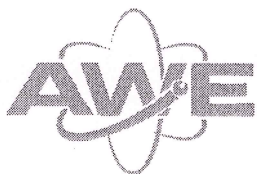


AWE ALDERMASTON & BURGHEFIELD

SITE DEVELOPMENT CONTEXT PLAN (SDCP)
2005-2015



NOVEMBER 2005

summary

*revised page
for 2008*
→

In July 2005 the Government announced an investment programme to secure the replacement and refurbishment of the ageing facilities at AWE Aldermaston and AWE Burghfield.

This Site Development Context Plan (SDCP) identifies the principal, physical components of this programme and the way in which they are proposed to be accommodated at the sites.

The SDCP is accompanied by a Strategic Sustainability Appraisal (SSA) which identifies the main environmental and related issues that are likely to arise in the course of implementation of the programme.

Both documents provide the proposed context in which elements of the programme will be brought forward over the next three years. The programme as a whole is expected to be completed by 2015.

The documents are also intended as the starting point for discussions with the Local Planning Authority and other stakeholders which will continue for the duration of the programme.

Whilst there will inevitably be impacts, there will also be significant community and economic benefits arising from the project's implementation.

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1.introduction

background

- 1.1 The Atomic Weapons Establishment (AWE) is located at sites at Aldermaston, Burghfield and Blacknest in the administrative area of West Berkshire. AWE has played a central role in national defence for more than 50 years and is responsible for the entire life cycle of the United Kingdom's nuclear warheads, from initial research and design, through component manufacture and assembly, to in-service support and final decommissioning and disposal.
- 1.2 AWE Plc manages and operates the Atomic Weapons Establishment on behalf of the Secretary of State for Defence under a 25-year contract that commenced in April 2000.
- 1.3 AWE's core mission is to build and maintain the warheads for the submarine-launched Trident ballistic missile system that today forms the United Kingdom's sole nuclear deterrent. AWE is also required to maintain a capability to design a successor warhead to Trident should it ever be required in the future.
- 1.4 The Secretary of State for Defence informed Parliament in 2004 that the UK Government remains committed to maintaining the safety and effectiveness of the current nuclear deterrent, including making the necessary investment at AWE. The Government also remains committed to keeping open options for a successor to Trident.
- 1.5 In July 2005 the Secretary of State for Defence announced a three-year investment programme amounting to an additional £350m per year in order to:-

“... maintain the existing Trident warhead stockpile throughout its intended service life. In the absence of the ability to undertake live nuclear testing given that the UK has signed and ratified the Comprehensive Test Ban Treaty, it is necessary to invest in the facilities at AWE which will provide assurance that the existing Trident warhead stockpile is reliable and safe”.
- 1.6 The Secretary of State also confirmed that the local planning authority would be consulted in the normal way on the land-use aspects of the programme in the context of current planning legislation.



1.introduction

aim

- 1.7 The primary purposes of this document are to define the broad parameters of the Government's July 2005 investment programme in land use terms and to facilitate early discussion with the relevant planning authorities and other stakeholders.
- 1.8 The Site Development Context Plan (SDCP) includes 10 year Illustrative Site Development Framework Plans for each of the two principal sites at Aldermaston and Burghfield. These plans set out the principal land-use proposals that are the subject of the investment programme at an end date of 2015. No specific, significant proposals are involved in respect of the much smaller AWE Blacknest site.
- 1.9 An accompanying Strategic Sustainability Appraisal (SSA) has also been prepared which describes the key areas of potential effects on the environment and those who live and work around the site. The SSA also identifies how these issues will be addressed and managed by AWE as the programme progresses.
- 1.10 The SDCP and SSA represent the first step in a continuous review process to ensure that the context for more detailed proposals is up to date and the likely overall impact of the investment programme can be assessed at all relevant stages.

historical development

- 1.11 Very briefly, the history of development at Aldermaston and Burghfield is as follows:
- Pre 1939 – the Aldermaston site was a mediaeval deer park known as Aldermaston Common and Burghfield was predominantly farming land.
 - 1939-1950 – both sites were initially requisitioned by the Ministry of Supply, with Aldermaston ultimately operating as a base for the US Army Air Force Troop Carrier Groups and Burghfield becoming an Ordnance Factory.
 - 1951-2002 – both sites were selected to support the UK Atomic Weapons Programme with Aldermaston primarily involved in research and Burghfield producing various component parts and assembling the weapons. Direct employment at both sites is estimated to have peaked at around 6000 people.
 - 2002 – Site Development Strategy Plan (SDSP) published including transfer of all activity to AWE Aldermaston.
 - 2003 – decision to retain AWE Burghfield for operational reasons.
 - 2005 – Secretary of State announces investment programme to modernise existing facilities.



1.introduction

document format

- 1.12 Section 2 of this document briefly describes the nature of the overall programme and identifies its key components.
- 1.13 Section 3 sets out the key constraints and opportunities which have influenced the general approach to both sites and the specific proposals including those related to landscape, transport, legacy and sustainability considerations.
- 1.14 Section 4 addresses the land use principles that have been applied in formulating the illustrative framework plans.
- 1.15 Section 5 explains the intended sequencing of new development which will be the subject of submissions to West Berkshire Council, in consultation with neighbouring authorities, over the next few years.

2. the 2005-2015 programme

introduction

- 2.1 The overall approach to the modernisation of AWE Aldermaston and AWE Burghfield put forward in this programme is based on refurbishing and replacing facilities constructed principally in the 1950s and 60s.

The key elements of this approach are:

- improving standards of design
 - enhancing environmental performance
 - reducing environmental impact
 - managing traffic
 - maximising community benefits
- 2.2 The programme involves the re-use of previously developed or "brownfield" sites in accordance with one of the major themes of Government Policy.
- 2.3 This re-use needs to be achieved whilst maintaining continuity in relation to the activities and processes occurring on the sites and having regard to important issues such as decommissioning safety and security which are all carried out in the context of nuclear site licences and other stringent controls.
- 2.4 These factors support the view that there is no practical and sustainable alternative to AWE's continued presence at Aldermaston and Burghfield.
- 2.5 Both sites have a long history of positive co-existence with the local community and provide significant employment and other economic benefits.

the SDSP context

- 2.6 As indicated in the general introduction, against the background of the Aldermaston Site Development Strategy Plan (SDSP), this document and the associated plans seeks to set out a more specific land-use framework identifying individual proposals to be completed within the 10-year period 2005-2015 at both Aldermaston and Burghfield.
- 2.7 The components of the programme are very similar to those put forward in the SDSP. They are set in the context of the same safety, operational and environmental principles. In this regard they can be placed under the following five headings in relation to the broad types of development:-
- Manufacturing/production.
 - Testing/research.
 - Computing/communications.
 - Offices and business support accommodation.
 - Environmental proposals and programmes.



2. the 2005-2015 programme

2.8 In addition AWE will continue an on-going programme of modernisation of the service infrastructure within both sites. For example, the long-term aim remains to remove the majority of the above ground steam supply system.

principal programme components

2.9 The main elements of the programme have been split into those requiring new buildings and those involving significant in situ refurbishment of existing buildings and plant. As far as the latter are concerned, the framework plans only show the major examples to indicate where there will be significant construction and related activity. More minor refurbishments will take place at both sites over the period to 2015 and these will be taken into account in arriving at estimates of overall construction related activity and associated traffic movements.

2.10 Where refurbishment involves material changes to the appearance of any building or plant, individual applications will be submitted.

2.11 The principal "new build" elements in the programme are set out in the following tables (A – Aldermaston, B – Burghfield).

2.12 Their general, proposed locations are shown on the respective framework plans AWE1 (Aldermaston) and AWE2 (Burghfield) which accompany this document.



2. the 2005-2015 programme

new build projects

Manufacturing/Production

Reference (See Illustrative Framework plans for site locations)	Location	Indicative floor space (m ²)	Indicative height (m) (building only)
1.	A	10,000	5-10
2.	A	20,000	10-15
3.	A	3,000	5-10
4.	A	1,500	5-10
5.	B	3,000	5-10
6.	B	2,000	5-10
7.	B	7,000	10-15

Testing/Research

Proposal	Location	Indicative floor space (m ²)	Indicative height (m) (building only)
8.	A	6,000	20-30
9.	A	3,000	5-10
10.	A	12,000	15-20
11.	A	500	5-10
12.	B	9,000	5-10

Computing/Communications

Proposal	Location	Indicative floorspace (m ²)	Indicative height (m) (building only)
13.	A	4,500	5-10
14.	A	100	5-10
15.	A	100	5-10

2. the 2005-2015 programme

Office & Business Support Accommodation

Proposal	Location	Indicative floorspace (m ²)	Indicative height m (building only)
16.	A	24,000	15-20
17.	A	12,000	15-20
18.	A	9,000	5-10
19.	A	2,000	5-10
20.	A	1500 spaces approx.	N/A
21.	A	500 spaces approx.	N/A

Environmental proposals and programmes

Proposal	Location	Indicative floorspace (m ²)	Indicative height m (building only)
22.	A	N/A	N/A
23.	A/B	N/A	N/A

2.13 Most of the additional employment will arise in the context of the proposed office accommodation at Aldermaston, the majority of which is programmed to be completed by 2009. For both Burghfield and Aldermaston, it is expected that the implementation of the programme will not lead to levels of employment greater than those associated with the sites in the past.

2.14 The construction process will involve employment levels over and above the operational workforce whilst building occurs. The impact of the construction process itself and the additional employment it involves will be assessed and managed in accordance with a co-ordinated strategy for both sites.

2.15 Increased employment and the activity associated with construction will also involve significant economic benefits particularly in respect of the local community.



2. the 2005-2015 programme

further studies

2.16 In addition to the principal new build projects and the major refurbishments, further studies and assessments will be undertaken. For example in the early part of the programme there will be a focus on the western part of the Aldermaston site, including studies that deal primarily with the future use and operation of the West Gate and the area utilised by the Recreation Society. These are both related to the potential for creating a higher quality entrance to the Aldermaston site.

2.17 Specific studies to support the programme will also include:

- Transport Assessment
- Landscape and Visual Assessment
- Construction Logistics Strategy

a dynamic programme

2.18 Inevitably, with a project of this complexity, there are likely to be modifications and variations to the schedule of proposals and the associated framework plans as the programme develops. However, the overall context for the proposals represented in this document is not expected to change materially.

2.19 If other developments come forward outside the context of the programme set out in this document, the local planning authority and other key stakeholders will be involved at an early stage.

3. opportunities & constraints

introduction

- 3.1 The accompanying plans (AWE3 and AWE4) show the principal opportunities and constraints affecting both sites. Given their respective locations and characteristics Aldermaston and Burghfield give rise to different issues and challenges.
- 3.5 For a variety of operational and practical reasons there is little scope or need to depart from the overall land-use pattern at Aldermaston. Indeed, there is merit in seeking to accentuate and reinforce these distinctions.

Aldermaston Business Support Zone

site specific constraints & opportunities

Aldermaston

- 3.2 Aldermaston can be divided into three broad functional areas. The eastern part of the site to the east of the main north south access road (Griffin Road) is principally devoted to activity associated with conventional explosives and is currently licensed by the Ministry of Defence Ordnance Safety Group (DOSG).
- 3.3 To the west of Griffin Road the site splits generally into two areas. To the north is the Nuclear Storage and Processing Area (NSPA). This is devoted mainly to the nuclear aspects of the site's activities and is subject to additional levels of security.
- 3.4 To the south the area is principally characterised by business support activities including the majority of the existing office accommodation on the site. This is referred to below as the Business Support Zone. The area of this zone within which most redevelopment is proposed is referred to as West End.
- 3.6 For the Business Support Zone there is a significant opportunity to improve the presentation and image of the site without unduly compromising its historic layout. In this latter regard, Aldermaston is unique in land use terms. It has evolved in a particular historical context rooted in the 1950s and 60s and it is considered important to retain the overall character of the area whilst at the same time taking the opportunity to maintain and develop the world class status of its scientific and engineering community.

Aldermaston NSPA

- 3.7 The primary considerations relating to this area must be focussed on safety, operational efficiency and security with all other considerations wholly subservient to these fundamental factors. Inevitably, therefore, the area will continue to have a functional appearance.



3. opportunities & constraints

Aldermaston Eastern Area

3.8 Constraints in this part of the site are also dominated by safety, security and the need to maintain functional continuity during construction.

3.9 This creates a potentially complex picture related to the quantity distances (QDs) that must be maintained around buildings licensed to process and handle explosives. The amount and type of material involved and the nature of the buildings in which they are located defines the extent of the QD and the number of people permitted within it.

3.10 This means that during the project period, maximum flexibility must be maintained to move material and activities within the licensed area to minimise the restrictions associated with QDs. In addition, in the context of the current regulatory regime the licensed area could not be significantly reduced without prejudicing the implementation of the proposed new facilities and the overall operation of the area.

3.11 Restricted access to the eastern area does however have the benefit that, in nature conservation terms, it includes some valuable habitats. *lm*

3.12 With appropriate management there is the potential opportunity to protect and enhance these environmental resources, both now and in the long term, without affecting operational capability.

Burghfield

3.13 A significant site-specific constraint at Burghfield arises from its past history as a location for the processing and production of conventional explosives and munitions. This legacy will require a long-term programme of characterisation and subsequent clearance which is already under way.

3.14 In addition, any new buildings need to be in close proximity to the existing assembly facilities to ensure continuity of operations and appropriate levels of security at all stages.

*ce
Coxi
Parliament*

ie operating at edge of QDs



3. opportunities & constraints

General Issues

traffic & transportation

- 3.15 A survey has been undertaken of the existing work force to assist in the formulation of a travel plan and inform development of the SDCP and the SSA.
- 3.16 For both Aldermaston and Burghfield it is fully recognised that transportation, including access, is a significant and important issue, particularly during the construction period. Whilst the latter involves temporary impacts, construction will occur over an extended period and will require careful management and control. A Transport Assessment (TA) is currently in preparation.
- 3.17 In the context of an overall travel plan for both sites there are significant opportunities to achieve:-
- Sustainable transport choices for staff, contractors and visitors.
 - Improved accessibility to the development by walking, cycling, passenger transport and car sharing,
 - A reduction in the need to travel, especially alone by car, and
 - A reduction in vehicular movements within the sites.

- 3.18 These principles fully accord with national, regional and local planning policies aimed principally at reducing use of the private car.

landscape

- 3.19 A Landscape and Vegetation Appraisal has been undertaken for both sites. Further detailed assessment is being undertaken of the individual elements of the project.
- 3.20 Aldermaston is a large site which has few immediately recognisable reference points or landmarks. The industrial nature of many of the buildings and the homogeneity of much of the mid 20th century architecture can also be confusing for those trying to navigate the site and who do not already know it well. The site is evident in views from some public view points, visible within a well wooded landscape context.
- 3.21 In this regard there is an opportunity to enhance the legibility of the site through the design and treatment of the open space network and also improve the quality of the external environment through the introduction of addition structure planting and upgrading the hard landscape materials.

3. opportunities & constraints

3.22 Burghfield is smaller although it too lacks clear reference points. This will become less of an issue, however, as the current operational area contracts and the grid pattern of accessways which characterises the site becomes less dominant.

3.23 For operational and security reasons the boundary fences will remain clearly visible. However, if opportunities arise further internal boundary planting will be introduced.

3.24 Overall, the programme will address opportunities within the sites to:-

- Respond to and enhance the existing local landscape settings.
- Maintain existing landscape character.
- Maintain existing landscape features.
- Reinforce landscape structure.
- Improve landscape structure through additional planting and upgrading the approach to hard surface treatment.
- Retain, where possible, all important and healthy trees.
- To provide additional boundary planting where appropriate .

- Ensure that all future planting, in the context of any future development or landscape management, is of a sufficient scale, to significantly enhance the landscape context of both sites.

- Achieve a more attractive and high quality external presentation whilst ensuring that security is maintained.

sustainability

3.25 There will be significant opportunities to meet wider sustainability objectives as the development programme for Aldermaston and Burghfield proceeds. The current building stock is generally inefficient in relation to energy consumption and other infrastructure such as the above ground steam distribution system which will require replacement.

3.26 The development programme will involve significant improvements to the ageing utility infrastructure. The following opportunities will be addressed in respect of all development and infrastructure proposals:-

- Maintaining the status of both sites as “good neighbours” within their host communities including maximising economic and social benefits.
- Providing employees with modern and attractive facilities that are safe, comfortable and an aid to recruiting and retaining high quality staff.



3. opportunities & constraints

- Continuing to minimise the impact on the environment of operational and construction activities.
- Continuing an on-going programme of de-commissioning, demolition and de-contamination consistent with the above principles.

demolition & decommissioning

- 3.27 There are few examples of contamination arising from the operation of either site in the context of their current or historical uses and none which significantly constrain the implementation of the investment programme.
- 3.28 Since the beginning of 2003, AWE has demolished more than 100 facilities on both sites. This leaves over 1100 buildings on the Aldermaston site and over 360 at Burghfield, many of which date back to the 1940s. Surveys continue to identify further buildings for demolition.

3.29 As the programme proceeds, and indeed beyond 2015, there will be significant opportunities where practical to continue the decommissioning and demolition which will improve the appearance of both sites as well as reducing maintenance and utility costs.

3.30 During demolition work great care will be taken to minimise the environmental impact and avoid disruption to neighbours. Wherever possible, material resulting from demolition will be re-used within the sites to avoid unnecessary traffic movements and consume natural resources.

the community

3.31 AWE already has a close relationship with the local community. Liaison arrangements will be established to maximise the benefits arising from the project and to assist with the management of potential impacts.

4. land use principles & strategies

Aldermaston – General Approach

- 4.1 The overall approach to the Aldermaston site depicted on the accompanying framework plan (AWE1) is to recognise and reinforce the functional split already referred to.
- Aldermaston - Business Support Zone/West End
- 4.2 The bulk of new office accommodation is proposed to be located in the western part of the zone between the two main access roads in a high quality campus style format. The eastern section of the zone, developed principally in the 1950s and 60s, will be retained in its current form and any future redevelopment or refurbishment will preserve its basic layout.
- 4.3 An area including the new office campus and the area to the east is also proposed as a pedestrian priority zone with car parking provided to the north and south and associated strong pedestrian links.
- 4.4 As indicated in Section 2, work will also be undertaken to examine the feasibility of changing the principal, visitor entrance to the West Gate to improve the presentation of the site.
- 4.5 This could include moving the security fence as shown on the framework plan to maximise the positive impact of the new office accommodation from the main access road establishing a first class “gateway” to the Aldermaston facility. The design of improvements in this location will be considered in detail with all relevant stakeholders.
- 4.6 To the south of the main access road close to the West Gate a major new car parking area is proposed principally to serve the new and existing offices. This is currently a partially cleared area containing some of the older buildings on the site.
- 4.7 The aim is thus to seek to make the West End of the support zone the primary entrance to the Aldermaston site and to create a clear, high quality focus for the site including significant new hard and soft landscape works to reinforce the sites legibility.



4. land use principles & strategies

- 4.8 The western part of the Aldermaston site also includes recreation facilities including a building complex which requires significant expenditure to either refurbish existing provision or provide new facilities.
- 4.9 Again, as Section 2 of this document indicates, AWE are commissioning a comprehensive study on the usage and demand for various recreation facilities to inform the overall approach to this part of the site.
- Aldermaston NSPA
- 4.10 The most appropriate location for new buildings in this area is in its southern section. Within the NSPA there are three major refurbishments proposed. The remainder of this part of the NSPA is affected by an on going decommissioning programme, which does not facilitate redevelopment within the programme timescale.
- Aldermaston Eastern Area
- 4.11 As proposed in the SDSP all conventional explosive related activity is to be consolidated on the Aldermaston site. Overall, the aim is to concentrate facilities with the largest potential explosive inventories in the centre of the licensed area.
- 4.12 In the light of the current regulatory regime, uses that involve smaller or non existent QDs can be located on the periphery. The general principle must nevertheless be to maintain maximum dispersal and keep QDs contained within the licensed area boundary as much as possible.
- 4.13 Within the operational constraints in the eastern area, there is an opportunity for some additional tree planting in the context of an overall management plan. Large scale tree planting however would not be consistent with the heath land habitat that characterises most of the area.
- 4.14 An environmental management plan will be prepared for this eastern area to ensure that the existing environmental resources are protected and, wherever possible, that enhancement proposals are adopted. In particular, a grass cutting management regime will be explored which, taking into account the regulatory requirements, allows the original heath land habitat to be restored wherever possible.

4. land use principles & strategies

Burghfield – General Approach

- 4.15 The overall approach to Burghfield (Plan AWE2) will involve consolidation of operational uses in the northern part of the site, progressive characterisation and subsequent clearance and decontamination of the remainder of the site generally working from north to south. This remediation work will extend beyond 2015.
- 4.16 Whilst the site is set within a well established landscape framework, and therefore limited in views from the wider landscape, opportunities have been identified for additional planting to reinforce the sites enclosure, especially along the western edge.
- 4.17 A significant amount of demolition will be required to facilitate new building and the refurbishment of some facilities on both sites. Given the levels of construction activity that are likely over the project period, significant clearance work not directly related to the implementation of the investment programme will need to be carefully managed.
- 4.18 The framework plan identifies specific, longer term clearance areas at Aldermaston where the aim is to eventually remove existing buildings and structures. These proposals will be kept under review in the light of progress on the main construction and refurbishment programme.
- transport
- 4.19 The Transport Strategy will involve the adoption of demand management through more control of on-site parking, the implementation of a travel plan and by managing movements both on and off site.
- 4.20 Development of the travel plan has already commenced and it will be progressed in parallel with the development programme.
- 4.21 Key elements of the strategy could include:-
- Introducing a gate and parking permit system that allocates drivers to a specific car park and a gate. This is most relevant at Aldermaston.
 - Consolidating car parking in specific locations as shown on the illustrative framework plans.

common issues

demolition & clearance



4. land use principles & strategies

- An overall gate access strategy taking into account operational, movement and security considerations.
- Confirming dedicated gates for construction traffic and associated management.
- Reducing Single Occupancy Vehicles (through car sharing, bus travel, improved walking/cycling links and adoption of flexible working where possible).
- Staff and community consultation at an early stage of the process of implementing travel initiatives.

4.22 The local authority and all relevant stakeholders will be closely involved in the process of developing and implementing the strategy

Landscape Strategy

4.23 As indicated above, there is a clear need to improve the hard landscape materials and the soft landscape structure in key locations to reinforce the urban design principles, setting the development into a coherent and high quality landscape structure.

Construction

4.24 The framework plans have been prepared on the basis that construction activity would be contained within both sites in terms of compounds and lay-down areas. In this regard potential areas at both Aldermaston and Burghfield are identified on the respective plans.

4.25 In addition construction related traffic movements will require detailed management, both within and outside the site, having regard to impact on the relevant highway networks, security and operational continuity. This may involve temporarily defining self-contained construction areas which will be subject to specific arrangements.

5. development sequence

approach

- 5.1 The development programme will involve the submission of applications to West Berkshire Council over the next three years relating to the new development proposals. The details of this approach will be the subject of pre-application discussions with the Local Planning Authority. Some proposals may be the subject of individual applications, whilst others can be grouped together to some extent. In overall terms, the general sequence of development over the next 3 years is likely to be:
1. Proposals 14, 15, 18, 19 - late 2005
 2. Proposal 8 - early 2006
 3. Proposals 16 (part), 20 (part), 21 (part), 22 (part), 23 (part) - mid 2006
 4. Proposal 3 - mid 2006
 5. Proposal 6 - late 2006
 6. Proposal 2 - mid 2007
 7. Proposal 7 - late 2007
 8. Proposals 4, 5, 9 - 13, 17 - 2008
- 5.2 As already indicated, the SDCP provides the overall context for more detailed submissions. Inevitably, as individual components of the programme become more developed and strategies covering issues such as transport and construction evolve, there may well be a need to review the overall picture. However, the basic components of the programme are not expected to change materially and this document therefore represents a robust contextual basis for considering the overall development.
- 5.3 Any significant development outside the context of the SDCP will be the subject of further exercises such as this.

