



Non-Technical Summary

Howngill Park Energy Facility

Land off Knitsley Lane, Howngill Industrial Estate, Consett, Durham DH8 7EQ
For:

Project Genesis Ltd

CRM.0138.003



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Drawings

Drawing	Title
CRM.0138.001.PL.D.001	Location Plan
AL (0) 012	Proposed Site Plan
AL (0) 020, 021, 022,023	Proposed Elevations

1 INTRODUCTION

1.1 Introduction

- 1.1.1 Project Genesis Ltd is proposing to develop an Energy Facility at land within the Howns Gill Industrial Estate in Consett, Durham, DH8 7EQ.
- 1.1.2 A planning application for the proposed development has been submitted to Durham County Council.
- 1.1.3 As part of the preparation of the planning application an assessment has been made of the impact that the development as a whole might have on the environment (Environmental Impact Assessment). The findings of this assessment have been used to develop the proposals and a report of the assessment named the Environmental Statement has been submitted to accompany the planning application.
- 1.1.4 The Environmental Statement has been prepared under the requirements of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017. Schedule 4 of those regulations requires that a summary of the Environmental Statement be provided in non-technical language. This document is the Non-Technical Summary.
- 1.1.5 The planning application and the Environmental Statement is available to view online at:
J www.durham.gov.uk; and,
J <https://www.enzygo.com/consultations/consett-energy-recovery-facility>.
- 1.1.6 Electronic copies of the Environmental Statement are available for a charge of £10 by writing to Enzygo Ltd, The Byre, Tortworth Estate, Woodend Lane, Cromhall, GL12 8AA.
- 1.1.7 This Non-Technical Summary can be obtained free of charge from the same address.

1.2 The Proposed Development

- 1.2.1 The proposed development will generate low carbon electricity and provide a sustainable solution for managing residual commercial waste to significantly reduce material currently being sent to landfill or for export abroad.
- 1.2.2 The Energy Facility will have a 15MWth capacity (3.48MWe), enabling it to process up to a maximum of 60,000 tonnes per annum of non-hazardous Refuse Derived Fuel (RDF) produced from various types of waste locally arising, mainly commercial and industrial waste from 4 to 5 local sources/suppliers.

- 1.2.3 The proposed development will actively incorporate Combined Heat & Power (CHP). It is envisaged recipients of heat and power would be on adjacent occupiers on the industrial estate and the forthcoming development to the west (which includes a hospital, a care home and a leisure centre).
- 1.2.4 The CHP element of the scheme is a crucial element of the wider energy hub strategy for Hownsgill Industrial Estate and Project Genesis. In combination with other developments (such as the solar development), the potential is to create reliable sources of zero and low carbon heat and power which can be supplied at advantageous rates to current and future commercial developments. This directly supports objectives for a circular economy and to promote a Green Recovery, with a strong pull to attract inward investment to Consett through the availability of low carbon, lower cost energy.
- 1.2.5 The proposed development is presented in plan 012 and consists of the following:
-) An Energy Facility (EF) consisting of a fuel reception building and an energy plant;
 -) An Electrical Substation;
 -) Ancillary Infrastructure; and,
 -) Landscaping.
- 1.2.6 The proposed development forms an integral part of the masterplan for Consett which is part of the County Durham Local Plan.

2 THE PROPOSED DEVELOPMENT

2.1 Site & Setting

2.1.1 The application site is located within the Howns Gill Industrial Estate in Consett, Durham, DH8 7EQ (Grid reference E 410469 N 549814). The application site is identified in figure 2.1 below.

Figure 2.1: Site Location



2.1.2 The area of the proposed development site is approximately 1.64 hectares and is situated within the centre of the industrial estate. The estate is currently made up of a number of industrial units and is planned for future growth. The application boundary is provided in plan reference 010.

2.1.3 The Consett and Sunderland Railway Path (C2C) is a long-distance path which follows the route of the former railway line and is approximately 50m north of the site. This connects with the Lanchester Valley Railway Path approximately 600m to the southwest of the site

2.1.4 The nearest residential areas are approximately 350m to the north (The Chequers) and 430m to the east (off Knitsley Lane).

2.2 Summary of Process

- 2.2.1 The Energy Facility will utilise moving grate technology which has a proven track record both in the UK and Europe.
- 2.2.2 The Flow Diagram below provides an illustration of the proposed technology processes:

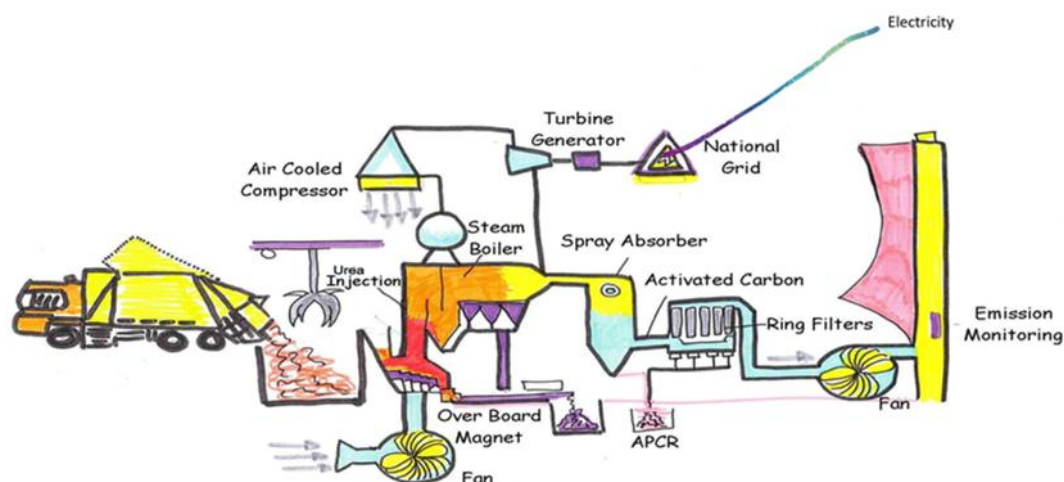


Figure 2.2 Process Diagram

- 2.2.3 Feedstock will be delivered to the site in closed vehicles, which would access the site via the existing highway entrance shared with the Hownskill Industrial Estate.
- 2.2.4 Traffic will be routed passed the gate office to the weighbridge and then proceed to deposit material inside the fuel reception building which will operate with fast shutting roller shutter doors at negative pressure. The material left will be used as a fuel and combusted in a highly controlled chamber to heat water to create steam. This steam will turn a turbine to make electricity, some of this steam can be diverted to be used directly for heat.
- 2.2.5 Bottom ash and fly ash are by-products created in this process. Bottom ash falls out of the combustion system whilst fly ash is created as part of the process for cleaning the gases produced so they are safe to emit from the chimney. The ashes will be removed off site for disposal or use as an aggregate (in the case of the bottom ash).
- 2.2.6 The facility will use the Best Available Techniques to control air pollution. It will be required to meet strict emission limits set out in the European Industrial Emissions Directive. Emissions will be monitored and controlled by the Environmental Agency who cannot issue a permit to operate if it has any significant air quality impacts and who have a strict enforcement procedure.

2.3 Summary of Built Development

2.3.1 A development platform will be created across the site with the existing earth bund to the north west being retained.

2.3.2 The elevations provided in plan 020, 021, 022 and 023 Site Elevations provide details of the proposed built structures including:

-) The Energy Plant approximately 35.5m long, 22m high and 32.7m wide.
-) The Fuel Store approximately 25.8m long, 22m high and 45.3m wide.
-) The stack, at a height of 50m.
-) A water tank at 25m high.

2.3.3 The following table provides details of the proposed developments ancillary equipment:

Figure 2.3: Ancillary Equipment

Equipment	Length	Width	Height	Number
External Silo	4m	3.2	2.1	4No
Dry coolers	11.5m	2.4m	3m	7No.
Ash bins	6.4m	2.3m	2.1	2No
Weighbridge	22m	5m	N/A	1No

2.3.4 All plant and machinery will be stored within the approved building.

2.3.5 A schematic of the proposed development is provided in figure 2.4 below.



Figure 2.4: Image of the proposed development

2.4 **Operating Times**

- 2.4.1 The delivery of raw materials and the collection of resulting materials will be made between 0700 – 1900 Monday to Friday and 0700 to 1300 on Sundays.
- 2.4.2 The Energy Plant will operate 24 hours a day, seven days a week with pre-planned short shut downs for maintenance work.

2.5 **Staff**

- 2.5.1 During the construction period up to 60 people will be employed within the site (with a large number of others in the supply chain). Although some specialist skills will be required, it is likely that much of the employment will come from the local area.
- 2.5.2 There would be three staff working at the facility on each of three eight hour shifts per day, 06:00 – 14:00, 14:00-22:00 and 22:00-06:00.
- 2.5.3 The development will also support the wider Hownsgill area by providing it with a stable source of low carbon energy and heat.

3 WHY IS THE DEVELOPMENT NEEDED

3.1.1 The proposed development provides a number of benefits as follows:

3.2 Climate Change and Low Carbon Energy

3.2.1 The proposed energy centre will provide a partially renewable, low carbon energy supply. Thereby contributing towards legally binding targets of at least 80% greenhouse gas emissions by 2050 (Climate Change Act 2008) and the movement towards a target of net-zero emissions from Green Houses Gas by 2050 (Leading on Clean Growth 2019).

3.2.2 In addition to these legally binding targets the production of renewable and low carbon energy is also consistent with the requirements of the National Planning Policy Framework and the accompanying Planning Practice Guidance for Waste which require that developments should support the transition to a low carbon future.

3.2.3 Contribution towards the goals of reducing climate change and producing renewable energy are highlighted as Objective 11 in the emerging Durham County Plan and within numerous Climate Change Strategies for the region.

3.3 Sustainable Waste Management

3.3.1 The waste sector has undergone significant changes in recent years, changing the focus on how waste is produced, managed and disposed of, moving emphasis away from traditional waste management routes and causing a radical change towards a much more resource-based approach.

3.3.2 The principles behind these changes include:

3.3.3 **The Waste Hierarchy**: This is a priority order via which waste should be managed.



Figure 3.1: The Waste Hierarchy

- 3.3.4 **Proximity and Self Sufficiency:** The development of an integrated network of waste management facilities to process a local communities waste.
- 3.3.5 **Increased recycling:** A reduction in the level of waste going to landfill and to encourage people to recycle more.
- 3.3.6 **Circular economy package:** Extracting the maximum value and use from all raw materials, products and waste, fostering energy savings and reducing greenhouse gases.



Figure 3.2: The Circular Economy

- 3.3.7 **Zero Waste:** Guiding principles for the elimination of waste

- 3.3.8 The proposed development seeks to ensure that materials disposed of within Durham and the wider region that cannot be recycled can be utilised to produce energy line with the above principles.
- 3.3.9 In addition to the above principles which are set out in European and National legislation and policy, the proposed development must adhere to the policies contained within the County Durham Waste Local Plan Saved Policies (April 2005) and the recently adopted Durham County Plan.
- 3.3.10 The Durham County Plan has identified that the region has a capacity gap for the treatment/disposal of non hazardous residual waste which means that there is currently not enough waste infrastructure to process materials generated by the region (particularly in the case of business waste).
- 3.3.11 A full assessment of the proposals against these policies is contained within the Planning Statement which supports the Planning Application. This has concluded that the proposed development complies with the requirements of the statutory development plan.

3.4 **Socio-Economic**

- 3.4.1 The Project Genesis Trust was formed in 1994 as a registered charity in order to regenerate the site of the former Consett Steelworks and reinvest the finds from the development in the provision of environmental, recreational and social benefits to local people.
- 3.4.2 Project Genesis has prepared a concept masterplan to determine the developable zones and types of uses that the site can support. This masterplan now forms part of the County Durham Local Plan and approximately 40% of the developable land has now either been completed or is under construction. These developments have included a supermarket, coffee shop, restaurant, a significant amount of new housing, including affordable housing and housing for older people, and a new building for Derwentside College and a number of new industrial premises and offices for local and international businesses.
- 3.4.3 The Local Plan states that *“Project Genesis in continuing to bring forward further development in the future is recognised, as are the benefits it has to the community of Consett both socially and economically and in terms of regenerating the built and natural environment”*.
- 3.4.4 The proposed development fits into the wider regeneration of the area, not only offering a sustainable solution to waste generated by businesses in the local area but also providing low carbon heat and electric to support wider development in the area.

4 STAKEHOLDER ENGAGEMENT, SCOPING AND METHODOLOGY

4.1 Stakeholder Engagement

- 4.1.1 Project Genesis Ltd have undertaken a programme of stakeholder engagement. These engagement activities ensured that stakeholders were fully informed of the proposals and were given the opportunity to input into the identification of key issues to be addressed through the Environmental Impact Assessment process.
- 4.1.2 Due to the Global Pandemic of COVID 19 public consultation events where not possible, however the applicant undertook the following activities to ensure that members of the public where fully consulted at the pre-application stage:
-) Website – Project Genesis Ltd provided details of the proposal on a website allowing members of the public with an opportunity to provide feedback and ask questions.
 -) Consultation Circular.
- 4.1.3 Further details of this process and the responses received are provided in the Pre-Application Consultation Document which is presented in Appendix 2.3 of the Environmental Statement.
- 4.1.4 The issues raised during these consultation events have been addressed within the design, development and assessment of impacts of the proposed development.
- 4.1.5 The engagement programme will continue through submission and determination of the application.

4.2 Scope of the Environmental Assessment

- 4.2.1 The process of identifying the issues to consider within an Environmental Statement (establishing the scope of the assessment) is known as scoping and has been undertaken in a number of stages for the project.
- 4.2.2 In addition to the stakeholder engagement exercise outline above, various pre-application discussions were held with Durham County Council to assist in gaining an understanding of key issues. These included discussions in May 2017 and subsequently January 2020.
- 4.2.3 In addition to this, a formal request was submitted to Durham County Council for it to provide an Opinion on the scope and content of the Environmental Impact Assessment. Informal

consultations were undertaken on a topic specific basis. The Council in turn consulted with relevant expert bodies.

4.2.4 The content of the Environmental Statement is drawn from the Scoping Opinion received from Durham County Council, together with other informal consultations, feedback from stakeholders and project teams considerable experience in preparing planning applications and Environmental Statements for energy facilities and related developments.

4.2.5 As a result of the consultation exercise and responses received, the following topics were identified as primary issues to be examined in detail within the Environmental Statement:

) Landscape and Visual Impact;

) Geo-Environmental;

) Noise & Vibration;

) Air Quality & Human Health;

) The Water Environment;

) Climate Change;

) Socio Economic; and,

) Amenity.

4.2.6 The following topics were scoped out of the Environmental Statement;

) Heritage;

) Ecology;

) Transport.

4.2.7 Specific topic reports have, however been submitted alongside the planning application.

4.3 Methodology

4.3.1 Independent specialist consultants have assessed each of the environmental issues identified. These specialist assessments generally involve site visits; the collection of data about the site and its surroundings; identification of the likely significant effects of the development; and the making of recommendations on how these effects could be avoided or reduced.

- 4.3.2 The assessment of each environmental topic forms a separate chapter of the Environmental Statement. For each topic, the methodology adopted has been set out together with an evaluation of existing (baseline) environmental conditions. The likely effects of the project have been identified together with an assessment of their significance.
- 4.3.3 The methods for predicting the nature and magnitude of any potential environmental impacts vary according to the subject area.
- 4.3.4 The significance of an effect has been assessed taking into account factors such as extent and magnitude of effect, duration and sensitivity of the receiving environment. In general, the following levels of significance have been used in the assessment:
-) Negligible: No significant effects
 -) Minor: Not noteworthy or material impacts;
 -) Moderate: Noteworthy, material impacts;
 -) Major Impacts and,
 -) Substantial Impacts.
- 4.3.5 Where an effect is described as 'negligible' this means that there is no effect or that the significance of any effect is considered to be negligible. All other levels of significance apply to both adverse and beneficial effects.
- 4.3.6 Whilst individual environmental impacts have been considered in individual sections of the Environmental Statement, there is the potential for one environmental subject area to impact upon another. Such combined effects have been addressed in each of the respective sections within the Environmental Statement.
- 4.3.7 The effects of the proposals together with other developments planned in the area have also been identified. Information on these planned developments has been obtained from several sources including the relevant local authorities and development plans.

5 ENVIRONMENTAL CONSIDERATIONS

5.1 Introduction

- 5.1.1 The development proposals include a range of measures that have been designed to reduce or prevent significant adverse environmental effects arising. In some cases, these result in the enhancement of the existing environmental conditions. The 'assessment of effect' has taken into account all measures that form part of the development proposal, and to which Project Genesis Ltd is committed. These measures are part of the development description provided within the Environmental Statement.
- 5.1.2 This section provides a non-technical summary of each of the topics assessed within the Environmental Impact Assessment in the order in which they appear in the Environmental Statement.

5.2 Need & Alternatives

- 5.2.1 The process and decisions underpinning the need for the facility, the choice of technology and alternative sites considered have been identified, described and evaluated. The conclusions of the assessment are set out below.
- 5.2.2 The NPPW paragraph 7 sets out policy to assist waste planning authorities in the determination of planning applications. Within this requirement, applicants only need to demonstrate market need for a proposed facility if it conflicts with the Local Plan of the area. In such a case, the waste planning authority should consider the extent to which operational facilities (i.e. not merely 'planned') can satisfy any identified need.
- 5.2.3 The proposed Energy Facility does not conflict with the Durham County Council Waste Strategy and Local Plan.
- 5.2.4 This assessment has, however, also demonstrated that there is both a national, regional and local need for residual commercial and industrial waste management facilities within Durham.
- 5.2.5 The proposed development produces up to 3.48MWe of electrical energy, providing valuable and reliable domestic energy source which reduces reliance on fossil fuels. Energy produced from waste is also recognised as contributing towards the Government's renewable energy targets.

- 5.2.6 With regard to the assessment of alternative locations, the proposed development is compliant with the locational requirements set out within Appendix B of the National Planning Policy Guidance on Waste and the locational requirements set out in local policy documents.
- 5.2.7 Firstly, the facility will accept small amounts of residual materials from a number of local suppliers and the proposed location is within a suitable distance of all of these market-based suppliers.
- 5.2.8 Secondly, the development of an energy-generating development on the industrial estate is part of a wider plan to attract inward investment to Consett through the availability of reliable and cheaper energy supply at the site and from adjacent energy developments. It is already proposed to provide heat to an adjacent strategic development which has recently secured outline planning permission. The wider masterplan has been accepted by Durham County Council and is included in the adopted Local Plan. It is therefore concluded that there are no more suitable locations for the proposed use within the region.
- 5.2.9 The final layout has been derived from a detailed analysis of both operational and environmental needs.
- 5.2.10 It is concluded that the proposed development fulfils an established need and that there are no more suitable locations, technologies or layouts for the proposed development.

5.3 **Landscape and Visual Impact**

- 5.3.1 Chapter 7 of the ES has assessed both the landscape and visual impacts of the proposal, the conclusions are summarised as follows:

Construction

- 5.3.2 Works involved during the construction period would include temporary and permanent works to build the new facility. In general, the activities and effects associated with the construction period are predicted to be broadly similar and no worse than the effects predicted at year 1 of the operational phases.

Landscape Character

- 5.3.3 The existing character of the site is defined by its restored nature forming part of an area which is intended for future development. The overall character of the area is mixed and typical of urban fringes where there are varied land uses and features. Land to the south and south west beyond the urban fringe is more rural and more so toward the edge of the study area and beyond into the North Pennines AONB. However, the landscape is influenced by its industrial

past and is interspersed with relic features and land restoration. In addition, there are various existing prominent modern developments present including industrial buildings at Howngill Park, a consented solar farm to the south, settlement on high ground and wind turbines in the wider surroundings which affect the overall landscape character and sensitivity. The proposed development fits with this existing pattern of development in a suitable location adjacent to other similar development on the edge of a settlement.

5.3.4 The LPA has anticipated expansion of the settlement edge for business use development similar.

5.3.5 The proposed development would not affect any important landscape features on the site or immediately adjacent. There are prominent natural landscape features in the local area which include semi mature trees to the northwest of the site. These will be unaffected by the proposed development and it is proposed that tree cover will be enhanced by planting on the development site.

Residual Visual Effects

5.3.6 The extent of change in views is limited by the existing urban fringe character and nature of views in the locality, on the whole changes beyond the immediate surroundings are anticipated to be minor adverse. The provision of inherent design mitigation and soft landscaping to provide filtering of views and for general amenity will be beneficial in reducing residual effects.

5.3.7 Views generally from locations in the surrounding area will comprise an increased amount of built form of industrial character and tall vertical elements on the skyline. The site benefits from screening provided by existing raised ground and semi-mature woodland on land immediately adjacent alongside the Consett and Sunderland, which will continue to develop in future years to provide further screening. Built development is commonplace in views from locations through the study as is typical of this urban fringe location on the edge of Consett. Buildings typically appear amongst trees and woodland on sloping landform and is notable on high ground to the northeast and northwest of the site. There are various prominent and detracting features in most views from the surrounding area, these include existing development industrial type buildings at Howngill Park, individual wind turbines and settlements, overhead lines and supporting steel lattice towers crossing the landscape.

5.3.8 There will be long term residual visual effects as a result of the development pertaining to the appearance of the upper part/roofline of the proposed buildings and the stack, which will be visible from the majority of directions around the site and are not considered significant. These will mainly affect receptors/shorter distance views from locations in close proximity. There will be some minor residual effects on longer distance views such as those from high ground to the

southwest/west but seen in the urban fringe setting comprising varied prominent elements this is not significant and will reduce slightly in future years as a result of mitigation planting

5.4 **Geo-Environmental**

- 5.4.1 Chapter 8 of this ES assesses the proposed developments impact on Geo-Environmental conditions. The chapter outlines the design, construction and operation of the proposed development and its associated environmental enhancement measures, which are assessed below.
- 5.4.2 As part of the site preparation works, a site strip will be undertaken along with removal of any existing obstructions. This will remove potential unforeseen contamination sources leading to environmental betterment. Unforeseen contaminated soils are considered to have Minor magnitude whilst the significance of the controlled waters is considered Minor. Based on this impact without mitigation is considered to be Minor Adverse. Impact following design mitigation will be Minor Beneficial.
- 5.4.3 Unforeseen contaminated soils are considered to have Minor magnitude whilst the significance of end users is considered Minor based on the commercial end use. Based on this impact without mitigation is considered to be Minor Adverse. Impact following design mitigation will be Minor Beneficial
- 5.4.4 Potential risk to construction workers will be managed through the use of normal management and hygiene practices together with appropriate personal protective equipment. This will follow the normal health and safety hierarchy of protection. Unforeseen contamination is considered to have Minor magnitude whilst the significance of the construction workers considered Major. Based on this impact without mitigation is considered to be Major Adverse. Impact following design mitigation will be Neutral.
- 5.4.5 The use of bound pavement construction and solid building floor slabs will provide greater encapsulation of the site and contribute to breaking the potential pollutant linkage with future site users. No contamination has been identified and so impact is Neutral.
- 5.4.6 Where deep foundations are proposed the risks of creating a preferential flow path will be addressed through the use of a piling risk assessment. As no contamination risk has been identified impact to controlled waters is considered Neutral.
- 5.4.7 During the operational stage risks from potential release of fuels and chemicals will be mitigated through the use of containment bunds to storage areas in accordance with Environment Agency guidance.

- 5.4.8 Fuels and chemicals will not be stored near to water courses.
- 5.4.9 Spill response kits will be available on site and will be used should localised spillage or leakage occur. The site will be subject to regular inspections and any localised spillage identified and removed.
- 5.4.10 As operational activities will be undertaken in accordance with appropriate practices. Impact following implementation of the design mitigation measures will be Neutral.
- 5.4.11 Foundations will be designed to transfer loads through Made Ground and in to competent soils and rock. It is considered to have Minor magnitude whilst the significance to the structures is considered Moderate. Based on this impact without mitigation is considered to be Minor/Moderate Adverse. Impact following design mitigation will be Neutral.
- 5.4.12 No significant risk from coal mining activities have been identified and so impact is considered Neutral.

5.5 Noise

- 5.5.1 The assessment contained within chapter 9 of the Environmental Statement has considered the potential of the proposed development to give rise to noise impacts at the identified sensitive receptors close to the application site.
- 5.5.2 Noise levels during construction operations would remain below the levels derived in accordance with the guidance contained in BS5228.
- 5.5.3 Vibration levels during construction operations would remain well below the level at which vibration might just be perceptible in residential environments.
- 5.5.4 The BS4142 assessment of operational noise levels, including site operations and vehicle movements, would remain below the prevailing background noise levels at all residential receptors assessed during the daytime. However, overnight, predicted noise levels would exceed the prevailing background noise levels, mitigation measures to reduce this exceedance to a minimum have been included within the design.
- 5.5.5 The BS833 assessment of operational noise levels at nearby receptors has shown that:
 -) Predicted internal noise levels at nearby offices would fall within the design range adopted for the assessment of internal noise levels in non-domestic buildings prior to the application of the mitigation measures suggested.

) predicted internal noise levels at the nearby residential receptors would meet the guideline value for sleeping in bedrooms prior to the application of the mitigation measures suggested.

5.5.6 The cumulative impact assessment has shown that the proposed development would have no significant impact on the ambient noise levels at the receptors assessed.

5.5.7 Based on the results of the assessment and conclusions drawn, noise and/or vibration should not pose a material constraint for the proposed development.

5.6 Air Quality & Human Health

5.6.1 The air quality assessment is set out in chapter 9 of this ES. The conclusions of the assessment are as follows.

Construction

5.6.2 The assessment has concluded that the additional heavy vehicle movements on local roads generated during the construction stages will be well below the EPUK/IAQM screening criterion (100 AADT) for potentially significant impacts on air quality at existing locations. It was therefore, not considered necessary to assess the impacts of construction traffic emissions further.

5.6.3 The construction works would have the potential to create dust. The assessment has therefore applied a package of mitigation measures to minimise dust. The implementation of these mitigation measures will ensure that any residual effects will not be significant.

Operation

5.6.4 The proposed facility will include all necessary emissions abatement and continuous emissions monitoring to ensure that the installation complies with the relevant emission limits. This will be a requirement of the environmental permit, regulated by the Environment Agency, that must be issued in order for the facility to operate.

5.6.5 Dispersion modelling of a number of pollutants was undertaken using ADMS 5.2. Impacts at both human and ecological receptors were quantified and the results compared with the relevant limits. The operational air quality effects of the proposed development on both human health and designated ecosystems (both individually and in combination) are judged to be 'not significant'.

- 5.6.6 An assessment of operational traffic both in isolation and in combination with other road users has been undertaken. The assessment concludes that as the increases in road traffic are well below the screening thresholds for potentially significant impacts on air quality, it can reasonably be assumed that the increase in roadside concentrations that the additional traffic will generate will be no greater than that which will trigger a negligible impact regardless of baseline concentrations.
- 5.6.7 Potential odour impacts associated with waste handling at the development are predicted to be, at worst, negligible at all receptors with the implementation of both integral and additional mitigation measures.
- 5.6.8 The air quality assessment has confirmed that a 50m stack is regarded as being an option that gives acceptable environmental performance and is acceptable under BAT (Best Available Technique) as required by the Environment Agency.

5.7 Water Environment

- 5.7.1 Chapter 11 of the Environmental Statement assesses the proposed developments potential impact on the water environment. The findings of the report are summarised below:

Flood Risk

- 5.7.2 The risk of surface water flooding is assessed as negligible for the Site but medium for the access/egress.
- 5.7.3 The risk of flooding from all other sources is assessed as negligible.

Mitigation Measures

- 5.7.4 The risk of surface water flooding affects the access/egress but would still be accessible by emergency services. Flood risk along the access/egress route will be mitigated to a low and acceptable level through the implementation of a basic Flood Evacuation and Management Plan.

- 5.7.5 Residual flood risk would be mitigated through the following approach:

-) Adoption of a surface water management strategy.
-) The finished floor levels above external levels.

Flood Guidance

- 5.7.6 The proposed use is classified as essential infrastructure. Essential infrastructure uses are considered acceptable in terms of flood risk in Flood Zone 2. Subject to the implementation of the above mitigation measures, the Sequential Test would be passed, and the Exception Test would not be required.

Site Drainage

Surface Water

- 5.7.7 The proposed development will increase the area of impermeable surfaces and therefore increase the amount of runoff without mitigation.
- 5.7.8 Surface water runoff from the Site will be restricted rate, which offers a betterment to existing conditions with uncontrolled runoff across all return periods.
- 5.7.9 Surface water runoff from the proposed development would be attenuated on-site up to and including the 1 in 100-year event, plus 40% climate change.
- 5.7.10 A SuDS drainage scheme is proposed to manage excess runoff from the development using cellular storage, with a connection to the adjacent private surface water sewer.

Foul Water

- 5.7.11 It is proposed that foul flows will discharge to the adjacent private foul sewer.

The assessment demonstrates that the proposed development will operate with minimal risk from flooding, will not increase flood risk elsewhere and is compliant with the requirements of national and local policy guidance.

5.8 Climate Change

- 5.8.1 Chapter 12 of this ES sets out the proposed development effects on Climate Change.
- 5.8.2 A raft of legislation and guidance has emerged within the last few years which reinforce the Government's commitment towards addressing both the cause and consequence of climate change. The review of the sustainability and needs objectives clearly demonstrate that there is an increasing urgency to develop a range of energy proposals which reduce reliance on fossil fuels in order to reduce the generation of CO₂ emissions and to firm up England's energy supply.
- 5.8.3 The proposed development will reduce the methane emissions associated landfilling which has a significant Global Warming Potential.
- 5.8.4 The proposed development will also offset carbon used in the production of energy, working towards the Governments low carbon goals.

5.8.5 In addition, the impacts of climate change on the proposed development have been considered within relevant technical assessments, and this confirms that the proposed development is appropriate for the application site.

5.8.6 It is therefore concluded that the proposed development will have a minor beneficial impact on climate change.

5.9 Socio Economic

5.9.1 Chapter 13 of this ES sets out the proposed developments effects on the socio-economic context of the area.

5.9.2 The baseline assessment shows that the wider area has:

-) Moorside East has lower than average levels of economically active people.
-) It has higher than average levels of unemployment.
-) It ranks within the bottom 10% for living environment domain.
-) It ranks poorly for overall access to housing and services.

5.9.3 The proposed development is part of a wider masterplan for employment at Hownsgill Industrial Estate. The provision of stable low carbon energy and heat will attract local investment providing much needed regeneration and jobs to the area.

5.9.4 The proposed development will also provide businesses with a sustainable and cost-effective way to manage wastes which cannot be recycled.

5.9.5 It is therefore concluded that the proposed development will have a moderate beneficial impact on socio economic indicators.

5.10 Amenity

5.10.1 Chapter 14 of this ES assesses the overall impacts on the proposed development on amenity. The assessment considered the impacts of the following:

-) Mud, litter, dust , waste, noise and vehicle emissions during construction; and,
-) Odour, noise, litter & vermin, heat and emissions during the operational stages.

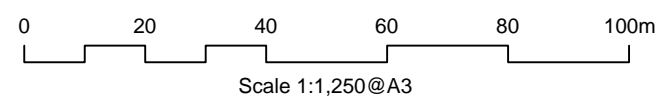
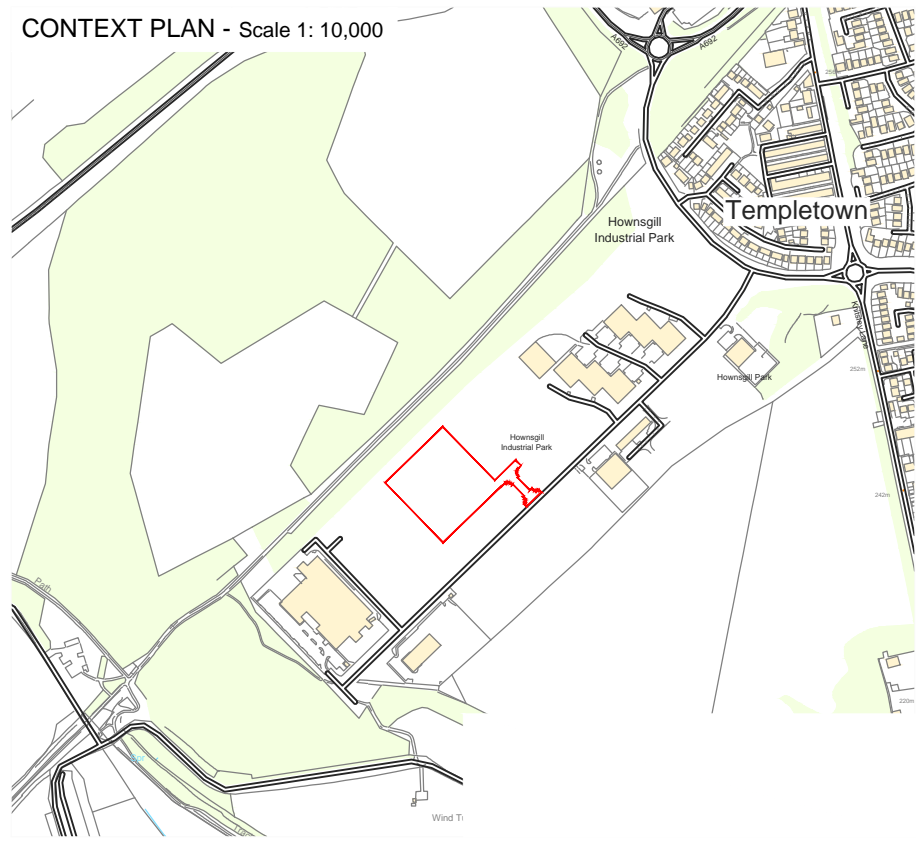
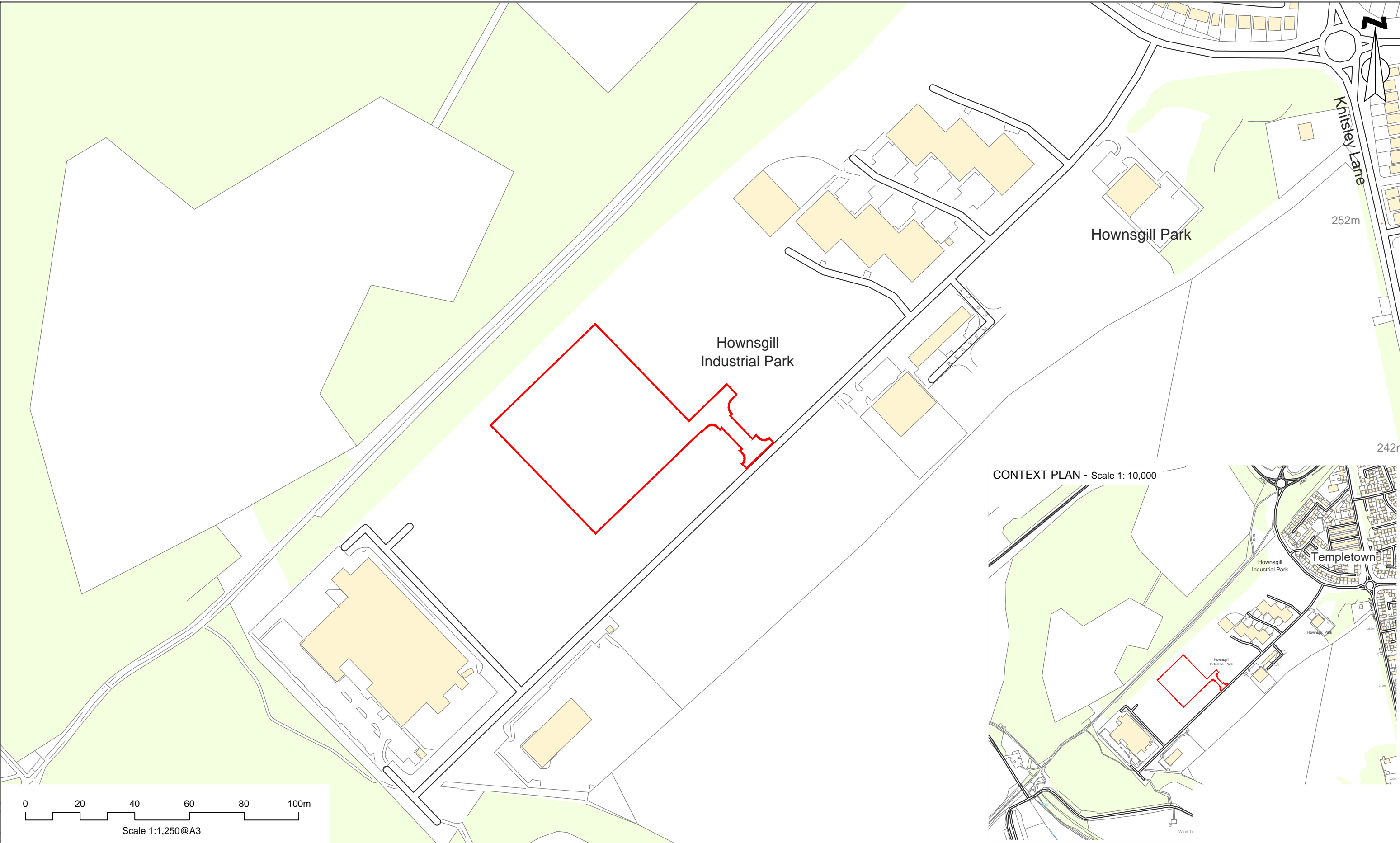
5.10.2 The assessment has demonstrated that integral design features of the proposed development and with suitable additional mitigation measures, the proposed development will have a negligible impact on the site and wider surroundings.


6 CONCLUSIONS

- 6.1.1 This Non-Technical Summary has outlined the findings of the Environmental Impact Assessment of the development proposals contained within the Environmental Statement that accompanies the planning application for an Energy Facility at the Howngill Industrial Estate in Consett.
- 6.1.2 The principal benefit of the proposed development, would be to:
-) Generate a new reliable local, low carbon electricity supply and heat to sustain and promote the growth of local businesses and to supply the wider national grid.
 -) Move the management of waste up the waste hierarch through recovery of renewable, low carbon energy from waste left over after recycling, which would otherwise be landfilled or exported abroad
 -) Provide new jobs at the Howngill Industrial Estate and support more jobs locally.
- 6.1.3 The Environmental Impact Assessment has considered the likelihood of significant environmental impacts occurring from the development of the proposed development upon the site itself and its surroundings. The environmental issues addressed as part of the scheme have been identified through consultation with the Council and other organisations.
- 6.1.4 The Environmental Statement has not identified any significant impact from the proposed development. It has shown that the development will create both moderate beneficial and slight adverse effects and that mitigation measures embodied within the project design, or imposed through planning conditions, will limit any impacts identified.

7 GLOSSARY OF TERMS

AOD	Above Ordnance Datum
BAP	Biodiversity Action Plan
ECoW	Ecological Clark of Works
dB	Decibels
EfW	Energy from Waste
EIA	Environmental Impact Assessment
ES	Environmental Statement
HGV	Heavy Good Vehicle
LAeq	Equivalent continuous A weighted sound pressure level (pressure level measurement parameter widely used for index of noise)
MW	MegaWatt (unit of power)
RAMSAR	The RAMSAR convention (The convention of wetlands of international importance, especially as waterfowl habitat) is an international treaty for the conservation and sustainable utilisation of wetlands.
Residual Waste	The remaining waste following removal of all recyclable material
SAC	Special Area of Conservation
SINC	Site of Interest for Nature Conservation
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
DCC	Durham County Council



Key:
 Application Boundary
 Area - 1.28ha



Samuel House, 5 Fox Valley Way, Stocksbridge, Sheffield, S36 2AA

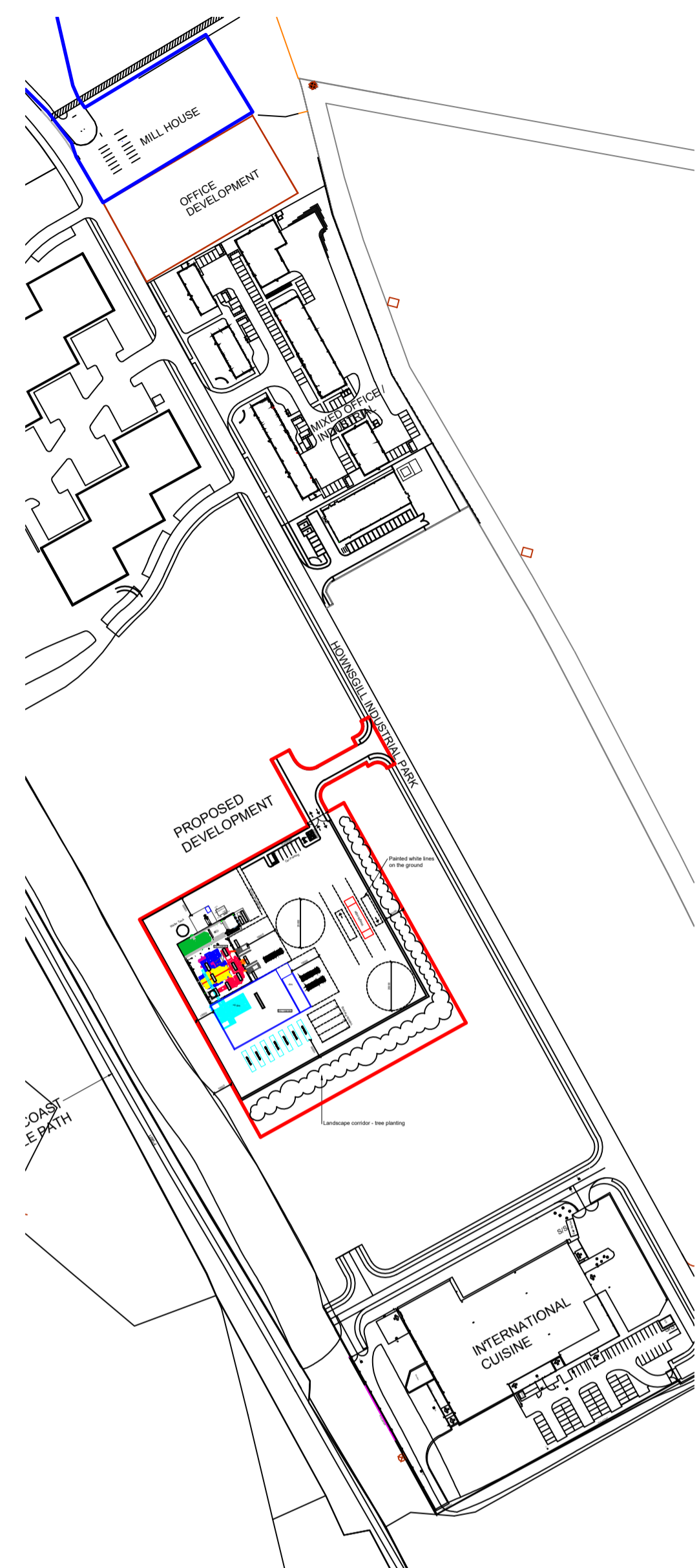
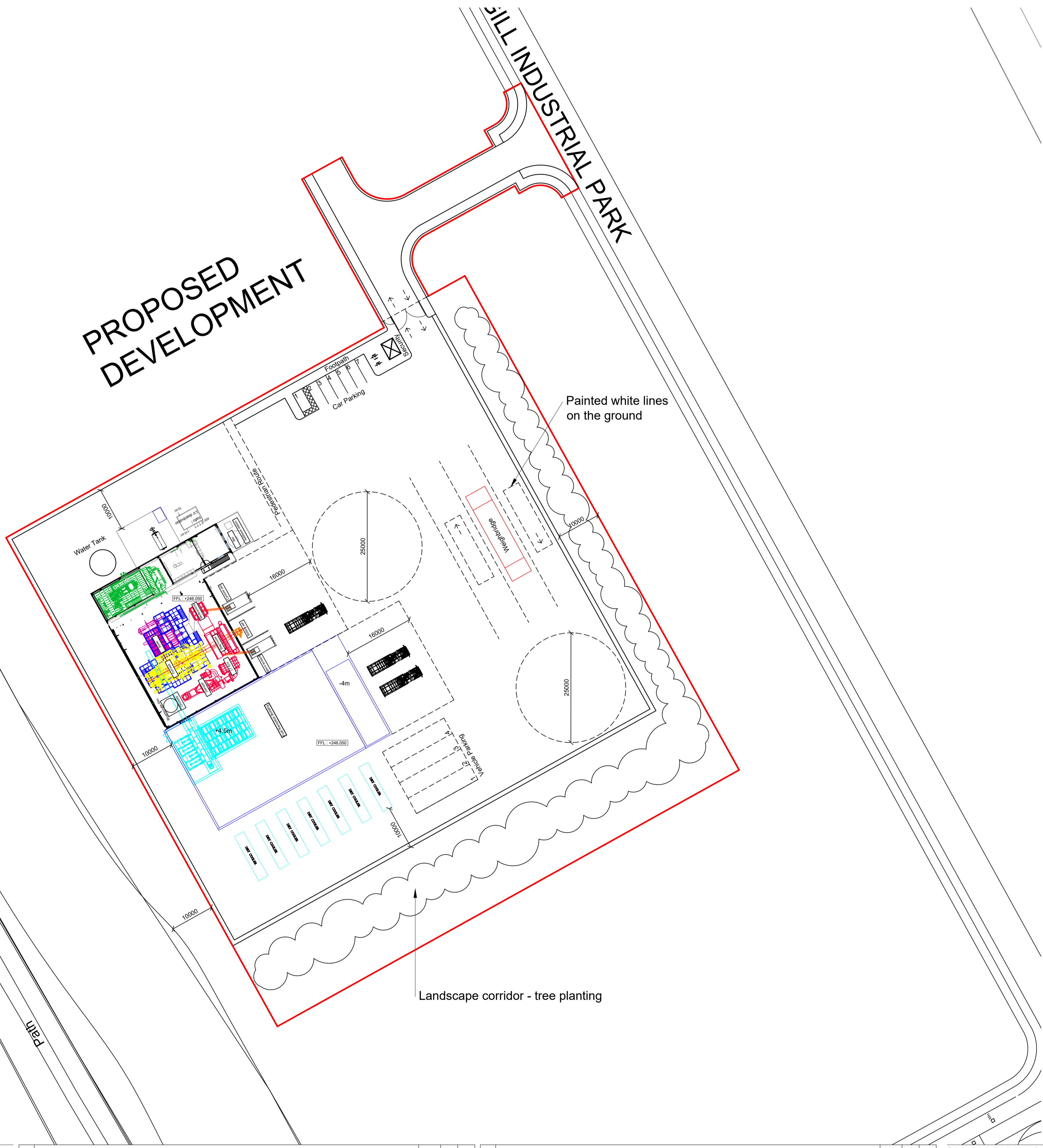
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June 2020	CRM.0138.001.PL.D.001
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MG	CM

PROJECT
Howngill Energy Facility
DRAWING TITLE
Location Plan
CLIENT
Project Genesis Ltd

**COAST TO COAST
CYCLE PATH**

**PROPOSED
DEVELOPMENT**

BILL INDUSTRIAL PARK



**Key Location Plan
1:2500**

NOTE:
Site area
4.04 acres
1.64 hectares

Landscape corridor - tree planting

Painted white lines
on the ground

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Residual Risks
In addition to the hazards/risks normally associated with the types of work detailed on this drawing take note of the above. It is assumed that all works on this drawing will be carried out by a competent contractor working, where appropriate, in an appropriate method statement.
Safety Health and Environmental Information Box

Rev	Revision	Date	Dwn	Chd
-	First Issue	03.11.20	FC	DD

Rev	Revision	Date	Dwn	Chd

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Client: **Project Genesis Ltd**
Layout Title: **Proposed Site Plan**

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Scale in m. 0 5 10 15 20 25

Drawing Number: **AL(0) 012**

Project Genesis Ltd

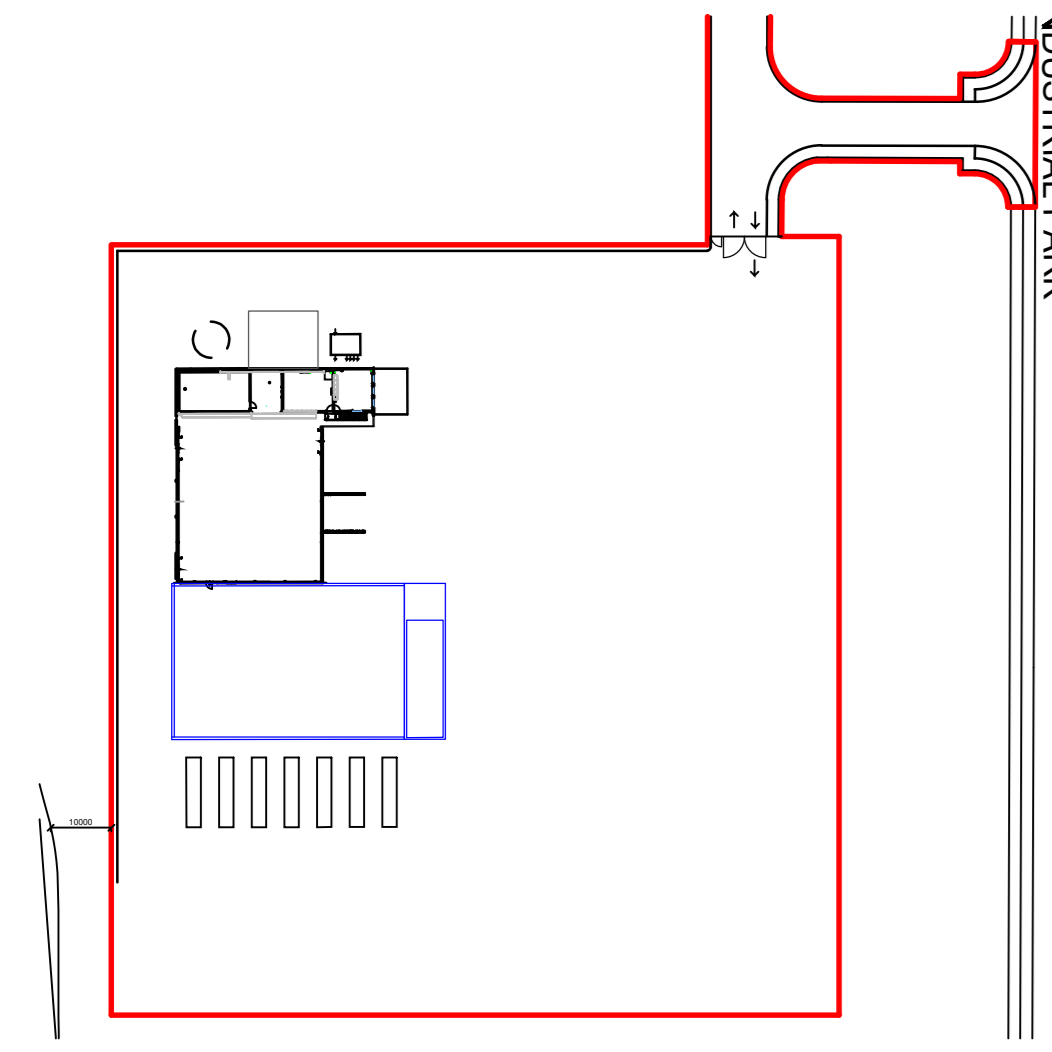
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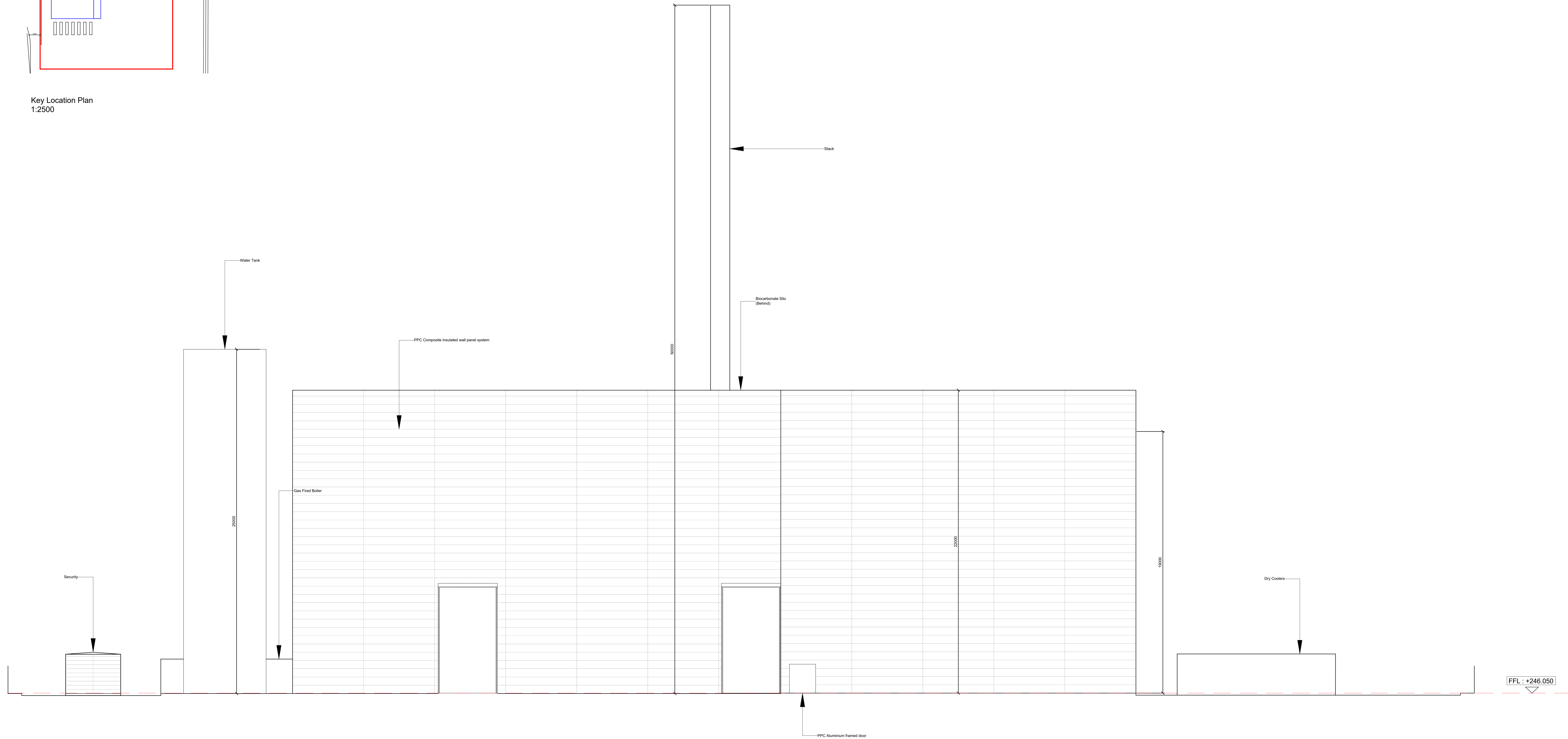
Status: **PLANNING**

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Key Location Plan
1:2500



North West Elevation

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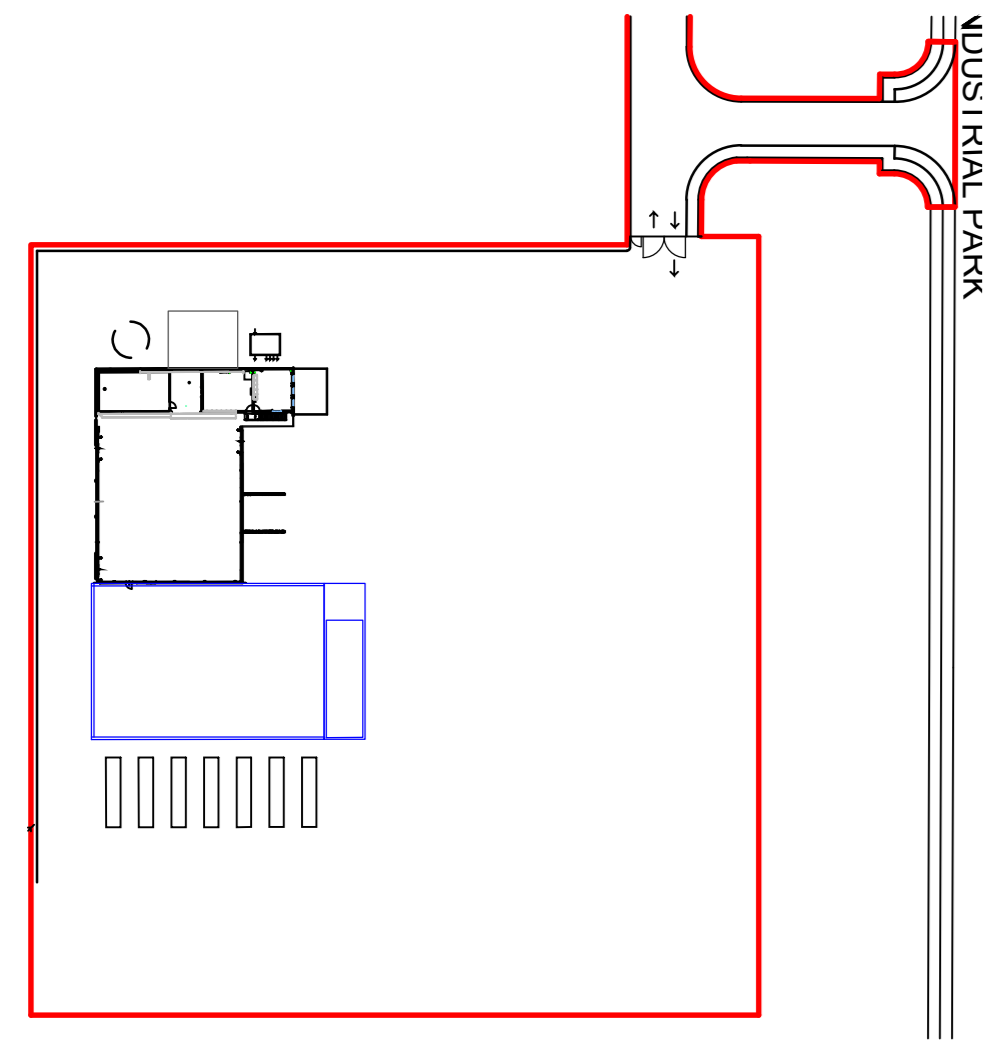
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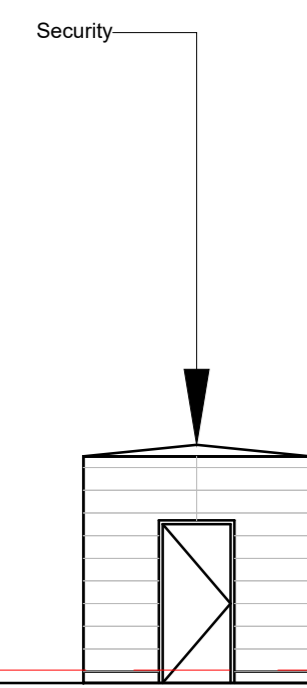
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Scale in m.			

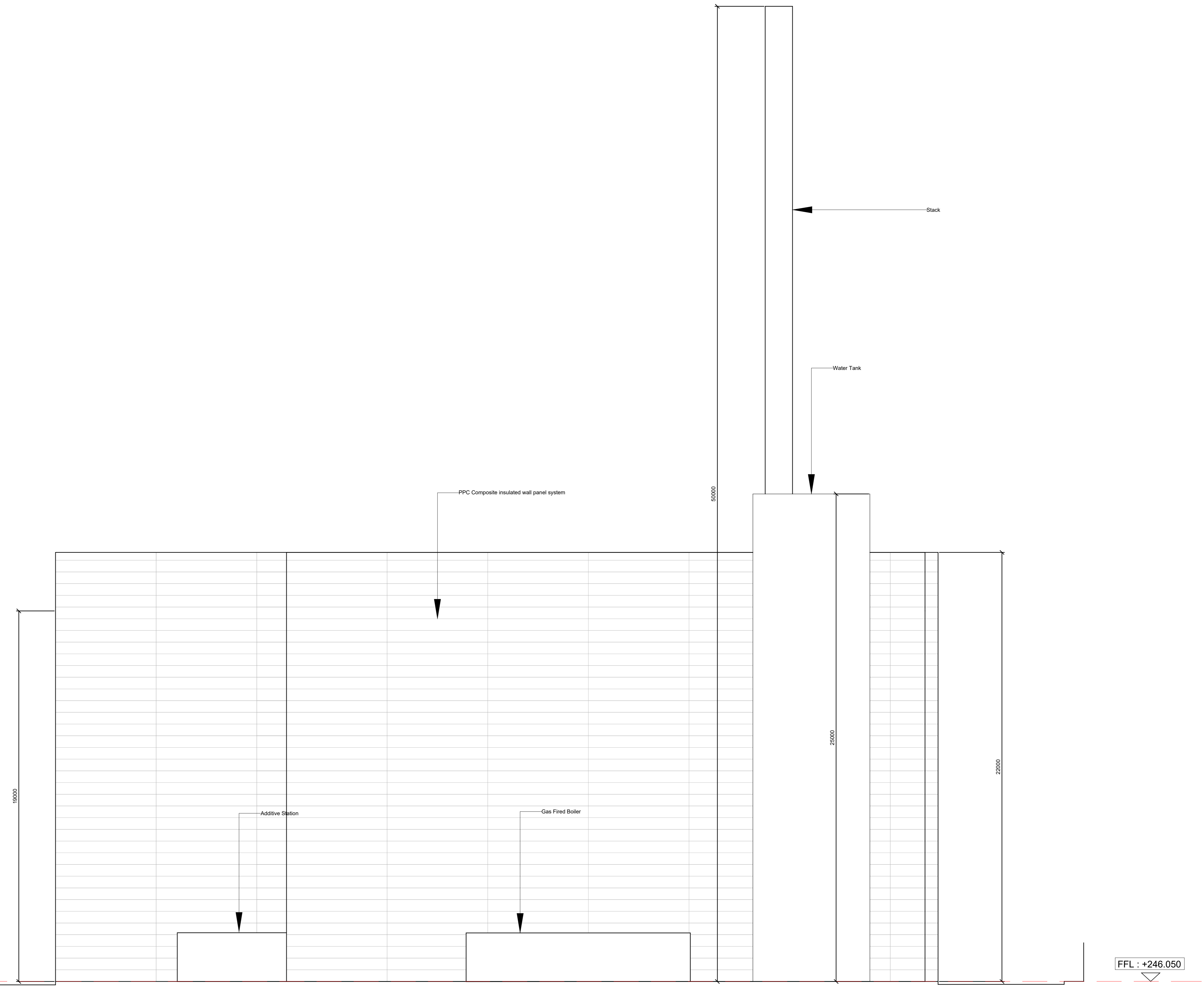
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Key Location Plan
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North East Elevation



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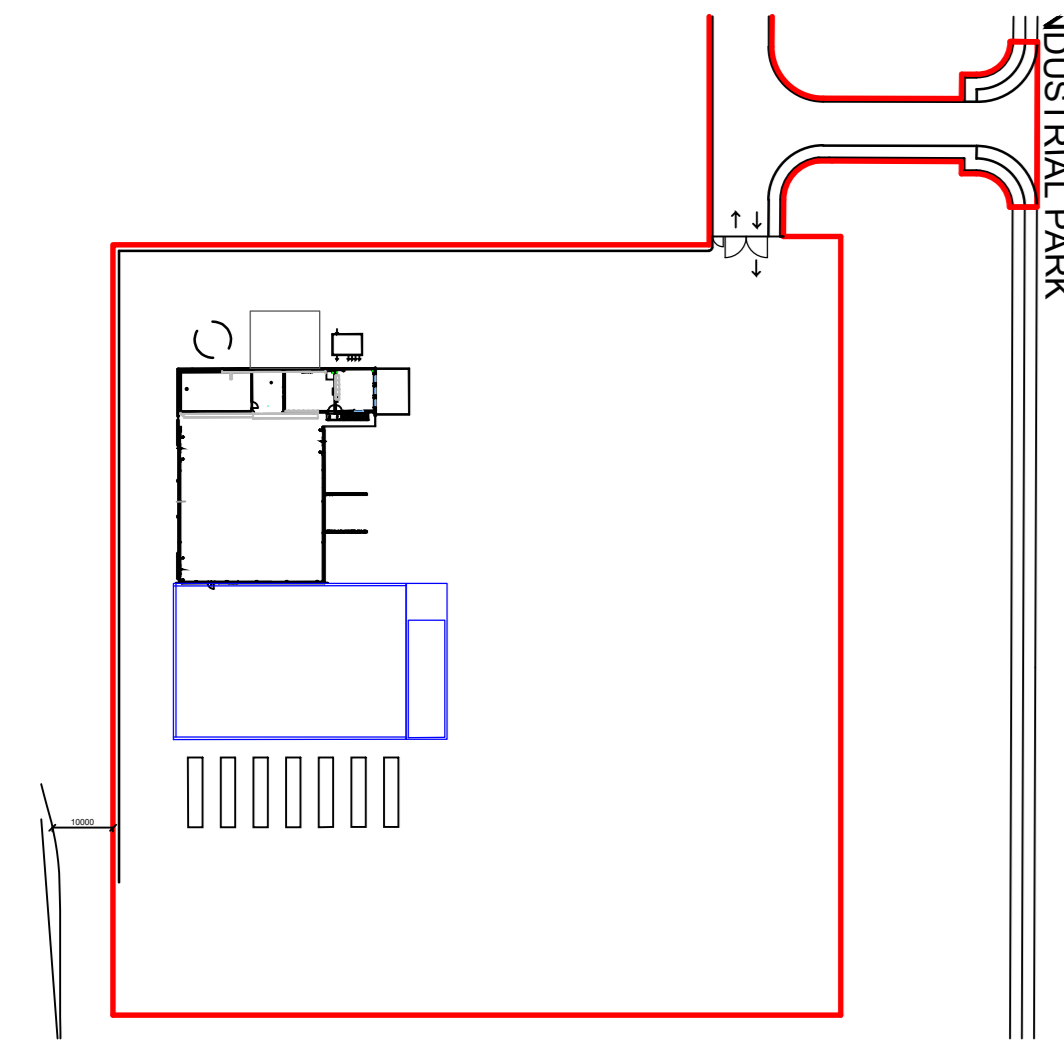
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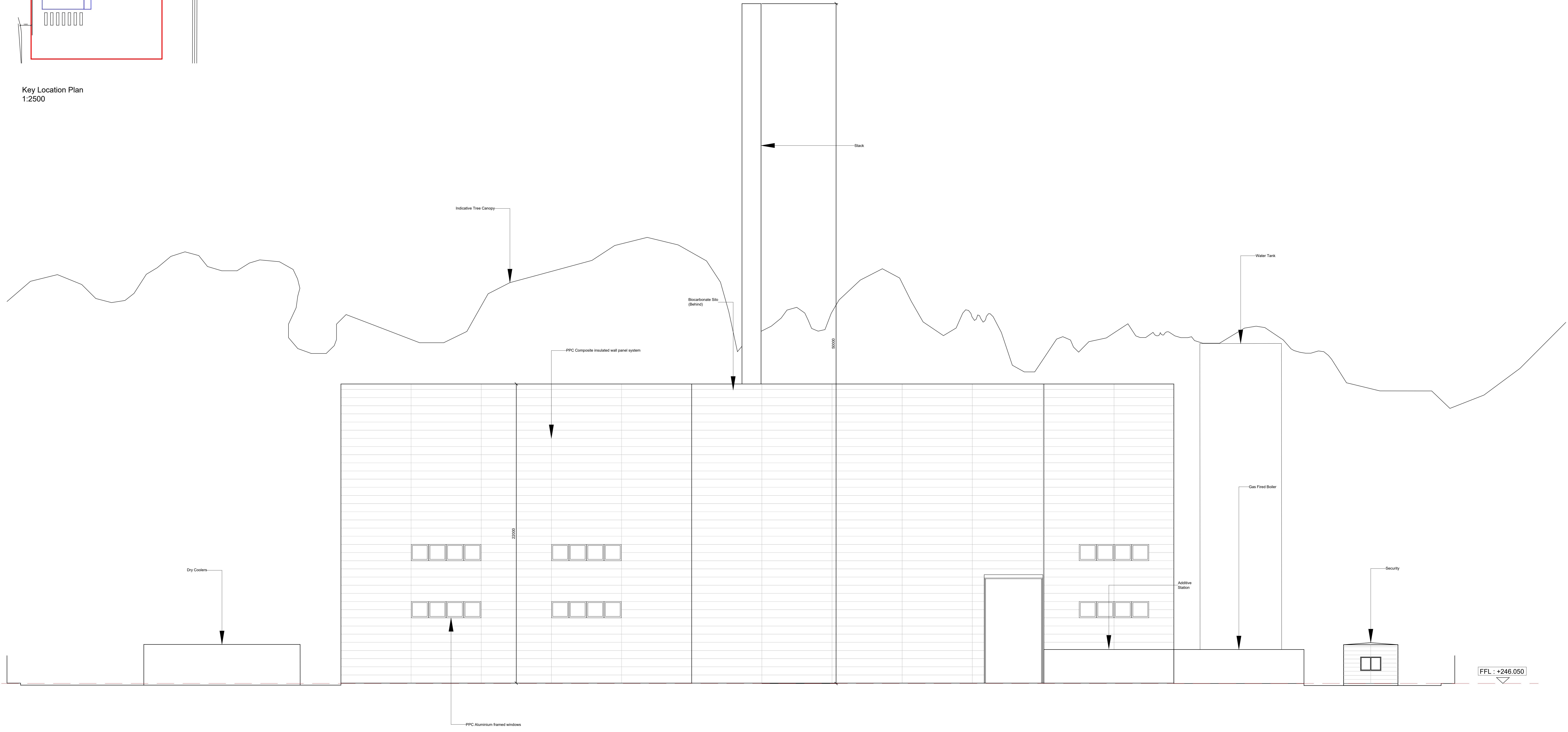
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 Client: Project Genesis Ltd
 Drawing Number: 2200033
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 Status: PLANNING
 FFL: +246.050
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Key Location Plan
1:2500



South East Elevation

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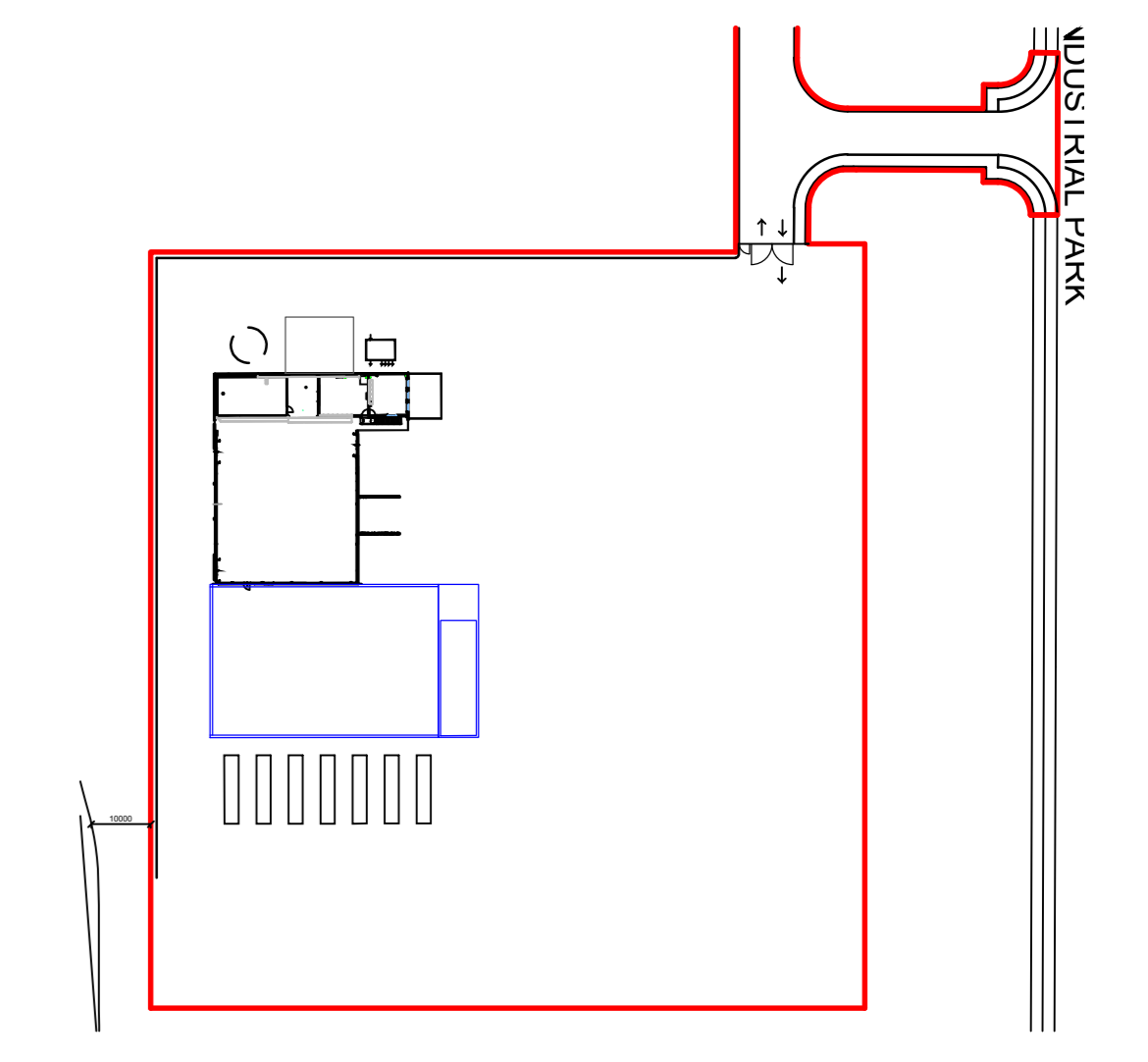
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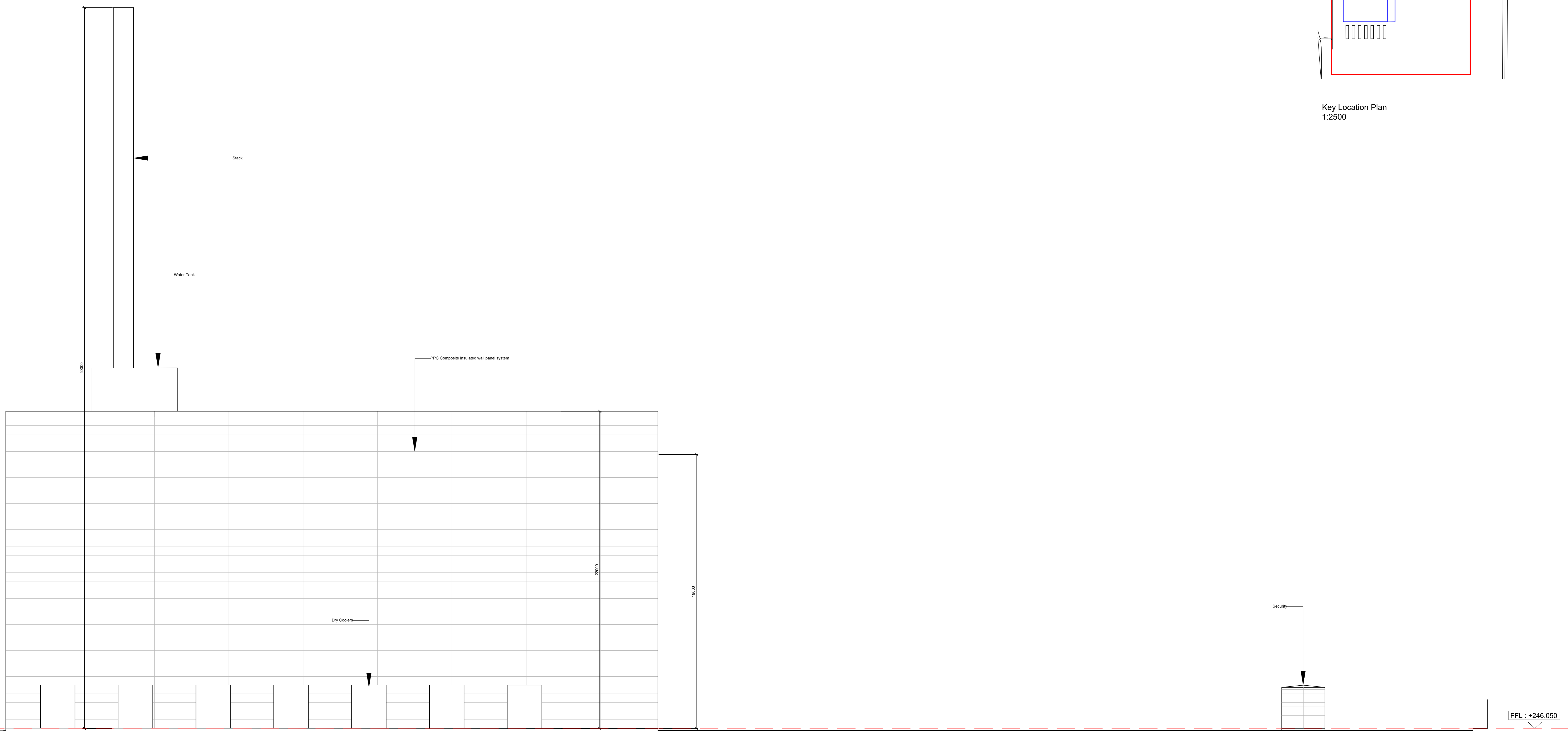
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Key Location Plan
1:2500



South West Elevation

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Rev	Issue	Date	Drawn	Checked

Project	EFW Facility, Consett	Drawing Number	AL(0)023
Client	Project Genesis Ltd	Scale	1:100
Proposed South West Elevation		Scale	1:100
Scale in m.			



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