



**Clifton Scannell Emerson**  
Associates

## Engineering Report

### Proposed Upgrade Scheme for Grange Castle Business Parks



**Comhairle Contae** South Dublin  
**Átha Cliath Theas** County Council

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**Client: South Dublin County  
Council**

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**Date: 11/03/2026**

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**Job Number: 24\_158**

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Civil  
Engineering

Structural  
Engineering

Transport  
Engineering

Environmental  
Engineering

Project  
Management

Health  
and Safety

CONSULTING ENGINEERS



## Document Control Sheet

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Project Number: 24\_158  
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## 1 Introduction

South Dublin County Council (SDCC) has appointed Clifton Scannell Emerson Associates (CSEA) to prepare an Engineering Report to support the Section 38 application for the Proposed Upgrade Scheme at Grange Castle and Grange Castle South Business Parks. The proposed scheme is being progressed under Section 38 of the Road Traffic Act 1994 and will be subject to a non-statutory public consultation process.

The objective of the proposed upgrade scheme is to improve the condition and functionality of the existing civil infrastructure within Grange Castle and Grange Castle South Business Parks while enhancing pedestrian and cycling infrastructure. The works will provide safer and more accessible routes for users transversing through the area and support the promotion of active travel.

The project primarily comprises remedial upgrades within the existing road corridor. The proposed works address deterioration in the current infrastructure while improving conditions for pedestrians, cyclists and vehicular traffic accessing both Grange Castle Business Parks.

The proposed works generally include, but are not limited to, upgrades and remedial works to the following existing infrastructure:

- Concrete footways
- Bituminous cycle tracks
- Bituminous carriageway surfaces
- Carriageway and cycleway kerbing
- Existing utility manholes and chambers, including concrete aprons and mowing kerbs
- Road signage
- Road markings
- Minor surface water drainage works
- Upgrades to existing and introduction of new pedestrian and cyclist raised crossings

The extent of the proposed works is illustrated under CSEA drawings 24\_158-CSE-GEN-XX-DR-C-1510, which is included under Appendix A of this report.

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## 2 Existing Condition

The existing infrastructure within Grange Castle and Grange Castle South Business Parks comprises of both single and dual carriageway construction, concrete footways and red bituminous cycleways serving pedestrians, cyclists and vehicular traffic. The road network within the business parks accommodates a high level of daily activity associated with commercial and industrial premises, including employees, visitors and service vehicles.

Across the business parks, sections of the infrastructure exhibit deterioration affecting safety and usability. The key existing conditions are summarised below:

- **Carriageway and Cycle Tracks:** Localised cracking, rutting and isolated potholes are present, with variations in the cycle track surface affecting ride quality.
- **Footways:** Concrete footways show cracking and settlement in places, resulting in uneven pedestrian surfaces.
- **Kerbing and Utility Surrounds:** Sections of kerbing and concrete surrounds to manholes and chambers are cracked or deteriorated.
- **Drainage:** Localised settlement has occurred around some gullies and surface water manholes.
- **Signage and Road Markings:** Road markings are faded in areas and some signage requires replacement.
- **Vegetation:** Vegetation and moss encroachment in some areas reduce the effective width of pedestrian and cycle facilities.

These conditions highlight the need for remedial works to improve the safety, accessibility and overall functionality of the infrastructure within the business parks.

### 3 The Proposed Scheme

The Proposed Upgrade Scheme for Grange Castle and Grange Castle South Business Parks seek to improve existing infrastructure for pedestrians, cyclists, motorists and business park users, with particular emphasis on enhancing active travel facilities.

The existing pedestrian and cycling infrastructure generally comprise generally comprises of ex. 1.5m wide concrete footways and 1.5m wide bituminous (red) cycle tracks, which in several locations are narrow and show signs of deterioration. Under the proposed scheme, these facilities will be replaced with a 3.0 m wide shared bituminous pedestrian and cycle path, providing a safer and more consistent route for active travel users.

The scheme aims to improve connectivity and accessibility throughout the business parks while enhancing safety for pedestrians and cyclists travelling between businesses, public transport stops and surrounding employment areas. The proposed works are confined within the existing road corridor, with no significant widening beyond the current road, verge, footpath or cycle track footprint.

The key elements of the proposed scheme include:

- **Upgrade of Pedestrian and Cycle Infrastructure**  
Site Clearance of existing 1.5 m wide footpaths and 1.5 m wide cycle tracks and construction of a 3.0 m wide shared pedestrian and cycle path with bituminous surfacing and concrete kerb edging within the existing road corridor.
- **Pedestrian and Cyclist Crossings**  
Introduction and upgrading of controlled and uncontrolled raised pedestrian and cyclist crossings to improve accessibility and enhance safety for vulnerable road users.
- **Traffic Calming Measures**  
Implementation of traffic calming measures through the provision of raised pedestrian and cyclist crossings (controlled and uncontrolled) and the installation of solar-powered traffic calming signage to encourage reduced vehicle speeds within the business parks.
- **Tree Protection Measures**  
Installation of tree protection systems (Geocell membrane with stone backfill) where works may interact with existing tree root systems in-situ across both Grange Castle Business Parks.
- **Carriageway Repairs and Resurfacing**  
Localised carriageway repairs and shave and pave resurfacing works, including cold milling of the existing surface and installation of approximately 45–50 mm bituminous surface course.
- **Kerbing and Refuge Islands**  
Removal and reconstruction of sections of existing carriageway kerbing, including the extension or modification of pedestrian refuge islands where required.
- **Signage and Road Markings**  
Installation of new traffic signage and wayfinding signage, together with the provision of new road markings, including pedestrian crossing markings and general traffic markings.

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- **Public Lighting and Landscape Works**

Minor adjustments to existing public lighting infrastructure where necessary, along with minor landscape reinstatement works following construction.

The extent of the proposed works is illustrated under CSEA drawings 24\_158-CSE-GEN-XX-DR-C-1510, which is included under Appendix A of this report.

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## 4 Compliance with Design Standards

The proposed scheme has been developed in accordance with current national guidance and best practice for the design of urban streets and active travel infrastructure.

The design has been informed by the following documents:

- **National Transport Authority – Cycle Design Manual**
- **Design Manual for Urban Roads and Streets (DMURS)**
- **Transport Infrastructure Ireland (TII) standards and guidance**

The proposed works primarily involve upgrades to existing infrastructure within the current road corridor. The design approach aims to improve the safety, accessibility and usability of pedestrian and cycling facilities while maintaining appropriate access for vehicular traffic within the business parks.

A Stage 1, 2 and 3 Road Safety Audit will be procured and undertaken for the proposed Upgrade scheme for Grange Castle Business Parks

The proposed shared pedestrian and cycle path, together with upgraded crossings, traffic calming measures and improved surface conditions, has been developed in accordance with the above guidance to provide a safer and more accessible environment for all road users.

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## 5 Traffic Management and Road Safety

The proposed works are not expected to result in significant changes to the existing road layout or traffic capacity within Grange Castle Business Parks. The scheme primarily involves the upgrade and renewal of infrastructure within the existing road corridor and therefore the impact on vehicular traffic movements is anticipated to be minimal.

Road safety improvements form a key component of the scheme. The introduction of raised pedestrian and cyclist crossings, enhanced road markings, upgraded traffic signage, and traffic calming measures will improve driver awareness of vulnerable road users and encourage reduced vehicle speeds. The proposed upgrades to pedestrian and cycling infrastructure will also improve accessibility and comfort for users travelling through the area.

Construction works will be temporary in nature and will largely take place within the footprint of the existing road infrastructure. The proposed upgrade works are expected to be undertaken in a phased manner over a nine-month construction period commencing at the end of Q4 2026.

During this period, temporary disruptions to vehicular and pedestrian movements may occur. Appropriate traffic management measures will be implemented to facilitate the safe delivery of the works while maintaining access to businesses and properties within the park.

The works will include site clearance, localised pavement and cycle track reconstruction, kerb realignment, installation of raised controlled and uncontrolled crossings, refuge island build-outs, upgrades to existing bus stop layouts, the introduction of traffic calming measures, carriageway resurfacing and reinstatement works (shave and pave), installation of signage and road markings, and minor surface water drainage and landscaping works. Repairs will be undertaken at appropriate intervals as required

All works will be undertaken in accordance with the Grange Castle Permit to Work requirements, with appropriate traffic management and safety measures implemented to minimise disruption. Tree protection measures will also be implemented where works occur in proximity to existing trees.

Overall, the scheme is expected to enhance safety and improve conditions for pedestrians, cyclists and motorists within the business parks.

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## 6 Conclusion

The proposed upgrade scheme for Grange Castle and Grange Castle South Business Parks aims to improve the condition and functionality of the existing civil infrastructure within the domain of both business park through targeted remedial works and infrastructure upgrades.

The works will enhance pedestrian, cycling and vehicular infrastructure while remaining largely within the existing road corridor. These improvements will provide safer and more accessible routes for users of the business parks, including employees, visitors, pedestrians, cyclists and motorists.

The scheme has been developed with reference to relevant national guidance, including the National Transport Authority Cycle Design Manual, Design Manual for Urban Roads and Streets (DMURS), and Transport Infrastructure Ireland standards.

Overall, the proposed works represent a proportionate and practical intervention that will improve the safety, accessibility and longevity of the existing infrastructure while supporting safer movement throughout the business parks.

Project Number: 24\_158

Project: Proposed Upgrade Scheme for Grange Castle Business Parks

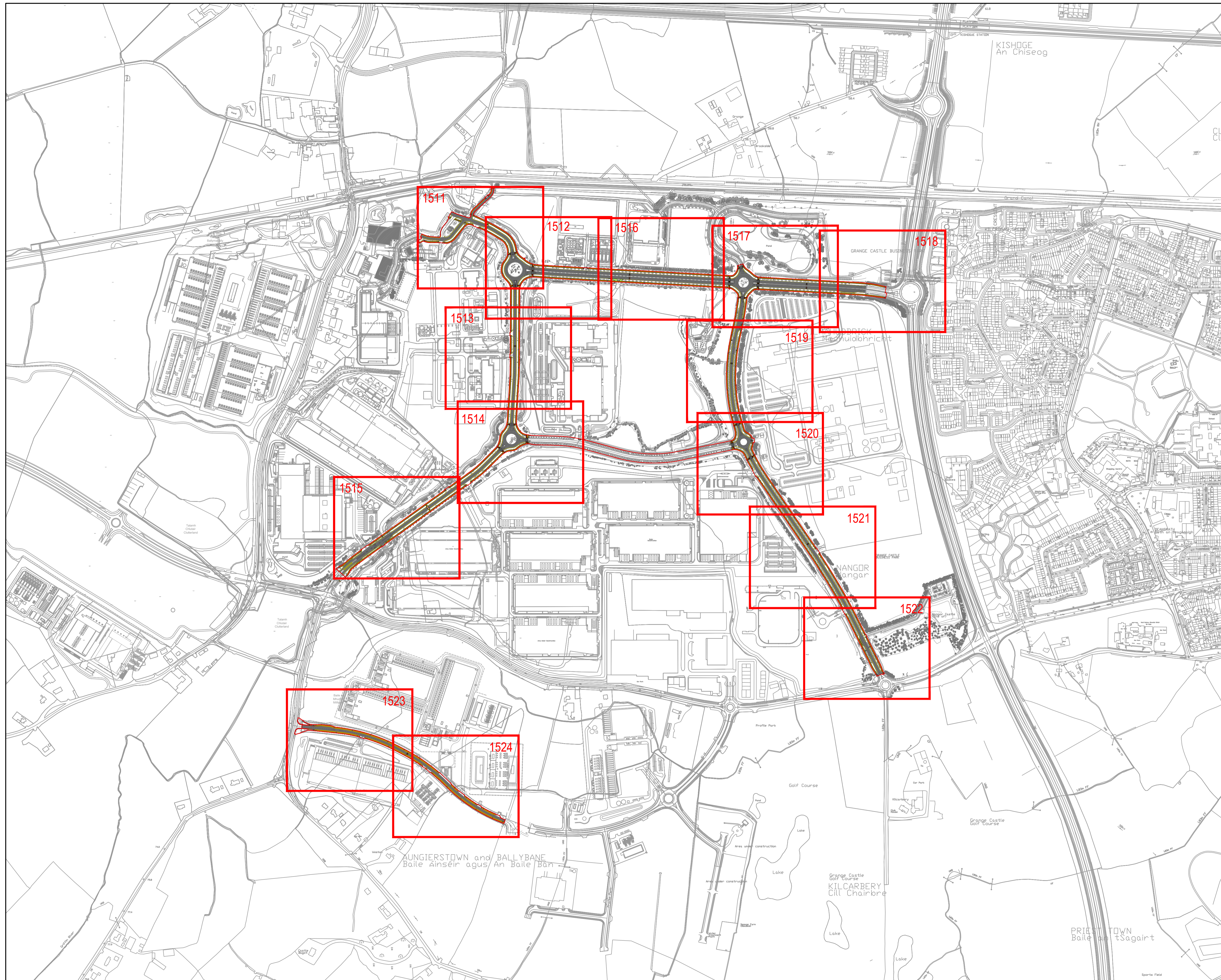
Title: Engineering Report

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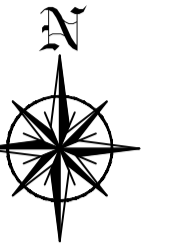
**Clifton Scannell Emerson**  
Associates

## **Appendix A - 24\_158-CSE-GEN-XX-DR-C-1510**



DRAWING IS PRODUCED USING THE IRISH TRANSVERSE MERCATOR (ITM) GEOGRAPHIC COORDINATE SYSTEM

A1



**LEGEND:**

- PROPOSED CARRIAGEWAY UPGRADES
- PROPOSED SHARED PATH
- PROPOSED FOOTPATH
- PROPOSED RAISED PLATFORM / RAMP
- PROPOSED TACTILE PAVING (BUFF)
- PROPOSED TACTILE PAVING (RED)
- COURDROY HAZARD WARNING TACTILE PAVING (BUFF - ROUND TOP)
- PROPOSED SEGREGATED SHARED CYCLE TRACK / FOOTWAY TACTILE PAVING (BUFF - SQUARE TOP)
- PROPOSED SITE BOUNDARY

Rev	Description	Drawn	Checked	Date
PL01	SECTION 38 ISSUE	KT	DRL	XX/XX/XX

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**Client** SOUTH DUBLIN COUNTY COUNCIL

**Project** PROPOSED UPGRADE SCHEME FOR GC BUSINESS PARKS

**Dwg. Title** PROPOSED LAYOUT KEY PLAN

**Drawn By** KT **Checked By** DRL **Date** MAR. 2026

Project Code	Originator	Zonal/Phase	Level	Type	Role	Dwg. No.
24_158 - CSE - GEN - XX - DR - C - 1510						

**S2** SUITABLE FOR INFORMATION 1:5000

**PL01** PLANNING 24\_158

Scale @ A1  
CSEA Job No.

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