Proposed Open Cycle Gas Turbine Electricity Generating Plant at Barrigone Quarry, Askeaton, Co. Limerick.

(Cultaca Limited)

Pre-Application Consultation with An Coimisiún Pleanála

14 July 2026

Agenda

1. Introductions
2. Rationale for the proposed development
3. Consenting Route
4. Site Location and Context
5. Proposed Development
6. Application Studies/Reports
7. Discussion

Core Design Team

- **Cultaca Limited –** Applicant / Project Promoter
- **KPMG Planning –** Planning Consultant, EIA Coordination & Project Coordination
- **Roughan & O'Donovan Ltd. –** Engineering, Project Design and Ecology
- **Mitchell & Associates Landscape Architecture –** Landscaping and Visual Impact
- **AWN Consulting –** Air Quality, Noise Impact, Climate, Waste Management and COMAH Assessment
- **ACSU –**Archaeological Impact Assessment

Rationale for Proposed Development

- The purpose of the proposed development is to enhance the capacity and resilience of the national grid by providing additional generation at times when renewable energy production is insufficient to meet demand.

- The proposed development is specifically designed to perform this supporting role, facilitating the continued expansion of renewable energy while ensuring a stable and reliable electricity system for homes, businesses and critical services. It is noted that the turbine is technically capable of operating on alternative gaseous fuels, including hydrogen.

- Electricity demand in Ireland is forecast to increase significantly due to the expected expansion of many large energy users. It is necessary to have a **mix of base load and flexible energy generation** plant to provide a stable transmission system to meet the high levels of energy demand in Ireland.

- By reinforcing the local electricity network in Barrigone, Co. Limerick and supporting the objectives of the Limerick City and County Development Plan, the OCGT development will contribute to the delivery of the spatial, economic and energy objectives.

- The subject site has been specifically selected as ideally situated with convenient access to the local grid network representing an optimal use of the land in a relatively low sensitivity area within an existing extracted Quarry Site.

- The proposal is consistent with the intent of the recently enacted Critical Infrastructure Bill, which recognises the strategic importance of energy infrastructure in supporting national, regional and local development objectives and in enhancing electricity generation.

- A detailed Planning Application Pack including an Environmental Impact Assessment Report is being prepared for the proposed development which will set out how the proposed development will assist in achieving the goals and objectives at a National Level through the National Planning Framework, at Regional level as set out in the Regional Spatial & Economic Strategy for the Southern and Region, and at a County wide level as detailed in the Limerick City and County Development Plan.

- The Revised NPF places a stronger emphasis on ensuring the **resilience and security of Ireland's energy systems, recognising the need for fuel diversification, enhanced system flexibility, and investment in critical infrastructure**.

- All three levels of Planning Policy highlight the critical role of continued investment, expansion and enhancement of Ireland's electricity network in supporting sustainable development patterns, national climate objectives and long-term economic growth. There is strong support, at all levels, for the reinforcement and expansion of electricity infrastructure to provide a reliable energy network in order to facilitate Ireland's population and economic growth objectives.

Consenting Route - SID

- On 5 June 2026 Cultaca Limited submitted an SID Determination Request to An Coimisiún Pleanála (ACP) in respect of the development to seek confirmation as to whether the proposed development constitutes Strategic Infrastructure Development (SID) in accordance with Section 182E of the Planning and Development Act, 2000 (as amended).

- The proposed scheme comprises of Open Cycle Gas Turbine (OCGT) with total energy output of 385MW. This will constitute 'Strategic Infrastructure Development' (SID) under Section 37A of the Act, as it surpasses the threshold set out:

  *'A thermal power station or other combustion installation with a **total energy output of 300MW or more".***

- Given the scale of the proposed, the proposed development falls within the definition of energy infrastructure in the Seventh Schedule of the Planning and Development Act 2000, as amended, thereby satisfying the requirements set out in section 37A(1) of the Act.

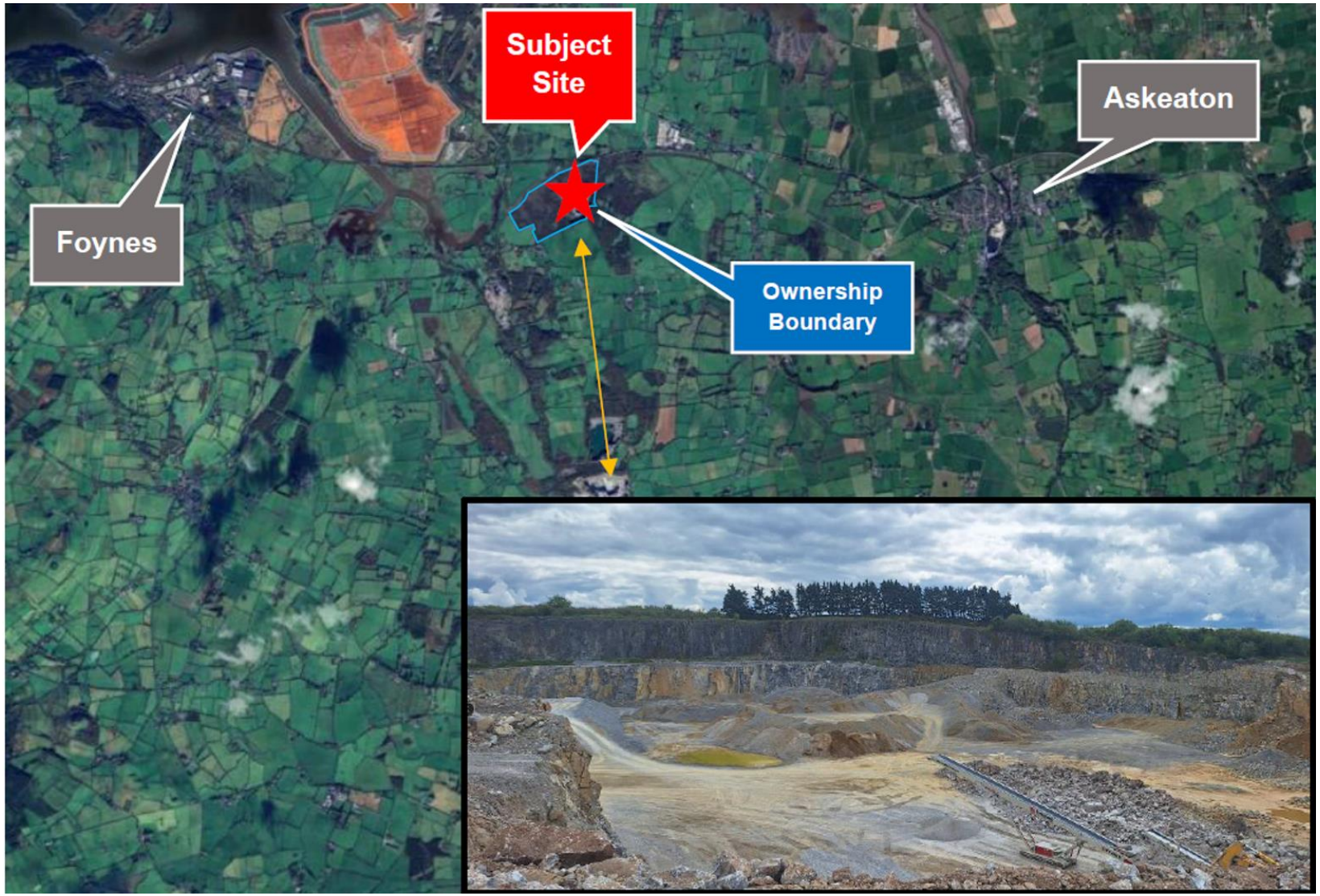
- An SID application will be made in Q4 2026 directly to An Coimisiún Pleanála.

Site Location and Context

- The subject site is located within the existing Roadstone Barrigone Quarry at Askeaton, Co, Limerick.
- The subject site measures approx. 4ha; and occupies a strategically positioned location approximately 4.2km west of Askeaton, and 4km southeast of Foynes.
- The site comprises an existing quarry operation which has been operating on a campaign basis for a number of years. There is an existing void on site, with limestone extraction having taken place since at least 1975.
- The lands form part of an established industrial resource area – the Roadstone Barrigone Quarry, the site is accessed via a 150m access road along the N69 National Road.
- Existing hedgerows and trees around the periphery of the site mean that the site is well screened by the existing established planting.
- The application site forms part of the wider Roadstone Ltd quarrying operations at Barrigone Quarry.

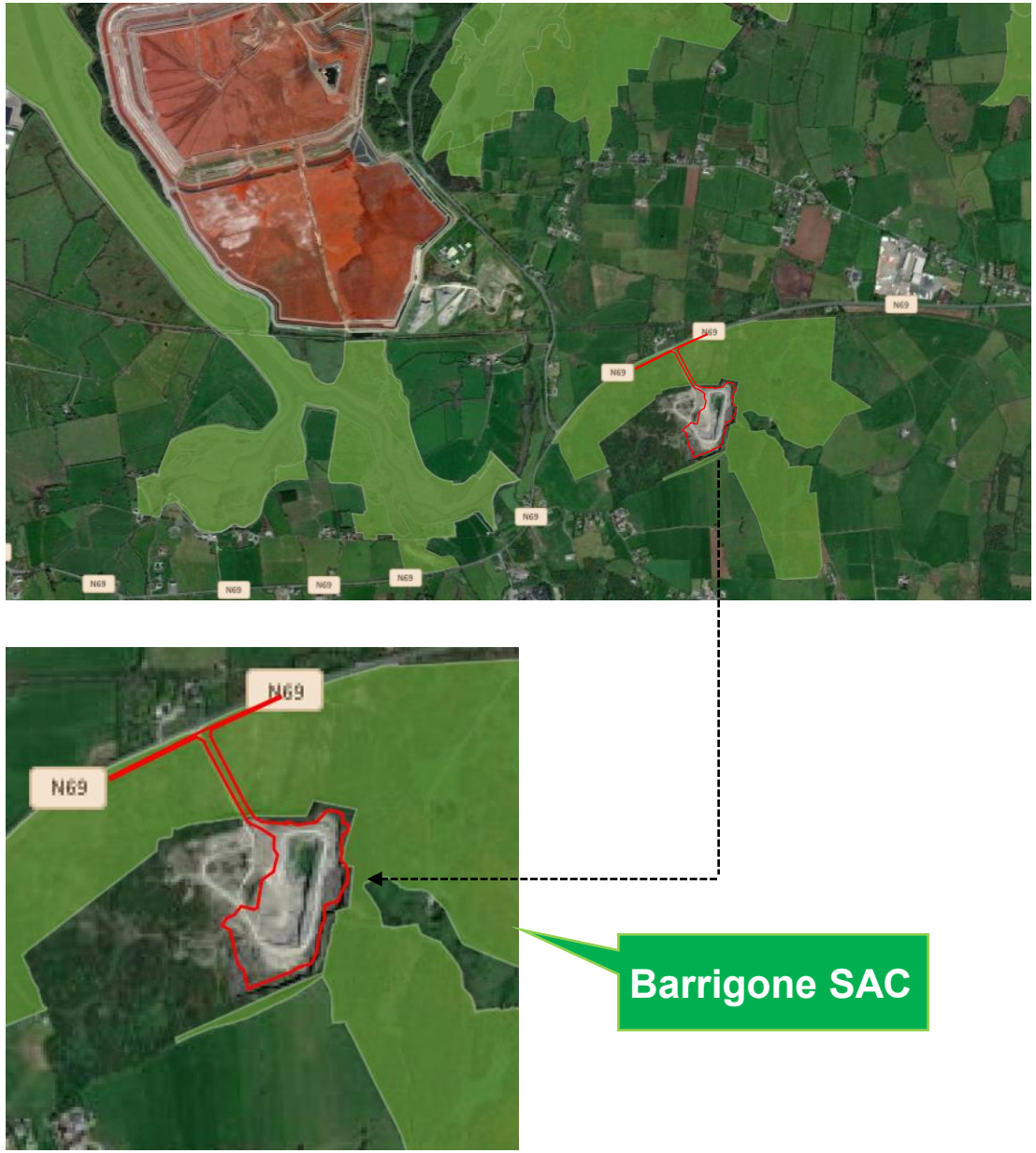
Wider Site Location and Context

- The Galtee Fuels Ltd. coal storage is located approximately 650m to the southwest of the site, Goulding Fertiliser Askeaton is located approximately 825m to the northeast of the site and Rusal Aughinish Ltd is located approximately 1.2km to the northwest of the site at its closest point.
- There are a number of neighbouring large scale energy projects in the wider vicinity of the site (5-10km radius) that demonstrate that, along with the context of quarries in the area, that the locality has an established record of accommodating large-scale energy, infrastructure and extractive industry developments, including Strategic Infrastructure Development, such as the Foynes to Rathkeale Protected Road Scheme, solar farms and electrical substations.
- While individual applications have been assessed on their merits and some have been refused, the overall pattern of decisions confirms that the area is recognised as suitable, in principle, for regionally and nationally significant infrastructure.



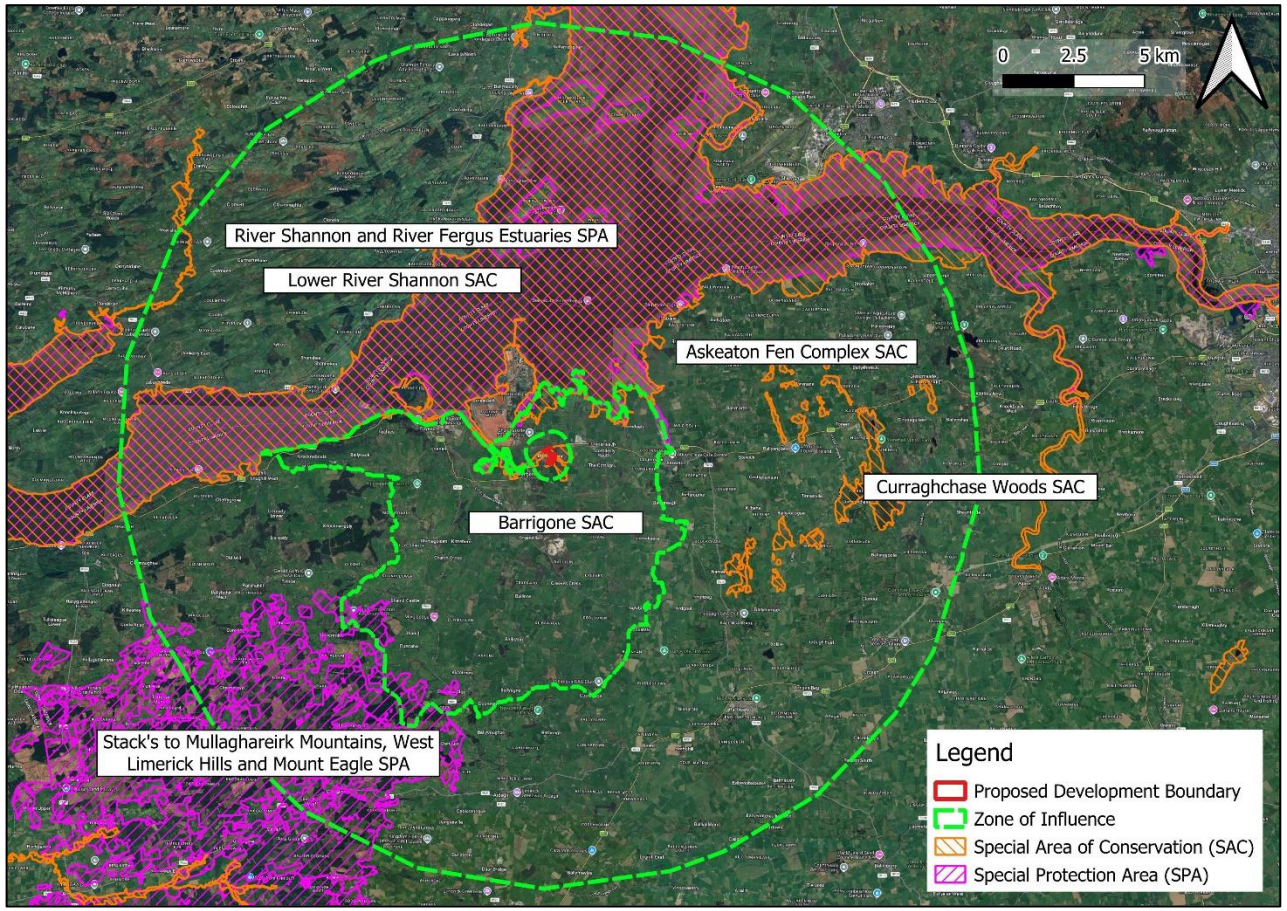
Site Designations

- An SSFRA has been carried out for the subject site - there is no significant risk of flooding to the proposed development. The site of the proposed development is located within Flood Zone C for fluvial and coastal flooding.
- The nearest surface water feature to the site is the Glenbane West Stream, which is located approx. 330m to the north east of the site, and is separated from the site by agricultural fields, a railway line and the N69.
- With regards to the Natura 2000 network, the proposed development site is located adjacent to the Barrigone SAC (Site Code: IE0000432) and Barrigone pNHA (Site Code: IE0000432).
- The site is located approx. c.750 east of the River Shannon and River Fergus Estuaries SPA (Site Code: IE00004077), and 1km south of the Lower River Shannon SAC (Site Code: IE00002165).
- The site is located within an existing quarry site, with a history of industrial use – A Cement batching plant was granted under LCCC Ref. 7510227
- There are no protected structures within the redline boundary.
- The closest site of architectural interest – A House (NIAH Ref. 21901007) is located approximately 930m to the south west of the site along the N69.
- The closest site of archaeological interest – a Ringfort-Rath (NIAH Ref. LI010-089) is located approximately 10m to the south of the site.



Ecological Constraints and Approach to Appropriate Assessment

European Sites within the Zone of Influence



Ecological Surveys

Completed

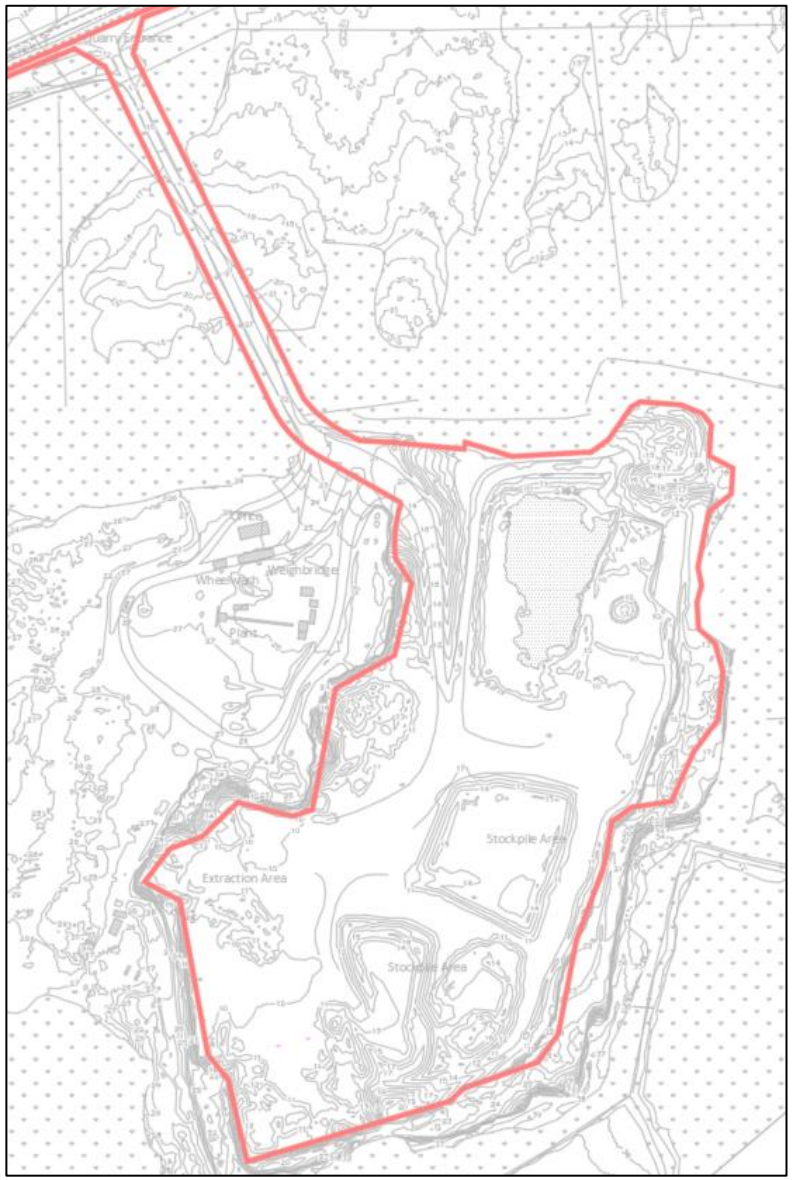
- Ecological walkover survey (June 2026)

Ongoing/To Be Completed

- Nesting bird surveys (July 2026)
- Annex I Grassland Survey (July 2026)
- Wintering Bird Surveys Oct 2026 – March 2027

Existing Site Layout

- The topography of the site ranges from approximately 13-28mOD along the access road and unexcavated section.
- Topography within the quarry site reaches 11mOD with mounds reaching maximum heights of 14mOD.
- The proposed development site is an existing quarry void which has been subject of excavation activities.
- A large water body exists within the quarry. Existing quarry buildings and wheelwash are also noted at the entrance to the quarry void.
- Roadstone offices, extraction areas and stockpile areas are located in proximity of the site. The quarry is surrounded by woodlands on all sides.



Existing Site Layout

Proposed Development

The proposed development comprises a flexible Open Cycle Gas Turbine (OCGT) generating plant with an electrical output of up to 385 MW.

The plant is designed to provide fast-acting capacity and system support during peak demand and periods of low renewable generation.

It will be primarily fuelled by natural gas, with secondary distillate (diesel) back-up for resilience and testing.

The main components of the site consists of the following:

- 30m high exhaust stack and emissions monitoring unit
- Single storey control building, including admin and workshop facilities
- Single storey electrical common building
- 3no. above ground tanks

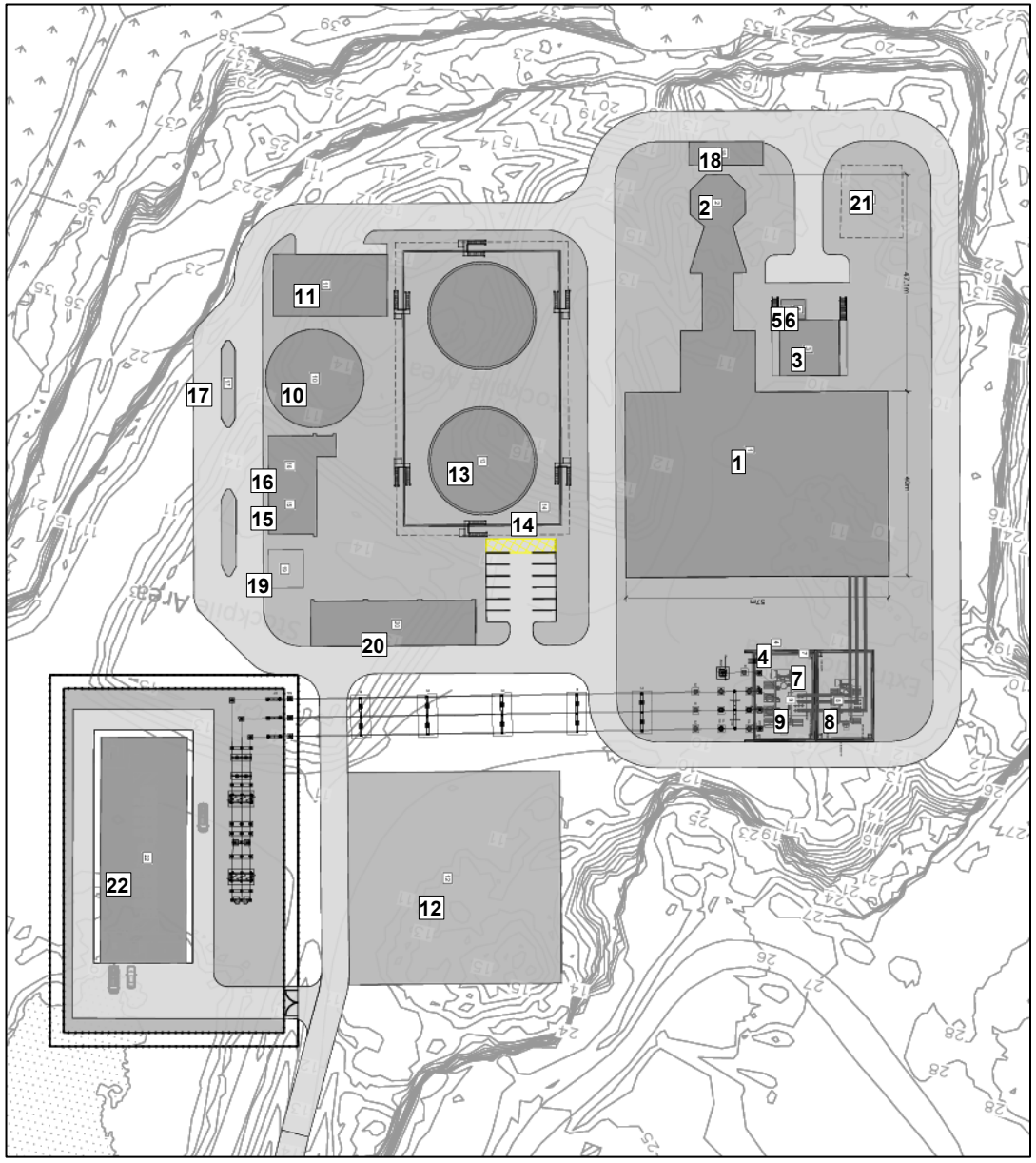
Above Ground Installation (AGI) Enclosure which houses the following:

- Single storey gas analyser kiosk.
- Single storey boiler house kiosk.
- Single storey ancillary pressure reduction kiosk.
- Single storey electrical and instrumentation kiosk.

(Source: ROD Drawing OCGT-ROD-BAR-XX-DR-CE-0005)

Proposed Site Layout

KEY TABLE	
1	GAS TURBINE & GENERATOR ENCLOSURE
2	STACK
3	ELECTRICAL PEECC
4	CIRCUIT BREAKER GENERATOR
5	EXCITATION OIL TRANSFORMER
6	SFC TRANSFORMER
7	TRANSFORMERS BASIN
8	UNIT TRANSFORMERS
9	STEP UP TRANSFORMERS
10	FIRE FIGHTING/SERVICE WATER TANK (4000m^3)
11	COMPRESSOR AND FIRE FIGHTING PUMPS BUILDING
12	AGI ENCLOSURE
13	FUEL OIL TANK (NO. 2 4500m^3)
14	FUEL OIL TANK BASIN
15	UNLOADING PUMPS
16	FORWARDING PUMPS
17	FUEL OIL UNLOADING AREA
18	PROPANE TANK
19	FOAM SYSTEM
20	CONTROL, ADMINISTRATION & WORKSHOP BUILDING
21	MAINTENANCE AREA
22	220kv SUBSTATION



ESB Connection Routes

The ESB Connection will be subject to a separate Planning Application. EirGrid will undertaken the design of the connection to the electrical network.

Option A (6,639m):

Route: N69, L6068, L1222 then reaches Creeves Crossroads

- Pros: Avoids railway, has two wide roads.
- Cons: L6068 reduced road width, cross the River Ahacronane and two other bridges/culverts.

Option B (7,422m):

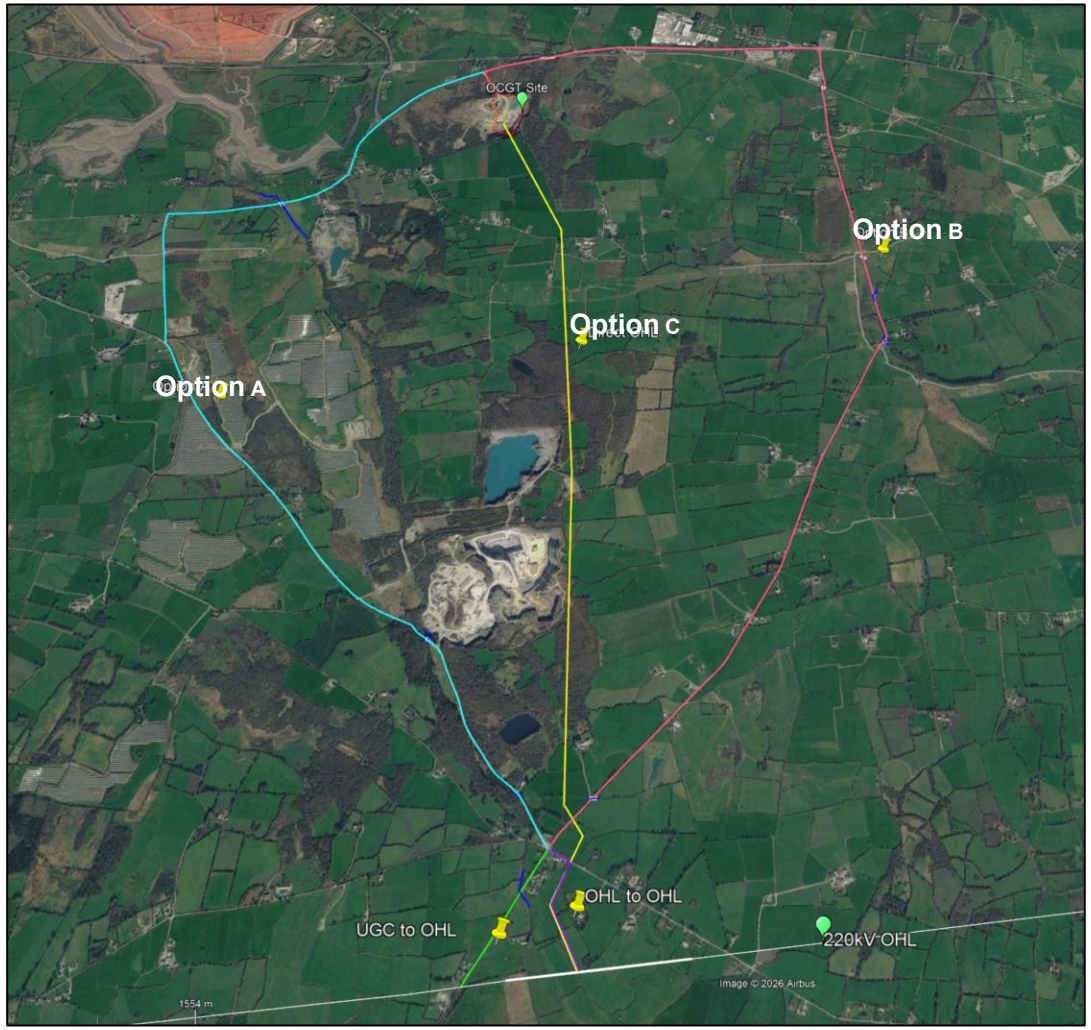
Route: N69, L1220, then reaches Creeves Crossroads

- Pros: All roads used are wide enough for cable and joint bay installation.
- Cons: The route crosses over the railways twice and route crosses x3 bridges/culvert.

Option C (approx. 5,000m):

Avoids utilities such as rivers, railways, bridges, culverts etc.

- Pros: Shortest at approx. 5,000m, avoid utilities on the ground/roads such as bridges and railway lines.
- Cons: Uses third party land.



(Source: ESB Utility Records)

Gas Connection Route

- A High Pressure gas main was identified approximately 700m east of the site, adjacent to the L1234 Glenbane East road. The gas main traverses in a north-south direction.
- Gas Networks Ireland will undertake the design of the connection to the gas main.

(Source: GNI Utility Records)

Civil Infrastructure

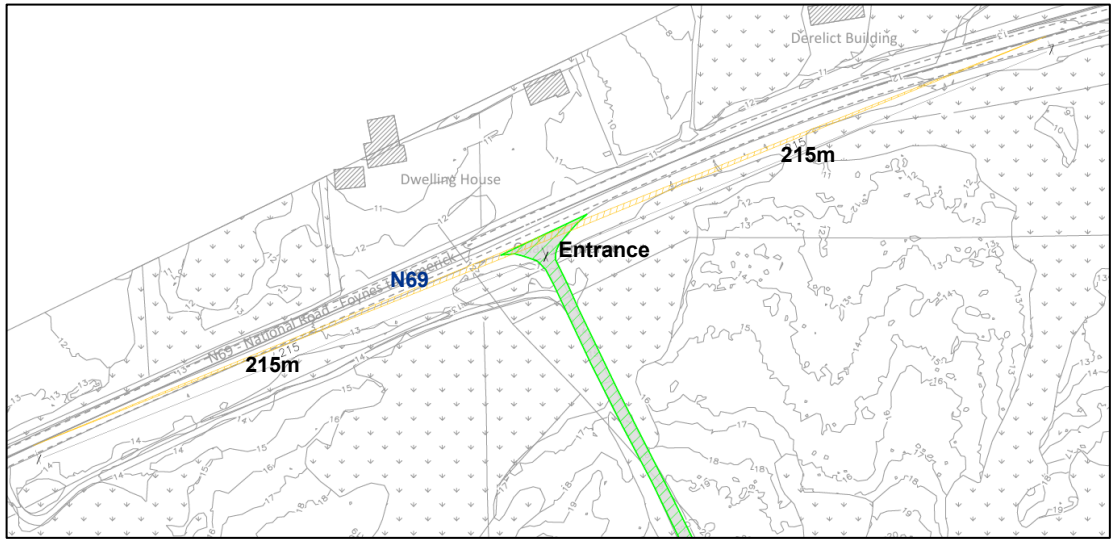
Road Network

- The OCGT site will be accessed via an existing entrance onto the N69, north of the site.

Access

- Visibility splay of 215m provided in either direction onto the N69.
- The speed limit of the N69 is 100km/h.
- Preliminary traffic analysis has shown traffic increases within TII's Thresholds for Construction period & Operation phase.

Southeast View to Site Access from N69 (Source: Google Maps)



Sight Visibility Splays from N69 to the Site Entrance

Drainage Strategy

Surface Water:

Separate surface water infrastructure to include SuDS features, including:

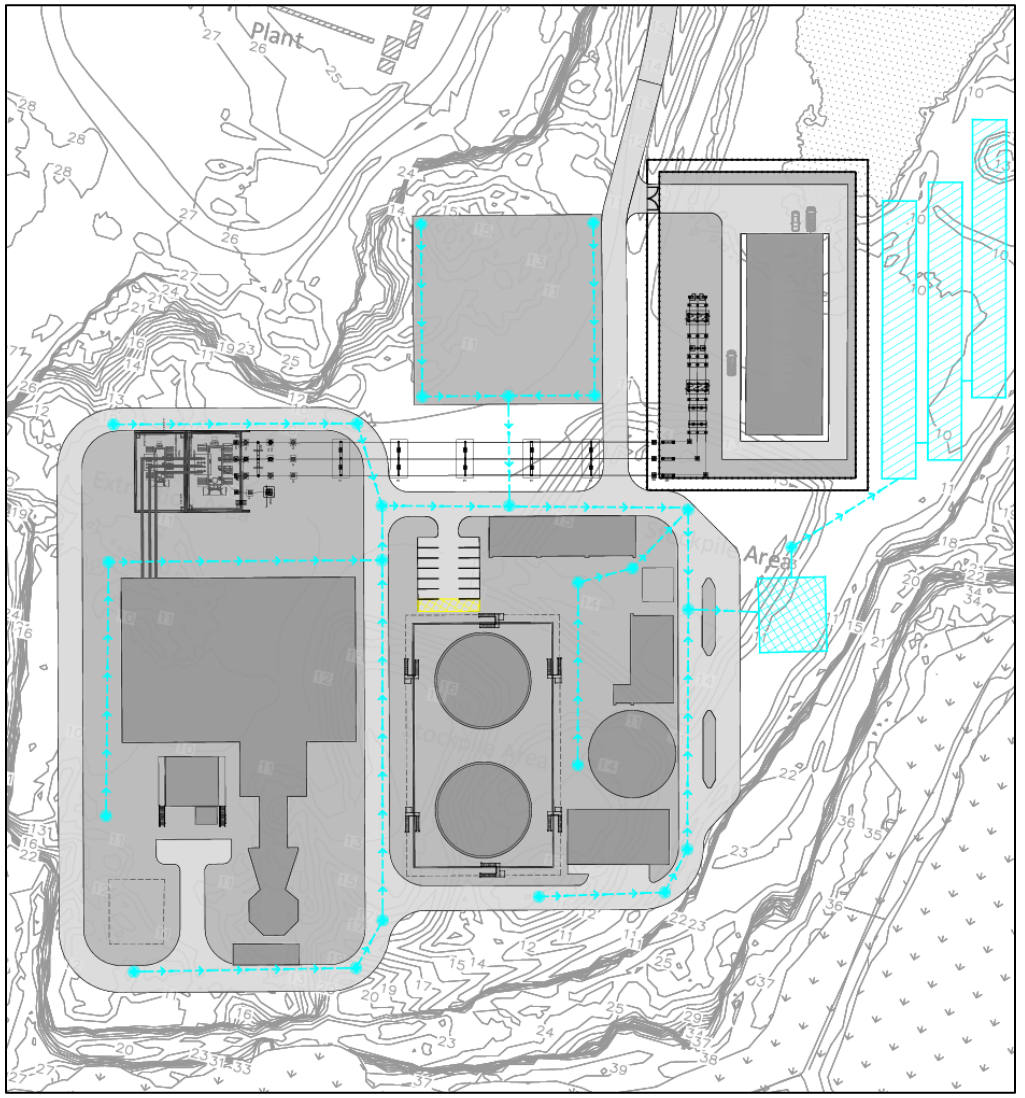
- Permeable Paving within car parking spaces
- Hydrobrake
- Infiltration trenches
- Petrol Interceptor
- Fire Retention tank

Foul Water:

Foul Drainage from the Control Building will outfall into a septic tank and percolation area and will be treated within the site.

Watermain:

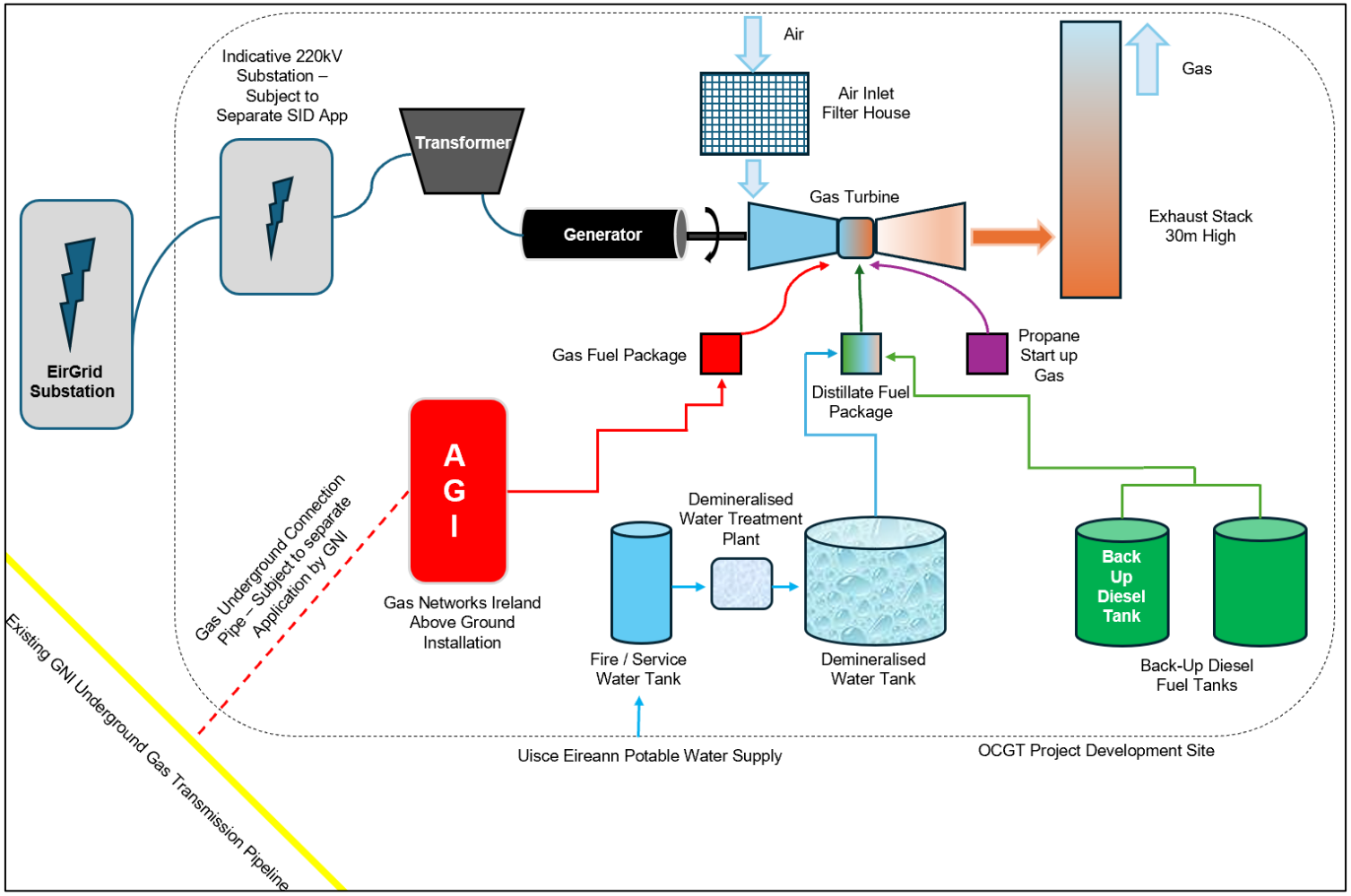
A Pre-Connection Enquiry has been submitted to Uisce Éireann and we are awaiting a Confirmation of Feasibility.



(ROD Drawing OCGT-ROD-BAR-XX-DR-CE-0006)

OCGT Process

- In summary, the open-cycle technology configuration provides a much quicker response time to start and begin generation in comparison to combined-cycle.
- This fast response time is required to meet the rapid changes in the transmission grid electrical supply and demand imbalance.
- The time to reach maximum load for an open cycle gas turbine is about 30 minutes but can be over 2 hours for a combined cycle.
- The proposed development will act as a reliable source of backup generation when the system margins are tight. It is forecast to displace the running of existing, higher carbon emitting units such as oil-fired units.
- The proposed development is expected is expected to provide a reduction in the level of carbon emissions.
- The proposed development meets a need for electricity generation that has been signalled by the Government as being an urgent and appropriate response to the transition to a renewables based national energy supply. The long term vision for the plant is to be hydrogen ready.



Need for the Proposed Development

- Ireland is undergoing a rapid transition to a low-carbon electricity system, with increasing deployment of renewable energy technologies such as wind and solar. While these resources are central to achieving binding climate targets, their output is variable and is not always sufficient to meet electricity demand. Maintaining a reliable, secure supply therefore requires flexible generation capable of responding quickly when renewable output is insufficient.
- The proposed Peaker Plant plays a critical role in this context. Rather than competing with renewable energy, it functions as an enabler of the net zero transition, providing fast-response capacity that facilitates renewable generation to be safely connected to the grid. By bridging periods of low renewable output, the facility ensures grid stability and prevents supply shortfalls, supporting the integration of renewable generation, and storage technologies.
- Within national policy documents, the need for flexible gas generation is recognised as a key part of the energy transition to net zero and for the purposes of energy security. The most recent Climate Action Plan (CAP 25) includes the delivery of at least 2 Gigawatts (GW) of New Flexible Gas Plant by 2030 as a national target alongside other renewable energy generation targets, recognising the role that flexible gas plants have to play in supporting a flexible and resilient electricity system. The Proposed Peaker Plant will help bridge this gap.
- The flexible nature of the plant means it can be turned on and off to react to fluctuations in renewable generation, by ramping up quickly to meet peak demand. The proposed plant is selected as open cycle as this configuration provides a much quicker response time to start up and begin generation. This fast response time is required to meet the rapid changes in the transmission grid electrical supply and demand imbalance. In terms of efficiency the combined cycle gas turbine is better and therefore once operating at maximum load will produce less emissions per megawatt (MW).
- The Proposed Project is in line with the National Development Plan (NDP) 2021-2030, and the Government's 'Policy Statement on Security of Electricity Supply'. The site location is close to an existing gas transmission pipeline, as well as the existing 220 kilovolt (kV) electricity infrastructure.

The benefits of the Proposed Project are summarised as follows:

- Grid Stability and Security of Supply: providing quick start power to react to peaks in demand, ensuring grid stability and security of supply;
- Flexibility: the new plant can be switched on or off to balance the grid when demand is high, or generation is low;
- Supports Ireland's Energy Transition: the new plant will act as a bridge technology ensuring a stable transition to more renewable generation without compromising reliability; and,
- Economic Benefits: generates employment during construction and also attracts investment through the provision of a secure and reliable grid.

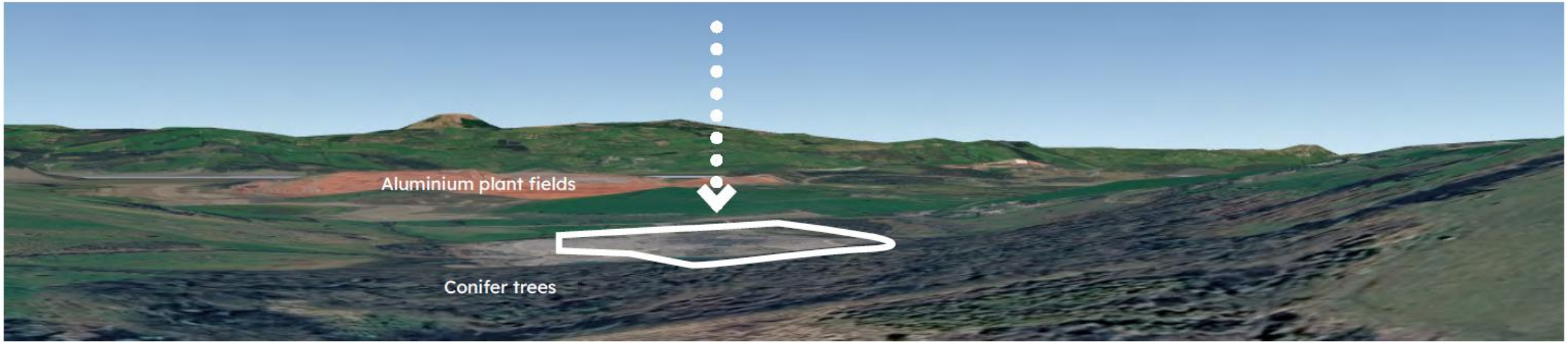
Example Open Cycle Gas Turbine Plant for Reference

- To better understand the requirements of the planning application for the OCGT site at Barrigone, reference was made to the Cashla Peaker Plant, another Strategic Infrastructure Development project.
- The Cashla Peaker Plant is located on lands at Pollnagroagh and Rathmorrissy (Townlands), Athenry, Co. Galway.
- Bord Gáis Energy Ltd. is applying for a 10-year planning permission for the proposed development of a natural gas-fuelled electricity generation plant (named 'Cashla Peaker Plant') designed to provide flexible support to Ireland's power system.
- The plant will operate primarily on natural gas. As an added resilience measure, it will be equipped with dual-fuel capability, enabling use of low sulphur diesel in emergency or back-up situations to ensure continued security of the electricity supply.
- Similar to the subject site, the proposed development is intended to operate on a time-limited basis only, with an operational life up to and including the 31st of December, 2050.

(Source: Bord Gáis Energy Ltd showing Cashla Peaker Plant)

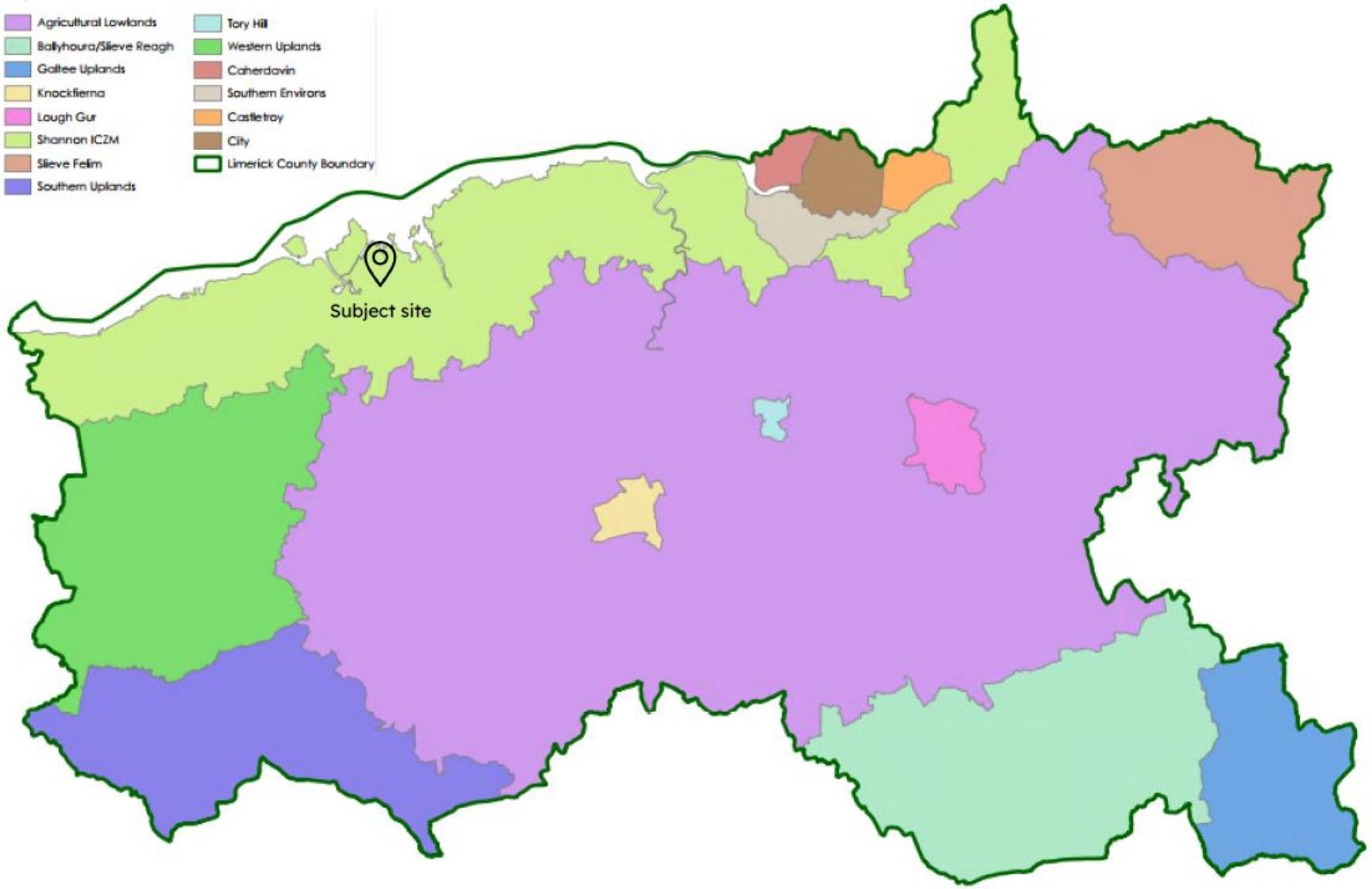
Aerial Views

Site and adjacent topography

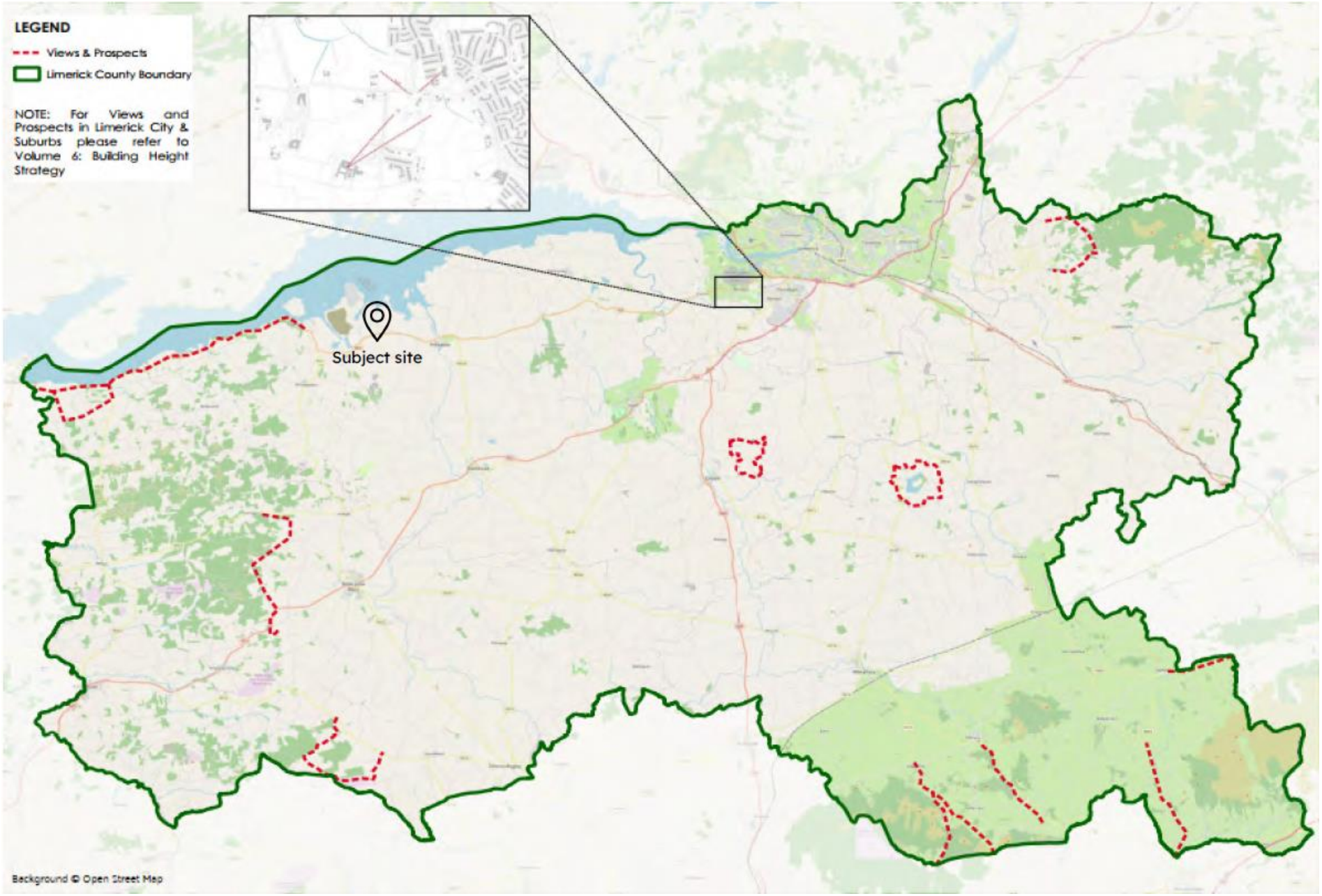


Landscape Character Assessment

- The site is located within Shannon Coastal Zone (LCA 06).
- This area is described in the Plan as a large area of northern Limerick bounded on one side by the Shannon Estuary, with its southern boundary defined by gradually rising ground leading onto the agricultural zone and western hills to the southwest.



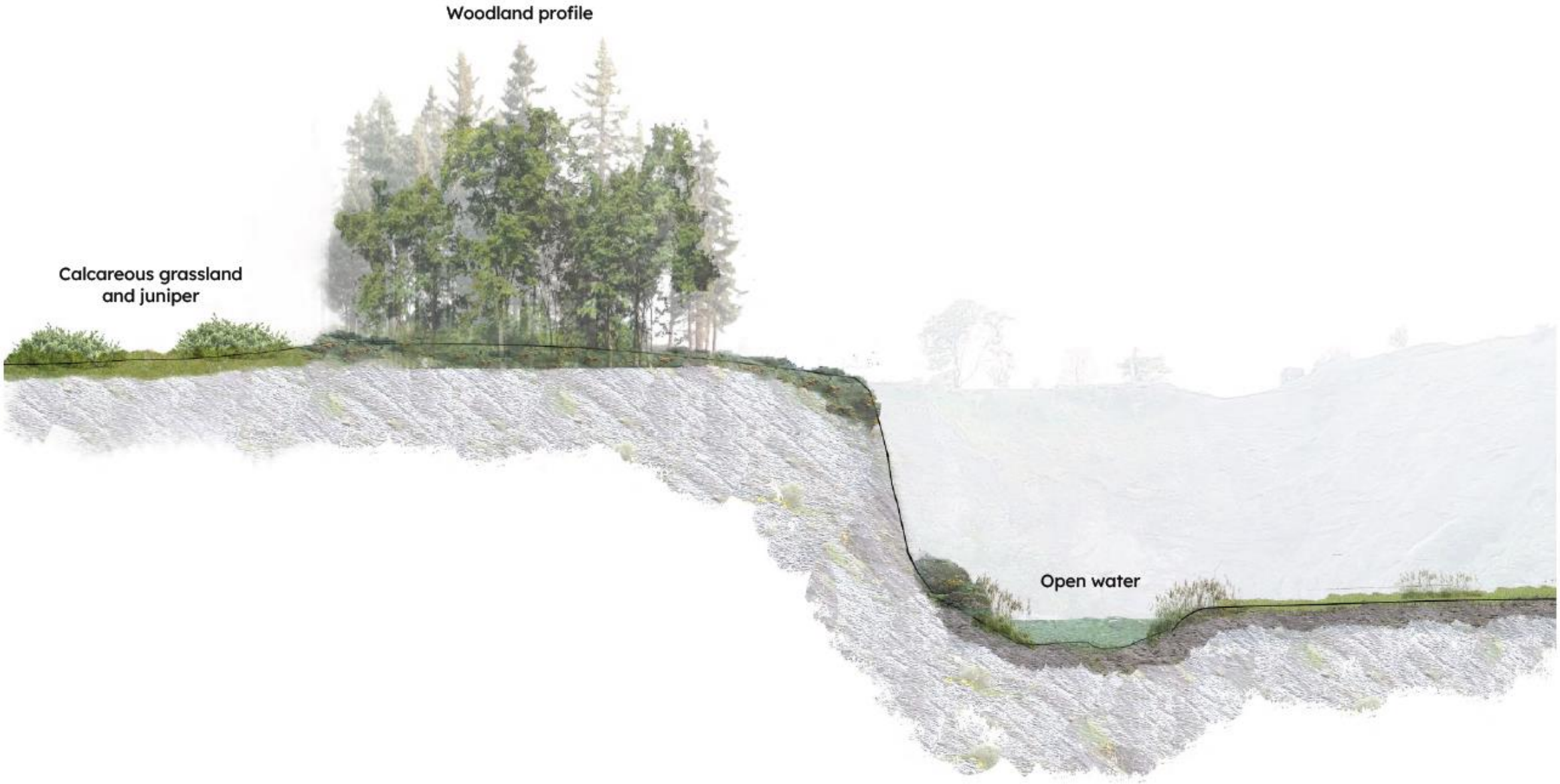
Protected Views and Prospects



Potential Woodland Areas – Visual Mitigation

- Native woodland planting (highlighted blue) to screen the stack and progressively replace the existing cypress planting to the north, enhancing the sites native landscape character.

Quarry Interface



Planning Application Reports & Assessments

Planning Report:

- Introduction
- Subject Site Overview
- Proposed Development
- Pre-Planning Consultation
- Planning History
- Planning Policy Assessment

Environmental Impact Assessment Report:

- Air Quality
- Climate
- Cultural Heritage: Archaeology and Architectural Heritage
- Biodiversity
- Landscape and Visual Impact Assessment
- Noise and Vibration
- Water: Hydrology & Hydrogeology
- Land, Soil & Geology
- Material Assets: Traffic & Transport
- Population and Human Health
- Material Assets: Water Supply; Surface & Foul Drainage & Utilities
- Material Assets: Waste Management
- Accidents and Disasters
- Interactions Arising
- Mitigation Measures & Monitoring

Additional assessments and Reports:

- Appropriate Assessment (AA) Screening Report & Natura Impact Statement (NIS)
- Noise Impact Assessment
- Landscape Visual Impact Assessment (LVIA)
- Engineering Services Report
- Ecological Impact Assessment (EcIA)
- Construction Environmental Management Plan (CEMP)
- Resource and Waste Management Plan
- Archaeological Impact Assessment (AIA)
- Site Specific Flood Risk Assessment (FRA)
- COMAH Land Use Planning Assessment

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