

A large teal graphic element on the left side of the page, consisting of a triangle at the top and a trapezoid below it, forming a shape that resembles a stylized stadium or a modern building facade.

Oxford United New Stadium Development

Utilities Statement

February 2024

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Utilities Statement

February 2024

Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description
P01	Sep 23	A Azizi P McBride P Heath D McMahon	A Homewood	S Mills	Planning issue
P02	Feb 24	B Fielding	P McBride	S Mills:	Planning Issue update

Document reference: 100111993 | P02 |

Information class: Standard

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1 Introduction

1.1 Purpose of document

The purpose of this report is to outline the information available and obtained on the existing and proposed utilities across the proposed site, and how the proposed development will impact the surrounding existing utilities.

1.2 Proposed Development

The proposed development will be home to Oxford United Football Club (OUFC) due to their current stadium coming to the end of its tenancy at the end of the 2025-2026 season. The development will include a football stadium, a fan zone, seating provision, a hotel, and a car parking area. Alongside a new football stadium, the development also aims to provide potential transport links to the surrounding area, including a pedestrian and cycle connections and potential bus routes, leaning into the emphasis of a sustainable development.

1.3 Methodology

The utility information shown in the following sections is not exhaustive and will require further investigation works to confirm what utilities are present on site and to ascertain exact positioning prior to construction. The design will refer to guidance contained in BS 6031:2009 “Code of Practice for Earthworks”, HSG47 Health and Safety Executive “Avoiding Danger from Underground Services” and Street Works UK publications, for buried utility positions in external areas.

The utility information used is taken from a Ground Penetrating Radar (GPR) survey carried out by Solum Surveying Ltd and provided by Ridge and Partners in July 2023.

2 Existing Site Utilities

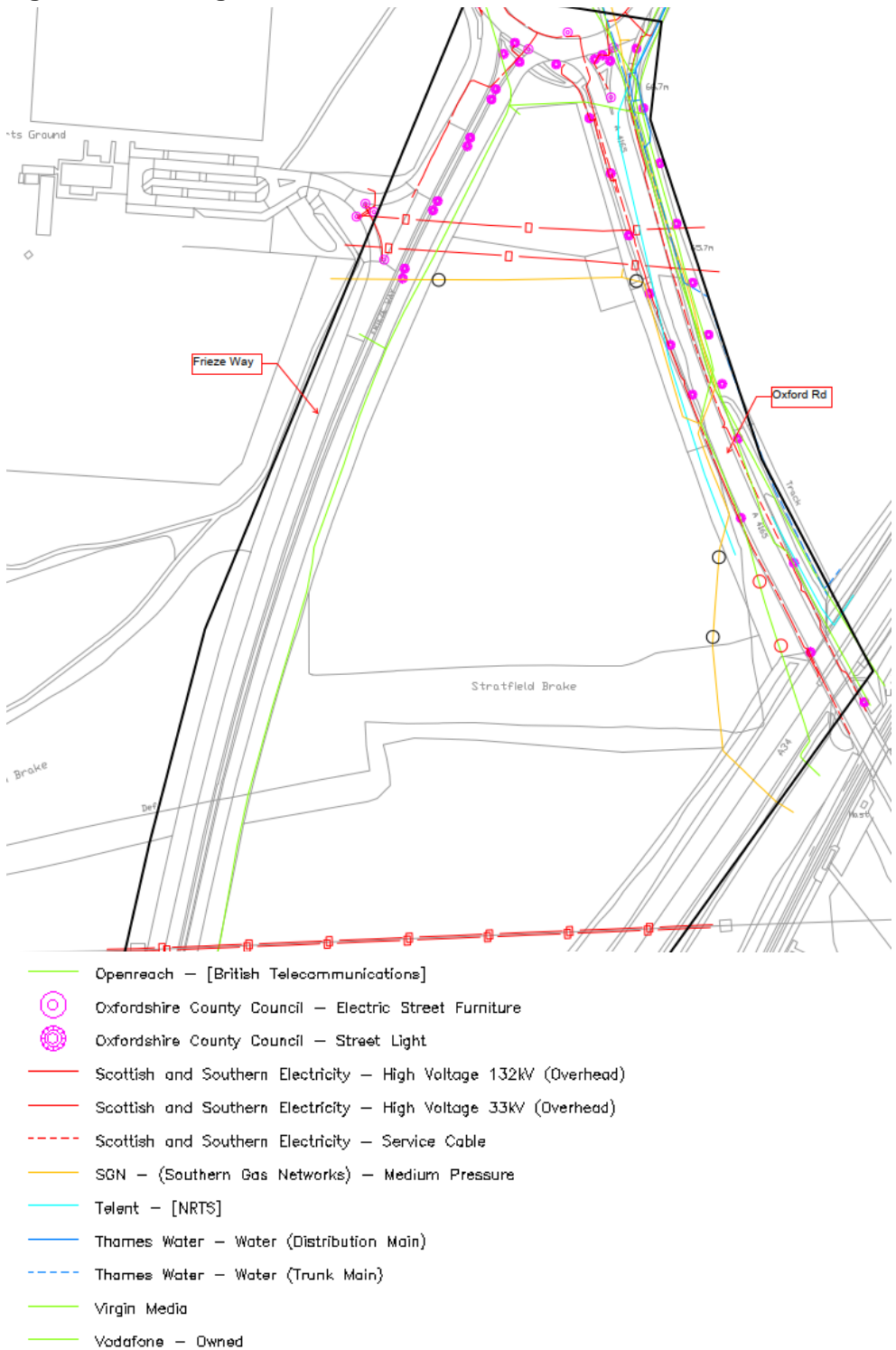
The proposed site extent is shown below in Figure 2.1 with the present existing utilities. It's important to note that not all utilities shown are present within the site, the ones within the site extents are as follows:

- a. Gas
- b. Telecoms – BT/Openreach
- c. Electrical – Underground
- d. Electrical – Overhead
- e. Surface Water

The principal utilities on site are two High Voltage (HV) overhead lines and a medium pressure gas main that traverse the north end of the site, running East-West. A variety of services to the far East of the site run parallel with Oxford Road (of which a medium pressure gas main and Openreach services which cross the Southeast corner of the site). To the far West edge of the site an Openreach service runs parallel to Frieze Way.

The survey shows the majority of the site to be unpopulated with utility services.

Figure 2.1: Existing Utilities



Source: Solum Surveying Ltd GPR – Ridge and Partners July 2023

3 Proposed Site Utilities

3.1 Electrical

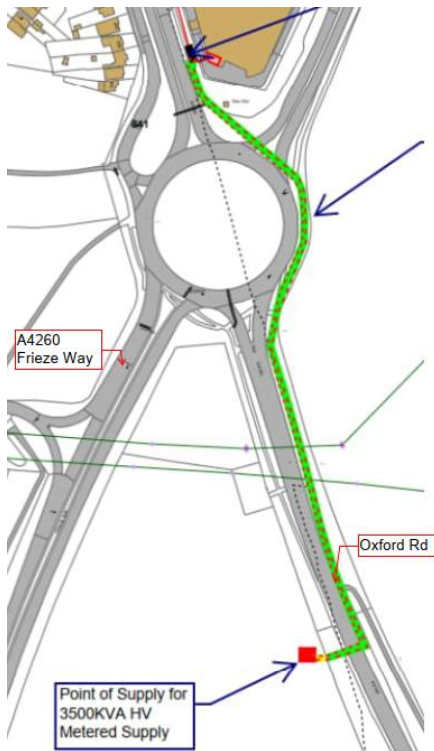
The proposed service routes have been planned to avoid as far as possible the potential for damage to trees and archaeological remains; and the installation and connection of the proposed electricity connection will not result in undue stress on the delivery of these services to the wider community.

The OUFC development will require a resilient High voltage (HV) supply to provide power to the site. The proposed stadium is currently located near two 132kV grid sub-stations, the first HV grid network is located at Lovelace Road and the second is located at Yarnton, off Cassington Road. The preference would be for the HV design to emanate from the Lovelace Road substation as there is a risk with Yarnton due to the distance from the proposed site.

A HV supply will be procured from the Distribution Network Operator (DNO), Scottish and Southern Electricity Networks (SSEN) local 33kV network to provide power to the facility. This supply will step down from 33kV to 11kV and terminate in extensible HV switchgear, which will then supply the DNO owned 11kV HV ring network containing transformers in Transformer Room 1 and Transformer Room 2 via 3 core CU XLPE insulated cable.

An initial application to SSEN has indicated that a new connection might come from the North of the proposed site, at the Kidlington Roundabout. The DNO have shown an indicative location of the substation, however this has developed since the application response was received from SSEN. Therefore, please refer to the MMD external layouts for an up-to-date proposal. The final location of the DNO connection point and route for the DNO cabling in the highway will be determined prior to construction stage and will depend on the capacity of the DNO network at that time.

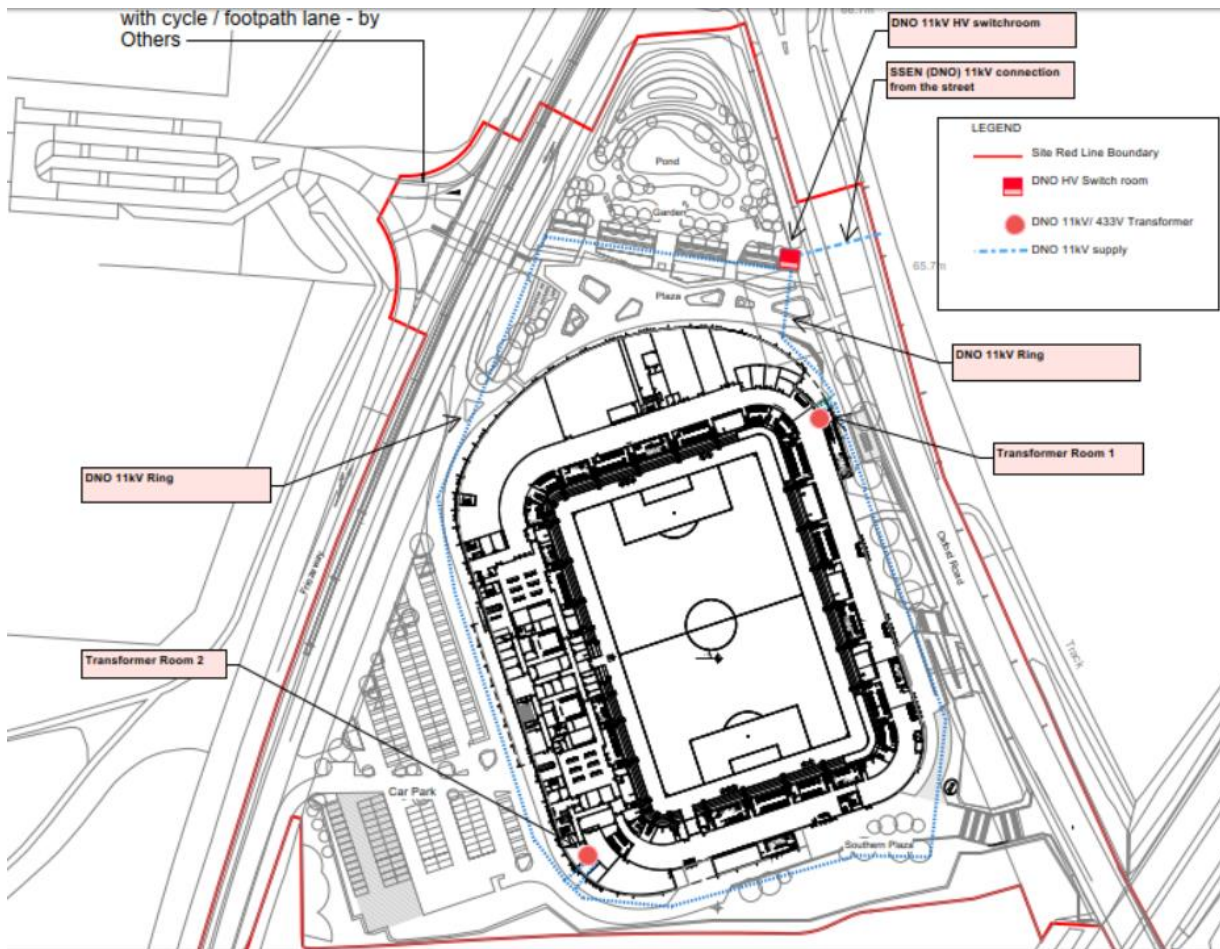
Figure 3.1: Proposed Electricity DNO Connection



Source: SSE application response 20th June 2023

A new DNO owned 11kV HV ring network will be designed, supplied from the DNO substation located North-East of the site. The 11kV ring network will emanate from the external DNO HV switchgear room, with the 2no. 3 core CU XLPE insulated cabling laid in a service trench which runs around the perimeter of the proposed Stadium. The 11kV ring network will terminate into each ring main unit (RMU) which will supply the transformers (i.e., TX-1, TX-2 or TX-3, TX-4).

Figure 3.2: Client Substations in NE & SW Corners of the Proposed Stadium



Transformer rooms for TX-1, TX-2 and TX-3, TX-4 will be within the footprint of the proposed stadium, located in the Northeast and Southwest corners, respectively.

3.2 Gas

The medium pressure gas pipework on site will remain unaltered unless this is highlighted as a risk once more surveys on-site have been undertaken, as there is no planned gas usage in the development. Therefore, development will not result in undue stress on the delivery of gas services to the wider community.

3.3 Comms

The incoming telecommunication services shall not result in undue stress to the wider community.

The proposals incorporate, telecommunications equipment, ducts or similar structures.

The telecommunications systems for the stadium shall connect to existing communication infrastructure at two diverse points to provide resilience. The connections are typically made in underground optical fibre connection modules or chambers, to existing infrastructure coordinated with Openreach and/or other service providers. Connection points will be discussed with Openreach at future design stages.

The provision of telecommunications services on site shall not give rise to any environmental impacts, for example, excavations in the vicinity of trees or archaeological remains.

3.4 Water

Application for a new metered water main connection will be submitted to the water utility company for the supply of potable water to serve the development. The connection will be designed to incorporate water storage for the various users to minimise the required instantaneous flow rate from the local water main, and therefore minimise impact on the local water network.

An application will also include a new unmetered hydrant connection to serve the development.

The design of the water connection will be undertaken in conjunction with the water utility company to avoid undue stress on the delivery of these services to the wider community.

A new connection will be taken from an adjacent main and will incorporate water utility company requirements for connections to serve the development. The position of connection will be defined by the water utility company.

The provisions of the mains and hydrant water services on site will not give rise to any environmental impacts.

3.4.1 Surface Water and Foul Water

Refer to Oxford United Stadium Development- FRA & Drainage Strategy (OUFC-MMD-XX-XX-RP-C-930001) for details of existing and proposed surface and foul water drainage.

