

Register Reference: Development:

SD21A/0042 Date: 26-Mar-2021 Construction of two single storey data centres with associated office and service areas; and three gas powered generation plant buildings with an overall gross floor area of 24,624sq.m that will comprise of the following: Demolition of abandoned single storey dwelling, remaining agricultural shed and derelict former farm building; Construction of 2 single storey data centres (12,797sq.m), both with associated plant at roof level, with 24 standby diesel generators with associated flues (each 25m high) that will be attached to a single storey goods receiving area/store and a single storey office area (2,404sq.m) located to the west of the data centres as well as associated water tower and sprinkler tank and other services; Amendments to the internal access road and omission of access to loading bay permitted under SDCC planning Ref. SD19A/0042/ABP Ref. PL06S.305948 that include the relocation of permitted, and new, internal security gates; and new internal access roads to serve the proposed development that will provide access to 39 new car parking spaces (including 4 electric and 2 disabled spaces) and sheltered bicycle parking to serve the new data centres; The development will also include the phased development of 3 two storey gas powered generation plants (9,286sq.m) within three individual buildings and ancillary development to provide power to facilitate the development of the overall site to be located within the south-west part of the overall site. Gas plant 1 (3,045sq.m) will contain 20 generator units (18+2) with associated flues (each 25m high) will facilitate, once operational the decommissioning of the temporary Gas Powered Generation Plant within its open compound as granted under SDCC Planning Ref. SD19A/0042/ABP Ref. PL06S.305948. Gas plant 2 (3,045sq.m) will contain 20 generator units (18+2) with associated flues (each 25m high), and, Gas plant 3 (3,196sq.m) will contain 21 generator units (19+2) with associated flues (each 25m high). These plants will be built to provide power to each data centre, if and, when required. The gas plants will be required as back up power generation once the permitted power connection via the permitted substation is achieved; New attenuation pond to the north of the site; Green walls are proposed on the southern elevation of each power plant, as well as to the northern elevation of the generator compound of the data centres, and enclosing the water tower/pump room compound, and a new hedgerow is proposed linking east and west of the site; Proposed above ground gas installation compound to contain single storey kiosk (93sq.m) and boiler room (44sq.m). The development will also include ancillary site works, connections to existing infrastructural services as well as fencing and signage. The development will include minor modifications to the permitted landscaping to the west of the site as granted under SDCC planning Ref. SD19A/0042/ABP Ref. PL06S.305948. The site will remain enclosed by landscaping to all boundaries. The development will be accessed off the R120 via the permitted access granted under SDCC planning Ref. SD19A/0042/ABP Ref. PL06S.305948. An EPA-Industrial Emissions (IE) licence will be applied for to facilitate the operation of the gas powered

generation plant. An Environment Impact Assessment Report (EIAR) has

been submitted with this application. All on a site of 22.1hectares.

Roads Department – Planning Report



Location: Site within the townland of Ballymakaily, West of Newcastle Road (R120),

Lucan, Co. Dublin

Applicant: EdgeConneX Ireland Limited

App. Type: Permission

Planning Officer: SARAH WATSON

Date Recd: 24-Feb-2021 Decision Due Date: 20-Apr-2021

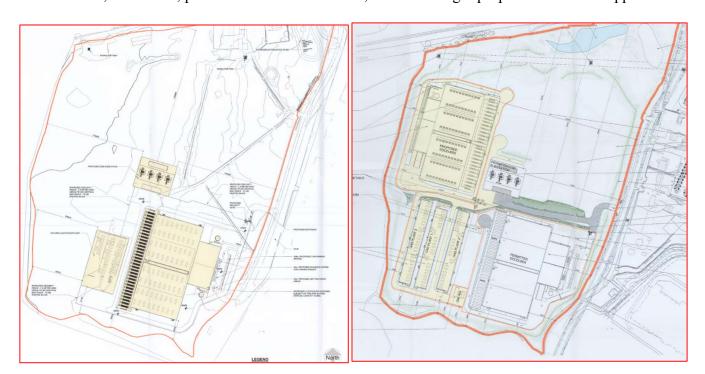
Prior to commencement of any works in the public domain, and in order to comply with The Roads Act 1993 Section 13 Paragraph 10, a Road Opening Licence must be secured from South Dublin County Council, Roads Maintenance Department.

Description

This application is far the construction of two single story data centers with associated office and service areas, the overall gross floor area office site is 24,624 sqm, including 12,797sqm single story data centers. This application would involve the following:

- Amendments to the internal access road and,
- Omission of access to loading bay permitted under SDCC planning Ref: SD19/0042 /ABP Ref. PL06S.305948 that include the relocation of permitted, and new, internal security gates; and new internal access roads to serve the proposed development
- Provison of 39no. new car parking spaces
 - o Including 4 electric and
 - o 2 disabled spaces
 - o and sheltered bicycle parking to serve the new data centres

shown below; on the left; permitted under SD19/0042; and on the right proposed under this application:





Road's Report from SD19A/0042

This application is for 4 No. data centre halls and associated equipment and site works, including temporary gas powered generation plant. Access is proposed off the realigned R120 and 39 No. car parking spaces are proposed. An application for enabling works has been made under SD19A/0004.

Realignment works are currently ongoing on the R120 and should be completed this year. This road improvement includes the provision of cycle tracks along both sides of the R120. The proposed development will access directly onto the R120.

We note that the enabling works and future site access points will be at the locations of an existing field entrance on the R120. There are numerous services including gas, water, electricity (ESB MV & ESB HV), SDCC communications ducting and other services in the vicinity of this access point. Roads Design & Construction recommend that the applicant be conditioned to provide a protection slab to protect these services for both temporary and proposed permanent access arrangements. In particular the SDCC communications ducts would be particularly vulnerable. The protection slab should be properly designed and approved by SDCC. Details of this access point must be agreed with the Roads Department prior to commencement of development.

The proposed vehicular access will be the only access to the site, and the existing access to an agricultural building to the north of the proposed access will be closed as part of the works. This access point will serve the proposed development and future development which will be the subject of other planning applications.

The access point will provide access to a temporary site compound for the construction stage which will accommodate 180 cars. A new access road will be constructed and the main facility gates will be 40m from the public road to ensure that queuing does not back up onto the R120. The applicant states that the proposed 39 No. car parking spaces are adequate for staff and visitor parking requirements on the site. This parking provision is acceptable. The development must also provide an adequate number of bicycle parking spaces for employees and visitors. A Mobility Management Plan for the development is to be agreed with the Roads Department.

An Environmental Impact Assessment Report has been submitted with the application and it includes information on traffic and transport for the proposed development. IT is estimated that 45 No. staff will work on the operational site over a 24 hour period. A TRICS analysis has been included to estimate daily traffic movements associated with the site. IT is estimate that the site will generate 77 two-way trips in the AM peak hour and 55 two-way trips in the PM peak hour. This assumes that all staff arrive and leave during peak hours and that some deliveries will occur during peak hours. These figures would usually be expressed as a percentage of background traffic on the receiving road network, and this is estimated as being 4.76% of the design volume of the road, as actual traffic figures were not collected and the EIAR for the realignment project was not available to the design team of the subject site. The estimated daily capacity (AADT) of the realigned road is 2,772 vehicles per day. Roads consider that the proposed development will have a minimal impact on the surrounding road network. Future applications for data centres on this site will require additional traffic analysis to demonstrate that the collective impact of development on this site does not have a detrimental impact on the surrounding road network.

Construction traffic from the site must be managed in accordance with a Construction Traffic Management Plan that is agreed prior to commencement of development with SDCC Roads Department.



Traffic and Transport Assessment:

The transportation report demonstrates that the traffic flows associate with the proposed development can safely be accommodated by the local road network.

The construction phase will generate 170 vehicle movements per day, which will include up to 40 HGVs per day.

In the operational phase, with the future data centre in place there will be 77 two-way vehicle movements in peak am and 77 two-way vehicle movements in pm.

- 16:00-00:00 40 Employees
- 00:00 08:00 20 Employees

The proposed peak hour trip rates are shown in Table 2 below.

Weekday Trip Generation	AM Peak (08:00 - 09:00)		PM Peak (17:00-18:00)	
	Departures	Arrivals	Departures	Arrivals
Staff	20	0	20	0
Total	60		0	

Table 2 Predicted staffing requirements

An Outline Construction Traffic Management Plan was submitted with this application, this document included detail of phasing of works, public transport available, pedestrian & cycling routes, haulage routes, and "Demolition & Construction Waste", which estimates a c 3,750 tonnes of demolition waste to be transported by c 470 trips throughout the demolition and construction phases (2 years). The anticipated number of workers during the peak of construction works is c 100 - 120 construction workers.

- **Condition:** Prior to commencement of development, the applicant shall submit a developed Construction Traffic Management Plan for the written agreement of the Planning Authority.
- Condition: Prior to commencement of development, the applicant shall submit a developed Construction & Demolition Waste Management Plan (C&DWMP) for the written agreement of the Planning Authority
- Condition: A Mobility Management Plan is to be completed within six months of opening of the proposed development. The Mobility Management Plan shall be submitted for the written agreement of the Planning Authority. REASON: In the interest of sustainable transport.

Access:

The proposed development will be accessed from a new entrance from the R120 Road. The R120 road has a width of 7.0m at the location of the proposed entrance.

The proposed access is similar to that permitted under SD19A/0024.

Roads Department – Planning Report



Drawing for Access general layout "P181103-PIN-XX-DR-D-0002-SI" by Pinnacle Consulting Engineers, shows the location of the proposed vehicular access.

- Condition: Footpath, cycle track and kerb shall be dished and widened and dropped crossing shall be constructed to the satisfaction of South Dublin County Council and at the applicant's expense. The footpath and kerb shall be dished and widened to the full width of the proposed widened vehicular access.
- **Condition:** Post construction, the condition of the footpath, cycle track, development's access8 in the vicinity of public road shall be assessed, and any found defects shall be reinstated to its original state at the applicant's expense.

Internal Layout:

The main access road through the proposed development is 10.0m wide while the rest of the roads around the development range in width between 5.5m-7.5m. The road into the perpendicular car parking bays is over 6.0m wide this is adequate space for reversing.

Multiple Autotrack analysis were submitted for different types of HGVs and trucks, the internal junction radiis are shown to be adequate to accommodate these types of trucks.

Parking:

Car Parking: The development will be provided with 39no. car parking spaces including EV and mobility impaired user's car parking space. This parking provision is reasonable for the operational requirements of this development.

Bicycle Parking: no details of bicycle parking spaces were provided.

- **Condition:** Prior to commencement the applicant shall submit a written statement and or a revised layout showing the proposed number of bicycle parking spaces for the development. External bicycle parking spaces shall be sheltered.

Site Lighting, Footpath and Public Lighting:

Site Lighting design was submitted. The lighting design will be required to be agreed with the lighting department of SDCC.

- Condition: A Public Lighting Design for the development must be submitted and agreed by the Public Lighting team of SDCC.

Roads Department – Planning Report



Should permission be granted the following conditions should apply:

- 1. Prior to commencement of development, the applicant shall submit a developed Construction Traffic Management Plan for the written agreement of the Planning Authority.
- 2. Prior to commencement of development, the applicant shall submit a developed Construction & Demolition Waste Management Plan (C&DWMP) for the written agreement of the Planning Authority.
- 3. A Mobility Management Plan is to be completed within six months of opening of the proposed development. The Mobility Management Plan shall be submitted for the written agreement of the Planning Authority. REASON: In the interest of sustainable transport.
- 4. Footpath, cycle track and kerb shall be dished and widened and dropped crossing shall be constructed to the satisfaction of South Dublin County Council and at the applicant's expense. The footpath and kerb shall be dished and widened to the full width of the proposed widened vehicular access.
- 5. Post construction, the condition of the footpath, cycle track, development's access8 in the vicinity of public road shall be assessed, and any found defects shall be reinstated to its original state at the applicant's expense.
- 6. Prior to commencement the applicant shall submit a written statement and or a revised layout showing the proposed number of bicycle parking spaces for the development. External bicycle parking spaces shall be sheltered.
- 7. All items and areas for taking in charge including areas currently in SDCC's charge shall be undertaken to a taking in charge standard.