

Kildare Innovation Campus NEWSLETTER



Summer 2023 - Project Update

KIC Masterplan

Over the next 10–15 years, the 72-hectare landbank in Leixlip known as Kildare Innovation Campus (KIC) is set to transform into one of Europe's premier state-of-the-art Science, Innovation and Technology campuses.



Credit: Courtesy of RKD Architects

A progressive masterplan for the redevelopment of the former Hewlett Packard site will, subject to statutory consents in due course, see facilities created for leaders in the innovation and technology sectors encompassing areas such as deeptech, quantum computing, photonics, artificial intelligence, machine learning, robotics, medtech and more.

The development, when fully completed, will create the potential for c. 4,000 jobs including in existing businesses already located on the site.

The developer's overarching vision for the campus is to re-establish its significance as a major scientific and technological hub, well located in the rapidly growing knowledge economy that typifies North Kildare.

In tandem with the development of next generation enterprise facilities, community benefit is an important consideration for the developers together with a deep appreciation of this unique site, given the area's wider historical significance and considerable amenity value. And so, for the first time in two centuries, the site will be made publicly accessible through a number of walking and cycling links and via a new public road which will greatly enhance its community benefit.

Aligning with the Leixlip Local Area Plan (LAP), the masterplan will also provide local access following the construction of a new pedestrian and cycle overpass of the M4 motorway.

The KIC site adjoins the lands of Castletown House. The house, widely considered to be the finest example of a Palladian-style country house in Ireland, set within eighteenth century parkland on the banks of the River Liffey, has a protected view corridor between the house and estate and the nearby 18th century Wonderful Barn.

Under the KIC masterplan, a sensitive approach was adopted to safeguard and enhance the links to, and views of, these landmark buildings and the view corridor. This was achieved through careful site planning, building height analysis and landscape treatment.

The comprehensive masterplan will see the campus developed in three phases. This three-stage plan will allow each phase to be completed and operate independently, as standalone developments, while linking up, upon completion of Phases 2 and 3, to become the overall campus.

Development will be in line with ambitious sustainability goals. Green building and urban design principles are incorporated in the design and in its long term operation.

The campus will be fully connected to the national grid and is committed to investing in increasing Ireland's renewable energy provision both on and off-site through the installation of substantial solar PV and through power purchase agreements where required. The site is also designed to incorporate best practice nature-based systems to manage water.

A planning application will be lodged in July 2023 with the local authority, Kildare County Council, for the phased redevelopment of the campus.



Proposed development

Location

Kildare Innovation Campus enjoys a prime location in North Kildare, located in the north-east of the county to the north of Celbridge and just south of Leixlip, with the Maynooth and Lucan urban centers also in close proximity.

The campus is well connected nationally and internationally via the main arterial road network with the M4 motorway and R404 bordering the site. Dublin City and Airport are both just a short, c 30 minute drive. Weston Airport is directly east and just 5 minutes from the campus.

Leixlip's Louisa Bridge Rail Station is situated c. 3.5km to the north and Hazehatch Station is located c. 5.5km south of the campus, providing connection to the Western Suburban Rail Corridor, South West Commuter Service and the Dublin to Galway Intercity Service. The campus is serviced by Dublin Bus with a stop at the main entrance on the R404. A number of universities and third-level education institutions are located in the region and the campus is close to Intel Ireland's Leixlip campus.

The site's access and connectivity makes it an ideal location for the mix of leading, future-focused enterprise activity envisaged.



Credit: Courtesy of RKD Architects



Kildare Innovation Campus – the past

The KIC site was initially designated as industrial land in the 1970s, and housed a meat processing plant for several years. In March 1995, Hewlett-Packard unveiled plans to establish a factory in Leixlip for the assembly of printer ink cartridges. The technology giant invested IR£328m in the site. Production commenced in November 1996. An expansion in the late 1990s grew Hewlett Packard's Kildare workforce to 2,100 employees. Operations ceased in 2015.

The campus has several former HP buildings onsite that will be repurposed going forward. One building will house the site's scale-up hub, which is already attracting interest from European companies in the deeptech field. Courtesy of Hewlett-Packard's substantial operations and investment, the site has access to key infrastructure, including a 110kv substation, electricity, gas and water utilities. Kildare Innovation Campus has already welcomed several companies in its new formation, including HP Enterprise, MGS, Nikon, DXC Technology and Cully Automation.

Kildare Innovation Campus – the future

Kildare Innovation Campus will be developed in three phases over the next 15 years.

When completed, 60% of the campus will comprise innovation, new deeptech (DT) and science buildings, complementing the activity of existing users. The remaining 40% will provide buildings for ICT and data centre related activity. A phase one data centre will be delivered in tandem with the development of the DT facility. That tandem delivery of initial DT support infrastructure will continue through the three phases.

Data centres and quantum computing are significantly interlinked. Quantum computing greatly benefits from co-locating with data centres, reducing net power requirement and improving internet speed.

The masterplan includes the delivery of c. 72,000sqm of new science and technology space to facilitate DT, quantum computing, photonics, artificial intelligence, machine learning, robotics, medtech and for other research and innovation purposes. A number of existing buildings (c. 43,000sqm) will transition over time to associated DT use and continue to serve the campus as reception and campus's services.

Site Overview and Analysis

Existing Features & Statistics

Grid Reference & Topography: The site is centred at Irish Grid reference N 99080 34746 at an altitude of approximately 51m. The site slopes gently down towards the south-east, which is consistent with the surrounding area.



Existing Buildings & Parking: 9 existing buildings connected by a link corridor, ranging up to 21.25 m in height and with a total GFA of 127,700sqm. 1613 parking spaces are provided across 7 parking lots.



Site Access: Currently 3 entrance points to the site. Primary access via M4 Junction 6 and the R449 (Barnhall Road). Secondary access via 2 entrances from the R404 (Celbridge Road) including a signalised junction at Building 1 and access off the roundabout adjacent to Barnhall Rugby Football Club.



Link Road: Private access controlled route through the site connecting the R449 Barnhall Rd to the R404 Celbridge Road. *The Leixlip LAP contains a stated objective to provide a future link road between the R449 and the R404. This road will be built in Phase 1 and will be open to public traffic.*



Campus Private Road Network: Private campus road network connecting to parking and service areas.



Site Profile: Extensive frontage to the M4 and the Celbridge Road that is currently heavily planted and screened.



Protected View: Tree lined Allee acknowledges the landscaped historical view between Castletown House and The Wonderful Barn.



Ponds & Landscaping: Attenuation ponds and landscape setting in area overlooked by campus cafeteria.



ESB Substation: Rinawade 110kV Substation and overhead lines.



DB Schenker: Recently Completed Building (Planning Ref: 20/873)



Castletown Estate: Separated by dense woodland.



Barnhall RFC: Rugby Club and small primary Montessori School.



Existing Residences: Small number of residential dwellings on opposite side of Celbridge Road.



Credit: Courtesy of RKD Architects

Site Overview, Proposed Development



Existing Buildings 1-6: Retained and will transition over time to associated deeptech use complementing existing businesses' science and technology activity and will continue to serve the campus as reception, cafeteria and campus services.



Deeptech Buildings: Buildings A1 & A2 will provide new state of the art deeptech buildings with associated parking, service yards, etc.



Data Centre Buildings: Buildings B1, C1, C2 & C3 will provide new state of the art data centre buildings with associated parking, services, etc.



Rinawade 110kV GIS Substation: Replacement 110kV substation. Once complete the existing substation will be removed.



Energy Centre: New on site Energy Centre, complete with admin/office building, 9no. gas turbines, 2no. fuel storage tanks, associated plant/equipment, parking and access roads.



Link Road: New public link road connecting the R449 Barnhall Rd to the R404 Celbridge Road with signalised junction at the R404. *The Leixlip LAP contains a stated objective to provide a future link road between the R449 and the R404.*



Pedestrian & Cycle Overpass: New pedestrian and cycle overpass of the M4 motorway with new pedestrian and cycle routes through the campus and along the existing Allee (view corridor).



Gas Networks: New Gas Skid and AGI Compound, complete with kiosk buildings and associated equipment.



District Heating: 2 New district heating pumphouses and associated inground piping.



ESB MV Substation: New ESB MV substation.



EV Bus Charging Hub: New charging hub will accommodate overnight charging of 10 EV buses.



Credit: Courtesy of RKD Architects

Masterplan

Program & Statistics

The masterplan will support the transition of the campus to a deeptech, science and technology precinct with a program that includes c. 152,773sqm of new state of the art buildings and the conversion over time of c. 42,862sqm of existing building stock to associated deeptech uses.

Campus Program Zones

Deeptech & Innovation Zones

Existing Buildings 1-6: Retained and will transition over time to associated deeptech use complementing existing businesses' science and technology activity and continue to serve as reception, cafeteria and campus services.

Deeptech Buildings: A1 & A2 will provide new state of the art deeptech buildings with associated parking, services yards, etc.

Data centre, ICT & admin zones

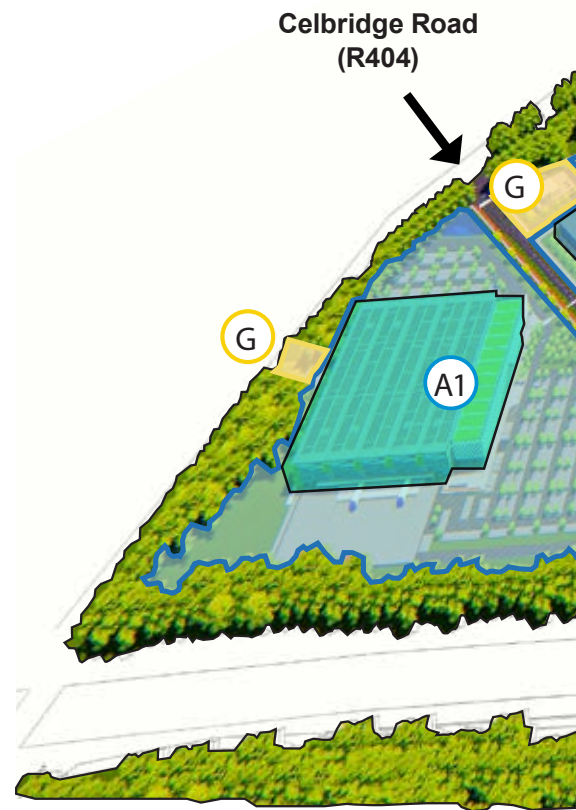
Data centre Buildings: B1, C1, C2 & C3 will provide new state of the art data centre buildings with associated parking, services, etc.

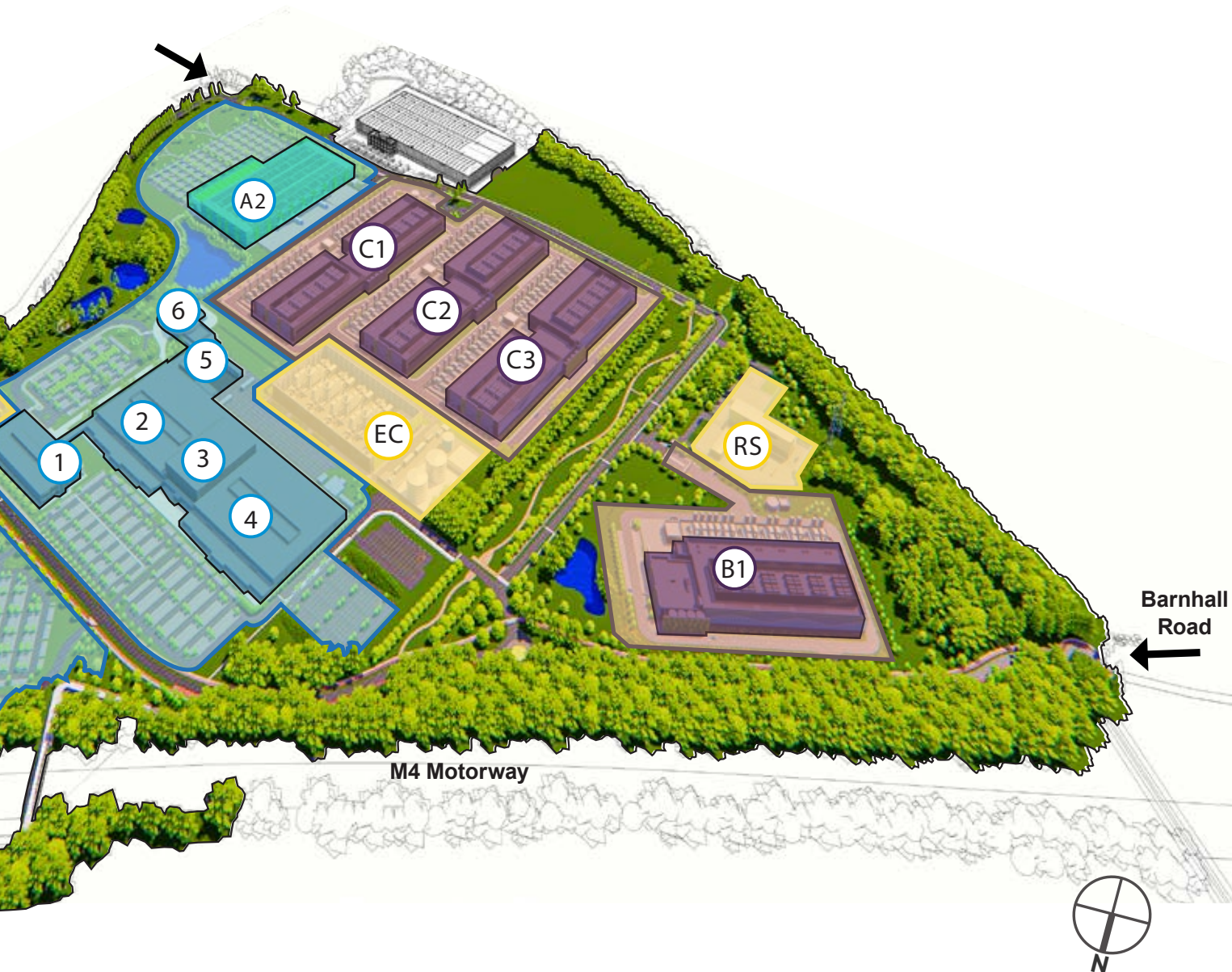
Power Network & Energy Zones

Rinawade 110kV GIS substation: Replacement 110kV substation. Once complete the existing substation will be removed.

Energy Centre: New on site Energy Centre, complete with Admin/Office Building, 9no. gas turbines, 2no. fuel storage tanks, associated plant/equipment, parking and access roads.

Gas Networks: New gas Skid and AGI Compound, complete with kiosk buildings and associated equipment.





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|-----------------------|-----------------------------------|--------------------|
| ① Existing Building 1 | Ⓐ1 New Building A1 | Ⓑ1 New Building B1 |
| ② Existing Building 2 | Ⓐ2 New Building A2 | Ⓒ1 New Building C1 |
| ③ Existing Building 3 | ⒺC New Energy Centre | Ⓒ2 New Building C2 |
| ④ Existing Building 4 | ⒺRS New Rinawade 110kV Substation | Ⓒ3 New Building C3 |
| ⑤ Existing Building 5 | ⒺG New Gas Skid & AGI | |
| ⑥ Existing Building 6 | | |

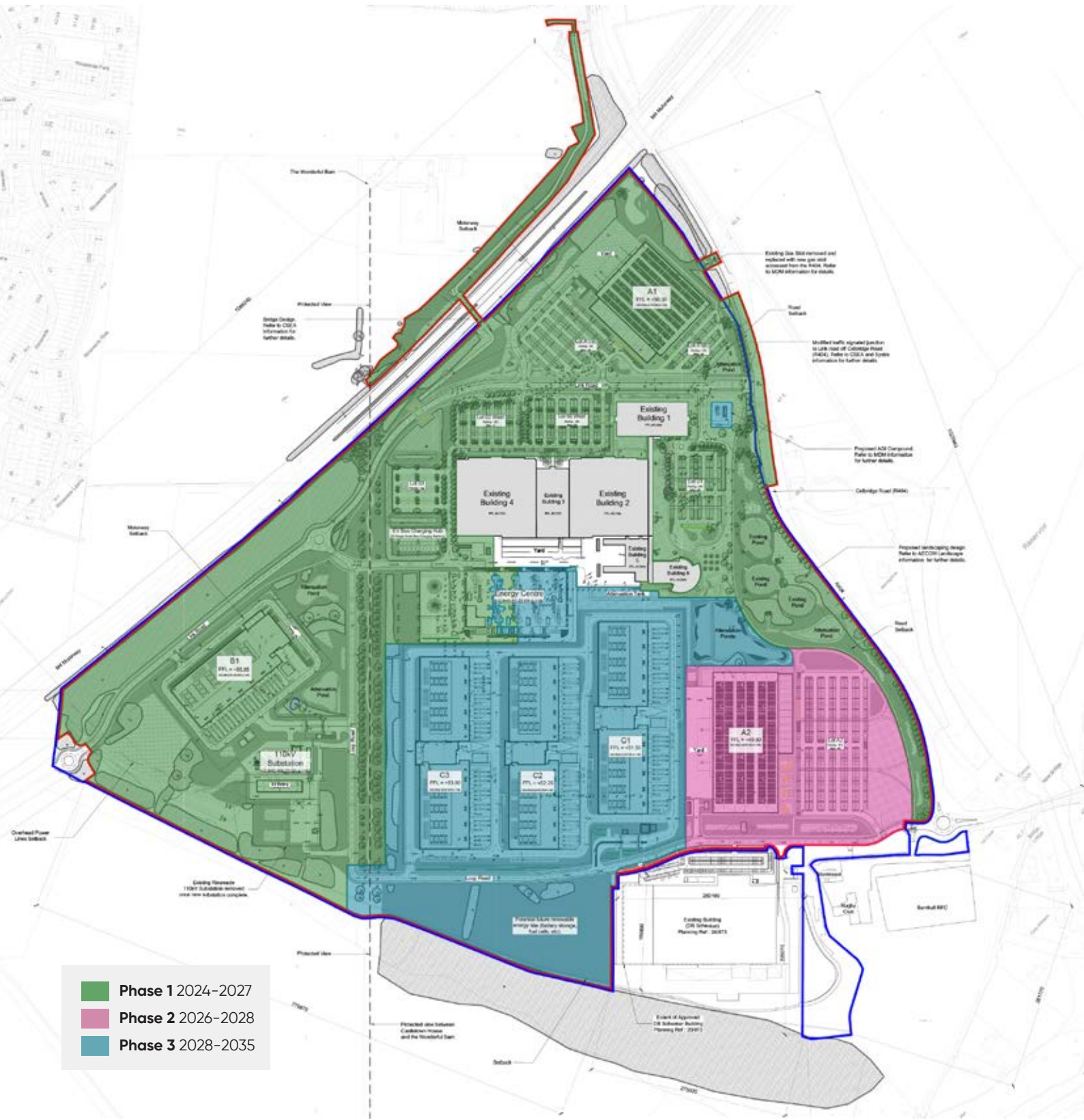


Figure 2.11: Kildare Innovation Campus Phasing Plan. Source: RKD Architectural Design Statement and Drawing A-1041.

Phase 1 (c. 2024 - 2027)

1. Building A1 (deeptech) with associated carparking, landscaping, services yard etc. The existing buildings Nos 1-9 will be retained and operated as currently. No works are proposed to these buildings.
2. Building B1 (data centre) will be constructed fully in Phase 1. It will be 50% utilised until Phase 3. Power to the building will ramp up to full capacity during Phase 3 of the development.
3. The new replacement 110kV substation will be developed adjacent to the existing 110kV substation. Once the new replacement substation becomes energised, the existing 110kV substation will be decommissioned. Associated grid diversion to the new substation will also be included in Phase 1.
4. The energy centre will be delivered in phases to align with power demand for the site and dispatchable energy requirements of the grid. The initial phase of the masterplan will include the provision of one open-cycle gas turbine powered by the existing distribution gas line. Supporting infrastructure within the energy compound will also be provided.
5. Public Link Road connecting the R449 Barnhall Road to the R404 Celbridge Road with a new signalised intersection at the R404 will be constructed. The existing signalised intersection will be removed and road and access reinstated.
6. The M4 pedestrian and cycle overpass including links to the entrance of Barnhall Meadows estate and the connections along the protected view line will be developed.
7. The electric bus charging hub will be constructed providing parking and charging for 10no. privately operated buses.
8. Modifications to the existing parking lots 1 and 2 to increase the parking provision and include EV and accessible stalls.
9. Hard and soft landscaping will be provided throughout the Phase 1 area as well as the required earthworks, drainage, services, utilities and new gas skid.

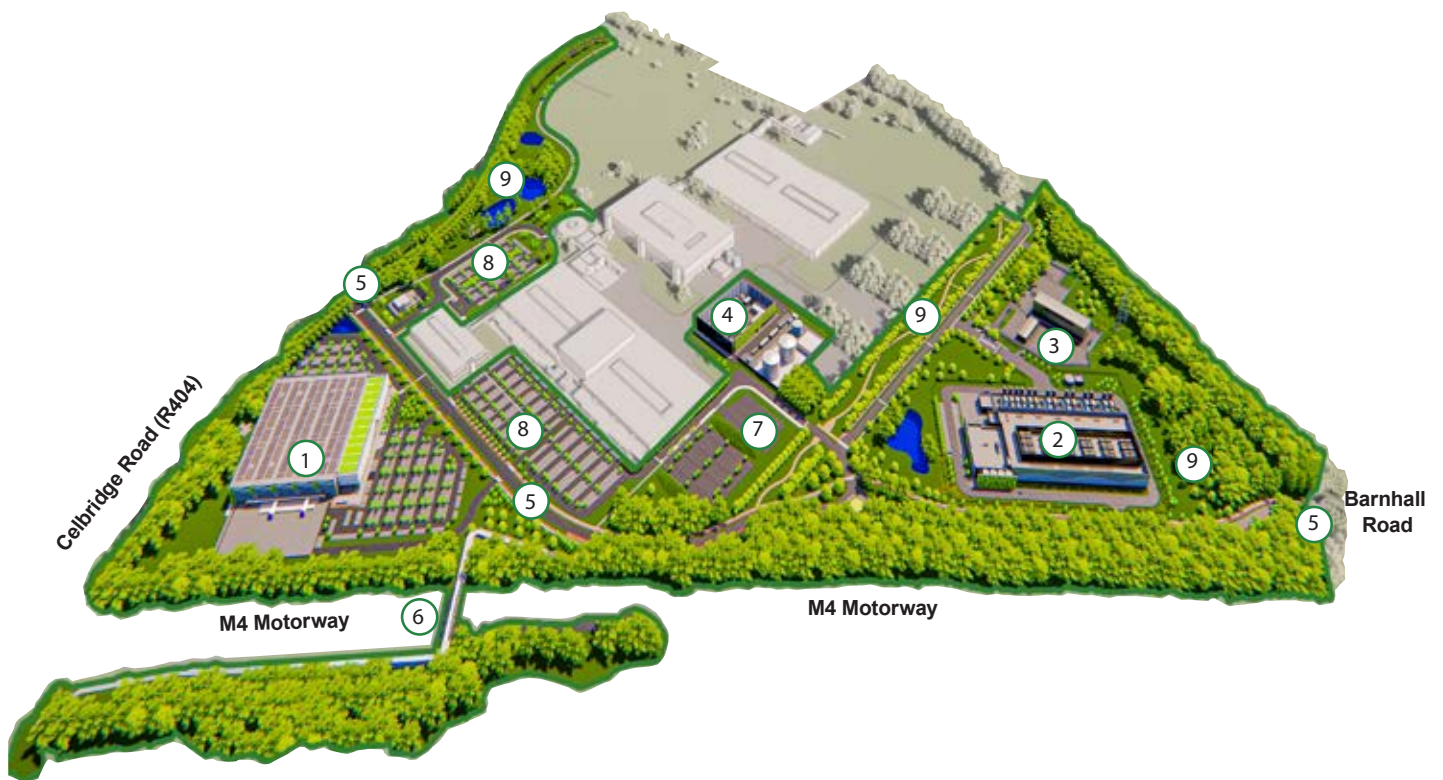


Figure 2.12: Kildare Innovation Campus Phase 1 Plan (Green Outline). Source: RKD Architectural Design Statement

Phase 2 (c. 2026 – 2028)

1. Building A2 (deeptech) with associated carparking, landscaping, services yard etc.
2. Hard and soft landscaping will be provided throughout the Phase 2 area, including the required drainage and services.

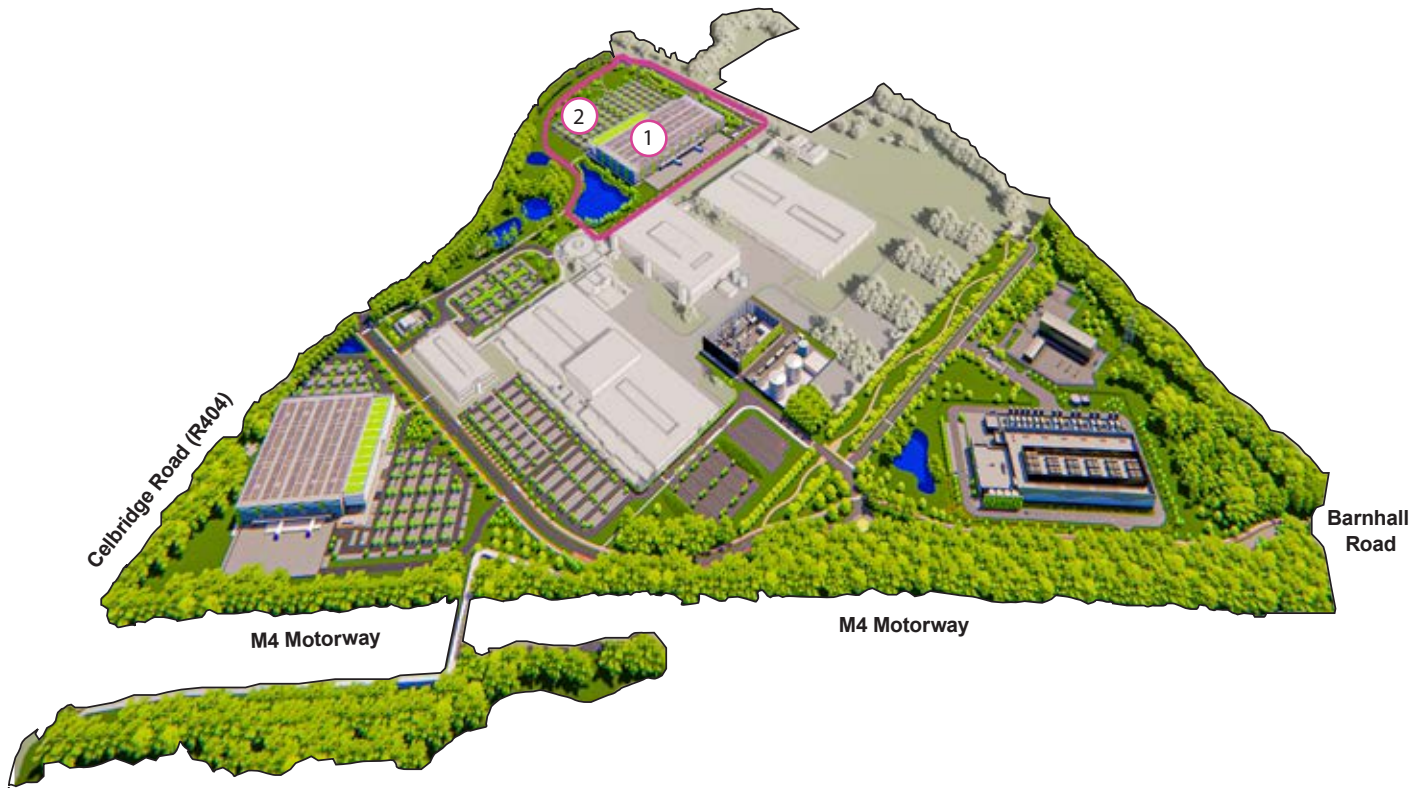


Figure 2.13: Kildare Innovation Campus Phase 2 Plan (Purple Outline). Source: RKD Architectural Design Statement

KIC – the future



Credit: Courtesy of RKD Architects

“KIC is being developed with an ESG-focussed, long-term investment view. The overall vision for the Campus is to re-establish the widely recognised importance of the former Hewlett Packard site as a major scientific and technological hub, thereby enhancing the knowledge economy which characterises Kildare and the neighbouring region. The exceptional quality of the available local talent pool together with the collaboration potential with third level education bodies and its connectivity to key transport nodes were further attractors in our decision to develop this site.”

Iwan Iwanow, Partner, Kildare Innovation Campus

Phase 3 (c. 2028 – 2035)

1. Demolition of existing buildings No. 7, 8 and 9. Provision of new data centre buildings C1, C2 & C3 with associated parking, landscaping, building services, etc.
2. The Energy Centre final phase will align with power demand for the balance of the site and dispatchable energy requirements of the grid. The third phase of the masterplan will include the installation of 8no. turbines powered by a local extension of the gas transmission network by GNI. The turbines will be capable of operating off biogas and hydrogen as well as natural gas and will be located within 14m high enclosed area.
3. The existing campus road which provides entrance from the Celbridge Road roundabout will be extended and linked up with the internal campus road adjacent to the view corridor. All associated cycle paths and footpaths will be linked up. Infrastructure will be demolished to make way for the build out of Phase 3.
4. Hard and soft landscaping will be provided throughout the Phase 3 area, including the required drainage and services.

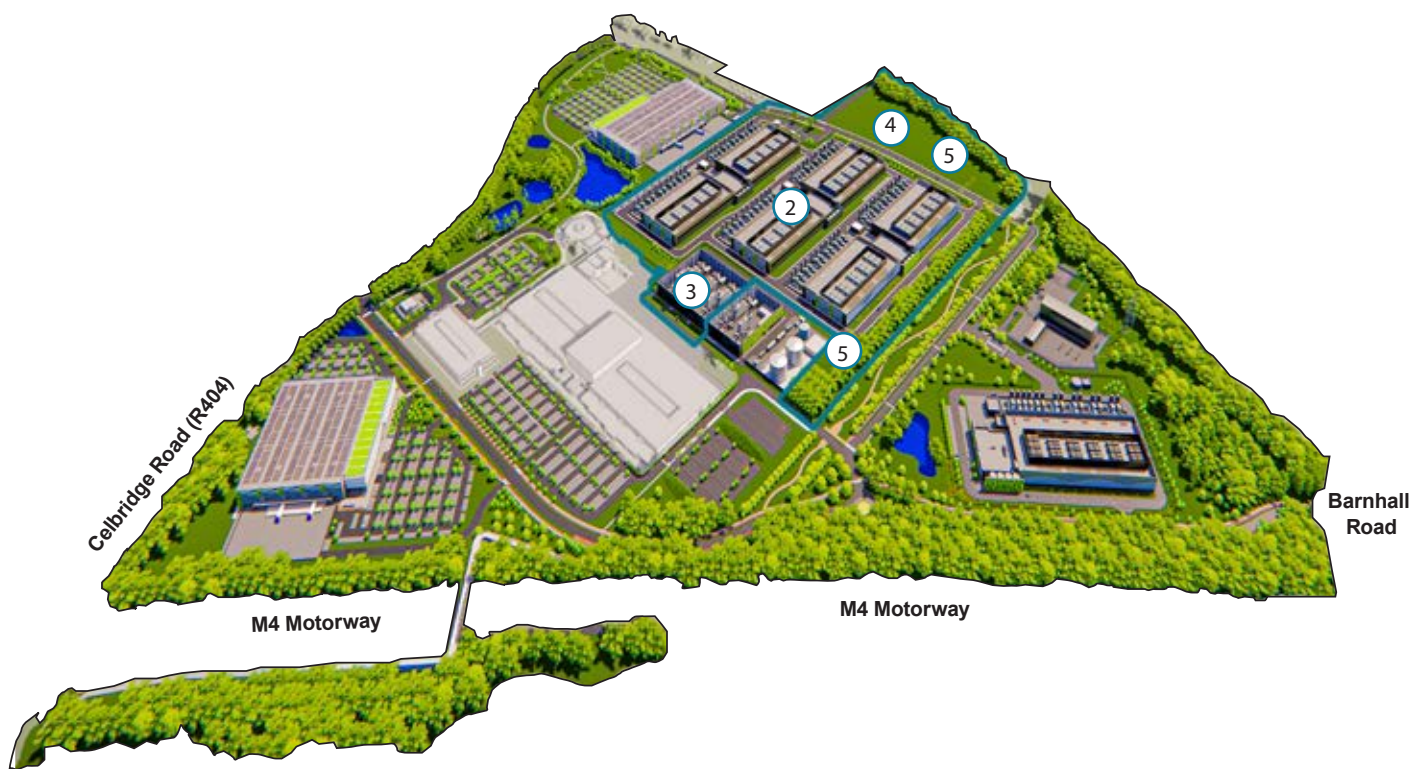


Figure 2.14: Kildare Innovation Campus Phase 3 Plan (Blue Outline). Source: RKD Architectural Design Statement



Protected View



Existing view corridor



Proposed view corridor

The proposed pedestrian and cycle links will be delivered in Phase 1 of the project. Through the designated view line the pedestrian pathway is proposed to be a self-bound gravel in buff colour or similar (as required by KCC). The pedestrian and cycle path will be brought to the boundary with Castletown Estate providing opportunity for a future link into Castletown Estate.

The pedestrian and cycle path will continue along the campus road up to the entry of the campus at Barnhall Roundabout. All pedestrian paths and cycleways will be accessible by the public but will remain in campus ownership.



Proposed development



Design view of proposed development



Design view of proposed development



Design view of proposed development



Photo of the cycle and pedestrian bridge overpass at Kilmacthomas in Co. Waterford similar to the one planned.

Project Information

Kildare Innovation Campus will submit a masterplan planning application for the redevelopment and enhancement of the KIC site to the local authority, Kildare Co. Council. Shortly after submission the full content and detail of the planning application will be accessible on the Council's planning enquiries website; <https://kildarecoco.ie/AllServices/OnlineServices/OnlinePlanningEnquiries/>

Or visit the Kildare Innovation Campus website on: <https://kildareinnovationcampus.com/>

Or call redevelopment planning consultants Tom Phillips & Associates on +353 1 478 6055

For general and/or community related enquiries, call our Project Communications Team at Keating & Associates:

Pat Keating +353 87 2451757 / pat@keating.ie
or Ellen Lynch +353 87 4112084 / ellen@keating.ie

KIC's communication ambition is for anyone who might have an interest or enquiry in relation to the KIC site redevelopment plan to have easy access to the project information that is available and we will be happy to engage as appropriate.



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