Rolls-Royce Raynesway

Design & Access Statement

May 2023

Delivering a better world

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Revision History

Revision	Issue date	Details	Issued by	Approved by
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Delivering a better world

Contents

Introduction

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1. Introduction

1.1 Background

For the last 60 years Rolls-Royce have designed, supplied and supported the nuclear propulsion plant that provides power for all of the UK Royal Navy's nuclear submarines.

In 2019, the Defence Secretary awarded a £235 million contract to Rolls-Royce Submarines Limited (RRSL) to support nuclear propulsion systems. RRSL designs and builds the nuclear reactors that power the submarines. The contract provided the support, advice and material required to ensure the continued safety and availability of the systems on board three submarines (Trafalgar, Vanguard and Astute) until 2022. The contract supported approximately 500 UK jobs.

In 2022, defence contracts worth more than £2 billion were awarded to BAE Systems and RRSL to begin the third major phase of the future submarine nuclear deterrent programme – Dreadnought. This investment is the latest financial commitment between the Ministry of Defence, BAE Systems and RRSL, and is the initial investment within a planned overall total of nearly £10 billion for the whole delivery phase. The contract will enable four new submarines to be built in the UK from the 2030s, with a lifespan of around 30 years. The overall programme, from design to build, will support about 30,000 jobs across the country.

In March 2023, the AUKUS trilateral agreement between Australia, the UK and US was announced. As part of the agreement it was reported that Australia will acquire a fleet of up to eight nuclear powered submarines, through the purchase of existing submarines from the US and new submarines. Where new submarines will be developed for Australia, RRSL will provide the reactors.

In order to meet the aspirations of the UK and Australian Governments and deliver these programmes, RRSL needs to expand and refurbish the facilities at the Rolls-Royce Raynesway site.

In response, AECOM have been commissioned by RRSL to prepare a masterplan and submit an outline planning application which accommodates the necessary increase in manufacturing and office capacity to meet these future needs. This design and access statement (DAS) has been prepared to support the outline planning application for this proposed expansion.

1.2 Development description

As shown in Figure 1 (opposite), the application site covers approximately 23.26Ha and is located north of Alvaston and Boulton Cricket Club, just east of the River Derwent and accessed from Western Service Road and Raynesway.

Outline planning permission with all matters reserved is sought for up to 104,430sqm (GIA) of manufacturing (Use Class B2) and ancillary office (Use Class E) floorspace, and a multi-storey car park, with associated infrastructure including internal vehicle routes, cycle parking, drainage, hard and soft landscaping, earthworks and demolition of existing buildings.

1.3 Document structure

This DAS should be considered alongside the submitted (planning application) plans, and other documents prepared in support of the development proposals.

Beyond this introduction the DAS is structured as follows:

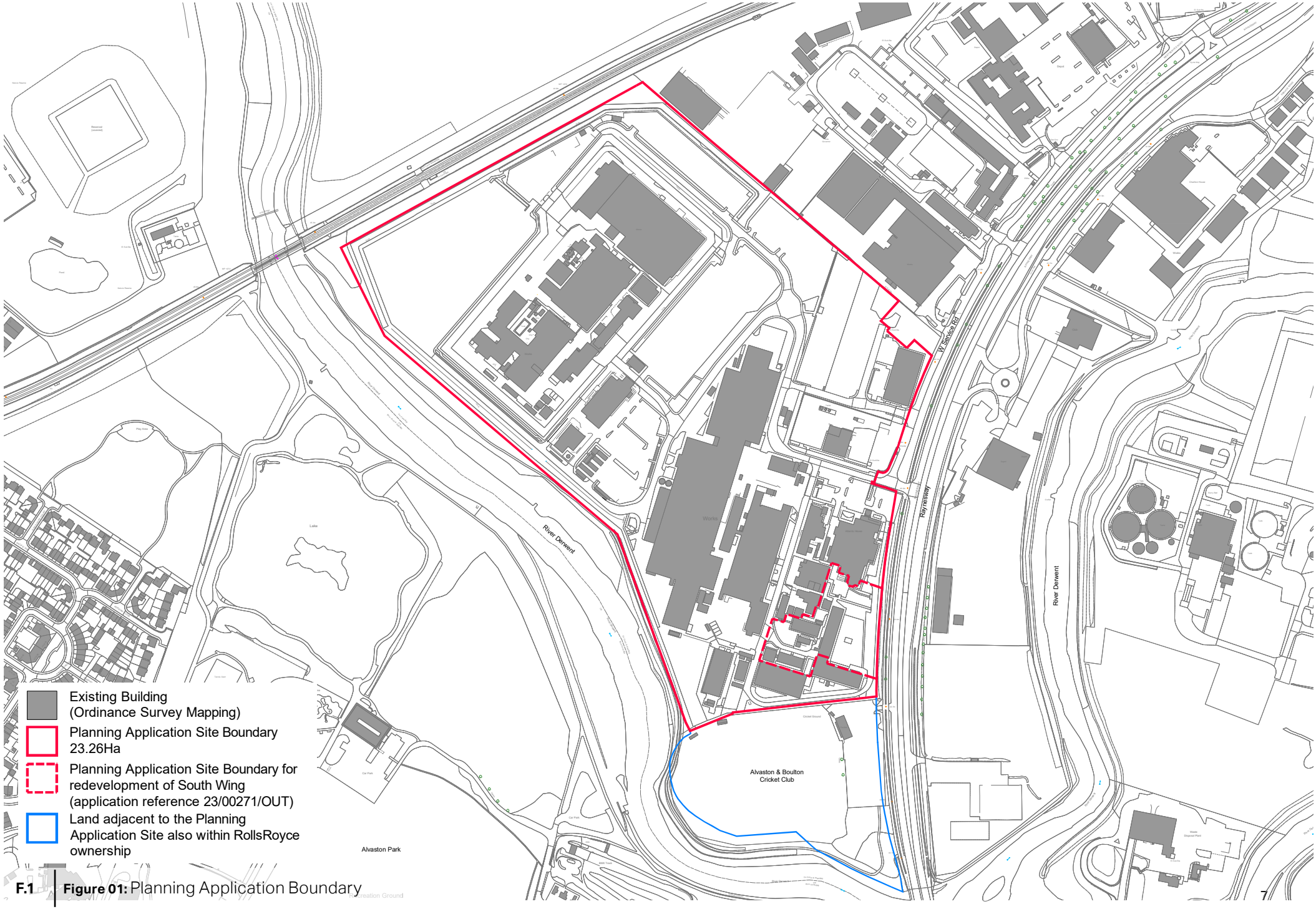
02 Context & Analysis: Context sets out the development scope and provides an understanding of the influences and opportunities within the developments setting. The section also provides an appreciation of the sites technical considerations which have influenced the design development.

03 Design Development: Sets out the evolution of the development proposals including early optioneering through to the selection of the preferred option.

04 Development Parameters: Confirms the parameters of the proposed development being sought for approval. These parameters form the basis for the accompanying Environmental Impact Assessment (EIA) and other technical reports.

05 Design Principles: Considers the overarching design objectives and provides an illustrative layout which demonstrates how future development could come forward and be accommodated on site.

06 Conclusion: Provides a summary of the main principles and gives an indication as to the potential development timescales.



F.1 | **Figure 01:** Planning Application Boundary

Context & Analysis

02

2. Context & Analysis

2.1 Site overview

Located to the east of Derby, the Raynesway site has been occupied by Rolls-Royce since 1959 and comprises industrial operations including two Nuclear Licensed Sites (NLS), together with ancillary office uses and car parking. The site is generally quite flat with high and low points of approximately 41mAOD and 45mAOD, respectively.

As illustrated in Figure 2, the site is bounded by the River Derwent (to the south and west); East Midlands railway line (to the north); Alvaston and Boulton Cricket Club (to the south); the A5111 Raynesway (to the east) and existing industrial uses (to the north east).

The application site is 23.26Ha and incorporates not only the original Roll-Royce Raynesway site but also includes land in third party ownership (BOC Gases and Star Micronics) which is in process of being acquired by Rolls-Royce (area indicated by the land coloured blue in Figure 2) to accommodate the required expansion. The application site also includes an area currently subject to a separate planning application for the redevelopment of South Wing (Reference 23/00271/OUT), which is outlined by a red dashed line in Figure 2 (opposite). The site is currently accessed directly from the A5111 Raynesway, or alternatively via the West Service Road through two separate controlled entrances.

The site is dominated by buildings that are predominantly large manufacturing facilities. Other buildings such as receptions, facilities, security huts and offices are also present. Hard-standing tarmac footpaths and car parks are present and interspersed between buildings. Some small areas of grass are also present adjacent to footpaths and between buildings. Scattered trees of various ages and species are also present throughout the site. A small patch of wildflower meadow is also present in the centre of the site, adjacent to one of the car parks. An approximately 10m wide border of grassland runs around the edge of most of the site, and the site is bound by wire fencing. The NLS requires a higher level of security and therefore these areas have additional secure boundaries.

F.2 **Figure 02:** Site Aerial Plan

2.2 Wider context

The site is located to the west of the A5111 Raynesway, approximately 3km to the south-east of Derby City Centre. Situated in a largely industrial area, the key surrounding land uses include:

North - Land to the north comprises St Modwen's Development, a 20Ha industrial and logistics park which is being developed in partnership with Network Rail. St Modwen's is separated from the Raynesway site by an existing railway line and is accessed via the A52 Brian Clough Way, an important strategic route linking Derby to Nottingham. To the north east of the site (to the west of St Modwen's on the banks of the River Derwent) is The Sanctuary Bird and Wildlife Reserve (a designated Local Nature Reserve).

East - To the east of the site are a number of industrial units including sites for LKAB Minerals, Balfour Beatty and Severn Trent plus Bestway Cash and Carry. The A5111 Raynesway dual carriageway and the Western Service Road are located immediately adjacent to the south eastern boundary of the site. Beyond the A5111 is a cluster of light industrial, leisure and warehouse units including BCA Derby, Choices Healthclub, Subway, Meachers Global Logistics and Charlton House Riverside Park. Further east is the River Derwent and The Severn Trent Green Power Derby AD Facility.

South - Immediately south of the site is Alvaston and Boulton Cricket Club (which is within the ownership of Rolls-Royce Submarines Limited but does not form part of this application) comprising a cricket pitch, club buildings and associated car parking area. Beyond the cricket club is the River Derwent, with Alvaston Park and Westside Business Park beyond.

West - To the west of the site lies the River Derwent, with Alvaston Park situated on the other side of the River. Alvaston Park is a large (34Ha) riverside park which has Green Flag Award status and comprises a large lake, sports pitches, tennis courts, a multi-use games area, cafe, BMX track, play areas and landscaped grounds.

Figure 3 (opposite), illustrates the above site context and highlights key environmental and historic designations within proximity to the site.

2.3 Technical Considerations

This section provides a brief summary of the current site conditions which have been considered during the preparation of the masterplan. Greater detail for these elements is provided within the corresponding technical reports which are submitted as part of this planning application.

2.3.1 Ecology

As set out within the Preliminary Ecological Appraisal Report (PEAR) which accompanies this application, there are no designated sites present within the site. However the River Derwent Local Wildlife Site (LWS) is located within 30m of the west Site boundary and Chaddesdon Sidings a potential LWS which is designated for its population of dark bush cricket is located approximately 45m north of the site. The hard-standing, amenity grassland and neutral grassland present within the Site are common and widespread habitats that are of low ecological importance.

Buildings and trees within the site were found to have negligible potential to support roosting bats and the habitats present on the Site are of limited value to foraging or commuting bats. However the site is adjacent to the River Derwent which provides good foraging and commuting habitat for bats. There was no evidence of, or features within the site to support badgers, otters, water vole, Great Crested Newts or common species of reptiles. However, due to the proximity of the River Derwent an otter survey would be required to assess any potential impacts to this species. There are no constraints posed by common toad, hedgehog, invertebrates or other notable species present on site. No evidence was found of active birds nests within any of the buildings. However, various ledges around the buildings do provide opportunities for nesting birds.

F.3 **Figure 03:** Site Context Map

2.3.2 Utilities

There are a number of existing utilities present on site, the majority of which service the existing development and it is envisaged that these will be diverted as necessary to accommodate proposed development. In addition, there are also a number of statutory utilities which cross the site including:

- A main combined sewer (900mm) (Severn Trent)which runs along the inside of the north eastern boundary of the site. The location of the sewer and associated easement are taken into consideration in the masterplan layout;
- A public surface water drain (Severn Trent) which runs along the south east boundary from the main vehicle access to the south east corner of the site;
- The existing potable water supply from Severn Trent is taken from Raynesway Road, via a 100mm pipe. The fire water main is also taken from Raynesway Road;
- Gas is supplied to the site from the Cadent Gas network on Raynesway Road at one point via a 125mm pipe and distributed to existing buildings. A medium pressure gas main also bypasses the north end of the site; and
- Power to the site is provided by the D.N.O. National Grid (formerly Western Power Distribution) at 11kV at two incoming point.

2.3.3 Flood Risk & Drainage

As set out within the Flood Risk Assessment and Drainage Strategy which accompany this planning application the EA Flood Map for Planning and the DCC Level 1 SFRA indicates that a southern portion of the Site is currently located within Flood Zone 2, with the remainder of the Site being located in Flood Zone 3. EA product 4 data identifies flood defences located along the river bank at the western and southern boundary of the site. It is understood that Derby City Council in partnership with the Environment Agency are undertaking a flood alleviation project, Our City Our River (OCOR) to reduce flood risk to properties and people.

A summary of flood risk from all sources is provided below:

Flood Type	Source	Flood Risk	Mitigation Recommended	Residual Risk
Fluvial	River Derwent	Low	Yes - To be integrated into RRSL site wide flood emergency procedures	N/A
Pluvial	Intense Rainfall	Low	No	N/A
Ground water	Elevated Ground water	Medium	Yes - To be integrated into RRSL site wide flood emergency procedures	Low
Sewers	Intense Rainfall	Low	Yes - Maintenance / repair of existing private drains	N/A
Artificial Sources	Ambergate & Butterley Reservoirs	Medium	Yes - To be integrated into RRSL site wide flood emergency procedures	Low

The existing drainage on-site discharges to two locations:

- The 900mm diameter combined water sewer adopted by Severn Trent Water which runs along the northeast of the site. A private foul water drainage network connects to this sewer by gravity within the site boundary; and
- Private drainage networks collect foul water flows from the southeast portion of the site and discharge to an existing Severn Trent Water combined water sewer off-site within the A5111 by gravity.

2.3.4 Arboriculture

As detailed within the Arboricultural Impact Assessment which accompanies the planning application, tree surveys undertaken at the site identified 61 features consisting of 53 individual trees, seven groups and one hedge.

No trees were categorised as high quality (Category A), 27 individual trees and two tree groups were categorised as moderate quality (Category B), 25

individual trees, five groups and one hedge were categorised as low quality (Category C) and one tree was categorised as unsuitable for retention for more than 10 years (Category U).

There are no Tree Preservation Orders or Conservation Area designations applicable to the site. Any required vegetation removal could be mitigated with a high-quality scheme of new tree planting and associated landscaping works which provide an opportunity to enhance the quality, benefits and resilience of trees on the site.

2.3.5 Geo-Environmental

As set out within the Phase 1 Geo-Environmental Report submitted as part of the planning application, the entire site was mostly undeveloped until 1950 when buildings associated with the Rolls-Royce Engineering Works were constructed within the site boundary. Prior to the development as an engineering works, the site comprised agricultural fields and the River Derwent which flowed through the central and southwestern areas of the site and was later infilled following the development as an engineering works. The site has mostly remained unchanged, although further buildings were constructed throughout the site between 1981 and 2022.

It is considered, based on the information obtained, that geo-environmental risks range between Low and Moderate. Potential sources of contamination relating to both on-site, off-site, historical and current land uses have been identified and potential linkages to human health (construction workers and future site users), controlled waters, development infrastructure and flora and fauna may be present. All levels of risk in respect to the LC:RM classifications are considered to be Acceptable for all of the pollutant linkages.

Key geotechnical findings as part of the report include:

- Made Ground is anticipated to underlie the entire site;
- Superficial deposits are anticipated across the site comprising clays, silts, sands and gravels of Alluvium Deposits and River Terrace Deposits; and
- The bedrock is designated as the Gunthorpe Member Mudstones which underlies the Alluvium Deposits across the entire site.

The report recommends that Ground Investigation (GI) works are undertaken in the locations earmarked for re-development, targeting areas where new buildings are proposed. The GI would determine the presence of any geo-environmental and/or geotechnical hazards and associated risks that require mitigation.

2.3.6 Access and circulation

The Raynesway site is currently accessed via the Western Service Road (WSR) which links to the A5111 Raynesway (northbound) in the form of a “left in-left out” priority junction,

From the WSR, the Raynesway site has two accesses; the northern access located immediately south of the existing Star Micronics GB which provides access to the Brown car park (used by RRSL) and Star Micronics car park. The southern access is the main RRSL access with security controlled gated access.

The WSR provides access between the A5111 and accesses to a range of industrial and commercial premises to the north of the Raynesway site. The WSR is subject to a 30mph speed limit and has streetlighting and footways. A segregated cycle path is provided on the grass verge that separates the WSR from the A5111.

The WSR meets with the A5111 Raynesway immediately to the east of the gated site access via a left in-left out priority junction on the dualled section of the A5111. The A5111 is a dual carriageway road which forms part of the eastern stretch of Derby’s outer ring road and is subject to 50mph speed limit in the vicinity of the site. The A5111 forms a key strategic link to the wider Derby highway network.

To the north, the A5111 provides a link to the A52 Brian Clough Way at the Spondon Interchange, as well as access westwards towards Derby city centre and eastward towards Junction 25 of the M1 and Nottingham. North of the Spondon interchange, the A5111 also provides connection to Derby Road for access to the areas of Chaddesden and Spondon.

Design Development

03

3. Design Development

3.1 Early Optioneering

Early optioneering studies were undertaken based upon the growth requirements (as they were at the time) that concentrated on an intensification of the existing Raynesway site (rather than the additional third party land which is now included within the application site. These optioneering studies are illustrated overleaf (see Figures 4 to 6) and considered different location options for proposed office accommodation (Building Number 6) and the resultant impacts on internal vehicle circulation and existing buildings as set out below:

Option 1 (Figure 4) - Illustrated the potential to construct new office accommodation (Building Number 6) as an extension to the western side of an existing manufacturing building.

Option 2 (Figure 5) - Showed the construction of new office accommodation (Building Number 6) to the eastern side of the existing manufacturing building.

Option 3 (Figure 6) - Provided new office accommodation (Building Number 6) to the northwest of the existing manufacturing building.

These early options were evaluated to understand the potential advantages and disadvantages of each and this comparison is detailed later in the section (See Figure 7).

3.2 Design Evolution

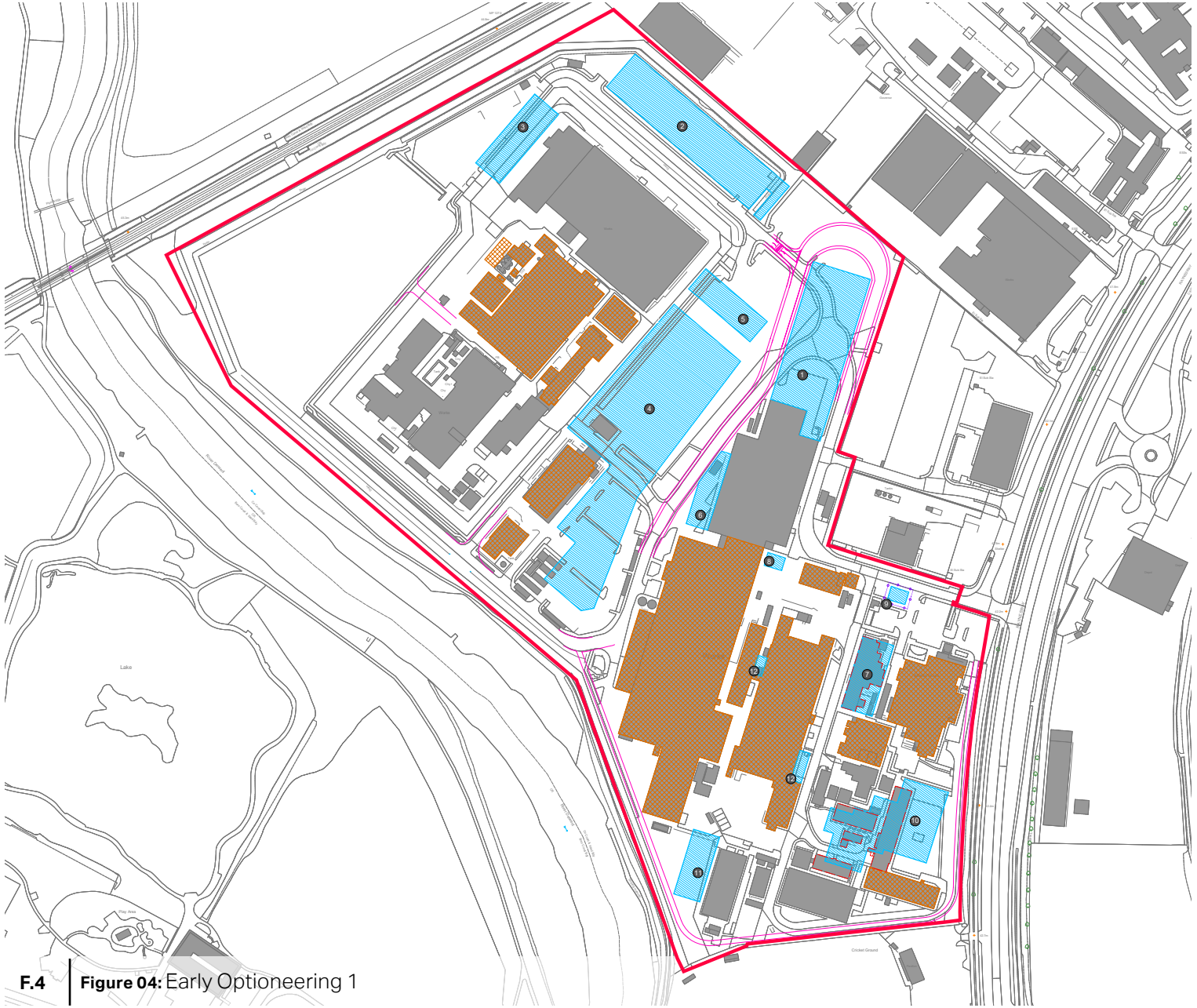
Following evaluation, Option 1 was initially selected by RRSL to be taken forward. However, following this, the requirements for the size of manufacturing facilities were significantly increased and the programme required to construct them was also accelerated to meet evolving customer requirements, which meant that the necessary facilities could no longer be accommodated within the existing Raynesway site or within any of the above options.

This led to the need to expand the current site via third party land acquisition (as reflected in the current planning application site boundary) in order to accommodate the necessary footprint increases of manufacturing facilities (Building 1) and additional infrastructure (including Building 12) and office space. This led to the evolution of the early optioneering work into the current illustrative masterplan. This was achieved through the facilitation of a series of design workshops with RRSL department leads, to debate the siting and required footprints of these increased facilities.

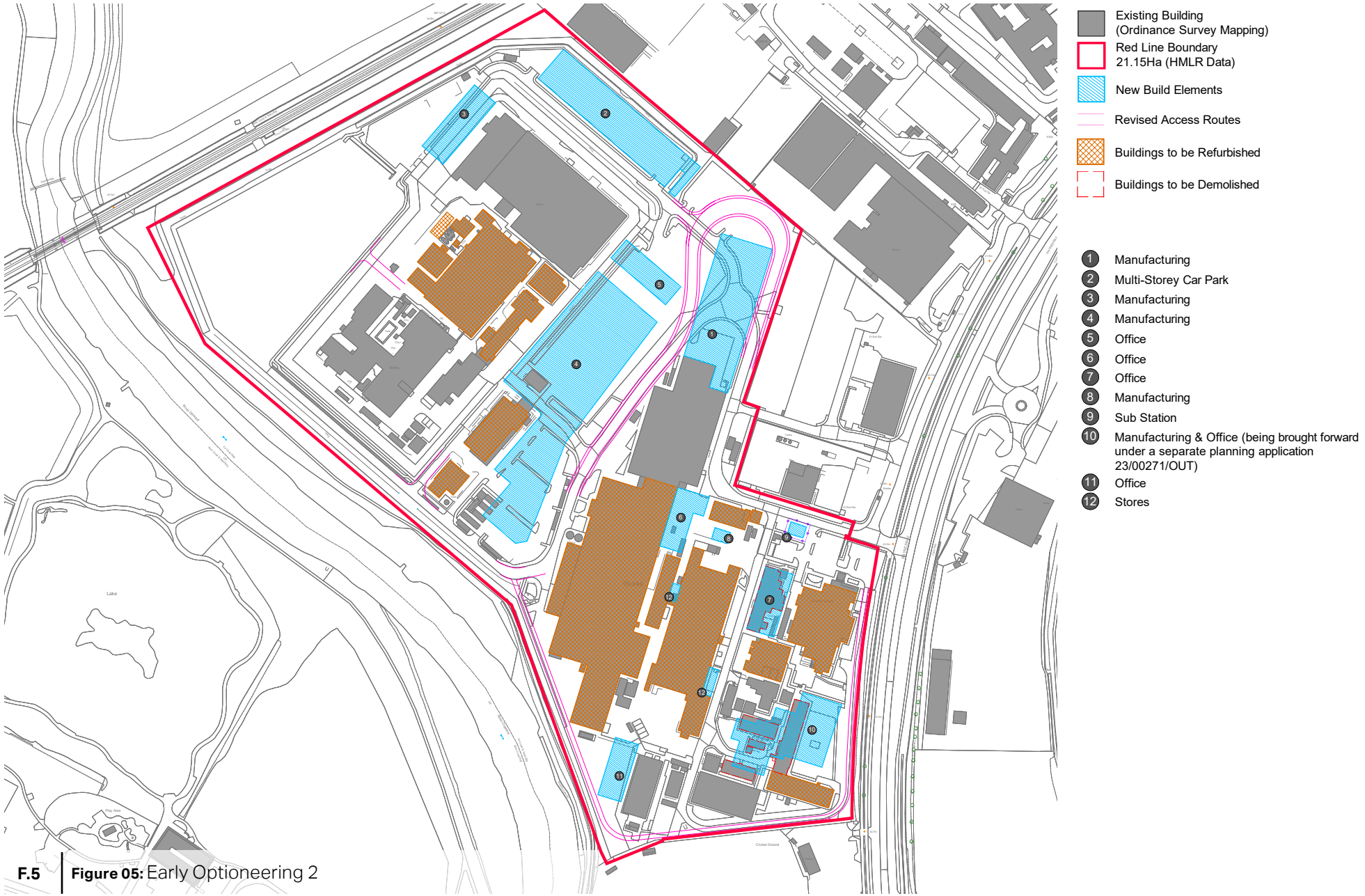
It was determined that there were few opportunities to test further alternate layouts due to the following considerations:

- The need to maintain important internal vehicle circulation routes through the site which are required to accommodate large vehicles and emergency services;
- Certain proposed buildings have sensitive security and operating requirements which therefore limit the options for alternative locations;
- The placement of utilities infrastructure such as the proposed substation (Building 12) need to be located to the front of the site to enable ongoing maintenance access from the utilities provider;
- There was a requirement to group certain facilities / buildings together for safety or operational reasons;
- To ensure continued site operations during the construction of new facilities / buildings, whilst meeting the necessary phasing timescales and customer requirements; and
- Working with existing site constraints (including statutory utilities / easements).

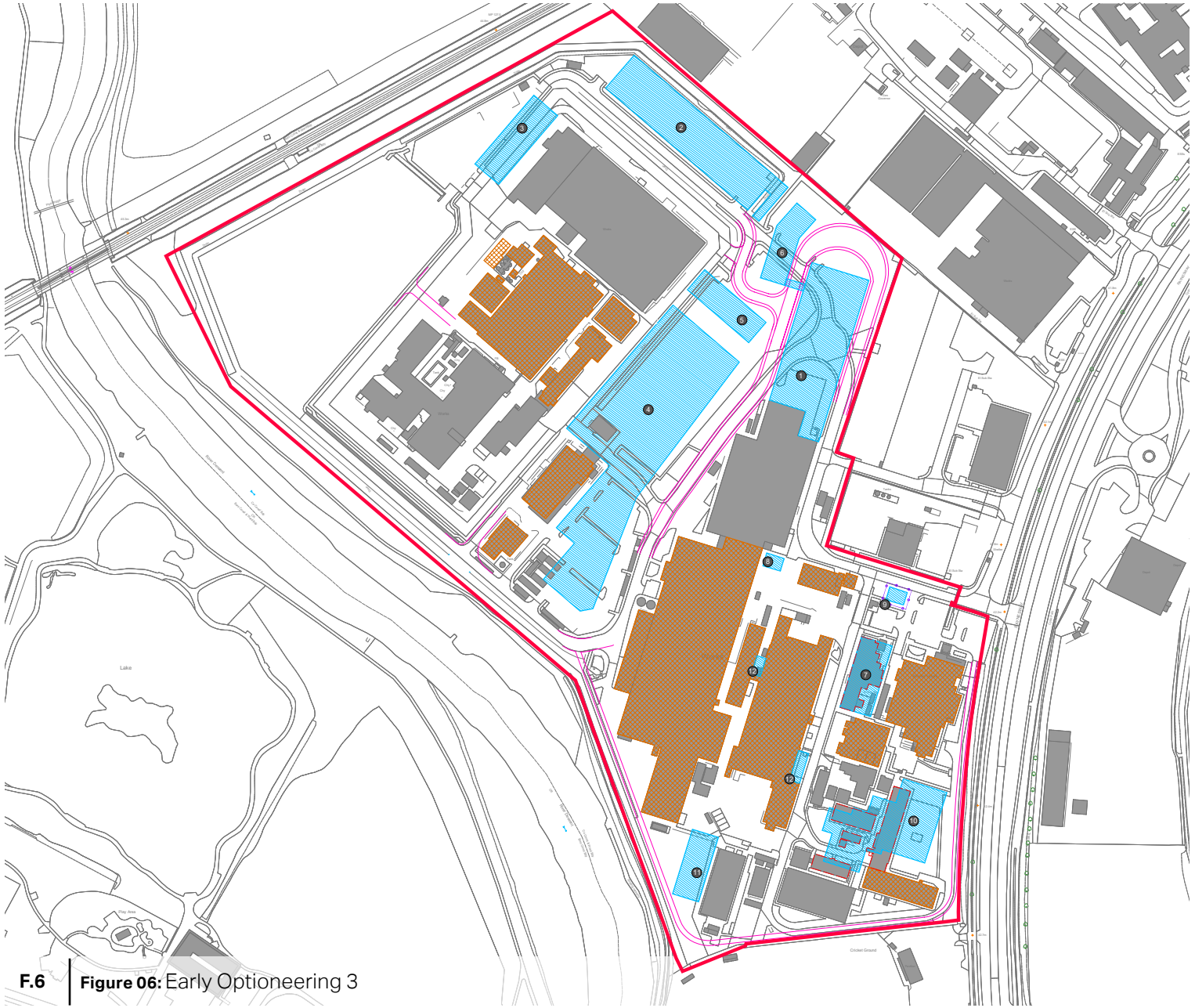
The resulting illustrative layout from this design development exercise is detailed within Section 5.



F.4 | **Figure 04:** Early Optioneering 1



F.5 | **Figure 05:** Early Optioneering 2



F.6 | **Figure 06:** Early Optioneering 3

		Option 1	Option 2	Option 3
	Summary	Construction of new office accommodation (building 6) as an extension to the existing offices.	Construction of new office (building 6) to the eastern side of the existing manufacturing facility.	Construction of new office (building 6) to the north west of building 1.
Proposed location	Advantages	Opportunity to consolidate office space which wouldn't impact on the proposed location of other buildings.	Opportunity to create separate new office accommodation in a currently underutilised location	The building is positioned in order to avoid the combined sewer and associated easement.
	Disadvantages	This would provide an extension of current office facilities rather than a separate new building which may impact on operational requirements/ proximity to the proposed manufacturing facility (building 1).	The location of the office in this location could impact on the current ventilation/operational requirements of the manufacturing facility. The siting of the building is in close proximity to existing buildings which may make construction difficult.	Due to the separation of the building from the existing manufacturing facility, an integrated bridge link would be required to provide direct internal access.
Accommo-dation	Advantages	Operating as an extension rather than standalone building, the proposals could utilise existing access and building services.	The footprint would match the current requirements. At four storeys high, this would provide the required additional desk spaces.	The footprint would match current requirements. At four storeys high, this would provide the required number of desk spaces. A new stand alone building (rather than an extension) provides opportunity to maximise natural lighting and ventilation in the office accommodation.
	Disadvantages	Due to space limitations, the footprint is limited and less than the requested size. At 4 storeys high (to match the existing office space) this would likely result in providing less desk spaces than desired.	Due to the proximity of surrounding buildings windows will need to be restricted to the eastern façade only which could cause reduced natural lighting.	As a standalone new facility, separate access and building facilities would need to be provided.
Impact on other buildings	Advantages	This option would not impact on the planned locations for the proposed manufacturing facilities or other surrounding buildings.	This option would not impact on the planned locations for the proposed manufacturing facilities (5).	The proposed building would have no impact on existing buildings.
	Disadvantages	Construction would cause disruption and require temporary relocation of the existing office facilities. Due to the width of the office accommodation this could reduce natural light levels within the existing part of the office.	The placement of the proposed building would require building 8 to be relocated. It is not known whether location of the office in this location would impact on the current ventilation/ operational requirements of the manufacturing building.	The placement of the building would require changes to proposed manufacturing facilities and could impact on necessary vehicle access arrangements to the Nuclear Licensed Site.
Access & parking	Advantages	The location of the extension in this location would not impact on internal vehicle circulation requirements and provides flexibility to relax the current proposed turning circle to the north of building 1 if required (following tracking).	The location of building 6 would not impact on the internal vehicle circulation requirements and provides flexibility to relax the current proposed turning circle to the north of building 1 if required (following tracking). The potential relaxation of the route is illustrated in this option.	Easily accessible from the main access route and in close proximity to the proposed multi-storey car park (MSCP) (building 2).
	Disadvantages	The placement of the building 6 would result in the loss of existing car parking in this location which would require relocation.	Location of the building here would potentially result in the loss of existing storage/ service yards.	The building would reduce flexibility to realign the internal vehicular circulation route should relaxation of the turning circle be required. It would also require the access to building 2 to be realigned, impacting on the external area of the proposed manufacturing facilities (building 5).

F.7 **Figure 07:** Early Optioneering Comparison Table

Development Parameters

04

4. Development Parameters

The approach to the outline planning application has been to adopt a cohesive yet flexible approach that outlines RRSL's overall growth ambitions but enables individual building projects to be phased and brought forward as required within the next ten years. In this way, it is possible to accommodate the evolution of individual building requirements as they are designed in more detail whilst still following the overall development parameters.

The parameter plan illustrated within this section of the DAS (Figures 8 and 9) are submitted for approval as part of the outline planning application for the site. The plan defines the physical envelope within which the future development will sit and sets the parameters for how the development will be accessed, the land use, maximum amount and scale of development as set out below.

4.1 Application area

The Parameters Plan defines the planning application boundary and in addition also highlights the planning application boundary (via a dashed red line) for the redevelopment of South Wing, a separate planning application (reference 23/00271/OUT).

4.2 Use

In line with the sites existing uses, the proposed land use for the new development is B2 (General Industrial) with ancillary office, parking and storage uses. Further details regarding the need for the proposed development is set out within the Planning Statement accompanying the application.

4.3 Amount

The Parameters Plan defines a proposed development area of 23.26Ha which extends to the entirety of the planning application site boundary and sets out the area within which new development will be contained.

Based upon RRSL's current understanding of future business needs to meet projected growth, an illustrative schedule was created (set out within Section 5) which sets out the envisaged footprints and floorspace of each new building / facility to ascertain a total floorspace requirement for the outline planning application.

Based upon these calculations, the planning application is seeking permission to develop up to 104,430sqm of new floorspace. This key parameter sets an overall maximum amount of development floorspace, whilst retaining flexibility for individual buildings to flex in size as they are developed in greater detail.

4.4 Scale

The maximum ridge height of proposed buildings across the site is 40m above FFL. This sets an overall building envelope for future development, providing a definable limit for building height, whilst retaining flexibility of potential building typologies until detailed design stage, helping to ensure that the development can respond to changing customer and business requirements.

4.5 Access

The development will take access from existing vehicle access points located to the south east boundary of the site. This includes:

- An existing access located to the centre of the site, which connects directly onto Raynesway and the termination of the Western Service Road; and
- An existing access located further to the north, which connects into the Western Service Road and currently provides access into the RRSL Raynesway site via what is currently the Star Micronics site.

Accessibility will be captured in further detail as part of any subsequent reserved matters application. Any proposed scheme will be designed to promote accessibility for all users.

4.6 Demolition

The parameter plan sets out five buildings (labelled A, F, G, H and I) which are proposed for demolition under this planning application as set out below:

- **A** - An existing four storey office block, with single storey additions with a total footprint of approximately 879m^2 and a total floorspace of circa 3,188m^2;
- **F** - An existing single storey building which currently accommodates meeting and office facilities with a footprint and floorspace of approximately 939m^2.
- **G** - An existing single storey industrial / warehouse building which is located on the BOC site and has a footprint and floorspace of approximately 704m2;
- **H** - A single storey building which forms part of the manufacturing facilities within the Nuclear Licensed site and has a footprint and floorspace of approximately 179m^2; and
- **I** - A two storey building which forms part of the manufacturing facilities within the Nuclear Licensed site and has a footprint of approximately 499m^2 and a total floorspace of circa 998m^2.

The parameter plan also makes reference to four additional existing buildings (labelled B, C, D and E) which are proposed for demolition under separate planning applications 22/00408/DEM and 23/00271/OUT.

Planning Application Site Boundary 23.26Ha

Planning Application Site Boundary for redevelopment of South Wing (application reference 23/00271/OUT)

Proposed Development Area 23.26Ha

PROPOSED DEVELOPMENT PARAMETERS		
Maximum Floorspace	PROPOSED LAND USE	MAX RIDGE HEIGHT
Up to 104,430sqm	B2 (General Industrial) with ancillary office, parking and storage uses	40m above FFL

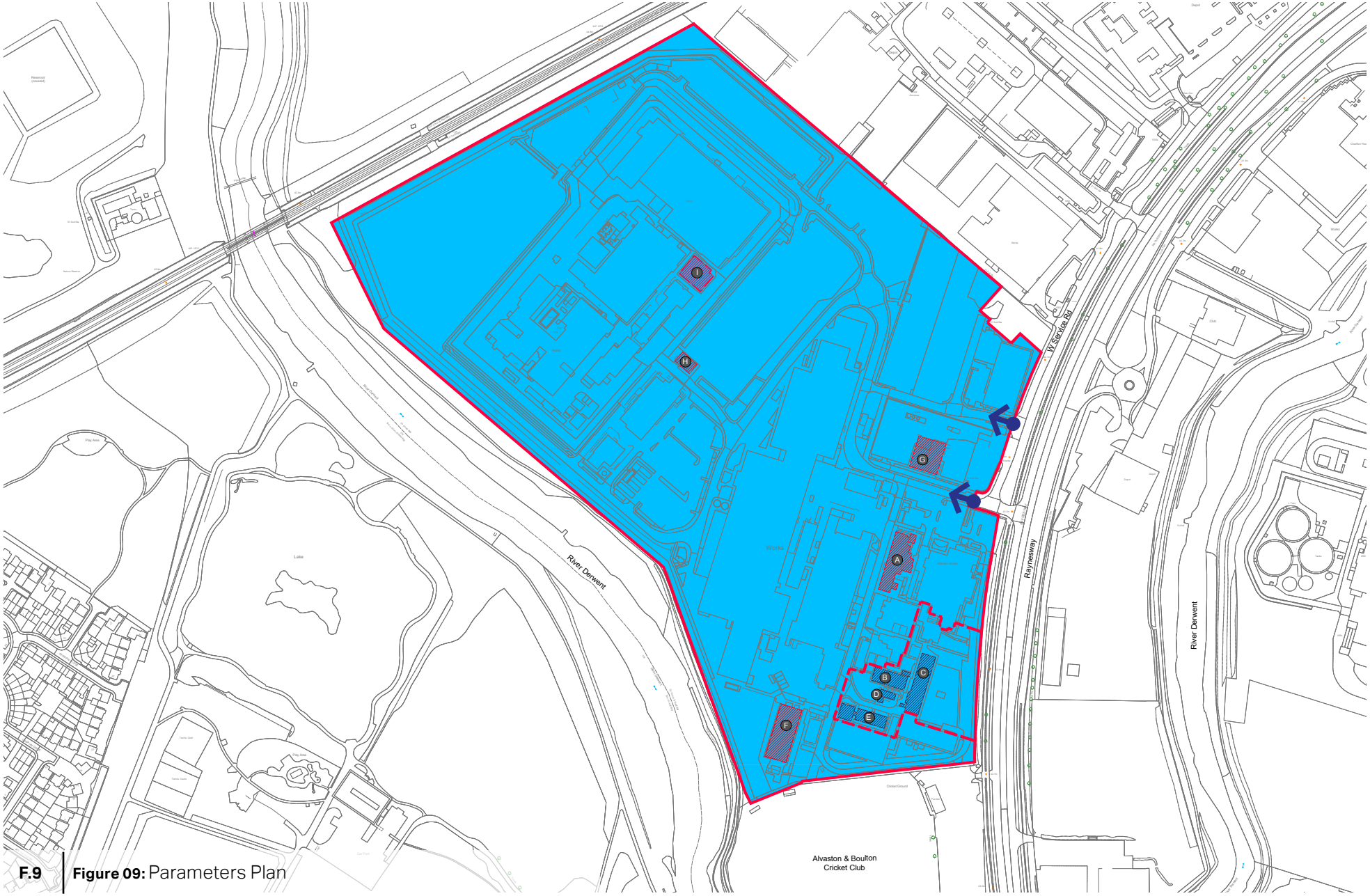
Existing Vehicle Access

Proposed Buildings for demolition under this planning application

Existing buildings to be demolished under separate planning applications: 22/00408/DEM & 23/00271/OUT

DEMOLITION SCHEDULE		
BUILDING	EXISTING FOOTPRINT (m2)	Total Floorspace (m2)
A	879	3188
B	Buildings to be demolished under separate planning applications	372
C		2544
D		383
E		417
F	939	939
G	704	704
H	179	179
I	499	998

F.8 | **Figure 08:** Parameters Plan Key



F.9 | **Figure 09:** Parameters Plan

Design Principles

05

5. Design Principles

5.1 Appearance

The appearance of proposed buildings will be determined at detailed design stage and subject to subsequent reserved matters application. It is envisaged that new buildings will remain consistent with the existing site character and will be bound to the parameters noted within the parameters plan set out in Figures 8 and 9 (Section 4).

5.2 Landscaping

Landscaping proposals will be set out in greater detail as part of any subsequent reserved matters application. However, it is envisaged that new landscaping will reflect the existing site, with areas of hard surfacing (macadam circulation routes and parking areas and concrete service yards) and surrounding soft landscaping. In addition, as set out within the Biodiversity Net Gain (BNG) report which accompanies this application, landscaping proposals will need to consider opportunities to surpass the requirement for 10% BNG through the enhancement of soft landscaping areas including areas of existing modified grassland to provide neutral grassland habitat. In addition, the report also suggests opportunities to incorporate biodiverse green roofs into proposed building designs (where feasible).

5.3 Sustainability

The Sustainability Statement which accompanies this planning application demonstrates how the proposed redevelopment of the Rolls-Royce Raynesway site in Derby will meet the sustainable development targets and aspirations in the local area, and set by Rolls Royce as noted in the table below:

Emission	Target
Operations & Facilities (scope 1 & 2)	Achieve net zero GHG emissions from operations and facilities by 2030 (excludes product test emissions)
	Reduce total scope 1 + 2 emissions (includes product test emissions) by 50% by 2030, from a 2019 baseline
Product Testing (scope 1)	Use SAF for 10% of Civil Aerospace and Defence UK product testing by end of 2023
Product Testing (scope 3)	Release mtu Series 2000 and 4000 series reciprocating engines to run on sustainable fuel by end of 2023
	Prove compatibility of all in-service Civil Aerospace engines and all major in production Defence engines on 100% SAF by end of 2023
	Reduce CO2 emissions associated with use of sold products by 55%, normalised by original equipment revenues, by 2030, from a 2019 baseline
	Reduce absolute CO2 emissions from new products sold within Power Systems by 35% by 2030, from a 2019 baseline

The Sustainability Statement demonstrates how the proposed development will aim to maximise sustainability. BREEAM assessments, or a suitable equivalent such as DREAM for Defence related projects, will be completed for each building to quantify the sustainability of each building, and an Excellent rating will be required for all new builds.

There may be some constraints to sustainability due to the nature of the work that takes place on the site, and the limited space available to make improvements, but RRSL is committed to ensuring sustainability remains a priority throughout the process.

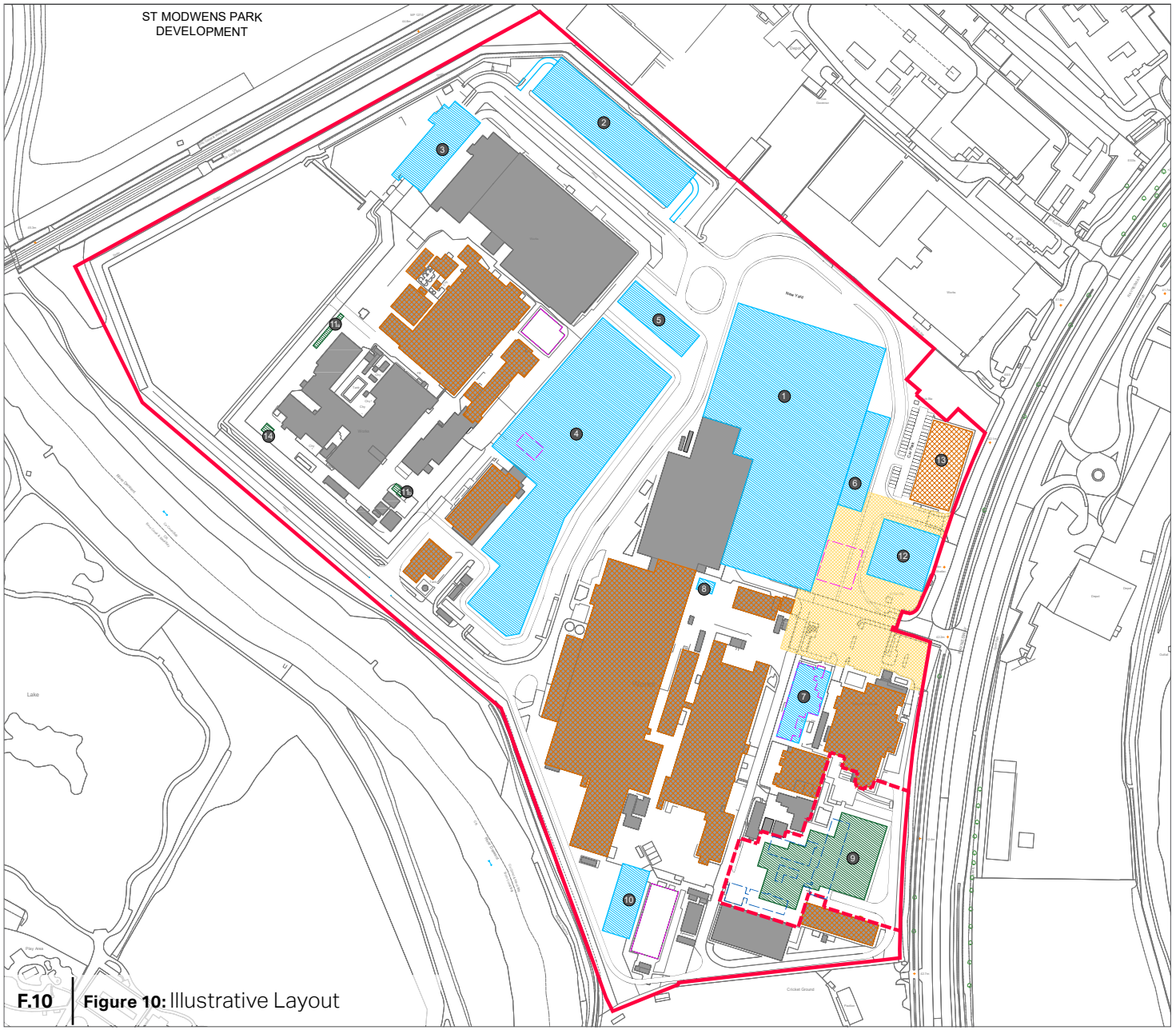
5.4 Illustrative Layout

An illustrative masterplan has been produced (see Figure 10) which sets out how the future development could look. The layout conforms with the parameters noted within Section 4 and sets out how the buildings proposed within the indicative accommodation schedule (set out below) can be successfully accommodated within the application site. In addition to proposed new buildings, the masterplan also details potential buildings to be refurbished in the future as part of RRSL's ongoing maintenance and improvements programme and is shown to illustrate RRSL's commitment to the site.

The illustrative masterplan sets out how existing internal vehicular routes can be diverted and new routes created in order to maintain the necessary circulation through the site and also indicates how the Nuclear Licensed Site boundary to the north could be increased to accommodate the proposed new development.

It is important to note that the illustrative masterplan will be subject to development as part of any future reserved matters application once the buildings have been designed to a greater level of detail.

Proposed Building		Building Use	Proposed Building Footprint (m^2)	No. of Storeys	Floorspace (m^2)
1	Manufacturing	Industrial/ Manufacturing	15,034	1	16,537
2	Multi-storey Car Park	Parking	3,996	8	34,537
3	Manufacturing	Industrial/ Manufacturing	1,460	1	1,606
4	Manufacturing	Industrial/ Manufacturing	11,750	4	29,810
5	Office	Industrial/ Manufacturing	1,000	2	2,508
6	Office	Office	1,148	6	7,577
7	Office	Office	1,066	5	5,863
8	Manufacturing	Industrial	90	1	99
9	Manufacturing & Offices (Excluded as being brought forward under separate planning application 23/00271/OUT)	Industrial/ Manufacturing + Office	3,140	5	19,110
10	Office	Office	939	4	4,133
11a	Stores (Excluded as being brought forward via a separate planning application)	Stores	145	1	145
11b		Stores	29	1	29
12	Sub Station	Infrastructure	1,600	1	1,760
13	Office/Warehouse (Existing Building)	Office	1,603	1	1,603
14	Manufacturing (Excluded as being brought forward under separate planning application)	Office	40.74	1	40.74
		Totals (excluding buildings 9,11,13,& 14)	**38,083**		**104,430**



F.10 | **Figure 10:** Illustrative Layout

Conclusion

06

6. Conclusion

6.1 Summary

This Design and Access Statement (DAS) sets out a clear vision for the proposed expansion at the Raynesway site and supports an outline planning application (all matters reserved) for up to 104,430sqm (GIA) of manufacturing (Use Class B2) and ancillary office (Use Class E) floorspace, and a multi-storey car park, with associated infrastructure including internal vehicle routes, cycle parking, drainage, hard and soft landscaping, earthworks and demolition of existing buildings.

Building on the foundations of this application, RRSL will bring forward future reserved matters applications as projects move forward which will provide a greater level of design detail. These will follow the development parameters and design principles set out within this document.

6.2 Potential timescales

Due to the scale of expansion planned at Raynesway and the need to maintain ongoing operations at the site during its implementation, it will be necessary to phase future development. Phasing delivery is not fixed at this stage and will be developed in more detail as the scheme progresses, however at this stage it is envisaged that the masterplan will be fully constructed within the next ten years.

About AECOM

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