

## 14. MATERIAL ASSET: UTILITIES

### 14.1 Existing Utility Services

#### 14.1.1 Electricity

The UCD Campus is fed from the ESB Local Network and benefits from a 38KV Substation located on the Campus.

The existing site is served from two current ESB Substations off the ESB Local MV Network.

#### 14.1.2 Natural Gas

The UCD Campus is fed from a Gas Networks Ireland 4 Bar High Pressure Network.

The existing site has a 4 Bar Network Gas Supply to the site off the Gas Networks Ireland UCD Campus supply.

#### 14.1.3 Telecommunications:

All Telecommunication Systems are underground in the UCD Campus.

The Telecommunications Network is a UCD Internal System with no external service providers in the site.

### 14.2 Proposed Development

#### 14.2.1 Electricity Supply

##### *14.2.1.1 Construction Stage*

Construction related activities will require temporary connection to the Local ESB Electrical Supply Network. This is generally provided by means of a Temporary Unit Substation on the site. The potential impact from the Construction Phase of the proposed Development on the UCD ESB Electrical Supply Network is likely to be short-term and low.

##### *14.2.1.2 Operational Stage*

It is proposed to provide a total of three new Double Substations each with up to 1.1MW capacity. Each new Substation will serve a phase of the Development.

The Substations will be installed to suit the phasing of the Development. The ESB Network in UCD is being developed to ensure an additional capacity of 10MW for future Campus Development which includes these loads.

Potential impacts on the Electricity Supply are planned for long term and are likely to be low.

## 14.2.2 Natural Gas

### *14.2.2.1 Construction Phase:*

Natural Gas will be provided to each Building in the Development from the UCD 4 Bar Internal Network.

A Metered Gas Supply will be provided to each phase of the Development.

The potential impact from the Construction Phase of the proposed Development on the UCD Internal Gas Supply Network and the overall Gas Networks Ireland Local Network will be neutral.

### *14.2.2.2 Operational Phase:*

Individual Metered Connections from the UCD Internal Gas Network will be provided to each Building. Gas Networks Ireland provide UCD with an overall 4 Bar Metered Supply to the Campus. UCD then distributed this Natural Gas around the Campus.

The potential impact on the Gas Networks Ireland Local Infrastructure is pre-planned but would be low as it is taken from the main 4 Bar High Pressure Distribution Network not off the Local Low Pressure Network.

## 14.2.3 Telecommunications

### *14.2.3.1 Construction Phase:*

Generally, external Fixed Line Telecoms will not be used during the Construction Phase. All Telecoms are generally off the UCD Internal Network.

Some Internal Network Cables, which are underground, will have to be diverted during Construction Phase. The potential impact from the Construction Phase of the proposed Development on Local Telecoms Networks will be neutral.

### *14.2.3.2 Operational Phase:*

All Telecoms to the new Development will be from the UCD Internal Network. No new external Telecoms will be provided to the Development.

The impact on the Local Area Telecoms due to the Operational Phase of the Development will be low due to the central UCD Internal Distribution Network.