

APPENDIX A: SECTION 3 – RESPONDING TO CLIMATE CHANGE AND MANAGING RESOURCES (PART)

ISSUE: CAMBRIDGE AIRPORT PUBLIC SAFETY ZONE AND AIR SAFEGUARDING ZONES

Policy 19 – Cambridge Airport Public Safety Zone and Air Safeguarding Zones

Public Safety Zone

Development, including change of use, which increases the number of people living, working or congregating on land within the Cambridge Airport Public Safety Zone, as identified on the Proposals Map, will not be permitted.

Air Safeguarding Zones

Applications for development within Cambridge Airport's Air Safeguarding Zones will be the subject of consultation with the operator of the airport and the Ministry of Defence. Restrictions in height, or changes to the detailed design of development may be necessary to mitigate the risk of aircraft accident and maintain the operational integrity of the airport.

Supporting Text:

The purpose of the Public Safety Zone is to restrict development in order to minimise the number of people on the ground at risk in the event of an aircraft crash on take-off or landing.

The Department for Transport Circular 1/2010 'Control of Development in Airport Public Safety Zones' should be consulted for further advice. There is a general presumption against new development, but some types of development may be acceptable in these areas such as extensions, alterations or change of use, which could not reasonably be expected to increase the number of people living, working or congregating within the Public Safety Zone.

Air Safeguarding Zones are also taken into account in any relevant planning decisions. The purpose of airport safeguarding is to take the measures necessary to ensure the safety of aircraft, their passengers and crew, while taking off or landing, or while flying in the vicinity of Cambridge Airport. This is achieved by assessing proposed development so as to:

- Protect the air through which aircraft fly;
- Protect the integrity of radar and other electronic aids to air navigation;
- Protect visual aids, such as approach and runway lighting, by preventing them from being obscured, or preventing the installation of other lights;
- Avoid any increase in the risk to aircraft of a birdstrike.

How the Policy Came About:

1. Airport Public Safety Zones and Air Safeguarding Zones are both the subject of specific Government circulars (Department for Transport Circular 01/2010 Control of Development in Airport Public Safety Zones and Circular 01/03 Safeguarding Aerodromes, Technical Sites and Military Explosives Storage Areas). In addition, paragraph 44 of the National Planning Policy Framework makes reference to the need to ensure that telecommunications equipment does not cause significant and irremediable interference with air traffic services. Option 75 of the Issues and Options report (2012) set out the need to consider the impact of development in Air Safety Zones and Air Safeguarding Zones.

Airport Public Safety Zones

2. Public Safety Zones are areas of land at the ends of airport runways within which development is restricted in order to control the number of people on the ground at risk of death or injury in the event of an aircraft accident on take-off or landing. Public Safety Zones are worked out from studies of aircraft accidents to assess the risk to people on the ground around airports and is correlated with the level of air traffic experienced by the airport. The area of the Public Safety Zone therefore corresponds to the 1 in 100,000 individual risk calculated for the airport.
3. The risk assessment underpinning the design of Public Safety Zones takes account of the normal direction that aircraft land and take off at an airport. The statistical risk assessment is specific to each airport's unique set of operations. Whilst aircraft follow a number of routes surrounding an airport, it is statistically more likely for an airport-related aircraft incident to occur on landing rather than on take-off. In the UK, the majority of airports use long, straight, arrival routes that follow the extended runway centreline for some distance to guide aircraft to the airport runway; therefore statistically, there is more likelihood that any incident, should it occur, would happen along these straight approach routes instead of the often curved departure routes. As a result, Public Safety Zones tend to extend away from the runway in a triangular shape, tapering to a point that usually lies on the extended runway centreline. The direction in which a runway is built and used is largely determined by the prevailing wind direction as aircraft normally land and take off into the wind. It is not unusual for a Public Safety Zone at one end of a runway to be generally a little larger than the Public Safety Zone at the other end.
4. The Government declared a Public Safety Zone at Cambridge Airport in 2002, following a period of consultation with the local authorities that began in 1999. In Cambridge and South Cambridgeshire, the Public Safety Zone comprises a narrow triangle of land extending approximately 1,300 metres (0.8 miles) from each end of the runway. The Public Safety Zone is reviewed intermittently by the Department for Transport and the Civil Aviation Authority in liaison with the airport's owners, who are responsible for providing current data and projections on air traffic for the airport.

5. Policy 8/13 Cambridge Airport Public Safety Zone within the 2006 Cambridge Local Plan currently refers to the Public Safety Zone shown on the Proposals Map (October 2009) as a cone (with a corresponding cone in South Cambridgeshire). The policy in the 2006 Local Plan on the Public Safety Zone was aligned to Department for Transport Circular 1/2002, which was then replaced by the Department for Transport Circular 01/2010.
6. The council must take the Public Safety Zone into account when determining about planning applications. The Government advises there should be a general presumption against new or replacement development, or changes of use of existing buildings, within Public Safety Zones. However, there are exceptions including some extensions and changes of use and new or replacement development involving a low density of people living or working there. The council consults Cambridge Airport and the Ministry of Defence on any planning applications, which fall within the Public Safety Zone. It remains necessary to indicate the extent of the Public Safety Zone on the Proposals Map, with a corresponding policy within the Local Plan.

Air Safeguarding Zones

7. In addition to the Cambridge Airport Public Safety Zone extending from the airport runway to Radegund Road, there are five Air Safeguarding Zones, which radiate out from the airport and potentially restrict the height of new buildings in Cambridge to varying extents (from all structures through to any structure greater than 90 metres above ground level). These Air Safeguarding Zones are currently mentioned in paragraph 8.33 of the supporting text to the policy in the Cambridge Local Plan 2006.
8. Airports with Air Safeguarding Zones are normally set out in the Department for Transport Circular 01/03 Safeguarding Aerodromes, Technical Sites and Military Explosives Storage Areas. Whilst Cambridge Airport is not covered by the requirements of this circular, all military airfields are also statutorily safeguarded. As Cambridge Airport is a contractor for the Ministry of Defence, it is subject to statutory safeguarding. This safeguarding order was confirmed by letter dated 23 July 2003 from the Office of the Deputy Prime Minister to a number of local authorities in Cambridgeshire, Essex, Suffolk, Hertfordshire and Bedfordshire.
9. Marshall has provided up to date information on necessary height constraints to the council and this is mapped by the council as a constraint layer for use in relation to planning applications. The map titled Airport Safeguarding Zones Heights for Referral indicates the areas where restriction on building heights may be required in order to allow the airport to continue to operate safely. This map is attached as Appendix F and will be included within the Local Plan. The map is also provided on the council's website (under Constraints on applications). In the light of the data held by the council on height restrictions, Marshall and the Ministry of Defence are consulted on planning applications as a

matter of course. In the event of their objection to any planning application, this is taken into account in decision-making.

10. Ongoing safeguarding of the airport can be achieved by assessing proposed developments within the Air Safeguarding Zones to ensure that there is:

- Protection of the blocks of air through which aircraft fly;
- Protection of radar and other electronic aids to aircraft navigation, by preventing reflection and diffraction of radio signals;
- Protection of approach and runway lighting, by preventing them from being obscured. Other lighting may need consideration in order to ensure that it is not mistaken for approach or runway lighting;
- Avoidance of any increase in the risk of birdstrike.

ISSUE: HAZARDOUS INSTALLATIONS

Policy 20 – Hazardous Installations

Proposals for the development of hazardous installations/pipelines, modifications to existing sites, or development in the vicinity of hazardous installations or pipelines, as identified on the proposals map, will be permitted where:

- a. It has been satisfactorily demonstrated that the amount, type and location of hazardous substances would not pose adverse health and safety risks; and
- b. Any necessary special precautions to limit potential societal risks to an acceptable degree would be put in place prior to the commencement of development.

Supporting Text:

Current pressures on land use and the need to make the most efficient use of previously developed land increasingly mean that developments have the potential to come into conflict with one another. This is particularly relevant where new hazardous installations and pipelines are developed or where new development would be in close proximity to existing hazardous installations and pipelines.

Planning applications for the development of hazardous installations/pipelines and development close to hazardous sites or pipelines will be referred to the Health and Safety Executive and/or the Environment Agency.

How the Policy Came About:

11. European Union law in the Seveso II Directive (96/82/EC) requires that the objectives of preventing major accidents and limiting the consequences of such accidents are taken into account in land-use planning policies. These policies should consider three key scenarios:

- The siting of new establishments;
 - Modifications to new establishments; and
 - New developments within the vicinity of existing establishments and the increased risk of a major accident.
12. The Directive is implemented in the United Kingdom through the Control of Major Accident Hazard Regulations 1999 (COMAH).
13. Department of Communities and Local Government Circular 04/00: Planning Controls for Hazardous Substances (Paragraph 9) states that:
- “The hazardous substances consent controls are designed to regulate the presence of hazardous substances so that they cannot be kept or used above specified quantities until the responsible authorities have had the opportunity to assess the risk of an accident and its consequences for people in the surrounding area and for the environment. They complement, but do not override or duplicate, the requirements of the Health and Safety at Work etc Act 1974 and its relevant statutory provisions (defined at Section 53 of that Act) which are enforced by the Health and Safety Executive. Even after all reasonably practicable measures have been taken to ensure compliance with the requirements of the 1974 Act, there will remain a residual risk of an accident which cannot entirely be eliminated. These controls ensure that this residual risk to persons in the surrounding area and to the environment is properly addressed by the land use planning system.”*
14. In response to the Buncefield incident in December 2005, where a series of large explosions and fires occurred at the Buncefield fuel depot in Hertfordshire, a major incident investigation was set up. The Buncefield Investigation: Final Report of the Major Incident Investigation Board was produced in 2008, and it contained a number of recommendations, including some related to planning. These recommendations included the following actions:
- Land-use planning should be integrated with the COMAH regulatory system;
 - There is a weakness in the separation between COMAH and Health and Safety Executive advice to local planning authorities; and
 - Planning decisions should also take into account the societal risks by undertaking a Quantified Risk Analysis (QRA).
15. Hazardous installations are operated by a range of companies and industries and form an important part of the economy. Regulated control of these sites is important in order to achieve acceptable health and safety standards to protect the environment and the general public. Proposals for hazardous installations are required to obtain hazardous substances consent that may also be regulated under the Control of Major Accident Hazards (COMAH) Regulations. The competent authorities for COMAH sites are the Health and Safety Executive (HSE) and the Environment Agency.

16. The term 'hazardous installations' primarily refers to sites that store significant quantities of industrial chemicals or compounds that are of a hazardous nature; e.g. those that may be explosive or toxic to the environment. As an example, these sites may include chemical manufacturers, or gas storage facilities where the gas is either in bulk storage, in the case of utility companies, or used in production of another product such as aerosols. Pipelines can also be included within the remit of this policy as they can also represent risk to the wider population.
17. Every hazardous installation is different, with varying characteristics and risks. Some types of installations may require a buffer to any residential or other sensitive uses, whereas others may be compatible with such uses. As a result, the only appropriate policy approach is to set out general policy that can be applied on a case-by-case basis, covering applications for new or intensified hazardous installations, or development in the vicinity of existing installations.
18. The following sites in Cambridge are understood to accommodate hazardous installations/pipelines:
 - Cavendish Laboratory, Department of Physics (Explosives);
 - Cambridge Holder Station, Newmarket Road (Hazardous Substances);
 - Q8 Cambridge Terminal, Ditton Walk (Hazardous Substances);
 - National Grid pipelines running from Maddingley to Teversham, and through to Addenbrooke's.
19. In the Issues and Options report (2012) hazardous sites/pipelines were not identified as an issue for discussion. The first consideration is whether the local plan needs to include a policy on the matter. Given the fact that there are a number of hazardous installations within the city, it seems likely that the council will continue to receive applications for hazardous substances consent over the plan period, and that development will continue to occur in areas near hazardous installations. This would ensure compliance with EU law. The second consideration is what the local plan should set out, for example limiting uses to industrial areas, and presuming against sensitive uses in particular zones. However, these would be based on little evidence of risk, and would not be in line with the HSE approach to such sites. As such, it is considered that the policy approach should make reference to the need to consider societal risk caused by new hazardous installations or by development occurring close to these sites.

ISSUE: MULLARD RADIO ASTRONOMY OBSERVATORY, LORD'S BRIDGE

Policy 21 - Mullard Radio Astronomy Observatory, Lord's Bridge

Development proposals within the Lord's Bridge Consultation Areas shown on the Proposals Map, which could adversely affect the operation of the Mullard Radio Astronomy Observatory will:

- a. Be subject to consultation with the University of Cambridge;
- b. Only be granted planning permission where any harm to its scientific operation can be overcome by measures secured by condition or planning obligation.

Supporting Text:

The Mullard Radio Astronomy Observatory at Lord's Bridge is of international importance and must be safeguarded. The Observatory contains unique radio and optical telescopes operated by the University of Cambridge and the University of Manchester/Jodrell Bank. The telescopes measure signals that are very weak, and hence highly susceptible to many forms of interference: specifically to electrical interference; microwave interference from telecommunications masts and equipment; light pollution and mechanical vibration from domestic, industrial plant, and other sources such as the movement of vehicles, including aircraft.

The Mullard Radio Astronomy Observatory is located within South Cambridgeshire District Council. There are two consultation areas, which fall within the city council's boundary. The large consultation area covering most of the city requires consultation with the University of Cambridge on applications involving microwave transmission, such as telecommunications masts and equipment (consultation area 2). The smaller area just extends into the city between Trumpington and Grantchester and is more sensitive, also requiring consultation on any applications involving industrial development or resulting in light pollution (consultation area 1).

How the Policy Came About:

The Mullard Radio Astronomy Observatory contains radio and optical telescopes, which are of international importance. Radio astronomy is the study of celestial objects by means of the natural radio waves they emit. The signals emitted by radio sources can be received from the most distant parts of the universe. The telescopes are highly susceptible to many forms of interference including electrical waves, microwaves, light pollution and mechanical vibration.

The 2006 Cambridge Local Plan contains Policy 8/15 Mullard Radio Astronomy Observatory, Lord's Bridge, which relates to the protection of the use of the observatory. Although the observatory falls within the administrative boundary of South Cambridgeshire District Council, there are two consultation areas under the 2006 Local Plan Policy 8/15, which fall within the city boundary.

Option 200 within the Issues and Options Report proposed to take this policy forward. Residents largely supported this approach. One respondent made reference to a proposal to re-open the Oxford-Cambridge railway line, which used to go through this site. Whilst it was not considered appropriate to include this matter within the policy on the Mullard Radio Astronomy Observatory, it is recognised that this issue could be one of the long-term aspirations addressed by the County Council's Transport Strategy for Cambridge and South Cambridgeshire.

The consultation zones for the Mullard Radio Astronomy Observatory have not changed over the years since the adoption of the 2006 Cambridge Local Plan. The steer given by Members at January 2013's Development Plan Scrutiny Sub-Committee agreed to move forward with the development of a replacement policy for the Mullard Radio Astronomy Observatory.

DELIVERY AND MONITORING

Policy 19 – Cambridge Airport Public Safety Zone and Safeguarding Zones

- Data used as a constraint in planning applications
- Number of times the policy used is recorded in the council's Annual Monitoring Report
- Any amendments to the constraints to be updated by GIS officer and reported on the council's website

Policy 20 – Hazardous Installations

- Data used as a constraint in planning applications
- Number of times the policy used is recorded in the council's Annual Monitoring Report
- Any amendments to the constraints to be updated by GIS officer and reported on the council's website
- Register of hazardous installations needs to be held by the council

Policy 21 - Mullard Radio Astronomy Observatory, Lord's Bridge

- Data used as a constraint in planning applications
- Number of times the policy used is recorded in the council's Annual Monitoring Report
- Any amendments to the constraints to be updated by GIS officer and reported on the council's website