



Envision AESC Giga Factory

Design and Access
Statement





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1.0 INTRODUCTION

1.1 Statement Overview

This Design & Access Statement has been prepared by RPS, on behalf of Envision AESC, in support of a full planning application for development providing 108,795m² (GIA) for the manufacture of batteries for vehicles with ancillary office / welfare floorspace and associated infrastructure provision, accesses, parking, drainage and landscaping.

The site is located within the International Advanced Manufacturing Park One (IAMP One), a joint venture between Sunderland and South Tyneside Councils.

This document sets out the design development process and details the scheme within this full application and has been written in accordance with CABE publications “Design & Access Statements - How to write, read and use them”, based upon the principles of inclusive design.

The process has been fully informed by a consideration of issues, including:

- **Use:** What buildings and spaces will be used for;
- **Amount:** How much would be built on the site;
- **Layout:** How the buildings and public and private spaces are arranged on the site and the relationship between them and the buildings and spaces around the site;
- **Scale:** How big the buildings and spaces are;
- **Landscaping:** How open spaces will be treated to enhance and protect the character of the place;
- **Appearance:** What the buildings and spaces will look like;
- **Inclusivity:** How everyone can get to and move through the place on equal terms regardless of age, disability, ethnicity or social grouping.



Aerial View with Planning Application Boundary - NTS

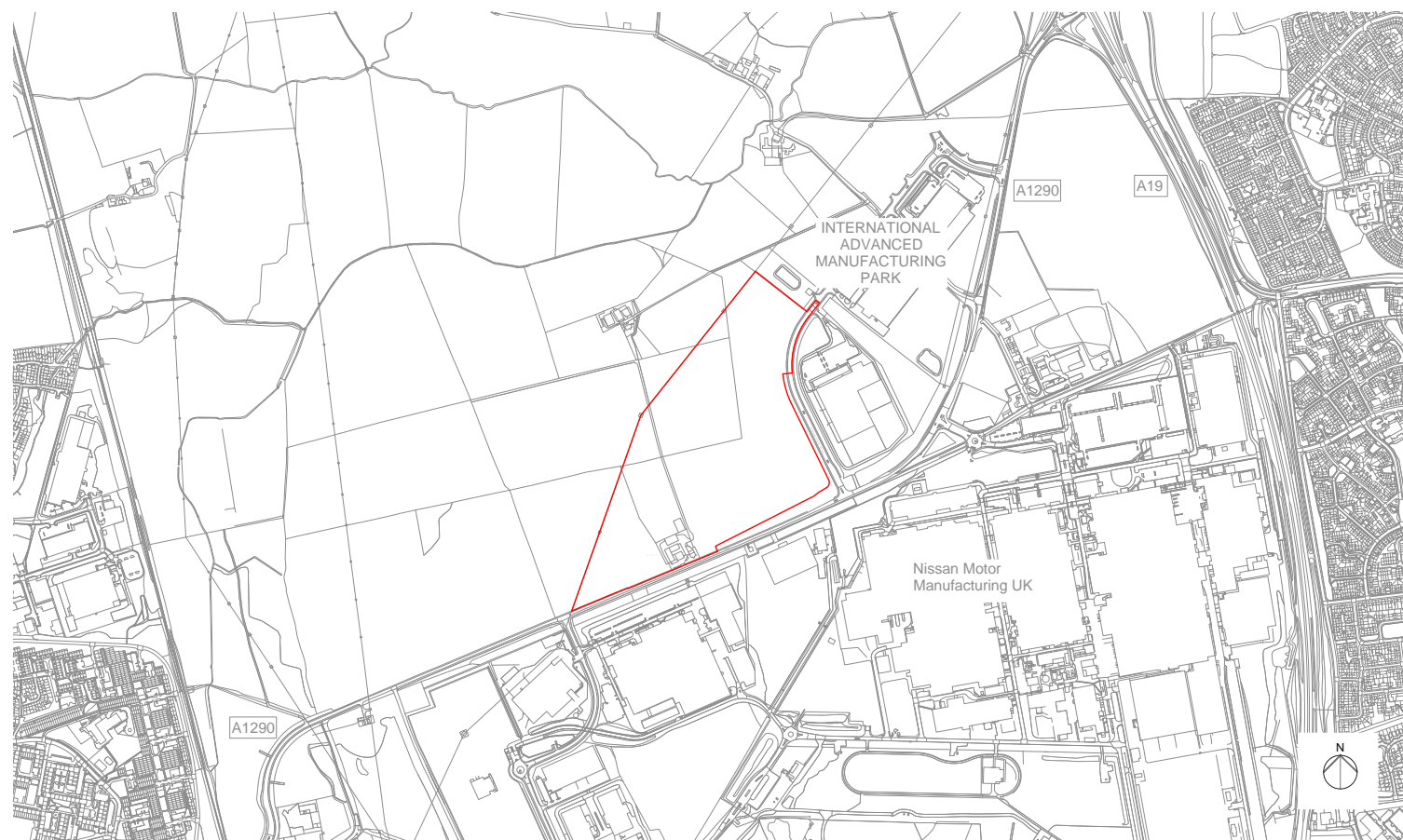
2.0 LOCATION AND CONTEXT

2.1 Site Location

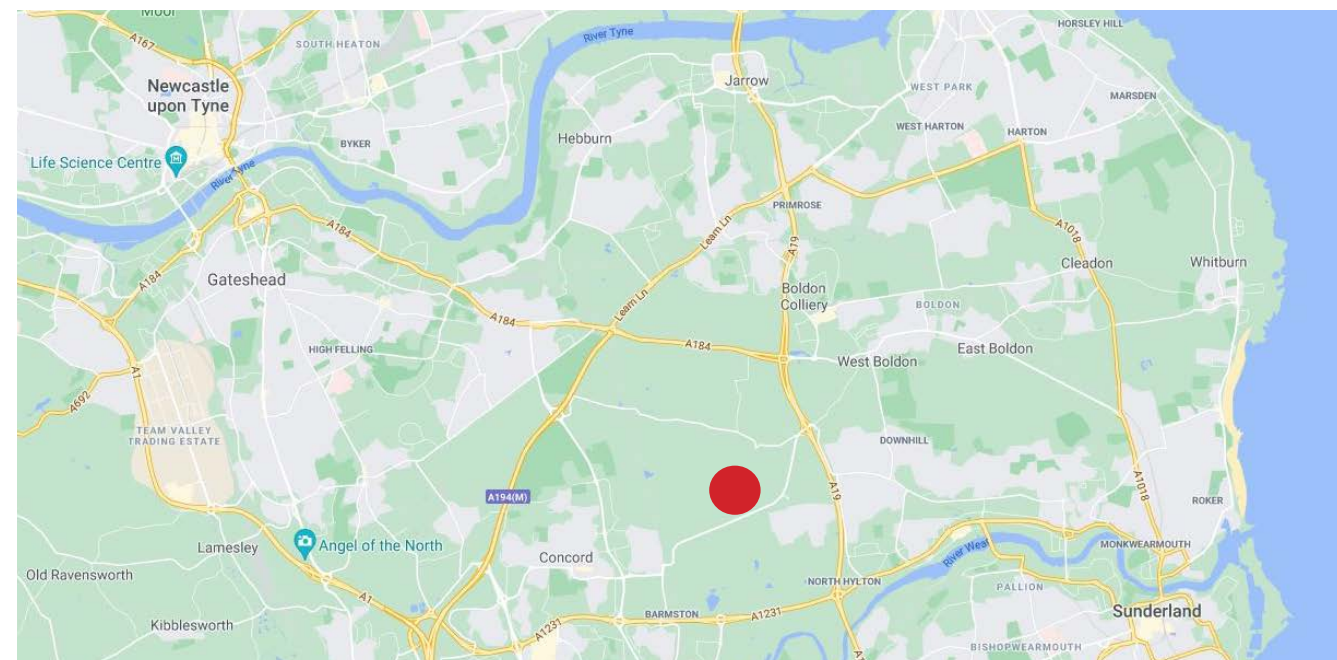
150 Ha of land at the International Advanced Manufacturing Park, or IAMP, is allocated for advanced manufacturing and automotive uses in the IAMP Area Action Plan (AAP) (adopted Nov 2017).

In 2018 the IAMP One application was approved which was for 61.03 Ha, including 2.5 Ha of land which is allocated for flood / ecological mitigation lying outside of the overall development area and in the Green belt land. In 2020 the IAMP One Phase 2 application included an additional 6.5 Ha located within the SW corner of IAMP One. Therefore the total development area for IAMP One that has permission is 65.03 Ha and will deliver 1.688m ft².

The proposals are to create a new Gigawatt Battery Manufacturing Plant, which will create employment opportunities for up to 700 new jobs and relocation of 300 employees from the existing Nissan Site, resulting in 1000 employees.



Site Location Plan with Planning Application Boundary - NTS



Existing Site Plan - NTS

3.0 DESIGN PROPOSALS

3.1 Site Layout

The proposal for the site is to provide 108,795m² (GIA) of manufacturing space and support accommodation for the production of automotive batteries to enable the drive towards the removal of fossil fuel in personal vehicles. This will include a manufacturing plant and support accommodation, including space for R&D, office functional staff, security gatehouse, waste segregation and utilities buildings.

The site boundary has generally been set by the boundary in approved outline application 20/00556/OU4 IAMP ONE Phase 2, and specific boundary constraints are described below:

- **North West** – Limit of IAMP Phase 1, Existing National Grid Overhead HV Powerlines.
- **North East** – Flood zone, adjacent to IAMP Infrastructure Attenuation Pond
- **East** – Adjacent to new IAMP Highway Infrastructure – International Drive, and to new industrial IAMP units (SNOP)
- **South** – Adjacent to A1290 Highway, including space allocation for future duelling and Foul Water Rising Main. Adjacent to Nissan Motor Manufacturing UK.

The site boundaries and their various constraints have established the overall site available for the masterplan.

The required building footprint has been established by the demand of product output and requirements for the process equipment to provide. This building footprint has been used in early masterplan options analysis to determine the optimum building orientation to provide safe and efficient site access from International Drive as well as provide space for suitable boundary treatments to the Highways boundaries on South and East elevations.



Proposed Site Plan - NTS

3.0 DESIGN PROPOSALS

3.2 Scale

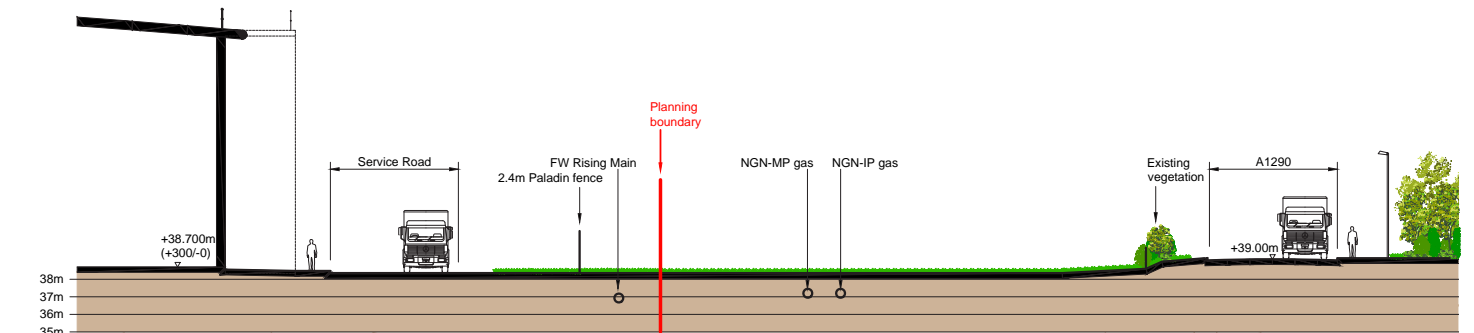
Maximum building heights have been maintained and are consistent with the maximum set in 'Building Heights Parameters Plan 4' from the outline planning permission 20/00556/OU4.

- Upper ridge 30m + handrail, walkways & PV
- Lower ridge 16.5m + handrail, walkways & PV
- Eaves 26.5 & 13.0m

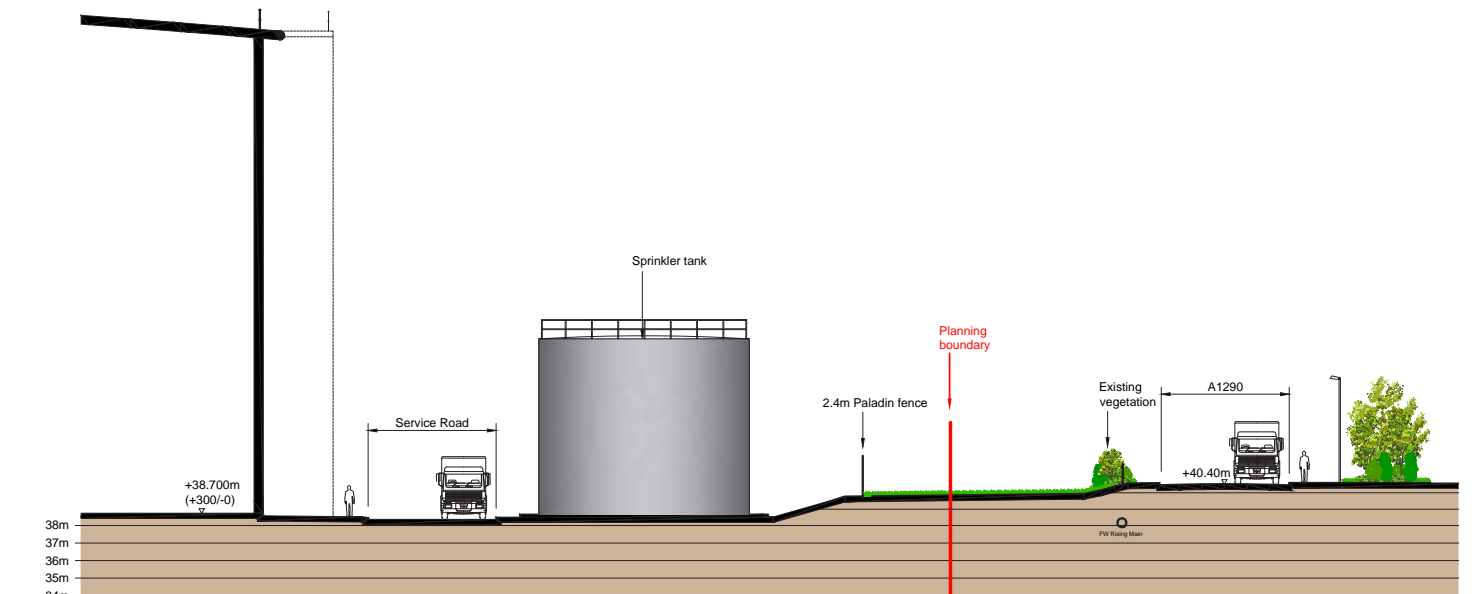
The manufacturing plant has various types of processes in a linear route which sets the height requirements for different parts of the building. These building heights have been rationalised to create a simple and legible building form, the roof height varies to provide an efficient building skin to the overall process, and ensure that rainwater management is efficient and robust due to the sensitivity of the internal process to water ingress.

The tallest part of the process is on the West of the building, and the roof height here has been set to 30m to ridge, with only a small number of flues, perimeter handrails and solar PV panels projecting beyond this point. The lower part of the manufacturing building roof is 16.5m and smaller ancillary stores and goods in and goods out areas project beyond the main building footprint to help to provide relief to the building elevations.

Stair cores, principally provided for fire escape and Fire Authority access (location & number subject to detailed design), have been placed on the building perimeter, projecting from the elevations, and also help to provide some relief to the elevations to break down the overall building mass.



Proposed Site Section 4 - NTS



Proposed Site Section 5 - NTS



Proposed Elevation D - NTS