

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN: HYDROGEN PRODUCTION FACILITY CONDITION 3: P2025/0222

LAND OFF CENTRAL AVENUE | PORT TALBOT | SA12 7BU



PREPARED BY



PREPARED FOR



REPORT NUMBER
PRO1013/CEMP

REPORT STATUS
Final

REVISION
-

REPORT DATE
August 2025

WRITTEN & PREPARED BY
Francesca Wray MRTPI | Principal Planner

REVIEWED & APPROVED BY
David Baker | Development Director

AUTHORISED BY
Sirius Planning

CONTENTS

1. INTRODUCTION	4
1.1 INTRODUCTION	5
1.2 PROPOSED WORKS DURING CONSTRUCTION PHASE	6
1.3 SITE OVERVIEW	6
2. SITE MANAGEMENT AND OPERATION – CONSTRUCTION PHASE	8
2.1 CONSTRUCTION METHODS	9
2.2 GENERAL SITE MANAGEMENT	9
2.3 CONTROL OF NUISANCES	11
2.4 TRAFFIC MANAGEMENT	13
2.5 WASTE	16
2.6 HOURS OF WORKING	16
2.7 RESPONSIBLE PERSONS	17
2.8 ECOLOGICALLY APPROPRIATE WORKING METHODS	17
4. CONCLUSIONS	21
3.1 CONCLUSION	22



1. INTRODUCTION

1.1 INTRODUCTION

1.1.1 This Construction Environmental Management Plan (CEMP) has been prepared by Sirius Planning on behalf of Protium Green Hydrogen Supply Limited (PGHS Ltd.), for the following development (collectively referred to as the Development) located on a parcel of land within an existing industrial estate off Central Avenue, Port Talbot, SA12 7BU:

- An Electrolytic Hydrogen Production Facility (HPF) and associated compression and storage; and
- A Hydrogen Tube-Trailer Filling Station (HTTFS).

1.1.2 The document addresses Condition 3 (CEMP) of planning permission ref. P2025/0222.

1.1.3 This CEMP seeks to avoid, minimise or mitigate any construction effects on the environment and the surrounding community. This CEMP covers Site activities which may require operational controls in relation to potential environmental impacts and details mitigation measures to minimising risks to the environment.

1.1.4 The CEMP will be monitored regularly throughout the duration of the works to ensure best practice is followed.

1.1.5 Condition 3 of planning permission ref. P2025/0222 states:

Condition 3

“No development, including site clearance, shall commence until a Construction Environmental Management Plan (CEMP) incorporating a construction method statement to manage highway impacts) has been submitted to and approved in writing by the Local Planning Authority. The CEMP shall include the following:

i. Construction methods: details of the extent and phasing of development; details of construction materials or techniques to be used; details of the storage and management of plant and materials used in constructing the development

ii. General Site Management: details of the construction programme including timetable; details of site clearance; details of compliant investigation procedures; details of site construction drainage, containments areas, appropriately sized buffer zones between storage areas (of spoil, oils, fuels, concrete mixing and washing areas) and any watercourses or surface drain;

iii. Control of Nuisances: Identification of the significant construction and demolition noise & vibration sources; details of physical and operational management controls necessary to mitigate noise & vibration emissions; details of dust & odour control measures and measures to control light spill

iv. Traffic Management: details of site deliveries; details for the loading and unloading of plant and materials; details for the parking of vehicles of site operatives and visitors; storage of plant and materials used in constructing the development; wheel washing facilities; and a scheme for the erection of temporary/semi-temporary signage warning drivers of the presence of children and speed restrictions;

v. Scheme for recycling/disposing of waste resulting from demolition and construction works;

vi. Hours of working on site, including specified hours of deliveries; details of restrictions to be applied during construction and demolition works (including timing, duration and frequency of works) to prevent noise or nuisance amenity issues to surrounding properties

vii. Responsible Persons: details of the persons and bodies responsible for activities associated with the CEMP and emergency contact details

viii. Ecologically Constraints and Mitigation Plan working method statement (in accordance with 6.2 of the Preliminary Ecological Appraisal provided by FPCR Environment & Design).

The CEMP shall be implemented as approved throughout the site preparation and construction phases of the development”.

- 1.1.6 The aim of this CEMP is to provide a clear and consistent approach to the control of construction activities. The appointed contractor(s) will be responsible for working in accordance with the environmental controls documented in the CEMP, pursuant to the LPA. The overall responsibility for implementation of the CEMP will lie with the appointed contractor(s). This CEMP has been designed with the objective of compliance with the relevant environmental legislation and mitigation measures. Any additional construction licenses, permits, or approvals that are required will be the responsibility of the project developers / appointed contractor(s).

1.2 PROPOSED WORKS DURING CONSTRUCTION PHASE

- 1.2.1 The Development is for the construction and operation of a Hydrogen Production Facility and Hydrogen Tube-Trailer Filling Station.
- 1.2.2 The design utilises c. 1,165m² of existing hardstanding along with c. 773m² of existing permeable areas consisting of granular material. Minimal construction is required for the development, with installation and assembly of equipment comprising the majority of the construction period.
- 1.2.3 The principal construction works include:
- Delivery of construction equipment to Site;
 - Fencing off construction area;
 - Construction and installation of Site drainage;
 - Movement of plant and machinery;
 - Excavation of cable run trenches;
 - Installation of cabling;
 - Delivery and installation of Site drainage;
 - Landscaping.
- 1.2.4 Following appointment of contractors, construction of the Development will follow a defined project programme essentially to meet the shortest timescale for completion of the project taking account of planning conditions and relevant health, safety and environmental considerations.

1.3 SITE OVERVIEW

- 1.3.1 The Site is situated on a parcel of land within an existing industrial estate off Central Avenue and covers approximately 0.6ha of land. The Site comprises previously developed land consisting of existing asphalt hardstanding along with strips, of varying width, of stone chippings surfacing along the boundaries of the existing hardstanding area. There are also strip foundations associated with the previous workshops within the south-west of the Site.

Figure 1.1: Site Location



- 1.3.2 The majority of the Site is currently used to store containers with small areas used to store construction materials, wooden pallets and general building supplies. The area used for storage changes regularly as containers and building materials are removed / added. A containerised hydrogen production plant and associated equipment is also being stored within the Site. A steel palisade fence bounds the Site (c. 2.4m in height) along with an access gate (c. 13.8m wide). The private access road and associated road verge is located off Central Avenue within the south-eastern extent of the Site. To the west, the Site is bound by mature trees beyond which lies Central Avenue.
- 1.3.3 Under the adopted Local Development Plan Proposals Map, the Site is designated as within an Existing Employment Area (EC2) and within an area safeguarded for Minerals (M1).
- 1.3.4 The nearest residential receptors to the Site are located along Fenbrook Close approximately 350m to the south-east, beyond the Swansea Bay University Health Board Headquarters and the A4241.
- 1.3.5 The nearest statutory ecological designations are the Earlswood Road cutting and ferryboat inn Quarries SSSI located approximately 2km to the north and the Crymlyn Burrows SSSI approximately 2km to the north-west of the Site. The nearest non-statutory designated site is the Jaffa Land Baglan SINC located approximately 500m to the north of the Site.
- 1.3.6 The nearest Listed Building to the Site is the Grade II Listed The Vicarage off Church Road located approximately 780m to the east of the Site. The nearest Scheduled Monument is the Plas Baglan, which is the remains of a castle or fortified house, 1.2km to the east of the Site.
- 1.3.7 The Site is located within Flood Zone 3, which is a defended zone.



2. SITE MANAGEMENT AND OPERATION – CONSTRUCTION PHASE

2.1 CONSTRUCTION METHODS

Extent and Phasing of Development

- 2.1.1 The design utilises c. 1,165m² of existing hardstanding along with c. 773m² of existing permeable areas consisting of granular material. The extent of the Development area is illustrated on Drawing No. **PRO1013/01/03**.
- 2.1.2 Due to the minimal level of construction required, there is no phased approach to constructing the Development. Construction works are limited to initial site preparation (clearance of existing containers and materials, security fencing installation, drainage infrastructure construction and re-surfacing of the private access road) and installation and assembly of equipment.

Details of construction materials or techniques to be used

- 2.1.3 The following construction materials will be used during the construction of the Development:
- Steel;
 - Aluminium;
 - Concrete;
 - Type1 stone aggregate;
 - Copper cable;
 - Aluminium cable;
 - Tarmac; and
 - Poly Pipe.
- 2.1.4 It is envisaged that only common construction materials shall be used on the Development e.g. concrete and steel etc. Contractors, Subcontractors, Specialist Vendors and Suppliers shall only use non-combustible materials wherever possible.

Details of the storage and management of plant and materials used in constructing the development

- 2.1.5 A temporary construction compound will be established within the existing hardstanding area on the Site and be the designated storage area during the construction phase. The compound will be clearly marked and no construction storage of materials and plant will be allowed outside this area.

2.2 GENERAL SITE MANAGEMENT

- 2.2.1 Construction of the Development will follow an agreed programme of works with an interdependent sequence of activities established, with the essential aim of meeting the shortest timescale for completion of construction.

Details of the construction programme

- 2.2.2 As a worst-case scenario, the construction period is expected to last between three to six months with commissioning taking place concurrently during the last three months.
- 2.2.3 Within the first month of construction, initial site preparation works will be undertaken including site clearance and establishment of a temporary construction compound for the temporary storage of plant and materials required. The establishment of the temporary construction compound will not involve any civil works as it is situated on the existing hardstanding area within the Site. Following this, the drainage system shall be constructed and installed to control runoff during the remaining construction and assembly fitting phase (see paragraphs 2.2.13-2.2.22). In addition, the private access road will be re-surfaced and proposed palisade security fence will be installed around the HPF compound area.
- 2.2.4 Following site preparation works, electrical construction works will be undertaken with cable trenches excavated, cables being laid and the trenches reinstated. The criteria and planning for this work will be to ensure the security and integrity of the cables.

- 2.2.5 Equipment delivery to the site will take place at the latest possible time, once all site preparation and ground works have taken place. The main components of the HPF and HTFS compound are shipped either as containers or assembled skids, and designed for ease of integration. The containers will be lifted onto the existing hardstanding by crane and secured. It should be noted that some of the key plant and equipment are already stored on Site.
- 2.2.6 Following the delivery of equipment, the installation and assembly phase can begin which will include securing equipment in place and pipework installation.
- 2.2.7 Once the electrical equipment has been installed, the temporary construction compound will be removed along with any remaining materials, plant and equipment. The facility will then be commissioned within the last three months of the construction phase with the process checked against the Site Acceptance Test Procedures. All cabling will be completed and tested and the facility will be ready for operation.
- 2.2.8 During the commissioning stage, the grassland verge off the private access road will be sown with seed mix EM3 Special General Purpose Meadow Mixture as detailed within the Ecological Enhancement Details submitted as part of the planning application.

Details of site clearance

- 2.2.9 The Development utilises c. 1,165m² of existing hardstanding along with c. 773m² of existing permeable areas consisting of granular material.
- 2.2.10 The majority of the Site is currently used to store containers with small areas used to store construction materials, wooden pallets and general building supplies. It should be noted that these containers and supplies are regularly moved to and from Site. All containers and materials / supplies will be removed from Site at the start of the construction phase.
- 2.2.11 Small areas of scrub and ephemeral habitat are located around the boundaries of the existing hardstanding area. As stated in the Ecological Impact Appraisal which accompanied the planning application, any removal of scrub required within the development footprint should occur outside of the nesting bird season, which runs mid-March – September inclusive. In addition, the small area of Non-Native Invasive Species, Cotoneaster Sp., shall be undertaken in line with a INNS method statement. Please see Section 2.8 of this CEMP for further details.

Details of compliant investigation procedures

- 2.2.12 Neath Port Talbot County Borough Council, the local Community Council and neighbouring properties will be provided with the contact details of the contractors and Site Management once instructed. Whilst the proposed mitigation measures will limit any perceived adverse impacts from the construction phase, should substantiated complaints be received, the following actions will be undertaken:
- The complaint will be logged and the record will include the complainant's name, address, contact details and the nature, date and time of the complaint;
 - The complaint will be investigated within 24 hours to determine its validity and, if valid, the individual(s) involved;
 - At the earliest practical opportunity, Neath Port Talbot County Borough Council will be informed of the complaint and a course of action will be agreed together with timescales for remedial action;
 - Details of the remedial measures carried out will be recorded in a daily log; and
 - Neath Port Talbot County Borough Council and the complainant will be informed of the remedial measures taken and their effectiveness.
- 2.2.13 If substantial complaints persist, the Site Manager will arrange for further investigation to be carried

out. In the unlikely event that the nuisance is causing significant harm to local amenity then the offending activity will cease until appropriate remedial action can be agreed and undertaken. Any such action and liaison will be fully recorded in daily logs.

Details of Site Construction Drainage, Containment Areas, Appropriately sized buffer zones between storage areas and any watercourse or surface drain

- 2.2.14 The Site is consented for clean uncontaminated runoff to discharge into the underlying strata as approved within the Environmental Permit by Natural Resources Wales.
- 2.2.15 The drainage works on Site shall comprise constructing and installing a linear drainage channel, oil separator, installation of carried pipework from linear channel to oil separator and construction of an engineered infiltration trench to allow for the discharge of surface water to the underlying strata. The drainage scheme and construction details are presented on Drawing No. **PRO1017/02/01 R1** appended to this CEMP.
- 2.2.16 The drainage infrastructure shall be installed as one of the first elements of the construction works to allow control of runoff during the remaining construction phase.
- 2.2.17 All waters shall pass through the oil separator which shall ensure any silts and oils are dropped out prior to water reaching the infiltration trench.
- 2.2.18 The drainage features are located outside of the existing hardstanding surfacing and shall generally not be near anywhere that needs to be trafficked during construction. All site personnel shall be made aware of the location of the infiltration structure and oil separator to ensure that trafficking of this area is minimised.
- 2.2.19 Mobile plant used during the construction phase will be parked away from the infiltration trench during periods of downtime so if a spill occurs, there is sufficient distance between the mobile plant and trench to prevent any spills reaching the trench and allows sufficient time to clean up the spill.
- 2.2.20 In addition, all mobile plant will have spill kits within easy access so that should a spillage occur; this can be cleaned up quickly without any reaching the infiltration trench.
- 2.2.21 No concrete washout water should be allowed to drain to the surface water drainage system and should not be allowed to occur on Site unless within a specific contained area
- 2.2.22 Following completion of construction works the drainage scheme shall be cleaned out and maintained prior to occupation of the development.
- 2.2.23 A separate SAB application has been submitted to Neath Port Talbot County Borough Council for approval which provides full details of the drainage scheme for the Site.

2.3 CONTROL OF NUISANCES

- 2.3.1 The Site is located in an established industrial area between Central Avenue and the M4 and surrounded by industrial uses.

Identification of the significant construction and demolition noise & vibration sources

- 2.3.2 The majority of the construction work on Site will be the placement, installation and fitting of equipment therefore given the high level of background noise already established in the area, construction noise is unlikely to cause detriment to local amenity.
- 2.3.3 Any potential for noise arising from construction activities will largely be due to vehicle movements, and from plant and machinery associated with the construction including trenching of electrical cables and installation of infiltration trench. Excavators, haulage lorries, cranes, mobile plant, and power tools would all, at some time during the construction programme, be operating.

Details of physical and operational management controls necessary to mitigation noise & vibration emissions

- 2.3.4 It is proposed that deliveries will be made during the specified construction working hours and outside peak periods (see section 2.6) of this document. Under exceptional circumstances, both working and deliveries outside of these hours may be required however, this would be agreed with the LPA in advance.
- 2.3.5 The nearest residential receptors to the Site are located along Fenbrook Close approximately 350m to the south-east, beyond the Swansea Bay University Health Board Headquarters and the A4241.
- 2.3.6 Given the industrial location of the Site and limited construction works, noise and vibration impacts associated with the minimal construction works required would highly unlikely adversely affect nearby sensitive receptors. It is noted that given the temporary nature of the construction phase, noise sources would vary throughout the different stages of the construction period and all for relatively short durations within the restricted construction working hours for the Site (see Section 2.6).
- 2.3.7 To minimise noise impacts the following measures will be implemented:
- Vehicles used on Site will need to have effective silencers fitted;
 - Engines will be turned off when not in use;
 - Vehicles will avoid reversing on Site to minimise reversing and associated beepers;
 - Plant and machinery will be maintained in good working order;
 - All construction staff will be advised of quieter methods of operating plant and tools, and to report any damage to noise control measures as soon as they are identified;
 - Construction plant capable of generating significant noise and vibration levels will be operated in a manner to minimise the duration of the higher magnitude levels.
- 2.3.8 Works with the potential to generate noise and vibration impacts will be in accordance with *BSI (2014) British Standard BS5228 - Noise and vibration control on construction and open sites. British Standards Limited*.
- 2.3.9 The main sources of vibration during the construction phases are anticipated to be from vehicle movements and delivery of construction materials such as aggregates. Ground-borne vibration is attenuated rapidly with distance. Therefore, given the separation distance at the Site (350m to the nearest residential dwelling), it is highly unlikely that vibration during construction would be at levels sufficient to be perceptible by people or to cause damage to structures.

Details of dust & odour control measures and measures to control light spill

Preventing Mud on the Highway

- 2.3.10 The degree of dirt / mud during construction will be dependent on the time of year, the prevailing weather during the construction period and the type of construction activities (e.g. muck shifting). In wet weather greater attention will be paid to vehicle cleaning to ensure significant quantities of mud are not trafficked onto local roads, which once dry can become a significant source of dust.
- 2.3.11 Given the minimal level of construction required for the Development, it is not considered that dirt / mud will be trafficked onto local roads, however the internal private access road off Central Avenue will be actively monitoring during construction and cleaned as required by the use of a Laker type brush.

Dust Mitigation Measures

- 2.3.12 Possible impacts from dust will only occur during the relatively short construction phase. It is acknowledged that dust may be generated mainly under the following circumstances, however the degree to which these circumstances arise will depend upon the stage of the works and the coincident time of year and prevailing weather.

- Inappropriate storage of construction materials/powders;
- Movement of construction traffic;
- Transfer of soil and other materials onto impermeable or semi-permeable surfaces (e.g. roads) which then dry out and become airborne by wind and moving vehicles; and
- Cutting of building materials (e.g. concrete blocks).

2.3.13 Measures outlined below are proposed to ensure the adequate mitigation procedures are in place for dust during the short temporary construction phase.

- Sheeting of vehicles transporting materials to and from Site;
- Ensuring that any stored soil materials set aside for re-use is covered to prevent wind erosion;
- Ensuring that construction materials are stored in the appropriate manner in accordance with the manufacturer's recommendations and in line with good practice. Powders and fine material will be stored in drums or containers that can be sealed;
- During construction, browsers will spray water onto Site hardstanding areas during day and / or windy periods to keep Site dust to a minimum.

Odour Control Measures

2.3.14 Construction works for the facility will not create any adverse odour impacts and therefore no control measures are required.

Lighting

2.3.15 During the construction phase it will be necessary to utilise security lighting within the temporary set down areas during the agreed working hours (when in darkness; i.e. early mornings and evenings). These areas will not be lit outside of the core working hours except for exceptional circumstances. The lighting will be focused to the set down and compound areas only, directed away from surrounding off-site habitats and inward facing. Furthermore, cowlings will be used to ensure light spill is limited to the temporary construction compound.

2.3.16 Adoption of the above measures will mitigate potential impacts to ecological and human receptors.

Operational Phase

2.3.17 Once operational, lighting within the Site will be limited to a low number of emergency lights above the access doors to the ISO Containers. Lighting will be directed downwards to avoid light pollution. Emergency lighting will be designed with the following measures:

- Luminaires will be LED based due to their sharp cut off and dimming capabilities. To reduce the blue light component, warm white light (2700Kelvin or lower) will be used.
- Luminaires will be mounted horizontally, with no upward tilt.
- Lights will be set on Passive Infrared (PIR) motion sensors and timers. Luminaires will be set on 1–2-minute timers to minimise illumination times.
- PIR motion sensor lighting will be used.

2.4 TRAFFIC MANAGEMENT

2.4.1 The Transport Statement which accompanied the planning application set out the predicted transport impact of the Development, including the likely trip generating potential of the Site, the likely vehicles needing access to the Site, and how this will be achieved.

2.4.2 During the construction period, there will be vehicle movements associated with the arrival and departure of Site staff and the delivery of plant and construction materials.

Details of site deliveries

Construction Vehicle Routing

2.4.3 The maximum vehicle size servicing the Site will be articulated vehicles of 16.5m in length.

- 2.4.4 The Development will utilise the existing private access from the west off Central Avenue via the internal private access road. Central Avenue connects to the A4241 and the M4, a major motorway running from London to Swansea, at Junction 41 (Baglan Interchange), c. 2km to the south-east of the Site.
- 2.4.5 The carriageway width on Central Avenue is c10m with the access junction benefiting from a c3.45m ghost island right turn lane. The access junction is a standard bell-mouth junction with white line markings.
- 2.4.6 The internal private access road is fairly narrow at c4.5m in width (from its connection with Central Avenue for the first 45m), it then widens to c7.5m in width for approximately 40m adjacent to the Site before reaching the access double gates, which are approximately 13.8m wide.
- 2.4.7 Two cars will be able to pass at low speed along the private access road. For HGV's the access road will operate as one-way, HGV's waiting to leave the Site will have good forward visibility of HGVs entering the Site and so will wait for vehicles to travel through the narrow section before arriving at the wider section.
- 2.4.8 A Delivery Management Plan is appended to this CEMP and will cover the construction and operation phases of the Development. All external contractors will be required to familiarise themselves with the Delivery Management Plan as a condition of their appointment. A dedicated Delivery Coordinator will be appointed to oversee and enforce the Delivery Management Plan, ensuring smooth and efficient site operations.

Construction Vehicle Movements

- 2.4.9 The construction phase of the HPF and HTFS would result in the temporary generation of construction and staff related traffic over a three to six month construction period
- 2.4.10 Table 2.1 below illustrates the anticipated maximum vehicle attraction per day during the construction phase of the Development. The numbers account for construction worker movements and deliveries to the Site over the three to six month construction period. This includes cranes required during construction.

Table 2.1: Construction Vehicle Movements

Vehicle Movements Per Day	Cars	Vans / SGVs	HGVs	Total
Construction Phase (Six Months)	10	10	4	24

- 2.4.11 An anticipated maximum of 12 trips per day will be required during the construction phase, or 24 two-way movements (in and out). It should be noted that this is the maximum number and vehicle movements will vary depending on the construction activities on Site.
- 2.4.12 The deliveries will be scheduled to arrive within a set timeslot to avoid school commute hours when possible (see Section 12.6).
- 2.4.13 A vehicle Swept-Path Analysis illustrating internal movements is shown within the Transport Statement which demonstrates that vehicles are able to access the compound, manoeuvre and leave the Site in a forward gear.
- 2.4.14 The plant and equipment will be delivered to the Site in a range of vehicles, primarily flatbed lorries.

Details for the loading and unloading of plant and materials

- 2.4.15 A temporary construction compound will be created within the existing hardstanding area of the Site.

Delivery vehicles will unload and load materials and plant within the temporary construction period.

- 2.4.16 The containers / plant will be lifted onto the existing hardstanding by crane and secured.

Details for the parking of vehicles of site operatives and visitors

- 2.4.17 During construction, 5 cars and 5 vans are envisaged per day for construction staff. The staff vehicles will be accommodated within the Site using informal parking. Staff will not be able to park anywhere on the Site – this will be established by the delivery co-ordinator to facilitate smooth ingress / egress. It is anticipated that between five to eight technicians will be required during the installation and assembly phase.
- 2.4.18 The Development includes 4 no. car parking bays along the southern boundary of the Site along with a cycle shelter with 5 bicycle parking spaces.
- 2.4.19 Once operational, two technicians and one supervisor will be required over three rotating shifts typically between 07:45 and 17:00. Staff will be encouraged to car share and use sustainable modes of transport to Site.
- 2.4.20 Site operatives during both the construction and operational phases for the Development will use these car parking spaces which is considered to be sufficient for the number of operatives required.
- 2.4.21 There will be no parking on the local highway network.

Storage of plant and materials used in constructing the development

- 2.4.22 The temporary construction compound, which will be within the existing hardstanding within the Site, will be the designated storage area for plant and materials used during the construction phase. Storage of construction materials will be as per best practice guidance to minimise any potential dust impacts.
- 2.4.23 All fuel storage areas should be fully bunded and in full compliance with UK Regulations.

Wheel washing facilities

- 2.4.24 There is no requirement for wheel washing facilities given the minimal level of construction on site. Notwithstanding, should there be a need to provide temporary cleaning facilities during the construction phase, a mobile power washer would be provided. When required, vehicles, equipment and plant will be washed in designated areas within the Site, where run-off can be isolated for treatment prior to disposal or reuse. Washdown areas will be bunded, with capabilities to collect wastewater.

Scheme for the erection of temporary/semi-temporary signage warning drivers of the presence of children and speed restrictions.

- 2.4.25 A comprehensive signage scheme will be implemented along the private access road to ensure safe and efficient movement of construction vehicles. Clear signage will be installed at the exit gates and on the internal private access road to notify drivers that other HGV's entering the Site have priority over those existing the Site. Speed limit signed will indicate a speed limit of 10mph. A waiting area will also be marked at the Site gates where HGV's will be required to hold position in the unlikely event that a HGV or other vehicle is entering the Site. Drawing No. **PRO1013/01/25 R1** appended to this CEMP illustrates proposed signages for the Site.
- 2.4.26 The developer will engage with other users of the access road so that they are aware of the Delivery Management Plan (covering both construction and operation phases) and the Delivery Co Ordinator will keep other users updated regarding vehicle movements ensuring that there is a lines of communication between all users.

2.5 WASTE

Scheme for recycling/disposing of waste resulting from demolition and construction works

- 2.5.1 The reduction of waste and the recycling of waste materials is a key environmental consideration during the construction phase. Materials such as packaging, plastic, metal, residual waste will be segregated and collected from Site by a permitted waste management operator.
- 2.5.2 The waste management hierarchy prescribes the most sustainable approach to resource management:
- Prevention and Minimisation – Reduce the amount of waste generated at each stage of the project;
 - Reuse of Waste – Maximising reuse of waste generated on Site. This will reduce the quantities of waste transported from Site;
 - Recycling of Waste – Segregating materials for collection and off-site management.
- 2.5.3 The following measures will be implemented to minimise waste generation during the construction phase:
- Ordering of materials will be on an 'as needed' basis to prevent over-supply and a requirement for take back for surplus stock with suppliers;
 - Use of materials pre-cut to length to avoid surplus waste generated on Site;
 - Use of suppliers that use the least amount of packaging on purchase products;
 - Correct storage and handling of goods to avoid damage resulting in unnecessary disposal and resupply;
 - Ensuring correct sequencing of operations; and
 - Use of reclaimed / recycling materials in the construction works wherever possible.

2.6 HOURS OF WORKING

Specified hours for deliveries

- 2.6.1 Construction deliveries to the Site will be carefully managed through a pre-scheduled allocation of time slots to minimise disruption and ensure efficient operations. Deliveries will be restricted to designated hours, specifically before 08:00, between 10:00 and 14:00 and after 16:00 to avoid peak periods.
- 2.6.2 Other construction traffic will be restricted to construction working hours of 07:30 – 19:30 hours Monday to Friday inclusive and 07:30 – 16:00 hours on Saturdays.

Details of restrictions to be applied during construction and demolition works (including timing, duration and frequency of works) to prevent noise or nuisance amenity issues to surrounding properties

- 2.6.3 As a worst-case scenario, the construction period is expected to last between three to six months with commissioning taking place concurrently during the last three months. The majority of plant and equipment will be delivered within the first three months, with the electrolyser already stored onsite, followed by the assembly and commissioning stages for the last three months when vehicle movements will reduce.
- 2.6.4 Construction work will be subject to working hour restrictions and will only take place between the following hours:
- Monday to Friday: 0730 to 1930;
 - Saturdays: 0730 hours to 1600; and
 - Sundays and Bank Holidays: No work / deliveries permitted
- 2.6.5 Under exceptional circumstances, working outside of these hours may be required however, this would be agreed with the LPA in advance.
- 2.6.6 Emergency working may extend beyond the times quoted above. For these purposes, "emergency"

means a situation where, if the relevant action is not taken, there will be adverse health, safety, security or environmental consequences that in the reasonable opinion of the undertaker would outweigh the adverse effects to the public (whether individuals, classes or generally as the case may be) of taking that action.

2.7 RESPONSIBLE PERSONS

Details of the persons and bodies responsible for activities associated with the CEMP and emergency contact details

- 2.7.1 The appointed construction contractors will have the responsibility for activities associated with the CEMP together with the planning conditions of the permission, contractual obligations to comply with the requirements of specifications, codes of practices, regulations and UK legislation.
- 2.7.2 An appointed Site Manager will have the responsibility of Health and Safety on Site including providing a daily update to a Health and Safety Board identifying potential hazards. All visitors to the Site will be required to sign in and adhere to on-Site Health and Safety practices. All personnel working on Site will be required to wear the appropriate Personal Protective Equipment (PPE) including a high visibility vest or jacket, steel toe cap boots, and a hard hat as well as any other activity-specific safety wear.
- 2.7.3 The Site Manager will manage and co-ordinate on-Site environmental activities and act as a point of contact for local residents. Effective liaison between the Site Manager and local residents will seek to ensure that any concerns are resolved quickly and efficiently.
- 2.7.4 The Site Manager will be responsible for communicating the CEMP to construction staff; fulfilling environmental obligations on Site; attending to any on-Site environmental incidents or concerns; reporting and monitoring any environmental incidents; and ensuring waste management procedures are followed.
- 2.7.5 Daily inspections will be carried out on Site. Where necessary, reporting will record environmental performance and any non-compliances with the detailed CEMP.

Emergencies

- 2.7.6 Procedures for a general response will be included in the Health and Safety Plan detailed to be prepared by the appointed contractor. This will state the chain of command and standby operatives and will be clearly advised to all Site operatives. The emergency contact details for the works will be clearly displayed at the Site.
- 2.7.7 A list of all nearby residential properties, downstream abstractors and other sensitive receptors that could be affected by an environmental incident will be compiled by the appointed contractor.
- 2.7.8 Lessons learnt will be reviewed and imparted to Site operatives through safety and environment briefings. The CEMP would be updated / amended where necessary.

2.8 ECOLOGICALLY APPROPRIATE WORKING METHODS

Working method statement (in accordance with 6.2 of the Preliminary Ecological Appraisal provided by FPCR)

- 2.8.1 The Ecological Appraisal submitted as part of the planning application concluded that the Development will not lead to significant effects on ecological features subject to mitigation measures.
- 2.8.2 The appointed contractor will comply with relevant legislation for protected species and habitats and should retain habitats intact and undisturbed, and where possible enhance natural habitats.

Pre-Construction Phase

- 2.8.3 Whilst the majority of the development area is existing hardstanding or gravel, the development will

result in the loss of a small area of low-value scrub containing ornamental species and ephemeral habitats established over the unoccupied peripheries of the existing hardstanding area.

- 2.8.4 The Site is bound to the west by mature trees which are out-with the planning permission boundary. During construction, measures to protect the off-Site trees and habitats following guidance in BS5837 will be placed where necessary. Protective fencing or other suitable barrier will be erected along the western boundary of the Site and around the calculated root protection areas of retained trees prior to the commencement of any construction work and once installed, the area protected will be regarded as a construction exclusion zone. Fencing will comprise typical construction fencing panels attached to scaffold poles driven vertically into the ground, a specification example is appended to this CEMP.
- 2.8.5 A banksman will supervise the transit of any construction vehicles where they are near retained trees. In addition any oil, cement or other material that is potentially injurious to trees should not be stacked or discharged within 10m of a tree stem.

During Construction

- 2.8.6 To ensure any indirect impacts associated with the construction phase on surrounding habitat and ecological designated sites are minimised, the appointed contractor will adopt the following measures where appropriate:
- Good Site managed will be implemented to avoid generation of excessive litter, dust, noise and vibration;
 - Establish Site boundary to prevent access to areas outside of working areas, particularly along the western boundary adjacent to the mature trees off-Site;
 - Workforce will be restricted to working areas through the erection of fencing to prevent accidental damage;
 - All areas of the Site shall be delineated on a regular basis so that vehicles are confined as appropriate to areas that can be subjected to appropriate dust control measures;
 - Surface water will be managed using the proposed drainage system;
 - Any potentially polluting substances will be stored in a controlled manner and their use controlled by Site management;
 - Where run-off water is contaminated with silt, this water must not be discharged or allowed to flow directly or indirectly into the water environment without treatment;
 - Water contaminated with oils or hydrocarbons will be tankered and taken away from the Site for treatment/disposal;
 - Spill kits will be readily available if required;
 - Cover trenches over night to prevent wildlife from falling in and becoming trapped resulting in injury or death; and
 - Restricted night-time working and minimal lighting directed away from surrounding retained habitats.
- 2.8.7 All operatives undertaking works on Site are to be briefed prior to the works commencing on the locations, status and protection requirements for all retained habitats.

Reptiles

- 2.8.8 The Ecological Appraisal concluded that losses of small areas of establishing vegetation and scrub during construction could kill/injure reptiles. Therefore, any removal of suitable vegetation, log piles and discarded materials should be removed with the following precautionary methods:
- Vegetation removal should be undertaken outside of the main hibernation period (mid-October to mid-March) when the daytime temperature is above 10°C;
 - Employment of passive displacement techniques that serve to encourage movement / restrict to more suitable habitats outside the Site boundary;
 - Any suitable reptile habitat clearance will utilise the strim and push method with two stage clearance. Vegetation will Initially be cut down to a height of no less than 50mm. Areas will

then be left for 30 minutes before being cleared to ground level to allow reptiles to disperse.

Breeding Birds

- 2.8.9 The Development will result in the removal of small areas of self-set scrub and construction activities have the potential during breeding bird season to negatively impact nesting birds within the small areas of scrub onsite. Any removal of the small areas of vegetation within the development footprint required will occur outside of the nesting bird season, which runs from Mid-March to September inclusive. If this is not possible, a nesting bird check under ecologist supervision will be undertaken prior to any removal of vegetation.
- 2.8.10 If nesting birds are found, an appropriate radius around the nest should be fenced off and checked periodically by a suitably experienced ecologist until the birds have fledged.

Hedgehog

- 2.8.11 Hedgehog presence was not identified onsite, however they are known in the local area. Any pipes or trenches within the Site that are to be left open overnight will be covered to prevent mammal access. Inspections will take place each morning to ensure no mammals have become trapped overnight. Should a mammal be trapped an ecologist will be called immediately for further advice.
- 2.8.12 Removal of log piles and discarded materials shall be removed as per the precautionary methods set out in paragraph 2.8.8 above.

Non-Native Invasive Species

- 2.8.13 Small areas of Cotoneaster Sp. Were recorded within the willow scrub within the planning application boundary but outside the Development area. Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) makes it an offence to cause the species listed on this Schedule to grow in the wild, including through moving contaminated soil or plant cuttings. This plant will be removed as per the below method statement:

- Areas where the species is present should be clearly marked out on Site and works should be avoided in these areas until removal has taken place;
- No strimming should be undertaken in areas where invasive species are known or suspected to be present;
- Small seedlings can be removed by hand, although care must be taken to ensure the roots are removed;
- Larger plants will need to be removed and the soil excavated to remove the roots;
- It is recommended that the soil is excavated to a depth of at least 1m and that a buffer of at least 2m around the plants is removed to ensure that all roots are removed;
- Ideally removal should be undertaken when seed heads/fruits/berries are not present, as dropping these can result in further spread;
- Plant material from these species or soil contaminated with plant material should be classified and controlled waste and treated accordingly; and
- If being taken to an authorised landfill or suitable offsite disposal Site, such materials should be covered during transport and a registered waste carrier should be used.

Habitat Enhancement

- 2.8.14 Given the nature of the existing surfacing of the Site being hard standing and stone chippings, there is minimal room for ecological enhancements. However, the proposed Green Infrastructure features included as part of the Development include:
- Existing green linkages surrounding the Site retained and protected;
 - Existing vegetation surrounding the Site retained;
 - An area of modified grassland on the verge off the private access road will be enhanced.

- 2.8.15 A Ecological Enhancement Plan presented on Drawing No. **PRO1013/01/92** appended to this CEMP identifies the area of modified grassland on the verge of the private access road where Ecological Enhancements will be delivered. It is proposed to sow the grassland verge with seed mix EM3 Special General Purpose Meadow Mixture or similar. This meadow mixture contains a wide range of species and is used to create a very diverse sward where conditions vary across the Site. Further details can be found within the Ecological Enhancement Details provided as part of the planning application.

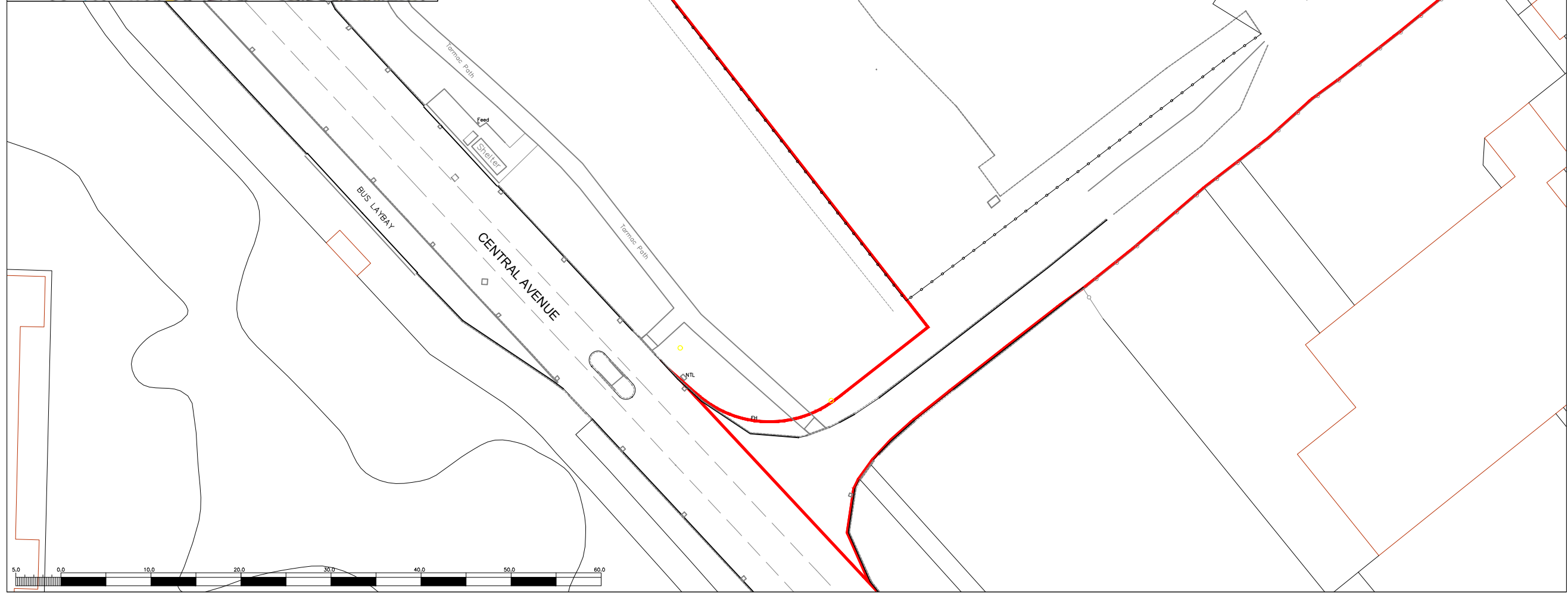
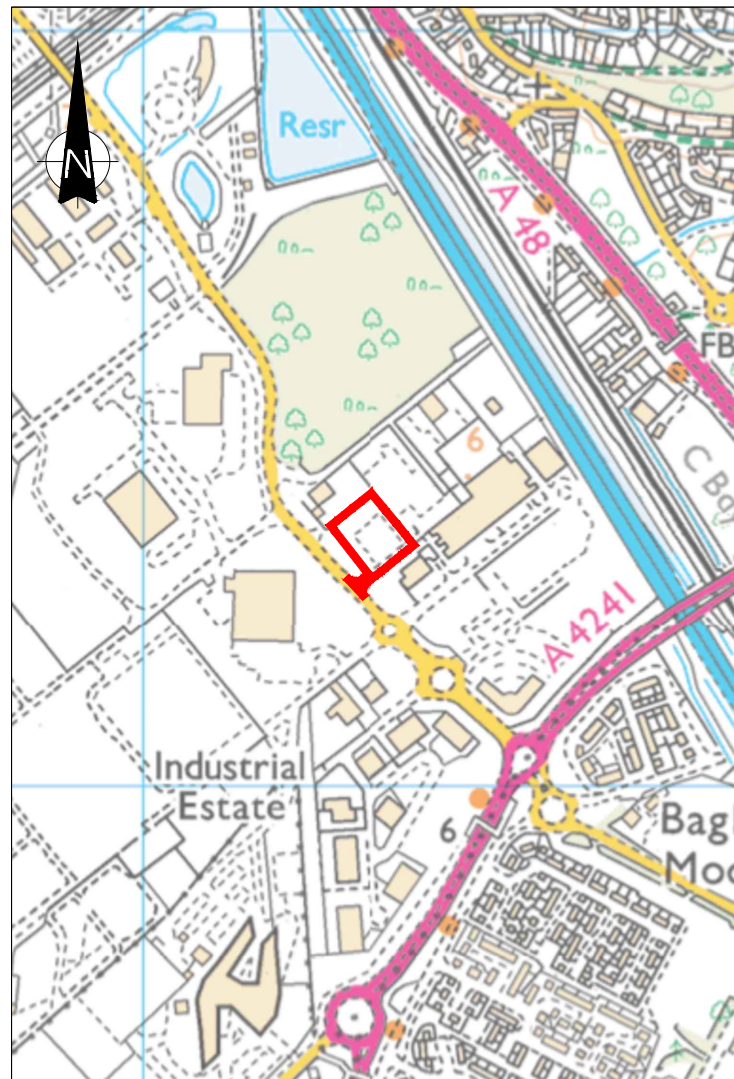


3. CONCLUSIONS

3.1 CONCLUSION

- 3.1.1 The purpose of this Construction Environmental Management Plan is to detail appropriate operational and pollution protection procedures, that will be adopted by the appointed contractor for the construction of the Hydrogen Production Facility and Hydrogen Tube-Trailer Filling Station, on a parcel of land within an existing industrial estate off Central Avenue, Port Talbot
- 3.1.2 The purpose of this document is to demonstrate the scope of measures be put in place during the construction phase to adequately protect the identified environmental resources and sensitive receptors, including human receptors.
- 3.1.3 This CEMP will form the basis of operations on Site, however it should be continuously reviewed and developed by the appointed contractor.





THIS INFORMATION IS CONFIDENTIAL AND THE PROPERTY OF SIRIUS. IT IS RELEASED ON CONDITION THAT NONE OF THE INFORMATION SHALL BE DISCLOSED TO ANY THIRD PARTY OR REPRODUCED IN WHOLE OR PART WITHOUT THE PRIOR CONSENT IN WRITING OF SIRIUS.

KEY
SITE BOUNDARY

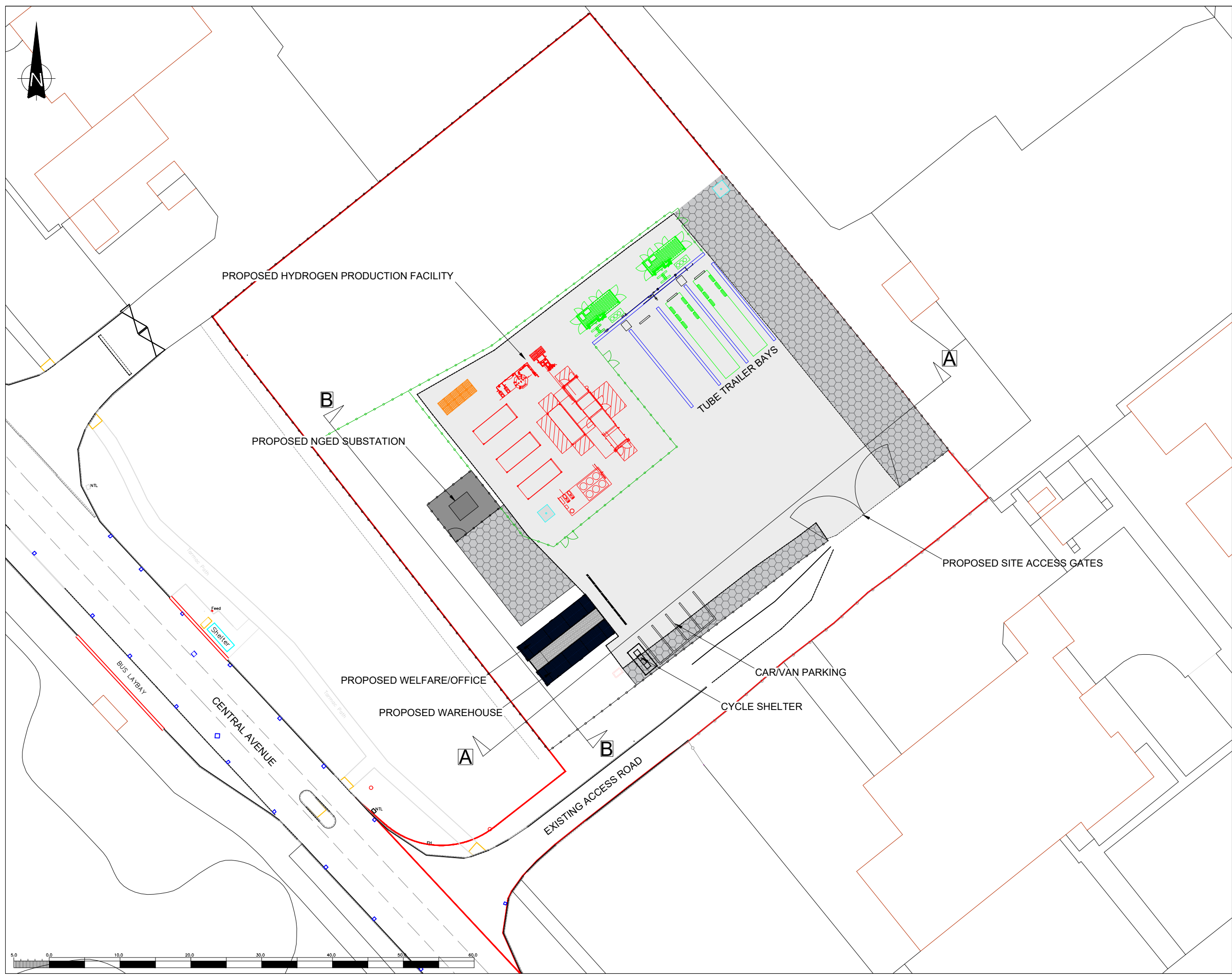
REV	DESCRIPTION	DATE	BY
-----	-------------	------	----



JOB TITLE
RE PLANT, PORT TALBOT
PROPOSED HYDROGEN
PRODUCTION FACILITY

DRAWING TITLE
SITE LOCATION PLAN

DRAWN S.T	DATE 11/3/2025	APPROVED F.W	DATE 11/3/2025
SCALE 1:10000 1:500	SHEET A3L	DRAWING NUMBER PRO1013/01/01	REVISION 0



THIS INFORMATION IS CONFIDENTIAL AND THE PROPERTY OF SIRIUS. IT IS RELEASED ON CONDITION THAT NONE OF THE INFORMATION SHALL BE DISCLOSED TO ANY THIRD PARTY OR REPRODUCED IN WHOLE OR PART WITHOUT THE PRIOR CONSENT IN WRITING OF SIRIUS.

NOTES

1. SEE DRAWING NUMBER PRO1013/01/06 FOR SECTIONS

KEY

- PLANNING APPLICATION BOUNDARY
- EXISTING 1.8m HIGH HERAS FENCE
- EXISTING 2.4m HIGH PALISADE FENCE
- PROPOSED 2.4m HIGH PALISADE FENCE
- PROPOSED ARMCO BARRIER
- EXISTING TARMAC
- PROPOSED CONCRETE
- EXISTING PERMEABLE AREAS

REV	DESCRIPTION	DATE	BY

CLIENT

PROTIUM

sirius Planning

4245 Park Approach, Thorpe Park, Leeds. LS15 8GB. 0113 264 9960

JOB TITLE

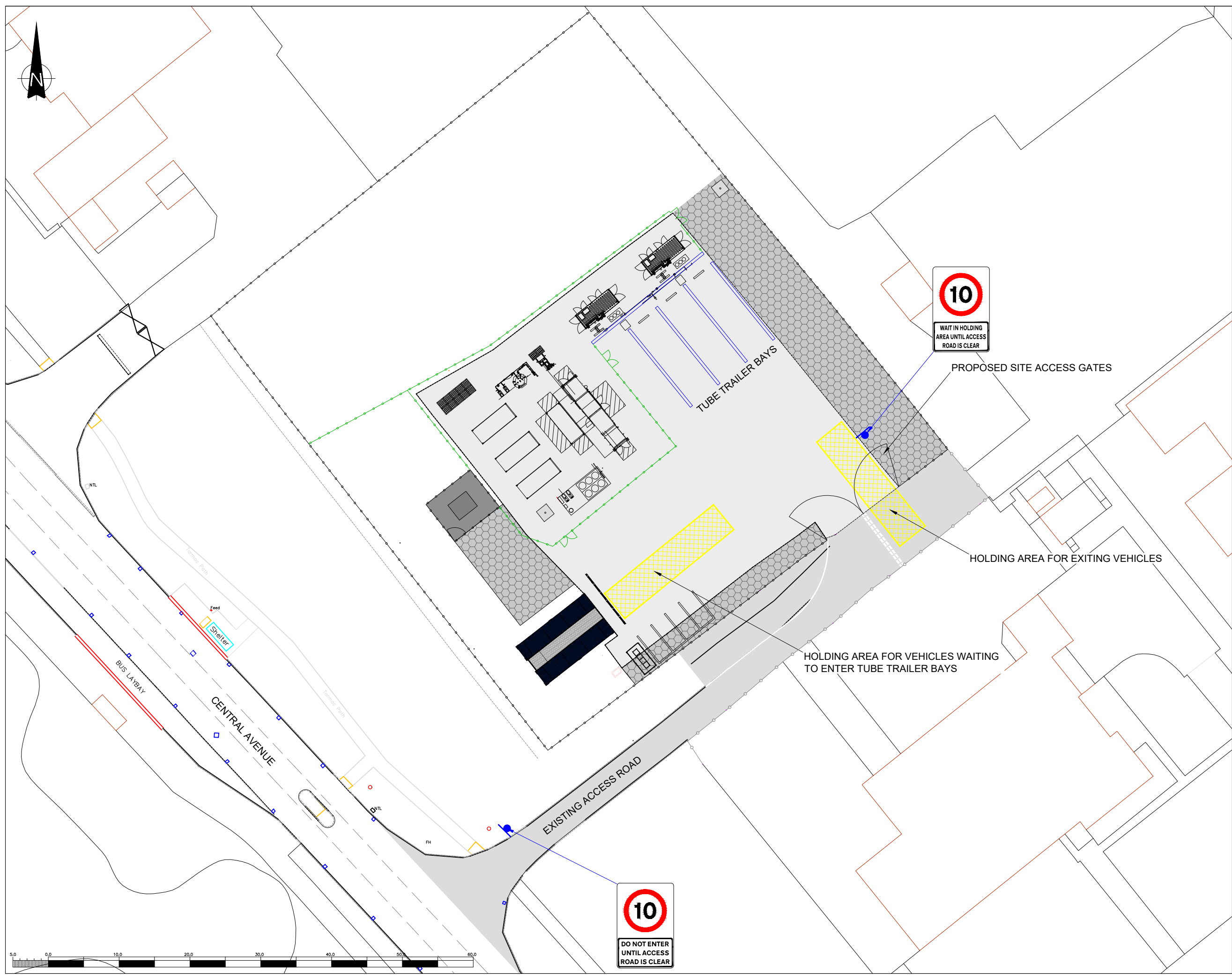
RE PLANT, PORT TALBOT
PROPOSED HYDROGEN
PRODUCTION FACILITY

DRAWING TITLE

PROPOSED SITE LAYOUT

DRAWN	DATE	APPROVED	DATE
S.T	31/3/2025	F.W	31/3/2025

SCALE	SHEET	DRAWING NUMBER	REVISION
1:500	A3L	PRO1013/01/03	0



THIS INFORMATION IS CONFIDENTIAL AND THE PROPERTY OF SIRIUS. IT IS RELEASED ON CONDITION THAT NONE OF THE INFORMATION SHALL BE DISCLOSED TO ANY THIRD PARTY OR REPRODUCED IN WHOLE OR PART WITHOUT THE PRIOR CONSENT IN WRITING OF SIRIUS.

NOTES

KEY

- EXISTING 1.8m HIGH HERAS FENCE
- EXISTING 2.4m HIGH PALISADE FENCE
- PROPOSED 2.4m HIGH PALISADE FENCE
- PROPOSED ARMCO BARRIER
- EXISTING HARDSTANDING
- PROPOSED CONCRETE
- EXISTING PERMEABLE AREAS
- PROPOSED SIGN

REV	DESCRIPTION	DATE	BY
1	SIGNS AMENDED.	1/8/2025	S.T

CLIENT

PROTIUM

sirius Planning

4245 Park Approach, Thorpe Park, Leeds. LS15 8GB. 0113 264 9960

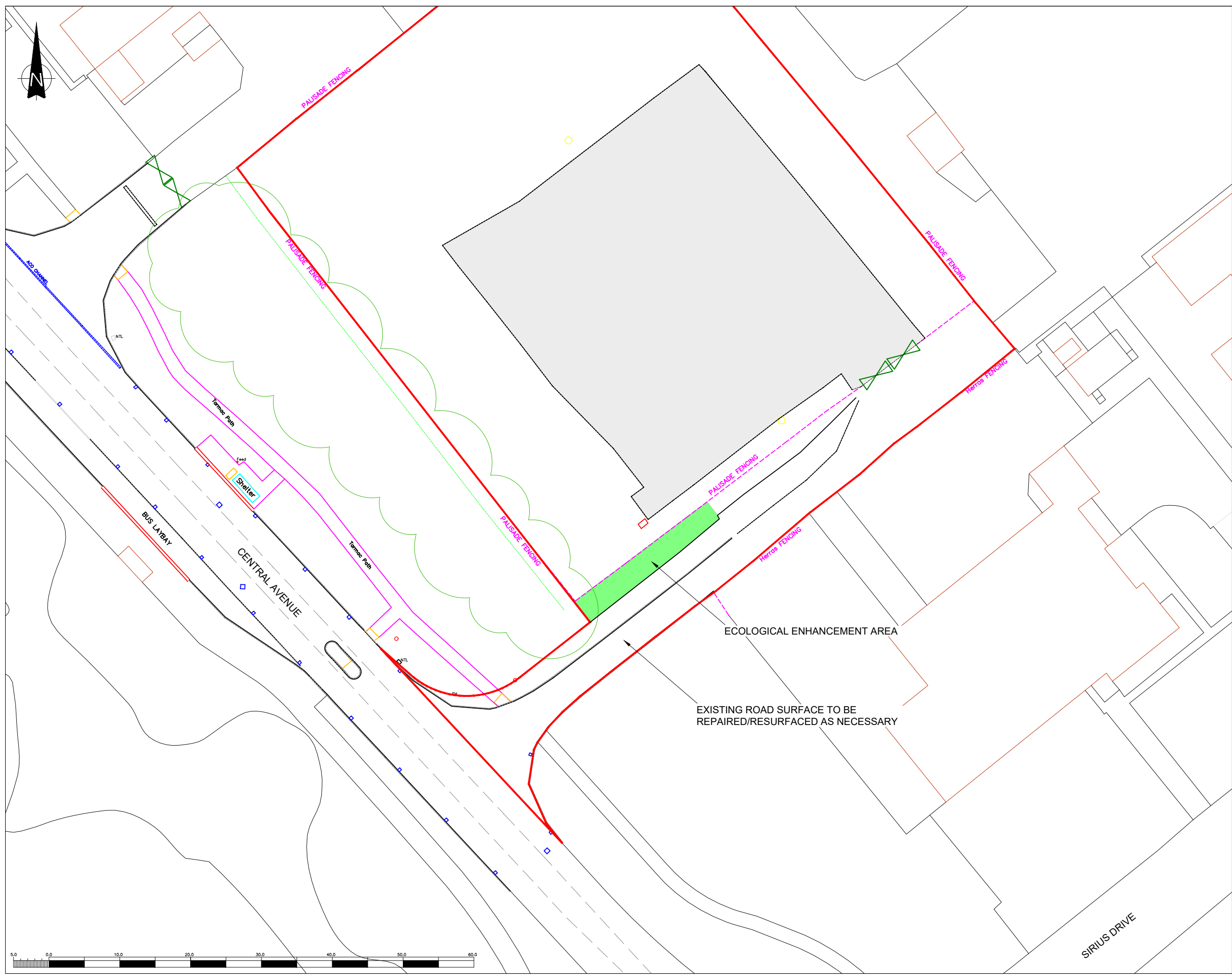
JOB TITLE

RE PLANT, PORT TALBOT
PROPOSED HYDROGEN
PRODUCTION FACILITY

DRAWING TITLE

PROPOSED ROAD MARKINGS
AND SIGNAGE

DRAWN	DATE	APPROVED	DATE
S.T	1/8/2025	F.W	1/8/2025
SCALE	SHEET	DRAWING NUMBER	REVISION
1:500	A3L	PRO1013/01/25	1



THIS INFORMATION IS CONFIDENTIAL AND THE PROPERTY OF SIRIUS. IT IS RELEASED ON CONDITION THAT NONE OF THE INFORMATION SHALL BE DISCLOSED TO ANY THIRD PARTY OR REPRODUCED IN WHOLE OR PART WITHOUT THE PRIOR CONSENT IN WRITING OF SIRIUS.

NOTES

KEY

- PLANNING APPLICATION BOUNDARY
- ECOLOGICAL ENHANCEMENT AREA

REV	DESCRIPTION	DATE	BY

CLIENT

PROTIUM

4245 Park Approach, Thorpe Park, Leeds. LS15 8GB. 0113 264 9960

JOB TITLE

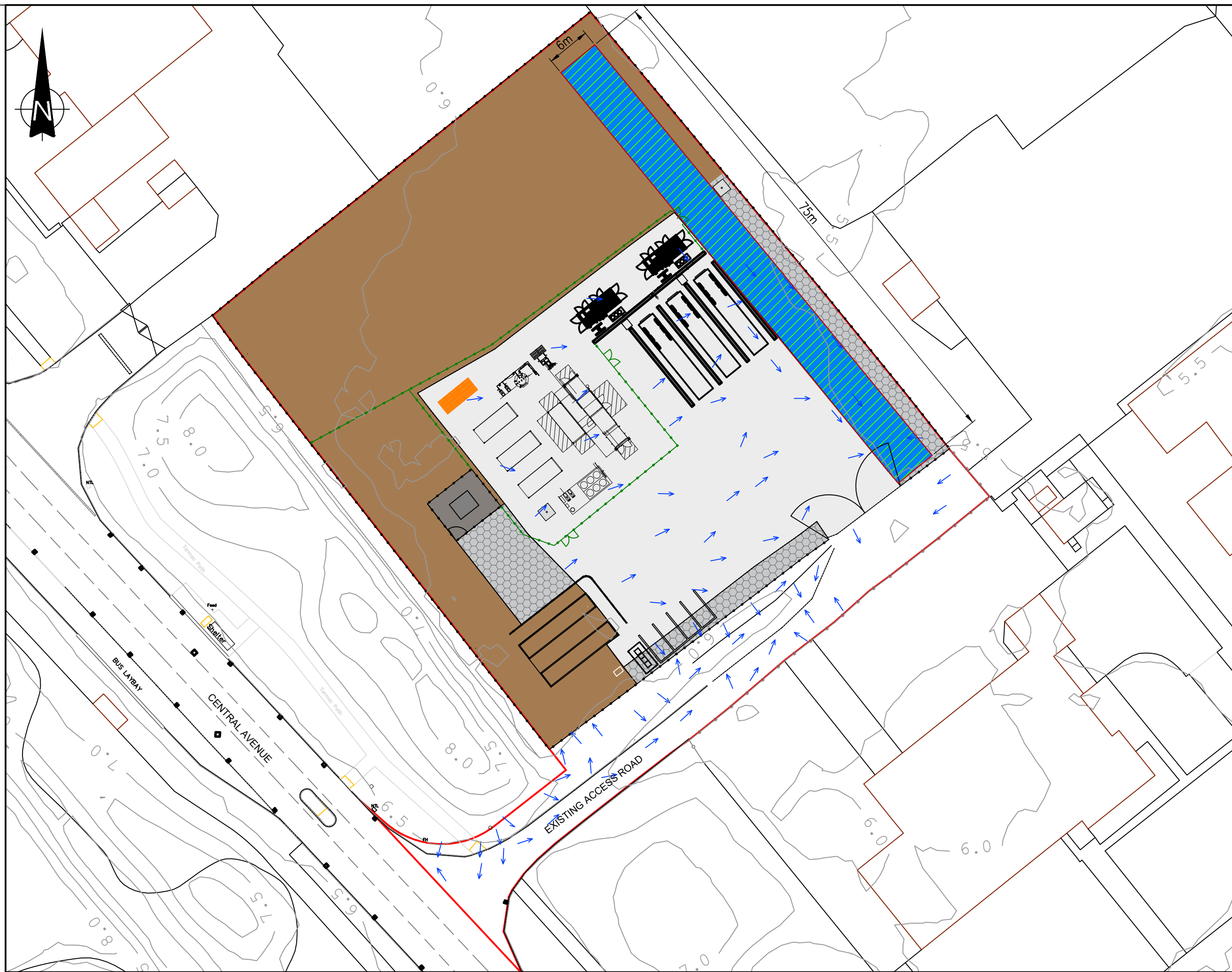
RE PLANT, PORT TALBOT
PROPOSED HYDROGEN
PRODUCTION FACILITY

DRAWING TITLE

ECOLOGICAL ENHANCEMENT

DRAWN	DATE	APPROVED	DATE
S.T	12/5/2025	F.W	12/5/2025

SCALE	SHEET	DRAWING NUMBER	REVISION
1:500	A3L	PRO1013/01/92	0



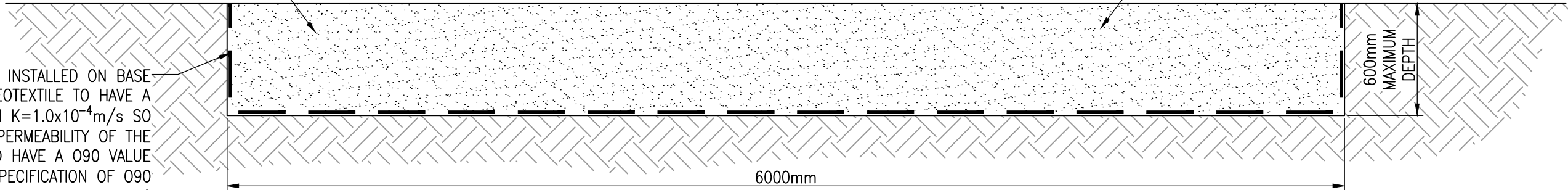
PLAN SHOWING LOCATION OF
PROPOSED INFILTRATION TRENCH

SCALE 1:500

INFILTRATION TRENCH SHALL BE FILLED WITH
TYP B FILTER GRAVEL IN ACCORDANCE WITH
CLAUSE 505 OF SHW (WHERE THIS IS NOT
POSSIBLE 4 - 40mm GRAVEL IN
ACCORDANCE WITH BS:7533:13 IS ACCEPTABLE

INFILTRATION TRENCH GRAVEL TO HAVE A
MINIMUM POROSITY OF 30%

FILTRATION GEOTEXTILE TO BE INSTALLED ON BASE
AND UP SIDES. FILTRATION GEOTEXTILE TO HAVE A
PERMEABILITY GREATER THAN $K=1.0 \times 10^{-4} \text{m/s}$ SO
THAT IS GREATER THAN THE PERMEABILITY OF THE
ADJACENT SOIL. GEOTEXTILE TO HAVE A 090 VALUE
OF 120 MICRONS (EXACT SPECIFICATION OF 090
VALUE TO BE CONFIRMED DURING CONSTRUCTION)



TYPICAL CONSTRUCTION DETAIL OF
PROPOSED INFILTRATION TRENCH

SCALE 1:25

THIS INFORMATION IS CONFIDENTIAL AND THE PROPERTY
OF SIRIUS. IT IS RELEASED ON CONDITION THAT NONE OF THE
INFORMATION SHALL BE DISCLOSED TO ANY THIRD PARTY OR
REPRODUCED IN WHOLE OR PART WITHOUT THE PRIOR
CONSENT IN WRITING OF SIRIUS.

NOTES

1. ALL DIMENSIONS IN MILLIMETRES AND ALL
LEVELS IN METRES ABOVE ORDNANCE DATUM.
2. DO NOT SCALE FROM THIS DRAWING.
3. ANY ANOMALIES IDENTIFIED WITH THE
DETAILS SHOWN ON THIS DRAWING ARE TO BE
BROUGHT TO THE ATTENTION OF SIRIUS
ENVIRONMENTAL PRIOR TO CONSTRUCTION
WORKS COMMENCING.

KEY

- PLANNING APPLICATION
BOUNDARY
- EXISTING 1.8m HIGH
HERAS FENCE
- EXISTING 2.4m HIGH
PALISADE FENCE
- PROPOSED 2.4m HIGH
PALISADE FENCE
- PROPOSED ARMCO BARRIER
- EXISTING TARMAC
- PROPOSED CONCRETE
- EXISTING NATURAL GROUND NON
IMPERMEABLE SURFACING
- PROPOSED PERMEABLE
AREAS
- PROPOSED INFILTRATION
TRENCH LOCATION
- PROPOSED SUDS AREA
- EXCEEDANCE ROUTES

1	DRAWING SHEET SIZE AMENDED, PROPOSED DESIGN	24/07/25	MCC
REV	DESCRIPTION	DATE	BY

CLIENT

PROTIUM

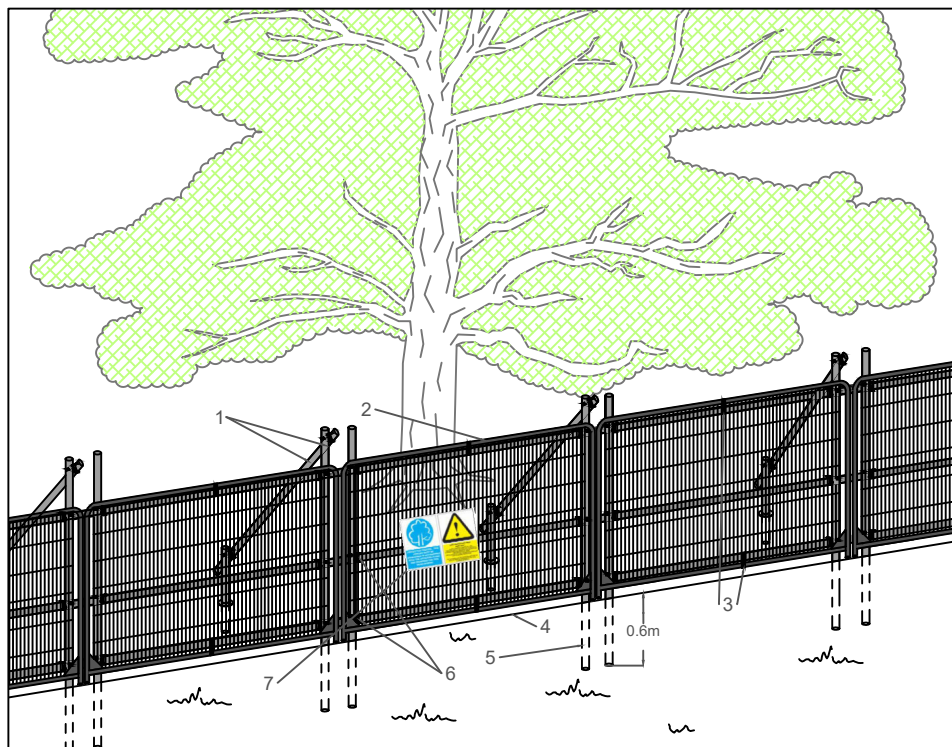


JOB TITLE
RE PLANT, PORT TALBOT
Proposed Hydrogen Production Facility

DRAWING TITLE
Proposed Infiltration Trench
General Arrangement and
Construction Details

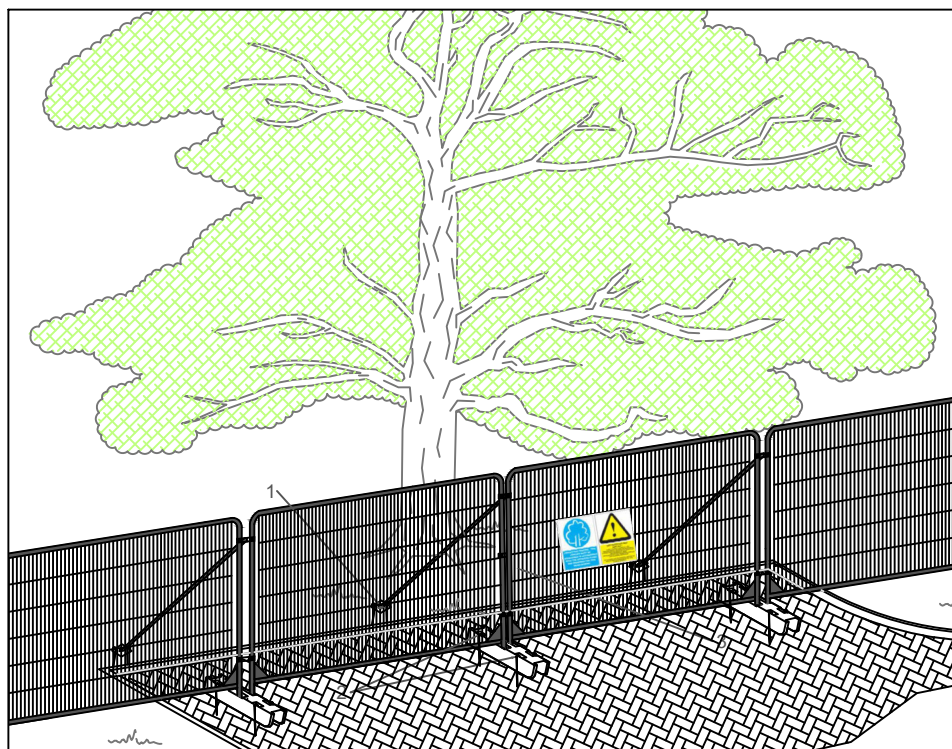
DRAWN	DATE	APPROVED	DATE
M.C	02/05/2025	J.D	02/05/2025

SCALE	SHEET	DRAWING NUMBER	REVISION
As Shown	A2L	PRO1017/02/01	1



Specification for High Intensity Protection Barrier

1. Standard scaffold poles
2. Heavy gauge 2m tall galvanized tube and welded mesh infill panels
3. Panels secured to scaffold frame with wire ties
4. Ground level
5. Uprights driven into the ground until secure (min depth of 0.6m)
6. Standard scaffold clamps
7. Construction Exclusion Zone signs



Specification for Low Intensity Protection Barrier

1. Stabiliser strut with base plate secured with ground pins
2. Feet blocks secured with ground pins
3. Construction Exclusion Zone signs

APPENDIX B PROTECTIVE FENCING SPECIFICATIONS

This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without written consent of FPCR Environment and Design Ltd.

Ordnance Survey Mastermap - Crown Copyright. All rights reserved.
Licence Number: 100019980 (Centremapslive.com).

FPCR | environment
& design



Operational Delivery Management Plan

Pioneer 2 Planning Application

MARCH 2025



Document Number	Document Title	Revision	PROTIUM 
	Operational Delivery Management Plan	00	

Revision History

Date	Revision	Reason for Issue	Prepared by	Checked by	Approved by	QA by
07/03/2025	00	Internal Review	PD	WS	NB	NB

Abbreviations

Abbreviation	Description
HPF	Hydrogen Production Facility
HTT	Hydrogen Tube Trailer
HTTFS	Hydrogen Tube Trailer Filling Station

Document Number	Document Title	Revision	PROTIUM 
	Operational Delivery Management Plan	00	

TABLE OF CONTENTS

1	Introduction.....	4
1.1	Statement Purpose.....	4
2	Site Operation	5
2.1	Hours of Operation.....	5
2.2	Opening Hours – Hydrogen Tube Trailers	5
2.3	Opening Hours – Commercial Vehicles.....	5
2.4	Staff Movements.....	5
2.5	Vehicle Movements.....	5
3	Delivery Management Plan	6
3.1	Delivery Coordinator.....	6
3.2	Delivery scheduling	6
3.3	Traffic & Waiting Management.....	6
3.4	Onsite Vehicle Routing & Forward Gear Entry/Exit	6
3.5	Signage & Access Control.....	6
3.6	Staff Training	7
3.7	HTT Trip Restriction Compliance	7
3.8	HTT management.....	7
4	Conclusion	7

TABLE OF TABLES

Table 1: Number of Vehicle Movements Per Day - Construction Phase.....	5
Table 2: Number of Vehicle Movements Per Day - Operational Phase	5

Document Number	Document Title	Revision	PROTIUM 
	Operational Delivery Management Plan	00	

1 INTRODUCTION

1.1 STATEMENT PURPOSE

This Operational Delivery Management Plan has been prepared by Protium Green Hydrogen Supply Limited (PGHS Ltd.) for Pioneer 2, a development proposal (collectively referred to as the Proposed Development) consisting of the following elements:

- An Electrolytic Hydrogen Production Facility (HPF) and associated compression and storage.
- A Hydrogen Tube-Trailer Filling Station (HTTFS).

On the 14th of January 2025, Protium met with Nicholas Waters and Matthew Griffiths of Neath Port Talbot Council to discuss site access at the Proposed Development. During this meeting, Protium proposed a traffic management system for Hydrogen Tube Trailers (HTTs) arriving and leaving the Site. This Operational Delivery Plan forms an Appendix to the Transport Statement attached to the Planning Statement and following planning award it will form a standalone document that will be retained within the Site file and used on a day to day basis to manage traffic flows to and from the Site..

Following this meeting, an abridged Transport Statement was issued to Matthew Griffiths and Nicholas Waters, detailing the Site access proposals. Nicholas Waters later confirmed in his response (24th of February 2025) that the proposed traffic management plan could be accepted in principle, subject to the submission of an Operational Delivery Management Plan. Therefore, the purpose of this Statement is to stratify this request by addressing the following key topics:

- **Delivery Timeslots** - The site is accessed off a Safe Route to School and therefore deliveries should avoid times of school commute.
- **Commercial Deliveries** - How commercial deliveries will be managed to avoid any commercial delivery vehicle waiting on the public highway.
- **Internal Routing** – The route delivery vehicles will take within the site, ensuring they can enter and exit in a forward gear.
- **Service Yard Management** - How delivery vehicles will be managed in the service yard area.
- **Parking and Holding Areas** – Allocation of offsite parking/holding areas should two vehicles arrive at the site outside of their permitted slot
- **Site Coordinator** - Nomination of a coordinator to operate and control the Delivery Management Plan.

Full details of the Proposed Development and a Site description are provided in the planning statement and accompanying appendices so will not be repeated here.

This Delivery Management Plan has been developed alongside and has been informed by the Transport Statement that accompanies the Planning Application. As a result, the approach to the management of vehicle's accessing the Site has changed particularly as traffic data has not been obtained for the private access road and the access junction with Central Avenue. The findings of the Transport Statement are that additional HTT movements can be accommodated at the Site based on the number of HGV' s that are currently using the Site and the number of vehicles that the Site would generate in the event that it was used for more intensive B8 industrial uses that would not require a bespoke planning permission

Document Number	Document Title	Revision	PROTIUM 
	Operational Delivery Management Plan	00	

2 SITE OPERATION

The levels of traffic generated by the Proposed Development are detailed below

2.1 HOURS OF OPERATION

Once commissioned the HPF will run for twenty-four hours, seven days a week, except during shutdown periods. There will be two planned shutdown periods annually.

2.2 OPENING HOURS – HYDROGEN TUBE TRAILERS

Hydrogen Tube Trailers will be able to access the Site on a twenty-four-hour basis. However, HTT movements to and from the site will only be scheduled for before 08.00, between 10:00 and 14:00, and after 16:00, in order to avoid peak traffic periods.

2.3 OPENING HOURS – COMMERCIAL VEHICLES

The Site will only be available for routine deliveries of consumables and spares for example between the hours of 07.00 am to 19.00. Commercial deliveries will typically be pre notified to ensure that vehicles do not arrive when HTTs are expected to leave or when there is due to be a change in shifts.

2.4 STAFF MOVEMENTS

The Site will be staffed on a three shifts per day basis typically between 07:45 and 17:00.

2.5 VEHICLE MOVEMENTS

2.5.1 Construction Phase

Table 1 below illustrates the anticipated maximum vehicle generation per day during the construction phase of the Proposed Development. The numbers account for construction worker movements and deliveries to site over a six-month construction period.

Vehicle Movements Per Day	Cars	Vans / SGVs	HGVs	Total
Construction Phase (Six Months)	10	10	4	24

Table 1: Number of Vehicle Movements Per Day - Construction Phase

An anticipated maximum of 24 trips per day will be required during the construction phase,

2.5.2 Operational Phase

Table 2 below shows the anticipated maximum vehicle movements per day in the operational phase of the Proposed Development. The numbers account for site operatives, deliveries and any required effluent removal from site.

Vehicle Movements Per Day	Cars	Vans / SGVs	HGVs	Total
Operational	6	4	8	18

Table 2: Number of Vehicle Movements Per Day - Operational Phase

A maximum of 18 trips per day will be generated during the operational phase of the Proposed Development. Further information is provided in the Transport Statement attached to the Planning Statement.

Document Number	Document Title	Revision	PROTIUM 
	Operational Delivery Management Plan	00	

3 DELIVERY MANAGEMENT PLAN

3.1 DELIVERY COORDINATOR

A dedicated Delivery Coordinator will be appointed to oversee and enforce the Delivery Management Plan, ensuring smooth and efficient site operations. Their responsibilities will include scheduling and managing delivery slots, maintaining clear communication with drivers and logistics partners, monitoring compliance with the plan, and promptly addressing any unplanned delivery issues to minimise disruptions.

The Delivery Coordinator will monitor speeding incidents, and drivers found to be speeding will be addressed accordingly. Records of these instances will be maintained, and if speeding persists, appropriate disciplinary action will be implemented. The Delivery Coordinator will also ensure that visibility between the top and bottom of the access road remains unobstructed. A visual inspection of the access road will be made every day to ensure sight lines are maintained. If any reduction in visibility is noted, necessary action will be taken to trim or lop any branches on the southern end of the woodland plantation (tree line along the southwestern boundary of the Site).

3.2 DELIVERY SCHEDULING

Deliveries to the Site will be carefully managed through a pre-scheduled allocation of time slots to minimise disruption and ensure efficient operations. No deliveries will be scheduled during peak drop-off and pick-up periods. Instead, deliveries will be restricted to designated hours outside of these times, specifically before 08:00, between 10:00 and 14:00, and after 15:30 as referred to above. This approach is intended to reduce traffic impacts and ensure that conflicts along the private access road are avoided. The Delivery Coordinator will remain in contact with all HTTs to ensure that any deviations to planned time slots are managed to avoid conflict on the private access road.

3.3 TRAFFIC & WAITING MANAGEMENT

Commercial deliveries will be carefully managed to prevent conflict on the private access road. Commercial deliveries will be given a specific time slot to arrive at Site that avoids the planned arrival/departure of HTTs. Upon arrival at the Site drivers will be required to report to the Delivery Coordinator and their vehicles will be directed to an appropriate holding area within the Service Yard to avoid disrupting the normal operation of the Hydrogen Filling Station. Wait times will be minimised where possible.

3.4 ONSITE VEHICLE ROUTING & FORWARD GEAR ENTRY/EXIT

HTTs will enter the HPF service yard in a forward gear and pass beyond the tube trailer bays. Each driver will be informed which of the tube trailer bays they are required to access before they arrive at the Site by the Delivery Co Ordinator to avoid wait times in the Service Yard. HTTs will then reverse into the designated bay under the supervision the Delivery Coordinator. While HTT are reversing cones will be placed across the access gate to prevent conflicts with vehicles entering the Site. Incoming vehicles will be able to wait outside the Site entrance in the wider lower section of the access road so as not to block the access for other users.

3.4 SERVICE YARD MANAGEMENT

The Service Yard will feature clearly marked unloading zones to facilitate efficient vehicle turnaround and minimise delays. The Delivery Coordinator will guide HTTs to their designated delivery bay, ensuring smooth and coordinated movements. The Service Yard will include safety barriers and clear walkways on Site to ensure the safety of personnel on the Site.

3.5 SIGNAGE & ACCESS CONTROL

A comprehensive signage scheme will be implemented along the private access road to ensure the safe and efficient movement of HTTs. Clear signage will be installed at the exit gates and on the private access road to notify HTT drivers that HTTs and other vehicles entering the Site are to be given priority over those exiting the Site. A waiting area will be marked immediately outside of the site gates where HTT's will be required to hold position in the unlikely event that a HTT or other vehicles is entering the site.

The Applicant will engage with the other users of the access road so that they are aware of this Delivery Plan and that all users can use the private access road safely. The Delivery Co Ordinator will keep other users of the private access road updated regarding vehicles movements and ensure there are lines of communications between all users.

Document Number	Document Title	Revision	PROTIUM 
	Operational Delivery Management Plan	00	

3.6 STAFF TRAINING

New staff will be trained in the operation of this Delivery Plan by the Delivery Co Ordinator to ensure all Site operatives are aware of how the Delivery Plan is to be applied, and it will form part of the new staff site induction. This will provide redundancy in the event that the Delivery Co Ordinator is ever unavailable. It will be the responsibility of the site manager to record that the induction includes the operation of the Delivery Plan. New staff will be supervised until considered competent to manage the Delivery Plan.

3.7 HTT TRIP RESTRICTION COMPLIANCE

HTT arrivals will be restricted to a maximum of 4 per day to minimise conflict on the private access road. A log of all HTT arrivals and departures will be maintained to ensure compliance with this restriction. Any deviations from the agreed conditions will be documented, reported, and managed appropriately. Any instances where the Delivery Plan fails to operate effectively will be recorded and the matter investigated by the Site Manager. If required HTT drivers will be given refresher training to ensure that the requirement and operational procedure within the Delivery plan is understood and complied with. A record of all training will be maintained in the training log for each employee.

3.8 HTT MANAGEMENT

HTT'S will be managed to avoid them returning to the Site in the unlikely event that the Site is unavailable and when arrivals times would put them in conflict with other HTTs or staff commercial movements. Due to the nature of hydrogen supply and the tonnages that will be supplied to customers, HTT's will be able to remain at the customers site rather than return when the Site is closed or if their scheduling would put them in conflict with HTT's that are schedule to leave the Site. This gives the Delivery Co Ordinator significant control and flexibility over when HTT's return to Site and will allow conflict on the private access road to be avoided.

Protium will receive notice of when customers require additional supplies of Hydrogen so the scheduling of vehicles, their delivery routes and delivery times will be managed by the Delivery Co Ordinator.

4 CONCLUSION

This Operational Delivery Management Plan has been developed to address the concerns of NPTC highways department as a result of the limited width of the private access road that provides access to the Site. In order to minimise vehicles entering and leaving the site meeting on the restricted width section of the private access road, HTT's will be scheduled to arrive by the Delivery Co Ordinator to avoid peak times on Central Avenue particularly during school drop off and collection times.

The delivery Co Ordinator will manage scheduling and will be responsible for the coordination of HTTs movement in the Sites Service yard to ensure that HTT arrive and enter their designated filling bay quickly and efficiently. Vehicle numbers have been established based on the max tonnage of hydrogen that can be produced by the Proposed Development and have been established by the Trasport Statement of which this Delivery Plan is an Appendix.

The Delivery Co Ordinator will schedule all HTTS arriving and those exiting the Site sop that conflicts on the private access road are avoided. The Delivery Co Ordinator will be in contact with all HTT drivers to ensure any changes to scheduling or delays en-route are accounted for and scheduling updated as a result. Should HTTS need to remain at the customers site then this will be communicated to the HTT drivers and the customer.

Staff will be trained in the operation of the Delkivery Plan, so they remain familiar with it. Further there will be ongoing review to ensure that the Delivery Plan is applied correctly, that any failures in procedures are identified recorded, and the Delivery Plan/staff training is addressed to avoid future occurrences as with any Site operational procedures.

This Operational Delivery Plan ensures that Pioneer 2 can operate safely and that HTT and HGV do not meet on the private access road. The structured approach to scheduling, traffic management, and compliance monitoring will facilitate smooth operations while maintaining safety and regulatory compliance.



PROTIUM

For further information, please contact:

Protium Green Solutions Limited
Unit 104, 164-180 Union Street
London, SE1 0LH