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Job Ref: 22087

Land Use, Planning & Transportation Department, South Dublin County Council

Decision Order Number: 1209

Register Reference: SDZZ22A/0011

11th January 2023

Development: The proposed primary school will extend to c3,355sq.m will be 2 storeys in height and will comprise 16 no. classrooms with an additional 2 classroom Special Educational Needs Unit; a General Purpose Hall and all ancillary teacher and pupil amenities and facilities. The proposed development also provides for hard and soft play areas, including 2 no. outdoor ball courts, bicycle parking, staff car parking, vehicle drop off and set down areas. Photovoltaic Panels (PV) are proposed on roofs in addition to EV Charging Points and a packaged Biomass heating plant. The proposed development also provides for all landscaping and boundary treatments and all associated site development works. Access to the site will be via a new junction and access road off Thomas Omer Way. The new access road will run south off Thomas Omer Way and then west into the site. The proposed access road Is in accordance with the Clonburris Strategic Development Zone (SDZ) Planning Scheme and incorporates public lighting, footpaths and cycle tracks. A further pedestrian / cycle only connection to Thomas Omer Way Is also proposed along the western green corridor, west of the proposed school building.

Location:

Thomas Omer Way, Balgaddy, Lucan, Dublin

Dear Sir/Madam,

We refer to the request for information received for the above development and wish to respond to the items raised as follows:

Item 3.4:

The applicant is requested to submit a revised layout of not less than 1:200 scale, detailing how fire tenders will access the building.

MMOS Response:

Noted and agreed. Please find attached revised fire tender autotracking plan. Drawing Ref. 22087-MMS-ZZ-ST-DR-C-10500.

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Item 8:

The following additional information is requested:

- (i) A SuDS proposal that complies with SDCC SUDS Explanatory Design an Evaluation Guide; the Clonburris SDZ Planning Scheme, Parks and Landscape Strategy and Biodiversity Management Plan and SDCC County Development Plan 2022-2028.
- (ii) Concept plans showing existing and proposed flows.
- (iii) Additional natural SUDS features shall be incorporated into the proposed drainage system for the development, particularly along strategic and local green links, e.g., bioretention tree pits, swales, rain gardens, green roofs etc.
- (iv) Swales to be planted with native and pollinator perennial riparian wildflowers using local species. Full species lists for the SDZ can be found in Ecological Survey of Clonburris (FERS Ltd., 2018) (v) The SuDS proposals should be a collaboration between landscape architect and the drainage engineer to integrate the SuDS into the landscape design proposals providing amenity, biodiversity, water quality treatment as well as quality and attenuation.
- (vi) Drainage and Landscape proposals to be consistent regarding SuDS provision. For example, only grasscrete shown on landscape plan; this is omitted from Engineers drawing; None of the SuDS proposals on engineers' plans are shown on landscape proposals.
- (vii) Drainage design proposals for the site that incorporate the waterway/SuDS/wetland along the southern site boundary.
- (viii) Demonstrate how the proposed natural SUDS features will be incorporated and work within the drainage and landscape design for the proposed development.
- (ix) Details on how each SuDS element function as part of the overall treatment/management train. (x) Demonstrate the biodiversity, amenity, water quality and attenuation value of all SuDS features including proposals for integrating the existing ditch to the northwest.
- (xi) Any proposed swales should be used for attenuation as well as conveyance of overland flow. They should also have an amenity and biodiversity value.
- (xii) A comprehensive SUDS Management Plan shall be submitted to demonstrate that the proposed SUDS features have reduced the rate of run off into the existing surface water drainage network. A maintenance plan shall also be included as a demonstration of how the system will function following implementation.
- (xiii) A minimum 10m setback from the top of the bank from watercourses bounding the site.
- (xiv) Demonstrate how the integrity of the riparian corridor can be maintained and enhanced having regard to flood risk management, biodiversity, ecosystem service provision, water quality and hydro morphology
- (xv) Inclusion of all above ground SUDS features in attenuation calculation (avoid underground systems). SDCC do not accept underground tanks unless it is demonstrated that above ground SuDS devices are not feasible.

MMOS Response:

- i) Please see attached revised surface water plan and civil engineering report. See drawing ref. 22087-MMS-ZZ-ZZ-DR-C-10002 and document ref. 22087-MMS-ZZ-ZZ-RP-C-0001.
- ii) Please see attached existing and proposed flow path plans. The existing flow path shows that all storm water currently flows to the north/northwest of site to the existing riverbed. The proposed layout brings all surface water around the proposed school and discharges into the existing riverbed at the north of the site. See drawing ref. 22087-MMS-ZZ-ZZ-DR-C-10011 & 10012.

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- a. The surface water attenuation volume proposed of 840m3 is undersized by approximately 50%. The applicant is requested to submit a revised drawing and report showing increased surface water attenuation volume for the development. The surface water attenuation should be provided by SuDS in so far as this is possible. Prior to submission of revised documents contact water services to discuss same. Also, it is required by SDCC drainage section for a climate change factor of 20% to be applied to attenuation calculations.
- b. There are no soil percolation test results, design calculations or dimensions submitted for the proposed soakaway. The applicant is requested to submit a report showing site specific soil percolation test results and design calculations for the proposed soakaway in accordance with BRE Digest 365 Soakaway Design. Subject to percolation test results passing test, all additional Surface Water is to be directed to proposed soakaway. If the percolation test does not indicate soil conditions are suitable for a soakaway, a written agreement from Irish Water is required in order to connect the surface water overflow to foul system.
- c. The applicant is requested to submit a revised drawing showing plan and cross-sectional views, dimensions, and location of proposed soakaway. Any proposed soakaway shall be located fully within the curtilage of the property and shall be:
- i) At least 5m from any building, public sewer, road boundary or structure.
- ii) Generally, not within 3m of the boundary of the adjoining property.
- iii) Not in such a position that the ground below foundations is likely to be adversely affected.
- iv) 10m from any sewage treatment percolation area and from any watercourse / floodplain.
- v) Soakaways must include an overflow connection to the surface water drainage network.

MMOS Response:

- a) Please find attached revised attenuation calculations for 1/100 event with a 20% allowance for climate change which show the total attenuation requirements on site as 690m³. All calculations can be seen in revised civil engineering report. Document ref. 22087-MMS-ZZ-ZZ-RP-C-0001.
- b) Soil percolation tests were completed on site, and it was confirmed that no infiltration is possible. However, the provision for a soakaway system is no longer necessary so the results are not applicable.
- c) This is no longer applicable as per above response.

We hope the above satisfies the requirements of the Planning Authority and should you require any further clarity, please do not hesitate to contact our office.

Yours Sincerely,

Stephen Leonard Civil/Structural Engineer

Murphy Matson O'Sullivan Consulting Engineers Limited

Stephen Leonard

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