comments – Transport Assessment and modelling requirements – Potential for around 29,750 daily trips (based on SCATP trip rates). Requirement for transport modelling using the Cambridge Sub-Regional Model (CSRM) to consider wider strategic impact. Full Transport Assessment (TA) and Travel Plans (TP) for residential, schools and employment sites required.

#### Highways access? (Updated August 2013)

Strategic Transport Issues - Cambridgeshire LTP3 sets out the transport strategy. Direct access to A428 Trunk Road (Cambridge – St. Neots – Bedford) via grade separated junction. Potential impact on junctions at either end of A428 (M11 Junction 14 and A1198 roundabout). No rail access.

Local Transport Issues - Poor access to services by walking, although potential to create cycle corridor to Cambourne (West) and Cambridge (East – via Highfields and Coton) with suitable new and improved provision.

Opportunity to strengthen bus services on corridor between Cambourne and Cambridge (Service 4) through appropriate enhancement of capacity.

Madingley Park and Ride capacity may need upgrading.

The County Council consolidated and confirmed its approach towards development on the St Neots and Cambourne to Cambridge Transport Corridor in its Draft Transport Strategy 2013 which provides for a development at Cambourne West and Bourn Airfield and which models the transport impacts of development proposals. The measures include: an outer Park and Ride site, extensive bus priority and bus infrastructure improvements including on the A428 and A1303 and within and between the new developments, high quality segregated bus priority measures on the A1303 between its junction with the A428 and Queens Road Cambridge, bus priority measures at the A428/A1198 roundabout, cycling infrastructure

	including links to Cambridge and measures to mitigate traffic impacts on local villages. The transport modelling work concludes that development locations should maximise sustainable travel alternatives to the car, particularly by providing high quality public transport. New Settlement locations are better suited to delivering the necessary infrastructure to encourage travel by non-car modes than dispersed village options.
Utility services? (Updated August 2013)	<ul> <li>Electricity – Likely to require system reinforcement</li> <li>Mains water – Cambridge Water Company advise that there is insufficient spare capacity within Bourn Reservoir Distribution Zone to supply the number of proposed properties. Spare capacity will be allocated on a first come first served basis. To increase the capacity of the zone will require either an upgrade to existing boosters and/or new storage reservoir, tower or booster plus associated mains.</li> <li>Gas – Cambourne benefits from a gas supply and it may be possible to link into this.</li> <li>Mains sewerage – Major Constraints to Provision of infrastructure and/or treatment to serve proposed growth. Bourn WwTW: This works is operating at capacity and will require new consent limits and major capital expenditure to accommodate the proposed development site. Network: The sewerage network is operating at capacity and will require a developer impact assessment to ascertain the required upgrades. This assessment and any mitigation required will be funded by the developer. The preferred option by Anglian Water to deal with the majority of the sewage from the proposed new village at Bourn Airfield is the treatment works at Papworth. There may also be capacity to upgrade the Bourn WwTW.</li> </ul>
Drainage measures? (Updated August 2013)	A Flood Risk Assessment is required, together with a comprehensive water management plan.
,	Early Years education:
School capacity? (Updated August 2013)	The levels of housing development would indicate that additional Early Years settings would be required to meet the demand arising from development. This possibly could be provided along with additional primary school accommodation. However, this may not always be possible and alternative approaches to enable sufficient Childcare and Early Years provision to be commissioned, may therefore need to be considered during the planning of new housing. This additional accommodation would not necessarily need to be specifically for Early Years and Childcare provision, with opportunities for co-locating and/or sharing community facilities being explored wherever possible.
	Primary education:

County Council education officers have advised that a development of this size would need to be self-contained in relation to primary school provision. There would not be any option for mitigating development of this size within existing schools.

The actual number and size of schools would need to be determined once more clarity around the housing mix and tenure was available. It is likely that between three and four primary schools would be needed, matching the experience of Cambourne.

#### Secondary education:

County Council education officers have advised that initial demographic forecasts suggest that there would be a requirement for a 5-6 form entry secondary school arising from the Bourn Airfield development. In the short term it would be possible to mitigate the impact of Bourn Airfield due to the close proximity to Comberton and Cambourne Village Colleges. However, these schools are both forecast to operate at capacity, and whilst there is some capacity for limited expansion neither could meet the demand of the Bourn Airfield development once completed. To meet the demand from the new development it would therefore be necessary to plan on the basis of splitting the community between two secondary schools. This would not be supported in planning and delivering a new community as it would be detrimental to the development of community cohesion.

The County Council education officers would be unlikely to support the allocation of Bourn Airfield unless there was a policy requirement for appropriate secondary school provision to be delivered as part of the masterplan.

## Health facilities capacity?

Further growth will require a new facility.

Existing facility: Monkfield Medical Practice, Sackville Way, Great Cambourne – extension planned for extra 950 homes. Would need new facility to meet further growth.

### Any other issues?

The County Council advises that new settlements, large extensions to the urban area and large areas of previously developed land such as airfields (Bourn Airfield falls into this category) are to be considered to be Strategic Development Sites. Core Strategy Policy CS18 (Waste Management Outside Allocated Areas) requires all strategic development to make provision for permanent waste management. The scale and nature of arisings, site specific circumstances and the proximity and nature of other waste management facilities are factors in determining the type of waste management facility/facilities that should be provided. This provision will be in addition to that required under Policy CS16 (Household Waste Recycling Centres) as this requirement relates to facilities which would process or recycle waste,

	rather than provision for waste collection and transfer.
	New settlements, in particular, may be appropriate locations for the development of combined heat and power for associated industrial and residential development.
Can issues be mitigated?	Yes

Does the site	
warrant further	Yes
assessment?	

#### **Tier 3: Site Specific Factors**

Capacity		
Developable area (Updated August 2013)	The major development site (as shown on the Policies Maccomprises land that could potentially be available for development.  141.7 ha. However, the built area of the new village within development site will be established through an Area Actina wider area of 282 ha to also provide required strategic landsterplanning of the new village, the range of uses requistrategic landscaping requirements will affect the area avairesidential development.	elopment is n the major on Plan for andscaping. ired and
Site capacity	3,500 dwellings.  As a high level confirmation of capacity, the Council's formula for large sites over 50 hectares identified in the SHLAA can be used. This applies a gross to net residential area of 40%, which allows for all non-residential uses and substantial strategic landscaping in the remaining 60%. On this basis the formula can be applied to the wider Area Action Plan area included in the Local Plan:	
Updated August 2013	Area Action Plan	282 ha
	Net developable area (i.e. net residential area)	112 ha
	Total dwellings @ 30 dwellings per hectare (net)	3,360
	Total dwellings @ 35 dwellings per hectare (net)	3,920
	Total dwellings @ 40 dwellings per hectare (net)	4,480
Density Updated August 2013	Average net residential density across the new settlement Densities will vary across the whole site with scope for hig densities in the settlement centre and lower densities arousettlement edge.	her

Potential Suitability	
Conclusion	The site is potentially capable of providing residential development taking account of site factors and constraints.

Availability	
Is the land in single ownership?	Yes
Site ownership status?	Landowner
Legal constraints?	Not known
Is there market interest in the site?	Not known
When would the site be available for development?	Site is available immediately

Achievability		
Phasing and	<ul> <li>The promoter has indicated that:</li> <li>The first dwellings could be completed on site 2011-16</li> <li>Development period (assuming 400 per year, 9 years for 3,500 dwellings, or based on 2,267 dwellings, 6 years)</li> </ul>	
delivery of the development Updated August 2013	However based upon its experience of the development of large scale new settlements at Cambourne and Northstowe the Council considers there will be a greater lead-in for such a major development. An element of flexibility is also built into the plan by development starting a year later than it might otherwise do. The Local Plan assumes housing completions towards the middle of the plan period commencing in 2022/23 and extending well beyond 2031 at an average of 220 dwellings per year.	
Are there any market factors that would significantly affect deliverability?	No.	
Are there any cost factors that would significantly affect deliverability? Updated August 2013	No, although there is potential for areas of contamination, as the site is previously military land/airfield. There will be significant infrastructure costs to provide improvements to the existing road network/create new links to A428, and to upgrade/increase capacity of the Papworth Everard or other relevant STW and provide flood risk mitigation measures into the appropriate watercourse catchments.	
Could issues identified be	Infrastructure requirements are capable of being overcome subject to their cost and timing. The Council will explore the extent to which	

overcome?	infrastructure requirements can be supported by the development of
Updated August	the site directly and the scope for external funding sources to
2013	contribute such as City Deal.
Economic viability? Updated August 2013	For strategic scale sites (new settlements and large urban extensions) much depends upon the extent, cost and phasing of the infrastructure to be funded by the development, the amount of housing that can actually be accommodated on site, and the timing of its provision in relation to that of the accompanying infrastructure.

#### **Site Assessment Conclusion**

Site with limited development potential. This does not include a judgement on whether the site is suitable for residential development in planning policy terms, which will be for the separate plan making process.

#### Status of Site in Proposed Submission Local Plan 2013

Allocated for residential development (Policy SS/6).