

Utility Report

GHX001 | Site Infrastructure

Garth Wymott 2

608623-0000-PEV-GHX001 | -XX-RP-ME-0004

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S3 – Suitable for Review and Comment

05/08/2021



**Ministry of
JUSTICE**

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Document History

Issue	Date	Comment	Author	Chk'd
P01	16/04/2021	Suitable for Review and Comment	AR/SH	JA/AI
P02	23/04/2021	Updated Buried Cabling Section at 2.1 following Site Visit	AR/SH	JA/AI
P03	23/06/2021	Planning Description Added	AR/SH	JA/AI
P04	21/07/2021	Planning Notes Added	AR/SH	JA/AI
P05	05/08/2021	Legals comments incorporated	AI	JA

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1.0 Introduction

This report focuses on the new Garth Wymott 2 main prison site that is proposed to be developed on mainly undeveloped land adjacent to the existing men's prisons at HMP Garth and HMP Wymott in Lancashire.

Separate reports have been provided for the Boiler House and Bowling Green proposals that should be read in conjunction with this report.

The proposed site lacks significant developments and there will be a requirement for new building utility services including electrical supply, water supply and foul and surface water drainage provision.

Information on the foul and surface water drainage can be found in a separate report.

Site investigations have been conducted to identify the availability of existing utility services to the site and surrounding areas.

Existing site drawings have also contributed to the available knowledge of the proposed site.

The proposal is for a new Category C prison to house 1715 residents across 7 accommodation house blocks.

This site is covered by the following local authorities.

- Electricity Northwest Ltd [Local DNO]
- United Utilities [Water Authority]

2.0 Site Description

2.1 Existing Site

The proposed site is located to the north of the existing HMP Wymott and East of HMP Garth sites. The proposed site extends across several fields between these existing sites and with Ridley Lane boundary to the North and a diverted Pump House Lane to the East.



Existing Site & Proposed Site

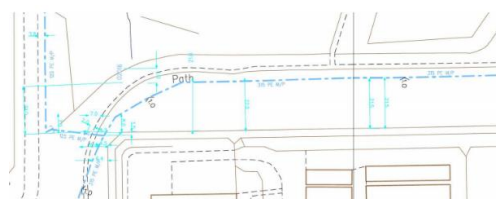
To construct the new Prison at the proposed location several existing buildings would require relocating along with the diversion of the identified buried services.

Within the red line boundary of the proposed site, we have the following: -

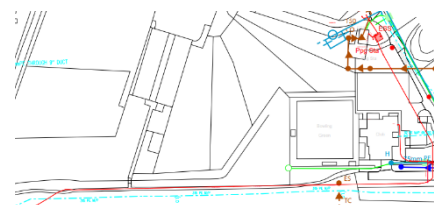
- Buried gas pipelines, high voltage cabling and Substation at the Pump House.
- A Bowls Club.
- Farm buildings.
- The existing sites boiler house.
- Existing Pump House [Covered by the civils report]

Buried gas services and HV Cabling and Substation.

The images below show the location of an existing medium pressure gas main, HV cable route and substation at the Pump House location that will need diverting to facilitate the development of the site. The buried services run in parallel with each other across the southern boundary line of the new site. Further investigation is required into the location and application of this equipment. Enabling works packages for this works may need to be instructed and locations for diverted services agreed.



Gas System Crossing Site



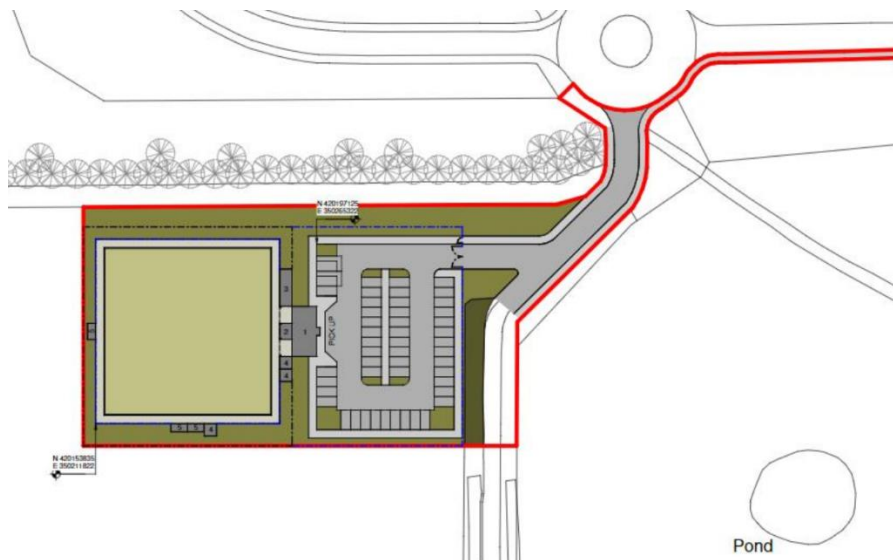
HV Cabling Crossing Site

We advise that these systems are identified precisely on site by the utility company responsible through a process of scanning and providing trial holes where necessary to enable a diversion scheme to be progressed. This may form part of the boiler house feasibility works that has just commenced if instructed.

The Bowls Club

The Bowls Club has now had some land prioritised for them just south of HMP Wymott to enable them to relocate. Applications have been made to the utility companies for new connections for water and electric.

Plans have been drawn up as shown below that provide a new facility with a connection to the local highway.



An electrical connection of 15kVA was made to Electricity Northwest to facilitate the small electrical demand required by the site.

To enable the electrical connection to this site Electricity Northwest will require a substation to be positioned locally as only HV cabling is in the vicinity. This is expected to be located between the car park and main road in a suitable GRP enclosure for a package substation.

An external lighting scheme has also been developed for this development that covers the car park, Bowling Green and connection to the local highway. This will be developed further with the highways agency and local authorities as we progress through the design stages, to ensure we meet the requirements for adoption or extension of existing systems. For further details on the Bowling Green please see 608623-0000-PEV-GHX0011-XX-RP-ME-0004

A new water connection has been made for the bowls club with United Utilities based on connections for 3 toilets a small kitchen and maintenance /ground irrigation / keeping supplies. This is still being processed and designed by United Utilities.

The Farm Buildings

We anticipate that the utility companies will have a process prior to the demolition of these existing buildings to identify and remove the connections for water and electricity back to the boundary of the site. We would expect that these cables will be traced and capped off leaving isolated [dead] services buried in the ground.

The Boiler House

The existing Boiler House will need to be relocated as part of an enabling works package to clear the site in preparation for the new development.

Due to nature and complexity around these works they are being considered in a separate document as part of a feasibility study.

2.2 Description of Development

The application site comprises 43.53 ha of land.

Individual site areas for each element:-

- New Prison = 18.4 ha
- Bowling Club = 0.63 ha
- Boiler House = 0.23 ha

Wider site area for Biodiversity Net Gain improvements within the RLB = 24.27 ha

The description of the proposed development is:-

Hybrid planning application seeking: Outline planning permission (with all matters reserved except for access, parking and landscaping) for a new prison (up to 74,531.71 sqm GEA) (Class C2A) within a secure perimeter fence following demolition of existing buildings and structures and together with associated engineering works; Outline planning permission for a replacement boiler house (with all matters reserved except for access); and Full planning permission for a replacement bowling green and club house (Class F2(c)).

The site address/description for the whole application/ scheme is: Land adjacent to HMP Garth and HMP Wymott, Leyland

The site location for each element is:

- New prison is: Land to the north of HMP Wymott
- New Bowling Green and club house is: Land to the south of HMP Wymott
- New Boiler House is: Land between HMP Wymott and HMP Garth

The indicative site layout proposes a range of buildings and facilities typical of a Category C resettlement prison, including:

- Seven new houseblocks each accommodating up to 245 prisoners (1,715 prisoners in total), totalling c.53,472 sqm GEA
- Supporting development including kitchen, workshops, kennels, Entrance Resource Hub, Central Services Hub and support buildings, totalling c.
- 21,060 sqm GEA
- Ancillary development including car parking (c. 525 spaces), internal road layout and perimeter fencing totalling 1326 linear meters enclosing a secure perimeter area of 10.5 ha

The house blocks will be four storeys (plus pitched roof) in height, whilst the other buildings will range from one to three storeys.

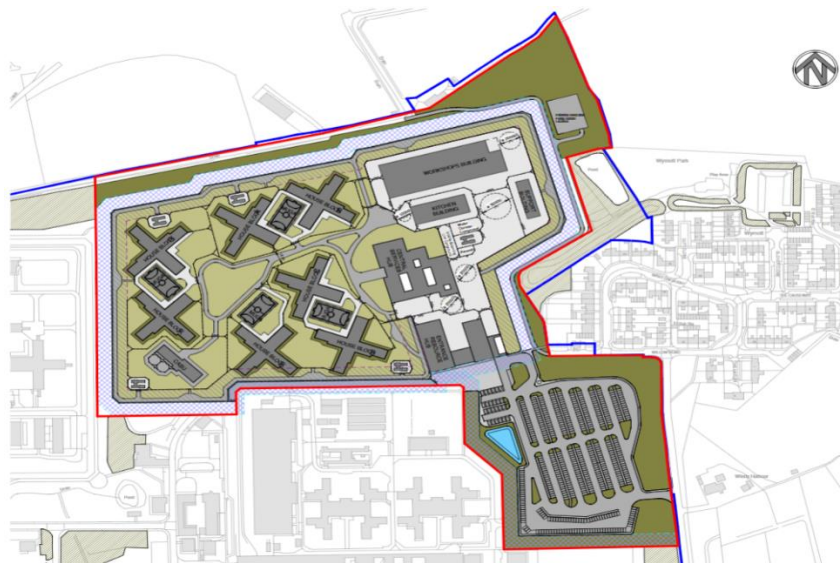
The new prison will be designed and built to be highly sustainable and to exceed local and national planning policy requirements in terms of sustainability. MoJ's aspirations include targeting near zero carbon operations, 10% biodiversity net gain, and at least BREEAM 'Excellent' certification, with endeavours to achieving BREEAM 'Outstanding'.

Parameters for the Bowling Club include:-

- Single storey in height
- Floor space =72 sqm GEA
- Car parking spaces = 37 no

3.0 Proposed Site

The site is to be developed to provide a new Category C Re-Settlement prison, to provide facilities for 1715 residents and 700 staff. Accommodation will be provided in 7 houseblocks, with several additional support buildings providing all necessary facilities.



Proposed Site Layout

4.0 Electrical Services

The new development will be an all-electric site to meet the zero carbon targets set out for the project. To facilitate the anticipated demand a Budget cost request for 6mVA has been applied for to Electricity North West Ltd.

A new application was made to Electricity North West Ltd and will supersede the original enquiry made by MACE.

Electricity North West Ltd have confirmed a connection is available for this proposal although infrastructure upgrades are necessary before a connection will be permitted. These are already planned works and as such this project is not expected to contribute towards this cost.

Electricity North West Ltd have stated that our connection will not be available to use until these upgrades are complete and this will be no earlier than 2024.

The chosen provider of electricity will terminate their new supply into a substation located within the carpark area. This location will be the end of the DNO service and allow them unrestricted 24hr access as they require and the start of the new private HV system that will supply the secure side of the Prison.

Also, for this stage initial external lighting plots have been designed and can be seen on the following report – External Lighting Report 608623-0000-PEV-GHX0011-XX-RP-ME-0011

This external lighting report and associated design shows the extent of the proposed lighting and also that we are within limitations expected for the designated environmental zone.

5.0 Potable Water & Fire Fighting

Applications have been made with United Utilities and applicable fees paid to progress the design, based on an estimation of the connected water load to serve all house blocks and ancillary support buildings of 10 l/s to facilitate the water demand and tank sizing we are expecting for the site.

United Utilities have recently confirmed that they require to undertake a review of their existing infrastructure to support this development and determine if any reinforcement is required.

Additional information has been supplied by PEV for United Utilities to complete this task.

The incoming Mains Water service will feed two separate tanks located within an External Water Service Compound (both complete with packaged booster pump sets) and terminating with one metered connection for Potable water and one unmetered connection for firefighting.

6.0 Communications

The MoJ are still to detail their requirements for telephones and data connections, and we expect the MoJ to make these applications based their needs.

A diverse incoming below ground ducting system will be provided to the Entrance Resource Block to facilitate the incoming provision from the service provider, from here communication services will distribute around the site to each block.

7.0 Conclusions

Early discussions have been held with the local utility providers for this project and these will continue through the next stages with designs developed should we progress.