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CALTRAGH LRD
NEWTOWNHOLMES ROAD,
CALTRAGH AND CORNAGEEHA

CO. SLIGO

SCREENING FOR ENVIRONMENTAL IMPACT ASSESSMENT

APRIL 2024

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DOCUMENT APPROVAL

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Date April 2024	Signature 	Signature 

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1 INTRODUCTION

Jennings O'Donovan & Partners Limited have been commissioned by Rhatigan Architects to carry out an Environmental Impact Assessment Screening under (Directive 2011/92/EU), as amended by Directive 2014/52/EU under Article 6(3) for the Provision of Works of a Housing Development at Newtownholmes Road, Caltragh and Cornageeha, Co. Sligo. The works hereafter in this report will be identified as 'the Project'.

This report provides an Environmental Impact Assessment screening for a Large-Scale Residential Development (LRD) consisting of an area of land measuring 3.796 Ha located at Newtownholmes Road, Caltragh and Cornageeha, Co. Sligo. This development is a Large-Scale Residential Development (LRD) under the Planning and Development (Large Scale Residential Developments) Act 2021 Section 32b. The Planning Application Stage of this process is being pursued by Rhatigan Architects.

The EIA Screening Report has been prepared to assess the potential impacts on the environment of the Proposed Development at the subject site. The full details of the scheme are as follows:
The proposal is for a residential development consisting of the construction of 118 no. new residential units and 1 no. new Creche. The development also includes public areas to the North and Central sections of the development.

The above approach delivers a mixture of 1, 2, 3, 4 and 5-bedroomed units, in accordance with the Urban Housing Policy P-UHOU-3. The public open space of 15% (TBD) provided is also in accordance with this Urban Housing Policy.

It is proposed to direct the foul water from the development to the centre of the site where there is an existing 300mm diameter foul water pipe that crosses the site from east to west. The proposed foul water will discharge under gravity to the existing foul water network.

Storm water generated from the development will discharge under gravity, passing through a petrol interceptor before entering an appropriately sized attenuation / infiltration storage system located within the open space at the centre area of the site. Following attenuation, the storm water will be discharged from the attenuation / infiltration storage system and percolate into the soil.

This report is prepared by Jennings O' Donovan & Partners Ltd (JOD) so that the possible effect on the environment has been examined through the process of an EIAR Screening and the most appropriate form of development delivered at this site.

1.1 Purpose of this Statement

The purpose of this Environmental Impact Assessment Screening Statement is to determine whether or not an Environmental Impact Assessment Report is required for the Proposed Development and to identify any environmental issues that might arise. It is worth noting that this Proposed Development is below any threshold, and we do not consider a Schedule 7A screening process will be required.

This report is supported and informed by accompanying documentation including an Appropriate Assessment Screening Report prepared by JOD.

1.2 Statement of Authority

This Screening for this EIA Report has been prepared by a qualified and accredited expert as follows: Dr. Monica Sullivan MCIEEM is Principal Environmental Scientist and lead ecologist with JOD. She has a Ph.D. in Environmental Sciences from Trinity College Dublin and has over 35 years' experience in the natural sciences. She is a chartered environmental scientist and has lectured since the mid 1990's – 2017 in invertebrate zoology, ecology and environmental pollution control to both masters and degree students. She has a clear understanding of the legislative framework governing the extent of environmental investigations, assessments and reports required to secure the necessary approvals on all types of projects. Dr. Sullivan has extensive experience in preparing EIA Screening and Scoping reports and works as part of a multi-disciplinary professional team, providing input to Environmental Impact Assessment Reports.

2 THE PROPOSED DEVELOPMENT AND ENVIRONMENTAL SENSITIVITIES

2.1 The Proposed Development

All drawings for the proposed works are outlined in Appendix I. The proposed residential development will consist of construction of 8 no. 2 bedroom semi-detached houses, 40 no. 3 bedroom semi-detached houses, 41 no. 4 bedroom detached houses, 1 no. 5 bedroom semi-detached house, 8 no. 1 bedroom apartments, 20 no. 2 bedroom apartments. The development of 1 no. creche facility with associated outdoor play areas and parking. Ancillary structures including ESB substations and associated switch rooms, bicycle and bin stores. Public and communal open spaces, private open space, site landscaping, public lighting, footpaths, roads, parking, foul and surface water drainage and all associated site development works. The application includes the provision of 2 no. access roads and construction of a footpath & cyclepath along the Newtownholmes Road.

There are public open spaces and amenity areas in the northern and central sections of the proposed development. The proposed site area is 3.796 ha.

It is proposed to direct the foul water from the development to the centre of the site where there is an existing 300mm diameter foul water pipe that crosses the site from east to west. The proposed foul water will discharge under gravity to the existing foul water network.

The storm drainage for the entire development has been designed in accordance with the Greater Dublin Strategic Drainage Study (GDSDS) and incorporates normal sustainable drainage systems (SuDS) measures before percolating into the ground. The storm drainage network will be watertight to prevent leaks which could contaminate the groundwater in the area and is designed to cater for surface water from hard surfaces in the proposed development including roadways, footpaths and the proposed buildings (Storm Sewer Drawing 6736-JOD-XX-ZZ-DR-C-200-001, Appendix I). An attenuation / infiltration storage system is proposed under the "central open area" which would store runoff and

percolate into the soil. The proposed watermain layout is outlined in Drawing 6736-JOD-XX-ZZ-DR-C-200-007, Appendix I).

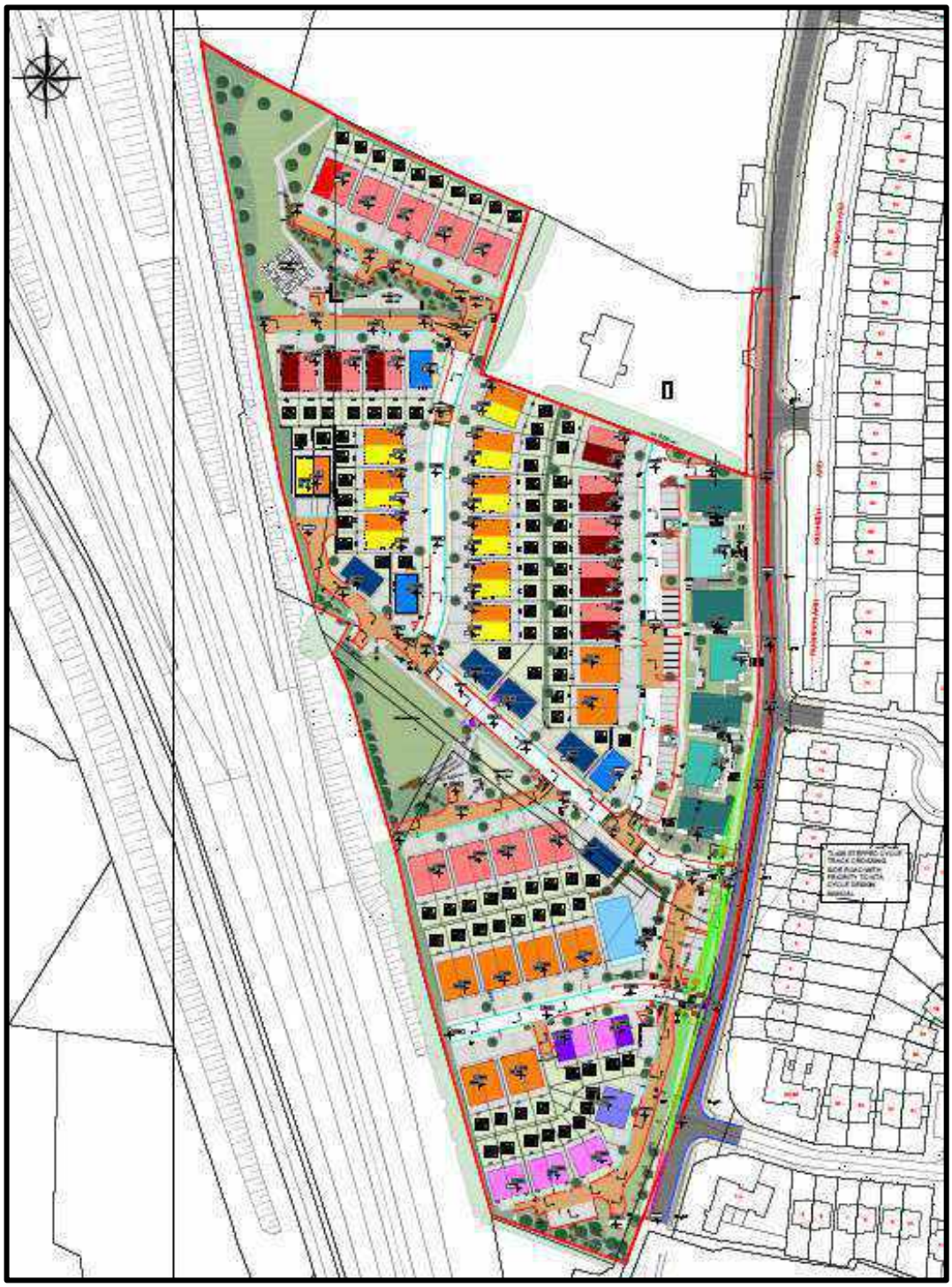


Figure 2.1: Site Plan for the new housing development at Newtownholmes Road, Caltragh and Cornageeha, Co. Sligo

2.2 Location

The Proposed Housing Development is located at Newtownholmes Road, Caltragh and Cornageeha in Sligo. The proposed site is currently a greenfield site bounded by the N4 to the west (Figure 2.2). The site is bordered by a residential housing estate to the east. An individual dwelling and active residential construction site borders to the north. There is an area of scrubland to the south. The wider surrounding

landscape is comprised of Sligo town and its amenities, residential and commercial areas, and improved agricultural grasslands.

The site slopes from c.47.32m at its north-eastern end to c.42.52m at its northwestern end, then slopes down to c.33.85m on its central western end, slope up to c.42.71m at its central eastern end, then slopes up to c.49.83m at its south-eastern end, then slopes down to c.47.49m at its southwestern end.

The proposed site has a street frontage of approximately 1865m on the Newtownholmes Road. The 2 no. access junctions to the new Proposed Development will be on the east boundary onto Newtownholmes Road.

Figure 2.2 Location of the Proposed Development

The townland of Caltragh comprises of housing estates and a local shop. Surrounding lands are mainly given to the urban areas of Sligo Town.

Caltragh is located at approximately 2km south of Sligo town centre, and approximately 5km north of Ballysadare. The local landscape, beyond the residential estates and the N4 neighbouring the site, is largely agricultural (**Figure 2.3**). Land ownership is generally delineated by walls /fencing in the urban area with treelines and hedgerows and stone walls in the wider more agricultural areas.
The Project covers an area of around 3.796 ha.

Figure 2.3: Local landscape in the environs of the Proposed Development.

2.3 Land, Soils and Flooding

The Proposed Development is located in an urban landscape. The main bedrock is Dartry Limestone Formation with dark fine-grained cherty limestone. Jennings O'Donovan conducted excavations on site to carry out trial pit tests and noted that the sequence of strata encountered generally consisted of topsoil on sandy gravelly clay. As the depth increased cobbles were observed with increasing frequency.

There is no risk from groundwater flooding according to the Office of Public Works (OPW) website, myplan.ie website or the CFRAM study accessed (September, 2023). OPW groundwater flood mapping confirmed that the site is not at risk from groundwater flooding (**Figure 2.4**). In addition, there is no risk of tidal or pluvial flooding.

Ground investigations were conducted in October of 2023 and in January 2024, including trial pits (**Appendix II**). Out of the trial pits tested, no groundwater was present in any of the trial pits. Based on these onsite tests, it is anticipated that the groundwater table will not be above the excavated level for the foundations and services.

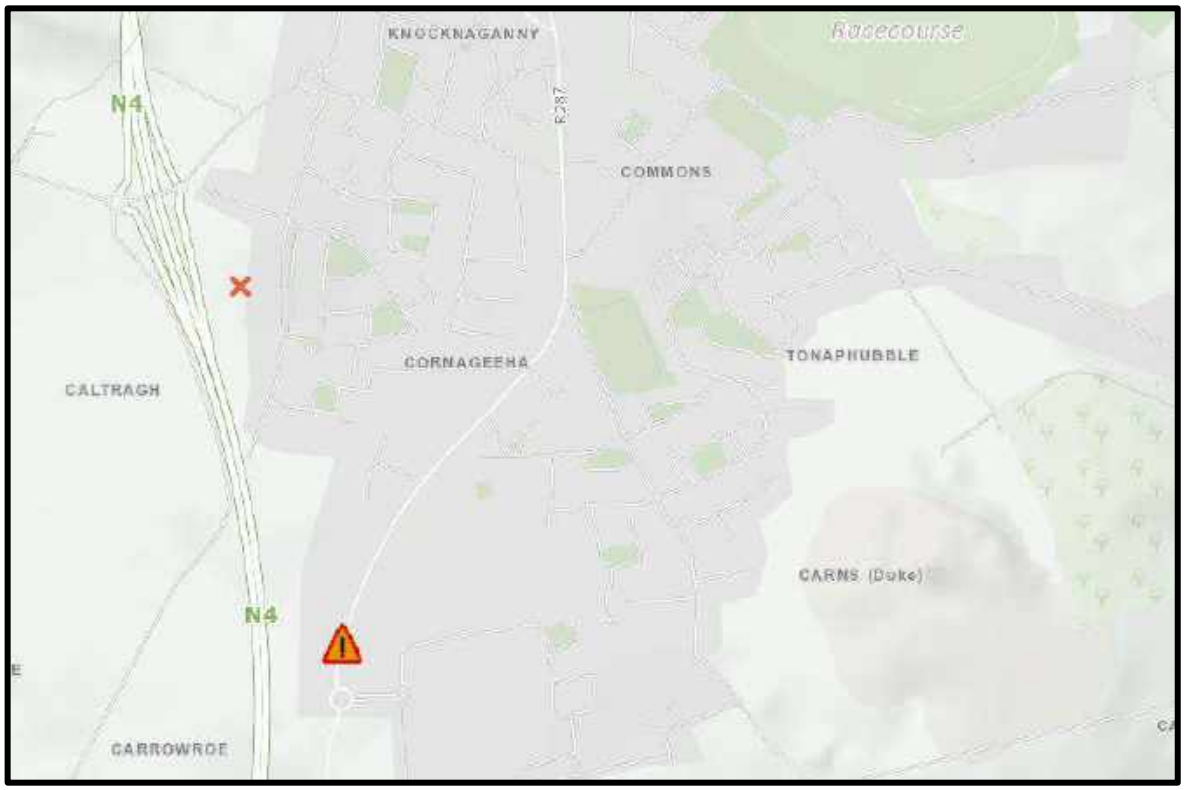


Figure 2.4: Flood Map for the Proposed Site (Source: FloodInfo.ie, 2023)

The scheme consists of 8 no. 2 bedroom semi-detached houses, 40 no. 3 bedroom semi-detached houses, 41 no. 4 bedroom detached houses, 1 no. 5 bedroom semi-detached house, 8 no. 1 bedroom apartments, 20 no. 2 bedroom apartments. The development of 1 no. creche facility with associated outdoor play areas and parking. Ancillary structures including ESB substations and associated switch rooms, bicycle and bin stores. Public and communal open spaces, private open space, site landscaping, public lighting, footpaths, roads, parking, foul and surface water drainage and all associated site development works. The application includes the provision of 2 no. access roads and construction of a footpath & cyclepath along the Newtownholmes Road.

The proposed use of natural resource of land will be significantly different to the existing land use situation. A housing development with associated backyards and infrastructure will be developed. The main habitat of this land has been assessed as 'Wet Grassland' and is of low ecological significance. Landscaping and 90 no. individual gardens are likely to lead to planted flowerbeds, lawns shrubbery and trees that could enhance biodiversity in this area.

The construction or operation of the Proposed Development (with no basements proposed) would not use such a quantity of soils or water to result in significant adverse effects on the local urban environment.

Ground conditions encountered during the completion of the fieldwork generally consisted of topsoil on sandy gravelly clay. As the depth increased cobbles were observed with increasing frequency.

Groundwater, Stormwater and Foul Drainage

The site is in an area of a regionally important aquifer that is noted as being high in vulnerability. The associated ground waterbody (GWB) is Cranmore West which covers an area of approx. 44km². The Water Framework Directive (WFD) latest status for the Cranmore West GWB (2016-2021) is 'Good', indicating no change from the previous 2013-2018 and 2010-2015 records held. Status for near surface and sub surface nitrate susceptibility (IE_WE_35G) at the Site is 6 and the status for near surface phosphate susceptibility (IE_WE_35G010200) at the Site is 7. There are no drinking water rivers or lakes in the local area and the Site is also not within a GSI public or group water scheme source protection area.

The nature of the Proposed Development will generate a demand for water, but this is for residential use and is not considered significant. Adherence to best practice Construction and Environmental Management during the construction phase will ensure that the Proposed Development would not result in pollution of groundwater or any surface water.

Management of surface water for the Proposed Development has been designed to comply with the policies and guidelines outlined in the *Greater Dublin Strategic Drainage Study (GDSDS)* and with the requirements of the Sligo County Council.

Storm drainage for the entire development will be designed in accordance with the *Recommendations for Site Development Works for Housing Areas* and also the recommendations of the GDSDS. The details of the pipe designs are outlined in Drawing 6736-JOD-XX-ZZ-DR-C-200-001. The storm water drainage design has been designed to cater for surface water from hard surfaces in the Proposed Development including roadways, footpaths, and the proposed buildings.

1 No. attenuation / infiltration storage system is included in the design with a total capacity of 1026m^3 and is proposed under the "central open area" which would store runoff and percolate into the soil.

Foul water drainage will flow by gravity to discharge into the public foul network that runs from east to west through the central section of the site. All sewer works will be designed and constructed in accordance with the following:

- Irish Water Code of Practice for wastewater infrastructure, connections and developer services, design and construction requirements for self-lay developments July 2020 (revision 2), IW-CDS-5030-03
- Irish Water Wastewater Infrastructure Standard Details, connections and developer services, construction requirements for self-lay developments; July 2020 (revision 04), IW-CDS-5030-01

In line with the Codes of Practices as outlined above, it is considered that the Proposed Development provides treatment of collected run-off, provides a SUDS treatment train approach and is low risk of pollutants. The SuDS principles that influence the planning and design process, enabling SuDS to mimic natural drainage are:

- Storing runoff and releasing it slowly (attenuation)
- Harvesting and using the rain close to where is falls
- Allowing water to soak into the ground (infiltration)
- Slowly transporting (conveying) water on the surface
- Filtering out pollutants
- Allowing sediments to settle out by controlling the flow of the water

The proposed drainage scheme takes into account a number of the above listed principles through the following measures:

- The proposed attenuation / infiltration storage system stores runoff and percolate into the soil.
- Providing public open space green areas allowing rainfall to naturally percolate into the ground
- Strategic placing of gullies to keep road surface gradients as gentle as possible to cater for the slow transporting of water on the surface
- Proposing a class 1 petrol/oil interceptor to remove pollutants from the system

Further detailed information is provided in the Storm & Foul Sewer Layout Drawing 6736-JOD-XX-ZZ-DR-C-200-001, Appendix I.

2.4 Biodiversity

A site visit carried out on September 28th, 2023 noted six main habitats (according to Fossit, 2000) in the survey area, namely BL3: Building and Artificial Surfaces, WL1: Hedgerow, WL2: Treeline, WS1: Scrub, GA1: Improved Agricultural Grassland: GS4: Wet Grassland.
No Annex I habitat occurs within or adjacent to the Project. No rare, threatened, or protected species of plants as per the Red Data Book (Curtis and McGough, 1988) were found. No species listed in the Flora Protection Order (2022) were found to be growing within or adjacent to the Project works.

The National Biodiversity Data Centre (NBDC) website was consulted. One kilometre Grid square 'G6834' incorporates the entire site; with one protected species recorded, namely the common wood pigeon (*Columba palumbus*). Much of the land boundaries with this Grid and close environs are delineated by hedgerow/treeline habitat which the pigeon is likely to favour.

2.5 Air and Climate

The EPA designate the area as Air Zone D: Rural Ireland for Air and Climatic factors.
Co. Sligo has one air quality monitoring station located in Sligo town (54.2730°N, -8.4804°E). Particulate matter and nitrogen oxide is measured at Sligo town. The monitoring station is located at Michael Conlon Road in the grounds of the Old Mill.

The EPA Air Quality site was accessed on September 26th, 2023 and the following ratings noted:

1. Sligo town is currently offline, the last recording had an Air Quality Index for Health (AQIH) is unknown (station currently offline and has been for the last 23 months) with latest PM_{25} average of 107.91 µg/m^3, PM_{10} of 113.83 µg/m^3 and NO_2 of 8.24 µg/m^3.

Since all of the indices are high, this indicates 'Moderate' air quality. This AQIH relates to large towns, which are generally higher than rural areas.

There is no significant impact on air pollution expected from the Proposed Development outside of potential temporary dust impact. Air and Climate are not likely to be significantly affected by the Proposed Development.

3 SLIGO COUNTY DEVELOPMENT PLAN 2017-2023

The Sligo County Development Plan 2017-2023 has been consulted alongside Draft Sligo County Development Plan 2024-2030.

Sligo City is identified as a City, Tier 1 in the Municipal District of Sligo which has a social housing waiting list of 770.

The Plan 2017-2023 outlines Housing Strategy Policies and Objectives that include:

Strategic housing policies

It is the policy of Sligo County Council to:

SP-HOU-1 Encourage a balanced supply of private housing in the county, in a manner that is consistent with the Core Strategy and the Settlement Structure, and which will support the creation of sustainable communities through the provision of an appropriate range of housing types and high-quality residential environments.

SP-HOU-2 Reserve 20% of eligible sites which are subject to new residential development (or a mix of uses including residential) for the development of social and affordable units, in accordance with the Housing Strategy and the requirements of Part V of the Planning and Development Act 2000.

SP-HOU-3 Ensure that the needs of older people, people with disabilities and other special-needs persons and households are adequately catered for in new developments.

Strategic housing objectives

It is an objective of Sligo County Council to:

SO-HOU-1 Implement the relevant provisions of the Sligo City and County Joint Housing Strategy 2010-2017.

SO-HOU-2 Continue to monitor the extent of residential development in the county area to ensure that sufficient land is zoned to accommodate housing demand over the Plan period.

SO-HOU-3 Ensure that 20% of all sites eligible for Part V is reserved for the development of new social and affordable residential units.

SO-HOU-4 Continue with the programme of refurbishment and regeneration of existing local authority housing stock.

SO-HOU-5 Establish a register of eligible households interested in acquiring affordable housing.

4 EIA SCREENING

4.1 EU Directive as Amended and Associated Transposing Regulations

The primary objective of the EIA Directives is to ensure that projects which are likely to have significant effects on the environment are subject to an assessment of their likely effects.

Directive 2014/52/EU amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment came into effect on May 16th, 2017.

The European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018) transpose the requirements of Directive 2014/52/EU, amending previous Directive 2011/52/EU, on the assessment of the effects of certain public and private projects on the environment (the EIA Directive) into planning law with effect from 1st September 2018. The regulations amend the Planning and Development Regulations 2001.

Directive 2014/52/EU does not make any amendments to the list of projects set out in the two annexes to the 2011 Directive. In the Irish legislation, Annexes I and II are broadly transposed by way of the Planning and Development Regulations 2001, as amended, in Schedule 5 Parts 1 and 2, with national thresholds added to certain Part 2 classes of development.

Schedule 5 Part 1 projects require EIA if the stated threshold set therein has been met or exceeded or where no thresholds are set.

Schedule 5 Part 2 projects meeting or exceeding national thresholds set out therein, or where no thresholds are set, require EIA.

Schedule 5 Part 2 Sub-threshold projects require screening for EIA, except in cases where the likelihood of significant effects can be readily excluded.

The new Annex II A, is transposed into the Planning and Development Regulations 2001 as amended by the insertion of schedule 7A – "*information to be provided by the applicant or developer for the purposes of screening sub-threshold development for environmental impact assessment*."

Art 92 of the Planning and Development Regulations 2001 as amended provides that;

> "*sub-threshold development" means development of a type set out in Part 2 of Schedule 5 which does not equal or exceed, as the case may be, a quantity, area or other limit specified in that Schedule in respect of the relevant class of development*".

4.2 Planning and Development Regulations 2001-2019 and Considerations of the 2001-2021 (unofficial consolidation)

The first stage of EIA screening is provided in Article 120 of the Planning and Development Regulations 2001 as amended (S.I. No. 296/2018 - European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018.

Art 120 (1) (a) provides that; "*where the authority proposes to carry out a subthreshold development, the authority shall carry out a preliminary examination of, at the least, the nature, size or location of the development*".

Art 120 (1) (b) provides that after the preliminary examination is carried out, and where the local authority concludes, based on such preliminary examination, that—

"(i) there is no real likelihood of significant effects on the environment arising from the proposed development, it shall conclude that an EIA is not required,

(ii) there is significant and realistic doubt in regard to the likelihood of significant effects on the environment arising from the proposed development, it shall prepare, or cause to be prepared, the information specified in Schedule 7A for the purposes of a screening determination, or

(iii) there is a real likelihood of significant effects on the environment arising from the proposed development, it shall—

(I) conclude that the development would be likely to have such effects, and

(II) prepare, or cause to be prepared, an EIAR in respect of the development."

Accordingly, Schedule 7A is triggered if there is significant and realistic doubt in regard to the likelihood of significant effects on the environment. Subsection (1b) in summary provides where the local authority prepares, or causes to be prepared, the information specified in Schedule 7A, then the information shall be accompanied by any further relevant information and may be accompanied by a description of the features, if any, of the proposed development and the measures, if any, envisaged to avoid or prevent what might otherwise have been significant adverse effects on the environment of the development.
The Regulations provide that where any person considers that a development proposed to be carried out by a local authority would be likely to have significant effects on the environment, he or she may, at any time before the expiration of 4 weeks beginning on the date of publication of the notice apply to the Board for a screening determination as to whether the development would be likely to have such effects.

4.3 Criteria for Determining Whether the Caltragh LRD at Newtownholmes Road, Caltragh and Cornageeha, Co. Sligo Should be Subject to an Environmental Impact Assessment.

Schedule 7 provides the following criteria for assessment:

1. Characteristics of the Proposed Development

The characteristics of proposed development, in particular:

(a) the size and design of the whole of the proposed development,

(b) cumulation with other existing development and/or development the subject of a consent for proposed development for the purposes of section Planning and Development (Large Scale Residential Developments) Act 2021 Section 32b, Planning Application Stage and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment,

I the nature of any associated demolition works,

(d) the use of natural resources, in particular land, soil, water and biodiversity,

(e) the production of waste,

(f) pollution and nuisances, EIA Screening Report 6

(g) the risk of major accidents, and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge, and

(h) the risks to human health (for example, due to water contamination or air pollution).

2. Location of the Proposed Development

(1) The environmental sensitivity of geographical areas likely to be affected by the proposed development, with particular regard to:

i) the existing and approved land use,

(ii) the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground,

iii) the absorption capacity of the natural environment, paying particular attention to the following areas:

(iv) wetlands, riparian areas, river mouths;

(v) coastal zones and the marine environment;

(vi mountain and forest areas;

(vii) nature reserves and parks;

(viii) areas classified or protected under legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive and;

(ix) areas in which there has already been a failure to meet the environmental quality standards laid down in legislation of the European Union and relevant to the project, or in which it is considered that there is such a failure;

(x) densely populated areas;

(xi) landscapes and sites of historical, cultural or archaeological significance

3. Types and characteristics of potential impacts:

The likely significant effects on the environment of the Proposed Development in relation to criteria set out under paragraphs 1 and 2, with regard to the impact of the project on the factors specified in paragraph (b)(i)(I) to (V) Planning and Development (Large Scale Residential Developments) Act 2021 Section 32b, planning application stage taking into account:

(a) the magnitude and spatial extent of the impact (for example, geographical area and size of the population likely to be affected),

(b) the nature of the impact,

(c) the transboundary nature of the impact,

(d) the intensity and complexity of the impact,

(e) the probability of the impact,

(f) the expected onset, duration, frequency and reversibility of the impact,

(g) the cumulation of the impact with the impact of other existing and/or development, the subject of a consent for proposed development for the purposes of Planning and Development (Large Scale Residential Developments) Act 2021 Section 32b , Stage

2 application and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment, and

(h) the possibility of effectively reducing the impact.

4.4 Section 28 Guidelines for Environmental Impact Assessment

The revised Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment August 2018 were issued under section 28 of the Planning and Development Act 2000, as amended, replacing the 2013 Guidelines, and accordingly planning authorities and An Bord Pleanála are required to have regard to them in the performance of their planning functions.

The Guidelines provides a glossary as follows:

Screening

The process of determining if development of a class prescribed in Part 2 of Schedule 5 to the 2001 Regulations that does not equal or exceed a threshold specified in that Schedule in respect of that class is likely to have significant effects on the environment and should be made the subject of EIA.

Source-Pathway-Target Model

A model identifying the source of likely significant impacts, if any, the environmental factors which will potentially be affected and the route along which those impacts may be transferred from the source to the receiving environmental factors.

2001 Regulations

The Planning and Development Regulations 2001–2018 (as amended by the Transposing Regulations, S.I. No. 296 of 2018).

The Guidelines provide that for all sub-threshold developments listed in Schedule 5 Part 2, where no EIAR is submitted or EIA determination requested, a screening determination is required to be undertaken by the competent authority unless, on preliminary examination it can be concluded that there is no real likelihood of significant effects on the environment. This is initiated by the competent authority following the receipt of a planning application or appeal. The examination should have regard to the criteria set out in Schedule 7 to the 2001 Regulations. A preliminary examination is undertaken, based on professional expertise and experience, and having regard to the 'Source – Pathway – Target' model as defined above.

5 PLANNING AND DEVELOPMENT (LARGE SCALE RESIDENTIAL DEVELOPMENTS) ACT 2021 SECTION 32B, STAGE 2 APPLICATION

Sub-threshold projects in Schedule 5, Part 2 require screening for EIA, except in cases where the likelihood of significant effects can be readily excluded.

Schedule 5 Part 2 outlines Annex II discretionary thresholds determined by Ireland (each EU Member State) which if met or exceeded require a mandatory EIA. It includes Infrastructure projects:

(a) Industrial estate development projects where area would exceed 15 ha.

(b) (i) Construction of more than 500 dwelling units.

(ii) Construction of a car-park providing more than 400 spaces, other than a car-park provided as part of, and incidental to the primary purpose of, a development.

(iv) Urban development which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere.

Having regard to the above thresholds, this application for "118 dwelling units on a site of 3.796 ha" (with below threshold parking incidental to the development) may be described as a sub threshold development.

5.1 Methodology

The following screening has had regard to the following:

- Planning and Development Act 2000 as amended
- Planning and Development Regulations 2018 (as amended)
- Planning and Development (Housing) and Residential Tenancies Act 2016 (as amended)
- Directive 2011/92/EU
- Directive 2015/52/EU
- Directive 2014/52/EU of 16 April 2014 amending Directive 2011/92/EU
- Transposition of 2014 EIA Directive (2014/52/EU) in the Land Use Planning and EPA Licensing
- Directive 2015/52/EU
- Systems – Key Issues Consultation Paper (2017; DoHPCLG)
- Preparation of guidance documents for the implementation of EIA directive (Directive 2011/92/EU as amended by 2014/52/EU) – Annex I to the Final Report (COWI, Millieu; April 2017)
- The European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018)
- Draft Guidelines on the information to be contained in Environmental Impact Assessment Reports, Environmental Protection Agency, 2017
- Environmental Impact Assessment of Projects: Guidance on Screening, European Commission, 2017
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment August 2018, DoHPLG.
- Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Subthreshold Development 2003, DoHPLG.
- Interpretation of definitions of project categories of Annex I and II of the EIA Directive (EU, 2015)
- Circular Letter: PL 05/2018 [2]7th August 2018 Transposition into Planning Law of Directive 2014/52/EU amending Directive 2011/92/EU on the effects of certain public and private projects on the environment (the EIA Directive) and Revised Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment.

- Circular Letter: PL 10/2018 22 November 2018 Public notification of timeframe for application to An Bord Pleanála for screening determination in respect of local authority or State authority development.

5.2 Planning and Development (Large Scale Residential Developments) Act 2021 Section 32b, Planning application

The 'Environmental Impact Assessment (EIA) Guidance for Consent Authorities Regarding Sub-Threshold Development' groups criteria for deciding whether or not a proposed development would be likely to have significant effects on the environment under three main headings (with sub-headings) which correspond to the updated Schedule 7 are outlined in Section 4.3 above. The Proposed Development will be assessed under these headings hereunder, namely Section 4.7.1, 4.7.2 and 4.7.3.

5.2.1 Characteristics of the Proposed Development

The characteristics of the Proposed Development, in particular:

(a) the size and design of the whole of the Proposed Development,

The scheme consists of 8 no. 2 bedroom semi-detached houses, 40 no. 3 bedroom semi-detached houses, 41 no. 4 bedroom detached houses, 1 no. 5 bedroom semi-detached house, 8 no. 1 bedroom apartments, 20 no. 2 bedroom apartments. The development of 1 no. creche facility with associated outdoor play areas and parking. Ancillary structures including ESB substations and associated switch rooms, bicycle and bin stores. Public and communal open spaces, private open space, site landscaping, public lighting, footpaths, roads, parking, foul and surface water drainage and all associated site development works. The application includes the provision of 2 No access roads and construction of a footpath and cyclepath along the Newtownholmes Road

It is proposed to direct the foul water to the public network using gravity systems. The connection is made to the exiting public foul network that runs from east to west through the central section of the site.

1 No. attenuation / infiltration storage system is proposed under the central public open area with a total capacity of 1026m^3 which would store runoff and percolates into the soil.

(b) Planning and Development (Large Scale Residential Developments) Act 2021 Section 32b, Planning Application Stage of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment.

5.2.1.1 Application site

There is no recent planning history on the application site.

5.2.1.2 Wider area

The accompanying Appropriate Assessment Screening considered that while the effects on European Sites were not expected as a result of the construction and operation of the Proposed Development, the potential for cumulative effects on these designated sites due to other plans and

projects acting in-combination with the Proposed Development were considered. Sligo County Council on-line planning application portal was used to search planning applications close to the Proposed Development. A five-year search timeframe was assessed. Retention, refused and withdrawn planning applications were excluded. In the wider area (within 500m), there are a number of permissions for domestic extensions and small-scale commercial developments. Table 5.1 outlines four applications within a radius of approx. 500m in the last 5 years.

Table 5.1 Planning applications in close proximity to the Proposed Development.

Planning Reference	Description of Development	Site Address	Decision Date	Distance from Site
2360056	development consisting of the following: a) A total of 65 no. residential units consisting of 19 no. – Type A – 2 bed semi-detached and terraced houses, 10 no. – Type B – 3 bed semi-detached and terraced houses, 23 no. – Type C – 3 bed semi-detached, terraced and detached houses, 13 No. – Type D – 5 bed semi-detached and detached houses b) Pedestrian, cycle and vehicular access/egress with Newtownholmes Road, c) All car parking, landscaping, boundary treatments, pedestrian links, public lighting, service connections and all associated site works.	Newtownhomes Road, Caltragh, Sligo	19/05/2023	adjacent to the project site
2338	development consisting of revisions to previously approved planning application ref. no. 22/181. The revisions include the change of house numbers 3 and 14 from 2 bed semi-detached houses to 3 bed semi-detached houses and associated site works	Newtownholmes Road, Caltragh, Sligo, Co. Sligo	18/05/2023	approx. 370m from the project site
19120	Development consisting of the construction a single storey extension to the rear of dwelling house with all associated works.	222 Rusheen Crescent, Caltragh, Sligo	24/05/2019	approx. 170m from the project site
21363	development consisting of a ground floor extension to rear and side of existing house and extension to bedroom on the first floor to side of house and widening of the entrance gate to front drive	No. 91 Crozon Park, Knocknaganny, Sligo	17/12/2021	approx. 170m from the project site

There were no other planning applications in the area at the time of writing (April, 2024).

Having regard to the scale of the permitted developments in the vicinity, the AA Screening Assessment noted that there will be no in-combination effects with local planning applications.

(c) the nature of any associated demolition works,
The site is currently a vacant greenfield site; no demolition works are proposed.

(d) the use of natural resources, in particular land, soil, water and biodiversity,
The site is currently a greenfield site, with residential developments to the east and partially to the north.
The nature of the proposed residential development will generate a demand for water, but this is for residential use and is not considered significant. Sustainable urban drainage systems (SUDS) will be incorporated into an attenuation / infiltration storage system located within the open space at the central area of the site. Following attenuation, the storm water will be discharged from the attenuation / infiltration storage system and percolate into the soil. The storm drainage for the entire Proposed Development will be designed in accordance with the *Recommendations for Site Development Works for Housing Areas* and also the recommendations of the *Greater Dublin Strategic Drainage Study* (GDSDS).

Adherence to best practice Construction and Environmental Management during the construction phase will ensure that development will not result in pollution of groundwater or surface water.

The site was surveyed by Jennings O'Donovan and Partners Limited lead-chartered ecologist, Dr. Monica Sullivan MCIEEM CEnv in 2023. She noted that there was no evidence of ground level animal pathways or any tree /ground nesting birds onsite.

Where it is proposed that any further shrubbery vegetation will be removed (including during the operation phase), compensatory native species will be planted – this is subject to agreement with adjacent landowner. Where possible, any removal of vegetation will take place outside of the nesting season (i.e. March 1st to August 31st). Where vegetation is to be removed, a suitably qualified ecologist will carry out a pre-removal survey to determine if there are any ground nesting or scrub/tree nesting birds onsite. No tree nesting birds were noted on site in 2023.

Due to the many constraints of the site, the specified housing density for the site in the County Council's Development Plan and to ensure the economic viability of the development the proposal involves the loss of existing treelines and hedgerows. There are trees and hedgerows onsite which are proposed to be removed that are native (and non-native),well-established and healthy and have a decent biodiversity associated with them. Although the proposed loss of trees and hedgerows will have an immediate impact on the biodiversity of the area, sufficient space for high-quality tree and hedge planting that can mitigate the proposed removals and improve the biodiversity of the site over time has been provided. To

further mitigate the biodiversity loss the first option should be relocating existing trees and hedgerows on the site to preserve the existing biodiversity as much as possible instead of planting new.

The proposed development landscaping includes native trees, hedges, and wildflower areas to promote biodiversity, offering homes, shelter and food sources to a wide array of wildlife and help foster a more vibrant and resilient ecosystem. Native trees and shrubs sourced only from Ireland nursery stock will be used to help prevent fungal pathogens arriving into Ireland. The wildflowers will only be from native sources to enhance biodiversity. Native trees will provide nesting sites for birds and shelter for small mammals, while hedges create nesting spaces and hiding spots for insects and birds. Native wildflower areas attract pollinators and insects, which, in turn, support birds and other wildlife. Trees and hedges produce fruits, nuts, seeds, and leaves that serve as food sources for many animals. Similarly, native wildflowers provide nectar, pollen, and seeds, offering sustenance for a variety of insects, birds, and small mammals. Native wildflower areas play a crucial role in supporting pollinators like bees, butterflies, and other insects which in turn, helps in pollination of other plants, promoting their growth and reproduction. The proposals create biodiversity hotspots by encouraging a wide range of species to coexist in a relatively small area.

(e) the production of waste

The Proposed Development will generate general household waste. Operational waste for the residential development will be controlled by each housing unit. In terms of the production of waste, measures will be outlined to maximise the quantity of waste recycled by providing sufficient waste recycling infrastructure, waste reduction initiatives and waste collection and waste management information to the residents of the Proposed Development.

During the construction phase, construction waste will be generated which will be the subject of a construction Waste Management Plan.

The main use of natural resources will be land. Other resources used will be construction materials which will be typical raw materials used in the construction of residential developments. The scale and quantity of the materials used will not be such that would cause concern in relation to significant effects on the environment.

There will be some waste materials produced in the construction of the proposed scheme which will be disposed of using licensed waste disposal facilities and contractors. As is standard practice the scale of the waste production in conjunction with the use of licensed waste disposal facilities and contractors will not cause concern for likely significant effects on the environment.

(f) pollution and nuisances

Noise, vibration, lighting and dust arising from construction activities and construction traffic have the potential for pollution or nuisance.

It is probable that minor impacts of noise pollution during the construction phase will occur. However, plant machinery and motorised vehicles on local roads within the area are not unexpected or out of character. Working hours will be limited to hours set by the planning conditions. Minor impacts identified will occur predominately during the construction phase in terms of construction related noise, dust and traffic. The frequency of impacts will vary throughout the construction phase, but it still not considered to be significant. The minor impacts will be temporary and will not lead to long term residual impacts.

The Proposed Development is on a Greenfield site. Proposed lighting within the development has been designed to adhere to the best practice lighting standards provided in the Institute of Lighting Professionals (ILP) guidance document Guidance Note 08/18 – Bats and Artificial Lighting in the UK (2018).

Bat species are not qualifying features of the surrounding European Sites.

Any risk of surface water pollution can be avoided by adherence to best practice Construction and Environmental Management during the construction phase which will ensure that the Proposed Development would not result in pollution of groundwater or surface water.

The Proposed Development is primarily for a small residential development. Accordingly, there are no significant expected significant residues or emissions. Aspects of energy efficiency are incorporated into the modern energy efficient design of the buildings.

(g) the risk of major accidents, and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge,

Standard construction practices will be employed throughout the construction phase to mitigate the potential of any major accidents or disasters from occurring. The Proposed Development will result in no particular risk of accidents arising from substances or technologies used. Traffic will be generated during the construction period, but for a temporary and defined period only.

(h) the risks to human health (for example, due to water contamination or air pollution).

The nature of the Proposed Development and the engineering provisions will not lead to the likelihood of any risk to human health. The Proposed Development is of standard construction method and of appropriate scale and does not require the use of particular substances or use of technologies which of themselves are likely to give rise to significant environmental effects.

The Proposed Development is located within the settlement of Sligo Town with a noted population of 20,608 in 2022. There are no operational impacts associated with this residential development that would be likely to cause significant effects in terms of human

health. **The Proposed Development will increase the local area population by c. *361* no. people once complete and fully occupied.** This increase in population can be accommodated within this area and there is a sufficiency of physical and social infrastructure in the area to support this additional development such as transport links, schools, a church and local shops.

5.2.2 Location of the Proposed Development

The location of the Proposed Development is described in section 2 above.

The environmental sensitivity of geographical areas likely to be affected by the Proposed Development, with particular regard to—

(a) the existing and approved land use

The existing and approved land is a vacant greenfield site and considered of low ecological significance however boundary vegetation would provide habitats for many species of flora and fauna. The site was previously used to graze cattle. Residential dwellings and amenities are common in the local area. There will be no significant impact on the local ecology or agricultural practices as a result of this development.

The land on which the site is proposed is 'Greenfield'. As such, the use of this material asset is in a manner compatible with the zoning designation and is entirely appropriate. Once constructed, the operation phase will provide an important material asset for the area in terms of 118 no. residential units. Whilst the demand on water services, power, telecommunications and transport infrastructure will all increase as a result of the development, the impact on these material assets will not be significant and can be facilitated within planned demand loads for the area.

(b) the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground.

The site is a greenfield site. The proposed development landscaping includes native trees, hedges, and wildflower areas to promote biodiversity, offering homes, shelter and food sources to a wide array of wildlife and help foster a more vibrant and resilient ecosystem. Native trees and shrubs sourced only from Ireland nursery stock will be used to help prevent fungal pathogens arriving into Ireland. The wildflowers will only be from native sources to enhance biodiversity.

Native trees will provide nesting sites for birds and shelter for small mammals, while hedges create nesting spaces and hiding spots for insects and birds. Native wildflower areas attract pollinators and insects, which, in turn, support birds and other wildlife. Trees and hedges produce fruits, nuts, seeds, and leaves that serve as food sources for many animals. Similarly, native wildflowers provide nectar, pollen, and seeds, offering sustenance for a variety of insects, birds, and small mammals. Native wildflower areas play a crucial role in supporting pollinators like bees, butterflies, and other insects which in turn, helps in pollination of other plants, promoting their growth and reproduction. The proposals create

biodiversity hotspots by encouraging a wide range of species to coexist in a relatively small area.

(c) the absorption capacity of the natural environment, paying particular attention to the following areas:

(i) wetlands, riparian areas, river mouths;
The proposal is not of such a location or scale that it would impact upon the absorption capacity of this aspect.

(ii) coastal zones and the marine environment;
The proposal is not of such a location or scale that it would impact upon the absorption capacity of this aspect.

(iii) mountain and forest areas;
The proposal is not of such a location or scale that it would impact upon the absorption capacity of this aspect.

(iv) nature reserves and parks
The proposal is not of such a location or scale that it would impact upon the absorption capacity of this aspect.

(v) areas classified or protected under legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive and;
The Appropriate Assessment Screening Report indicates no significant effect anticipated on any Natura 2000 sites or other designated sites.

(vi) areas in which there has already been a failure to meet the environmental quality standards laid down in legislation of the European Union and relevant to the project, or in which it is considered that there is such a failure;
This does not apply.

(vii) densely populated areas;
The surrounding area is densely populated. Given the quantum of units and proposed density, there will be no environmental impact as a result of increased population.

(viii) landscapes and sites of historical, cultural or archaeological significance.
The National Monuments Service Archaeological Survey Database does not record any monuments within or in the immediate vicinity of the subject site. Of the eight recorded monuments located within 1km of the subject site, the closes (RMP No. SL014-303, Enclosure) is c. 170m away.

5.2.3 Characteristics of Potential Impacts

(a) the magnitude and spatial extent of the impact (for example, geographical area and size of the population likely to be affected)
The magnitude of the proposal (3.796 ha) transforms a greenfield site into a small housing development. The Proposed Development is for 118 residential units, associated landscaping including parking to the front of each house. It includes

8 no. 2 bedroom semi-detached houses, 40 no. 3 bedroom semi-detached houses, 8 no. 4 bedroom detached houses, 33 no. 4 bedroom semi-detached houses, 1 no. 5 bedroom semi-detached house, 8 no. 1 bedroom apartments, 20 no. 2 bedroom apartments.

The development of 1 no. creche facility with associated outdoor play areas and parking. Ancillary structures including ESB substations and associated switch rooms, bicycle and bin stores. Public and communal open spaces, private open space, site landscaping, public lighting, footpaths, roads, parking, foul and surface water drainage and all associated site development works. The application includes the provision of 2 no. access roads and construction of a footpath and cyclepath along the Newtownholmes Road.

The scale of the proposed development will extend the existing Sligo Town area and will increase the population density in this area. The development will provide serviced residential accommodation. The extent of the impact will be confined to that area in the immediate environs of the subject site and will be limited primarily to the residential population in the vicinity.

(b) the nature of the impact

The impact will be an increase in the residential population to provide a specific type of housing. The impact will provide housing in a time of severe shortage and in accordance with the Sligo County Development Plan core strategy and as identified above in Section 4.

(c) the transboundary nature of the impact,

This does not apply.

(d) the intensity and complexity of the impact,

The proposal in itself is not of a complex nature such that it warrants an EIAR.

(e) the probability of the impact

Should approval be given, the development will proceed.

(f) the expected onset, duration, frequency and reversibility of the impact,

The principal impacts associated with the proposal will most likely be concentrated during the construction phase. The Proposed Development will be permanent.

(g) the cumulation of the impact with the impact of other existing and/or development, the subject of a consent for the Proposed Development for the purposes of section Planning and Development (Large Scale Residential Developments) Act 2021 Section 32b , Planning Application Stage and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment, and this is addressed in section 5.7.1.2 (Wider Area) above.

(h) the possibility of effectively reducing the impact.

On the issue of the built structures, it is considered that the proposal will visually change the existing landscape, however, the design put forward is for a housing estate approach which is a high standard architectural design, consistent with neighbouring structures with the provision of well-designed gardens, infrastructure and associated open spaces, lighting and landscaping.

In terms of wastewater treatment, it is considered that the impact upon the existing sewage system will be fully scoped having regard to the requirements of Irish Water. The floor levels of the Proposed Development will be constructed above the 100 year predicted flood events.

Foul Water and Storm Drainage

The foul water drainage for the development will be collected throughout the site in the foul pipe network and then directed to the centre of the site where there is an existing 300mm diameter foul water pipe that crosses the site from east to west. The proposed foul water will discharge under gravity. Details of the development's foul drainage network are shown on Drawing No. 6736-JOD-XX-ZZ-DR-C-200-001.

The water main has been designed in accordance with the Irish Water (Uisce Éireann) Code of Practice for Water Infrastructure. A 180mm OD PE connection is proposed to be made to the existing 150mm inside diameter uPVC watermain which is laid across the central area of the proposed site, as shown on Drawing No. 6736-JOD-XX-ZZ-DR-C-200-007, included in Appendix I. From the proposed 180mm OD PE watermain, it is proposed to connect 110mm OD PE watermains to serve the branches of the proposed development. A 25mm PE connection will be made to each dwelling/unit.

5.3 Inter relationship with above factors

All details have been outlined as required under the 'Environmental Impact Assessment (EIA) Guidance for Consent Authorities Regarding Sub-Threshold Development' groups criteria for deciding whether or not a proposed development would be likely to have significant effects on the environment under three main headings which corresponded to the updated Schedule 7. It is considered that any of the previously identified relatively minor impacts would not in themselves be considered significant nor would they cumulatively result in a likely significant effect on the environment.

The supporting AA Screening Assessment for this Proposed Development has *shown there will be no likely significant effects to any European Site during the construction or operations phases of the Proposed Development. Works will be contained within the site; it is anticipated that there will be no in-combination impacts from any local planning applications.*

6 CONCLUSION

This EIA Screening Report has been prepared in relation to a Planning and Development (Large Scale Residential Developments) Act 2021 Section 32b, Stage 2 application residential development on land situated at "Newtownholmes Road", Caltragh and Cornageeha**,** Co. Sligo in accordance with Article 120 (1) (b) of the Planning & Development Regulations, 2001 as amended, having regard to the following:

- The location, size and nature of this serviced site located in an urban setting and distanced from protected and/or environmentally sensitive sites.
- The proposed development is below the threshold of a mandatory EIA which would require an Environmental Impact Assessment Report (EIAR)
- The modest scale and quantum of the residential development proposed and integration with the adjoining Sligo town.
- The description of possible effects on the environment are not considered significant and therefore further assessment pursuant to the Planning and Development Regulations 2001 as amended are not considered necessary.

- An Appropriate Assessment Screening has been carried out. It concluded that the proposed development will not cause direct or indirect impacts on any Natura 2000 sites, and that an Appropriate Assessment is not required.

It is considered that a sub-threshold EIAR is not required for the Proposed Development as the proposal is below the thresholds of Schedule 5 of the Planning and Development Regulations.

As noted previously in the report the application involves the loss of existing treelines/hedgerows on the west side. This is done to comply with the specified housing density for the site in the County Council's development plan. Compensatory planting will form part of the proposed development.

All standard practices will be employed throughout the construction and operation phase of the development to ensure that the Proposed Development will not create any significant impacts on the quality of the surrounding environment.

7 REFERENCES

Biodiversity Maps, https://maps.biodiversityireland.ie/Map

EPA (2017) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (Draft). Environmental Protection Agency.

EPA Maps, **https://gis.epa.ie/EPAMaps/AAGeoTool**

EU (2017) Environmental Impact Assessment of Projects, Guidance on Screening (Directive 2011/92/EU as amended by 2014/52/EU).

Flood Maps, **https://www.floodinfo.ie/map/floodmaps/**

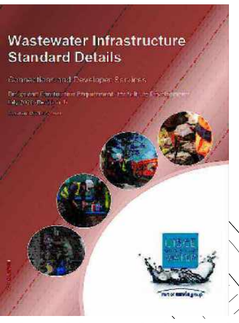
Geological Survey Ireland Spatial Resources (GSI), https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=a30af518e87a4c0ab2fbde2aaac3c228

JOD, Trail Pit Report, 2023, Proposed Housing Development at Caltragh, Co. Sligo

Archaeology Desktop Study of a Potential Development Site at Caltragh Road, Sligo, 2023, R. Crumlish

APPENDIX I

DRAWINGS



NOTE: CONTRACTOR IS TO REFER TO REVISION 4 OF THE IRISH WATER STANDARD DETAILS DATED JULY 2020 FOR WASTEWATER INFRASTRUCTURE DETAILS. THIS BOOKLET HAS BEEN INCLUDED IN PART OF THE CIVIL/STRUCTURAL PACKAGE.

ALL WORKS TO BE CARRIED OUT TO IRISH WATER CODE OF PRACTICE DOCUMENT CDS-5030-03

FOUL WASTE WATER LAYOUT TO BE INSTALLED IN ACCORDANCE WITH IRISH WATER STANDARD DETAIL STD-WW-02 REGARDING GENERAL LAYOUT.

ALL FOUL WASTEWATER DRAINAGE PIPE WORK, INCLUDING SERVICE CONNECTIONS TO COMPLY WITH SECTION 3.6 OF I.W. CODE OF PRACTICE REGARDING PIPE WORK GRADIENTS.

ALL FOUL WASTEWATER PIPE WORK MATERIAL TO COMPLY WITH SECTION 3.13 OF THE IRISH WATER CODE OF PRACTICE.

ALL MANHOLES TO BE CONSTRUCTED IN ACCORDANCE WITH I.W. STD-WW-10 and I.W. STD-WW-12.

WHERE FOUL AND SURFACE WATER MANHOLES AREA ADJACENT THEIR POSITIONS SHOULD BE STAGGERED TO ALLOW FOR CROSSING OVER OF SEWERS AS PER SECTION 3.5.13 OF I.W. CODE OF PRACTICE.

WHERE 0.3m SEPERATION DISTANCE CANNOT BE ACHIEVED BETWEEN FOUL AND STORM PIPES, THE PIPES SHALL BE SURROUNDED IN LEAN MIX CONCRETE.

ALL WASTEWATER PIPE WORK SHALL BE INSTALLED IN ACCORDANCE WITH I.W. STD-WW-05, STD-WW-06, AND STD-WW-06A REGARDING SEPARATION DISTANCES.WHERE SEPARATION DISTANCES CANNOT BE ACHIEVED, PIPES SHALL BE SURROUND IN LEAN MIX CONCRETE.

INSPECTION CHAMBERS TO BE INSTALLED ON ALL CONNECTIONS FROM FOUL AND SURFACE WATER SEWER WITHIN INDIVIDUAL PROPERTIES IN ACCORDANCE WITH I.W. STD-WW-03-1 IN COMPLIANCE WITH IRISH WATER CODE OF PRACTICE AND STANDARD DETAILS

FOUL SEWER DROP MANHOLES TO BE INSTALLED TO IW WASTEWATER CODE OF PRACTICE STANDARD DETAIL STD-WW-12.

HDPE TWINWALL PIPES TO BE USED FOR ALL STORM SEWER PIPES UNLESS OTHERWISE SPECIFIED. ALL FOUL SEWER PIPES TO BE IN ACCORDANCE WITH IRISH WATER CODES OF PRACTICE.

PIPES ARE TO BE BBA (BRITISH BOARD OF AGRÉMENT) OR SIMILAR APPROVED AND HAPAS (HIGHWAYS AGENCY PRODUCT APPROVAL SCHEME) OR SIMILAR CERTIFIED.

WHERE 0.9m COVER TO THE ROADWAY CANNOT BE ACHIEVED, PIPES SHALL BE SURROUNDED IN LEAN MIX CONCRETE.

GENERAL NOTES:

1 FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING.
2 ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE.
3 ENGINEER TO BE INFORMED OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES.
4 THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS AND SPECIFICATIONS.

LEGEND

SITE BOUNDARY shown thus

PROPOSED 1200MM D400 STORM/FOUL MANHOLE shown thus

PROPOSED DROPPED INVERT 1200MM D400 STORM/FOUL MANHOLE shown thus

PROPOSED CONCRETE SURROUND FOR LOW COVER STORM/FOUL PIPES shown thus

PROPOSED STORM WATER NETWORK shown thus

PROPOSED FOUL NETWORK shown thus

PROPOSED SURFACE WATER CONNECTIONS shown thus

PROPOSED FOUL WATER CONNECTIONS shown thus

PROPOSED STORM/FOUL WATER AJs shown thus

PROPOSED STORM/FOUL WATER BOUNDARY BOX TO IW-STD-WW-13 shown thus

PROPOSED ROAD GULLIES shown thus

EXISTING STORM WATER PIPE shown thus

EXISTING FOUL WATER PIPE shown thus

S03-5 C.L : 43.595 I.L : 42.405
F02-5 C.L : 43.510 I.L : 42.150
F02-4 C.L : 45.210 I.L : 41.750
S03-4 C.L : 45.210 I.L : 42.210
S03-3 C.L : 44.760 D.I.L : 42.180 I.L : 38.580
F02-3 C.L : 44.750 D.I.L : 41.690 I.L : 37.710
S03-3-1 C.L : 40.655 I.L : 39.035
F02-3-1 C.L : 40.440 I.L : 38.700
S03-2 C.L : 41.450 I.L : 38.000
F02-2 C.L : 41.410 I.L : 37.500
F02-1 C.L :37.870 I.L : 36.155
S03-1 C.L : 37.740 D.I.L : 36.250 I.L : 35.650
Foul Ref. 8401 Ex.C.L : 34.374 I.L : 31.174
Storm Ref 8402 Ex. C.L : 34.371 I.L : 31.491
F04-3 C.L : 45.540 I.L : 43.650
S05-3 C.L : 45.500 I.L : 42.890
STORM TECH ATTENUATION TANK VOLUME = 1026m³ DEPTH = 1.6m FILTRATION RATE = 0.03370 m/hr TtHE = 1419 min C.L. = 36.500m I.L. = 33.880m
F01-2 C.L : 36.145 I.L : 34.700
S03-1-2 C.L : 36.135 I.L : 34.975
S03-1-1 C.L : 36.160 I.L : 34.890
F01-1 C.L : 36.130 I.L : 34.510
F01 C.L : 36.315 D.I.L : 34.760 I.L : 34.160
F04-2 C.L : 41.715 I.L : 40.285
S05-2 C.L : 41.640 D.I.L : 40.340 I.L : 39.740
KLARGESTER NSBE040 PETROL INTERCEPTOR OR EQUAL APPROVED
Foul Ref. 8403 Ex.C.L : 35.691 C.L : 36.280 D.I.L : 34.145 I.L : 32.967
S04 C.L : 39.250 D.I.L : 36.900 I.L : 35.270
F03 C.L: 39.300 D.I.L : 37.415 I.L : 35.920
Storm Ref 8404 Ex.C.L : 35.659 C.L : 36.260 I.L : 33.362
F04-1 C.L : 40.680 I.L : 39.255
S05-1 C.L : 40.640 I.L : 38.240
S02 C.L : 36.500 I.L : 34.340
Foul Ref. 9302 Ex.C.L :37.593 C.L : 39.070 I.L : 33.926
F02 C.L : 36.470 I.L : 35.175
S03 C.L : 36.530 D.I.L : 35.350 D.I.L : 35.070 I.L : 34.500
F04 C.L : 40.470 I.L : 38.955
S05 C.L : 40.500 D.I.L : 38.240 I.L : 37.700
Storm Ref 9303 Ex C.L : 37.223 C.L : 39.000 I.L : 34.293
S04-2 C.L : 37.350 I.L : 36.190
F03-2 C.L : 37.380 I.L : 36.630
S04-1 C.L : 39.080 I.L : 35.550
F03-1 C.L : 39.180 I.L : 36.045
S06 C.L : 42.370 I.L : 38.470
F05 C.L : 42.750 I.L : 39.245
Foul Ref. 9306 Ex.C.L : 42.730 C.L : 42.730 I.L : 39.925
Storm Ref 9305 Ex C.L : 42.680 C.L : 42.680 I.L : 40.281
S07 C.L : 44.230 I.L : 42.960
F06 C.L : 44.285 D.I.L : 42.620 I.L : 39.410
S07-1 C.L : 43.900 D.I.L : 42.485 I.L : 39.790
S07-2 C.L : 43.490 I.L : 40.000
F06-1 C.L : 43.550 I.L : 40.000
S07-3 C.L : 41.895 I.L : 40.580
F06-2 C.L : 41.870 I.L : 40.400
Foul Ref. 9201 Ex.C.L : 45.960 C.L : 46.310 I.L : 40.098
Storm Ref 9204 Ex C.L : 46.030 C.L : 46.360 I.L : 40.340
F07-2 C.L : 46.750 I.L : 45.960
S08-2 C.L : 46.770 I.L : 45.935
F07 C.L : 46.410 I.L : 45.320
S08 C.L : 46.500 I.L : 45.400
F07-1 C.L : 46.380 I.L : 45.480
S08-1 C.L : 46.430 I.L : 45.605
Storm Ref 9205 Ex C.L : 49.077 I.L : 46.026
Foul Ref. 9202 Ex.C.L : 49.052 I.L : 45.567
Foul Ref. 9208 Ex.C.L : 50.731 I.L : 46.691
Storm Ref 9207 Ex C.L : 50.641 I.L : 47.031
N4
Spring

Red Line Area:-
37,960 m² 3.796 Hectares

ITM Co-Ordinates of site:- 568884, 834363
Irish Grid Co-Ordinates: 168926, 334357

Rev.	Modifications	By	Chkd	Aprvd	Date
P.04	Revised Site Layout	PC	EM	EM	29.04.24
P.03	Revised Site Layout	KK	EM	EM	24.04.24
P.02	Issued for PLANNING	PC	EM	EM	22.03.23
P.01	Issued for LRD	PC	EM	EM	05.10.23

Layout Ref.:
File P:\Jod-jobs\6736 Burkes Cornageeha\700 Drawings\703 Planning\01 WIP\6736-JOD-XX-ZZ-DR-C-200-001-SWFW Layout.dwg

Client
JOHN WALTER BURKE

Project
CALTRAGH LRD

Stage
PLANNING

Title
PROPOSED STORM AND FOUL WATER LAYOUT

Scale
1:400 @ A1

Surveyed	Drawn	Checked	Date
OSI	PC	EM	OCT '23

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Email: info@jodireland.com

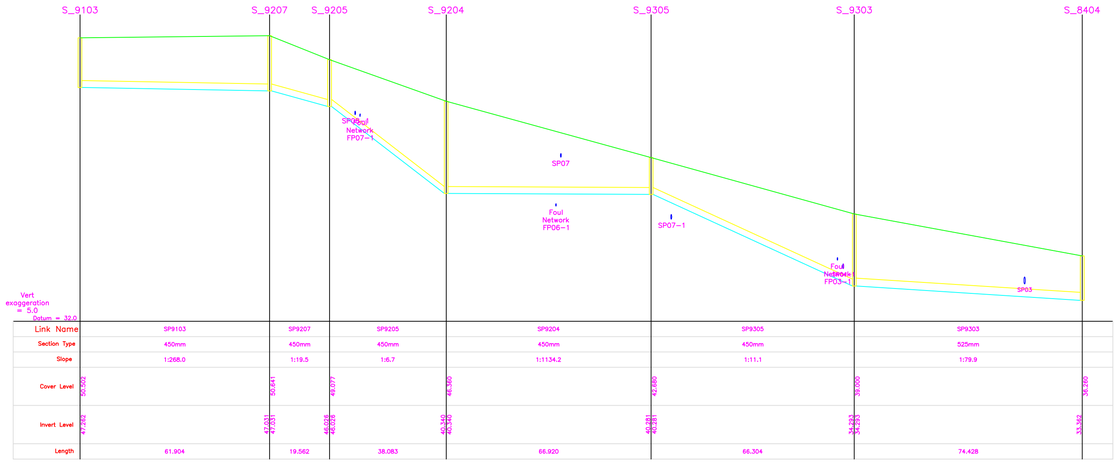
Drawing No. 6736-JOD-XX-ZZ-DR-C-200-001
Revision P.04

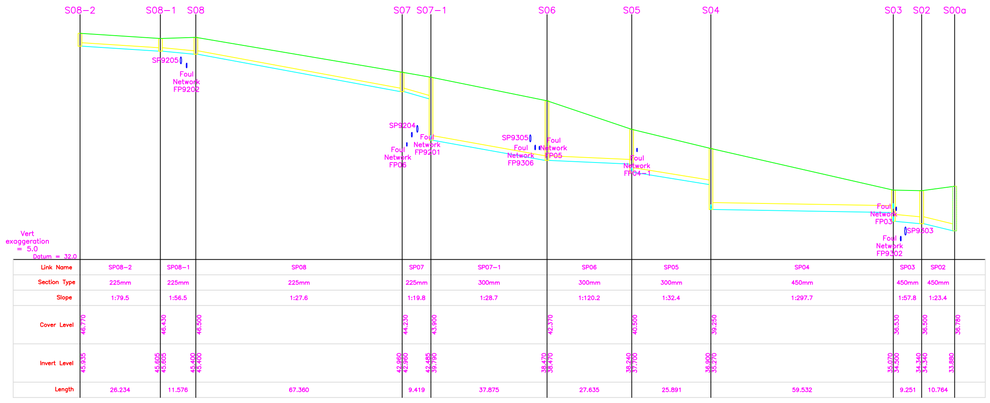
STORM NETWORK

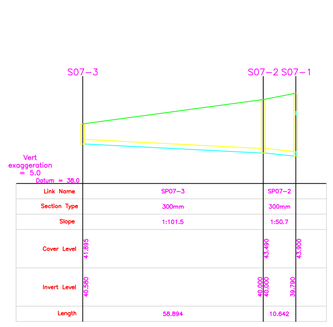
PIPE ID	UPSTREAM NODE	DOWNSTREAM NODE	LENGTH (m)	US IL (mOD)	DS IL (mOD)	SLOPE (1:X)	DIA (mm)
P9103	S_9103	S_9207	61.904	47.262	47.031	268	450
P9207	S_9207	S_9205	19.562	47.031	46.026	19.5	450
P9205	S_9205	S_9204	38.083	46.026	40.340	6.7	450
P9204	S_9204	S_9305	66.920	40.340	40.281	1134.2	450
P9305	S_9305	S_9303	66.304	40.281	34.293	11.1	450
P9303	S_9303	S_8404	74.428	34.293	33.362	79.9	525
P08-2	S08-2	S08-1	26.234	45.935	45.605	79.5	225
P08-1	S08-1	S08	11.576	45.605	45.400	56.5	225
P08	S08	S07	67.360	45.400	42.960	27.6	225
P07	S07	S07-1	11.671	42.960	42.485	24.6	225
P07-3	S07-3	S07-2	58.894	40.580	40.000	101.5	300
P07-2	S07-2	S07-1	8.390	40.000	39.790	40	300
P07-1	S07-1	S06	36.703	39.790	38.470	27.8	300
P06	S06	S05	28.135	38.470	38.240	122.3	300
P05-3	S05-3	S05-2	50.919	42.890	40.340	20	225
P05-2	S05-2	S05-1	51.965	39.740	38.240	34.6	300
P05-1	S05-1	S05	15.191	38.240	37.700	25.3	300
P05	S05	S04	25.891	37.700	36.900	35	300
P04-2	S04-2	S04-1	47.190	36.190	35.550	73.7	300
P04-1	S04-1	S04	8.547	35.550	35.270	30.5	300
P04	S04	S03	59.532	35.270	35.070	297.7	450
P03-5	S03-5	S03-4	57.572	42.405	42.210	295.2	225
P03-4	S03-4	S03-3	8.359	42.210	42.180	278.6	225
P03-3-1	S03-3-1	S03-3	60.192	39.035	38.580	132.3	225
P03-3	S03-3	S03-2	42.932	38.580	38.000	74	300
P03-2	S03-2	S03-1	48.570	38.000	36.250	27.8	300
P03-1	S03-1	S03	17.773	35.650	35.350	59.2	300
P03-1-2	S03-1-2	S03-1-1	8.432	34.975	34.890	99.2	225
P03-1-1	S03-1-1	S03	44.581	34.890	34.500	114.3	225
P03	S03	S02 (Infiltration tank)	9.251	34.500	34.340	57.8	450

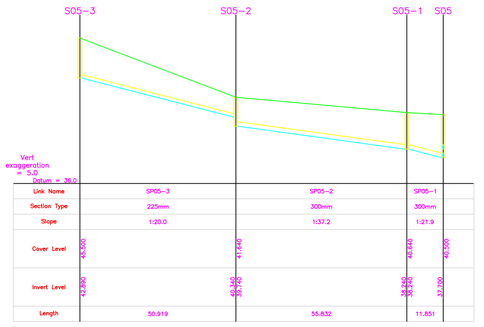
FOUL NETWORK

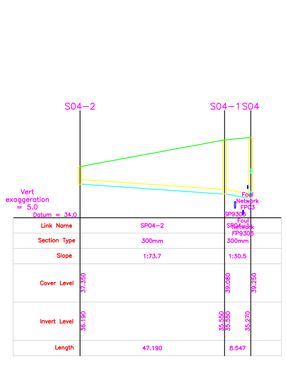
PIPE ID	UPSTREAM NODE	DOWNSTREAM NODE	LENGTH (m)	US IL (mOD)	DS IL (mOD)	SLOPE (1:X)	DIA (mm)
FP9105	9105	9208	62.396	46.962	46.691	230.2	300
FP9208	9208	9202	19.190	46.691	45.567	17.1	300
FP9202	9202	9201	38.529	45.567	40.098	7	300
FP9201	9201	9306	66.091	40.098	39.925	382	300
FP9306	9306	9302	66.931	39.925	33.926	11.2	300
FP9302	9302	8403	75.754	33.926	32.967	79	300
FP07-2	F07-2	F07-1	28.879	45.960	45.48	60.2	150
FP07-1	F07-1	F07	9.740	45.480	45.32	60.9	150
FP07	F07	F06	64.396	45.320	42.62	23.9	150
FP06-2	F06-2	F06-1	59.146	40.400	40	147.9	150
FP06-1	F06-1	F06	18.630	40.000	39.41	31.6	150
FP06	F06	F05	31.809	39.410	39.245	192.8	225
FP05	F05	F04	41.213	39.245	38.955	142.1	225
FP04-3	F04-3	F04-2	50.849	43.650	40.285	15.1	150
FP04-2	F04-2	F04-1	52.015	40.285	39.255	50.5	225
FP04-1	F04-1	F04	16.241	39.255	38.955	54.1	225
FP04	F04	F03	22.425	38.955	37.415	14.6	225
FP03-2	F03-2	F03-1	49.835	36.630	36.045	85.2	150
FP03-1	F03-1	F03	7.334	36.045	35.92	58.7	150
FP03	F03	F02	63.484	35.920	35.175	85.2	225
FP02-5	F02-5	F02-4	57.654	42.150	41.75	144.1	150
FP02-4	F02-4	F02-3	9.054	41.750	41.69	150.9	150
FP02-3-1	F02-3-1	F02-3	59.520	38.700	37.71	60.1	150
FP02-3	F02-3	F02-2	42.282	37.710	37.5	201.3	225
FP02-2	F02-2	F02-1	46.361	37.500	36.155	34.5	225
FP02-1	F02-1	F02	18.547	36.155	35.175	18.9	225
FP02	F02	F01	20.161	35.175	34.76	48.6	225
FP01-2	F01-2	F01-1	11.459	34.700	34.51	60.3	150
FP01-1	F01-1	F01	21.163	34.510	34.16	60.5	150
FP01	F01	8403	3.294	34.160	34.145	219.6	225
8403_EXG	8403	8401	92.235	32.967	31.174	51.4	300

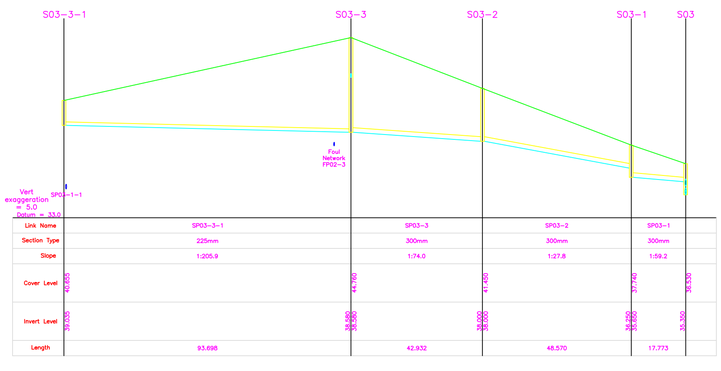


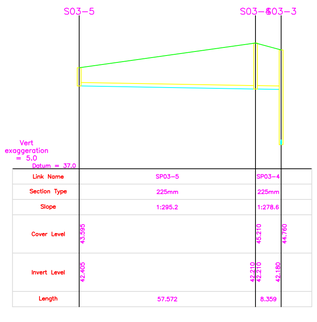


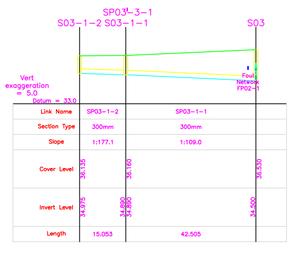












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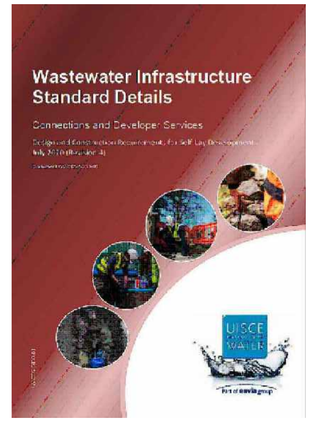

NOTE: CONTRACTOR IS TO REFER TO REVISION 4 OF THE IRISH WATER STANDARD DETAILS DATED JULY 2020 FOR WASTEWATER INFRASTRUCTURE DETAILS.

rev.	modifications	by	chkd	date
P.02	Issued for PLANNING	PC	EM	22.03.24
P.01	Issued for LRD	PC	EM	05.10.23

Layout Ref.:

file: P:\Jod-jobs\6736 Burkes Cornageeha\700 Drawings\703 Planning\01 WIP\6736-JOD-XX-ZZ-DR-C-200-002-003-SWFW Longsections.dwg

client
JOHN WALTER BURKE

project
CALTRAGH LRD

stage
PLANNING

title
PROPOSED STORM SEWER SECTIONS

scale
HORIZ: 1:1000, VERT: 1:200 @ A1

surveyed	drawn	checked	date
	PC	EM	OCT '23

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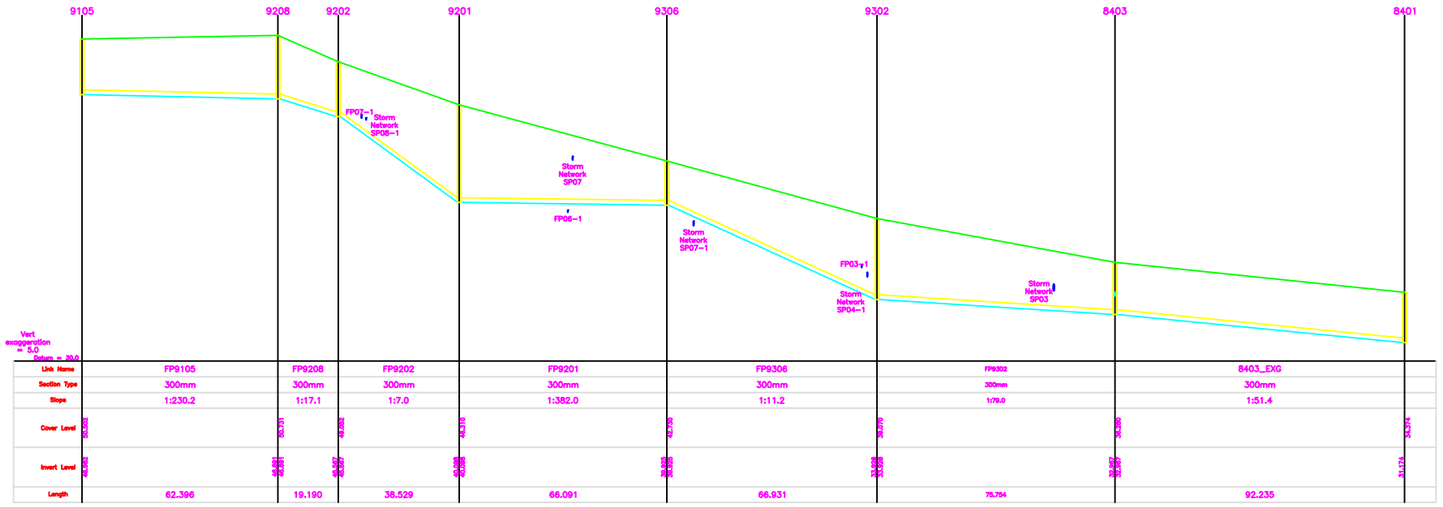
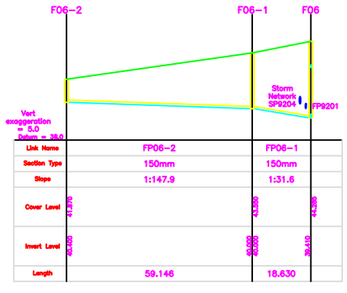
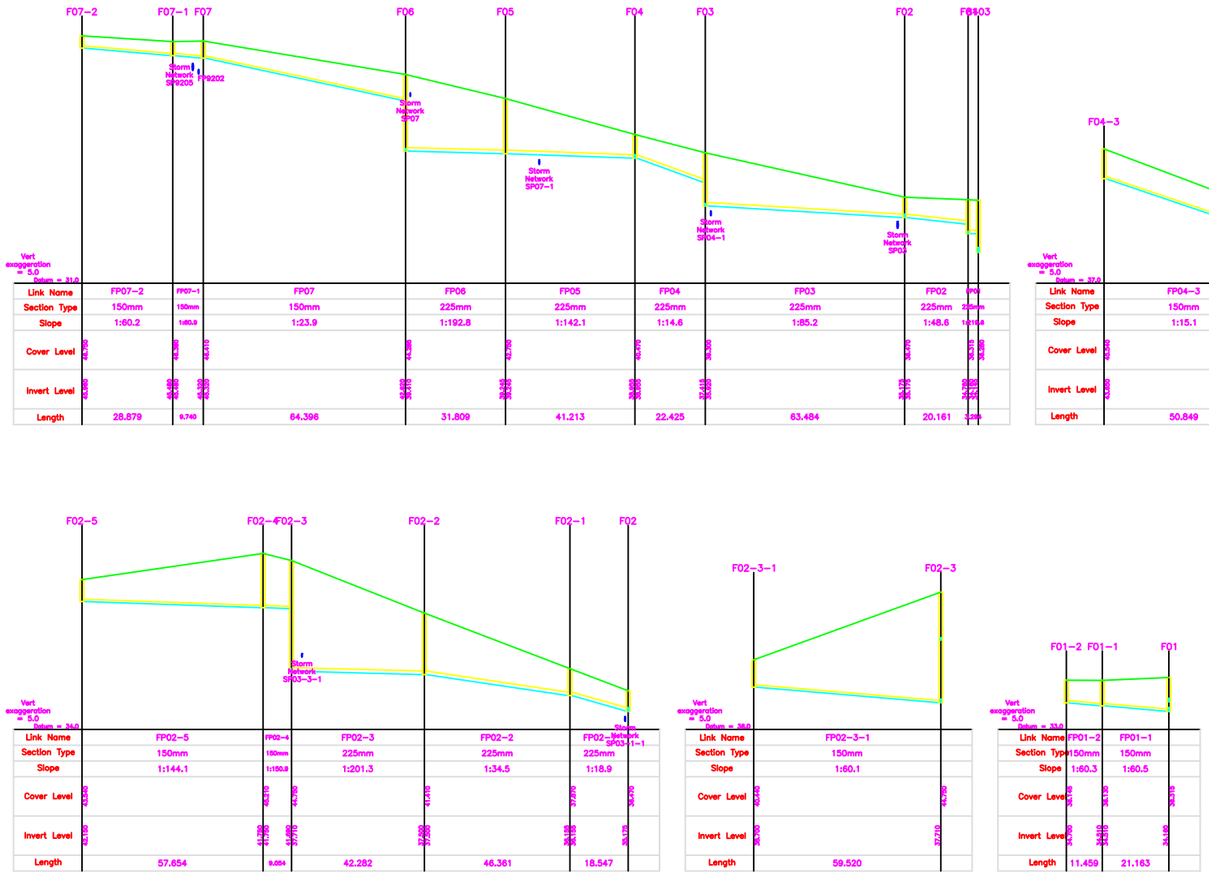
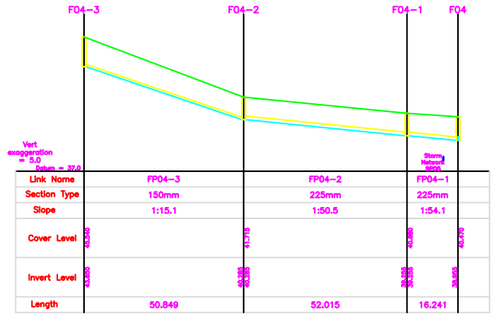
drawing no.
6736-JOD-XX-ZZ-DR-C-200-002

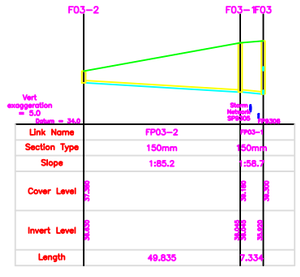
revision
P.02











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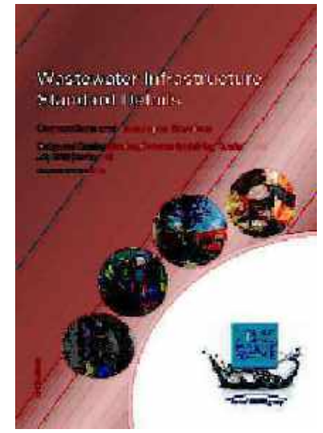

NOTE: CONTRACTOR IS TO REFER TO REVISION 4 OF THE IRISH WATER STANDARD DETAILS DATED JULY 2020 FOR WASTEWATER INFRASTRUCTURE DETAILS.

P.02	Issued for PLANNING	PC	EM	22.03.24
P.01	Issued for LRD	PC	EM	05.10.23
rev.	modifications	by	chkd	date

Layout Ref.:

file P:\Jod-jobs\6736 Burkes Cornageeha\700 Drawings\703 Planning\01 WIP\6736-JOD-XX-ZZ-DR-C-200-002-003-SWFW Longsections.dwg

client
JOHN WALTER BURKE

project
CALTRAGH LRD

stage
PLANNING

title
PROPOSED FOUL SEWER SECTIONS

scale
HORIZ: 1:1000, VERT: 1:200 @ A1

surveyed	drawn	checked	date
	PC	EM	OCT '23

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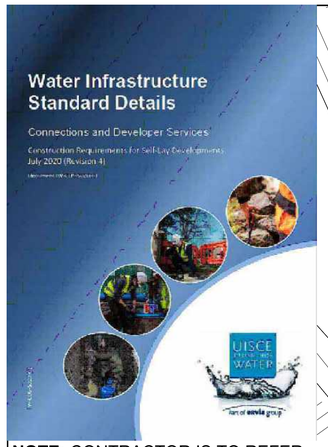
drawing no. 6736-JOD-XX-ZZ-DR-C-200-003

revision P.02



NOTE: CONTRACTOR IS TO REFER TO REVISION 4 OF THE IRISH WATER STANDARD DETAILS DATED JULY 2020 FOR WATER INFRASTRUCTURE DETAILS. THIS BOOKLET HAS BEEN INCLUDED AS PART OF THE CIVIL/STRUCTURAL PACKAGE.

N4

Spring

Scour Valve to IW-STD-W-30B
3 No. Sluice Valve to IW-STD-W-15
Boundary Bos to IW-STD-W-03
Fire Hydrant to IW-STD-W-18
Existing 150mm Watermain
Double Air Valve to IW-STD-W-22
Bulk Flow Meter
Pipe Connection to IW-STD-W-07
90m FIRE HYDRANT RADIUS

NOTES:-

ALL WORKS TO BE CARRIED OUT TO IRISH WATER CODE OF PRACTICE DOCUMENT CDS-5020-03 AND STANDARD DETAILS CDS-5020-01

FOUL WASTE WATER LAYOUT TO BE INSTALLED IN ACCORDANCE WITH IRISH WATER STANDARD DETAIL STD-WW-02 REGARDING GENERAL LAYOUT.

ALL FOUL WASTEWATER DRAINAGE PIPE WORK, INCLUDING SERVICE CONNECTIONS TO COMPLY WITH SECTION 3.6 OF I.W. CODE OF PRACTICE REGARDING PIPE WORK GRADIENTS.

ALL FOUL WASTEWATER PIPE WORK MATERIAL TO COMPLY WITH SECTION 3.13 OF THE IRISH WATER CODE OF PRACTICE.

ALL MANHOLES TO BE CONSTRUCTED IN ACCORDANCE WITH I.W. STD-WW-10 and I.W. STD-WW-12.

WHERE FOUL AND SURFACE WATER MANHOLES AREA ADJACENT THEIR POSITIONS SHOULD BE STAGGERED TO ALLOW FOR CROSSING OVER OF SEWERS AS PER SECTION 3.5.13 OF I.W. CODE OF PRACTICE.

WHERE 0.3m SEPERATION DISTANCE CANNOT BE ACHIEVED BETWEEN FOUL AND STORM PIPES, THE PIPES SHALL BE SURROUNDED IN LEAN MIX CONCRETE.

ALL WASTEWATER PIPE WORK SHALL BE INSTALLED IN ACCORDANCE WITH I.W. STD-WW-05, STD-WW-06, AND STD-WW-06A REGARDING SEPARATION DISTANCES.WHERE SEPARATION DISTANCES CANNOT BE ACHIEVED, PIPES SHALL BE SURROUND IN LEAN MIX CONCRETE.

INSPECTION CHAMBERS TO BE INSTALLED ON ALL CONNECTIONS FROM FOUL AND SURFACE WATER SEWER WITHIN INDIVIDUAL PROPERTIES IN ACCORDANCE WITH I.W. STD-WW-03-1 IN COMPLIANCE WITH IRISH WATER CODE OF PRACTICE AND STANDARD DETAILS

FOUL SEWER DROP MANHOLES TO BE INSTALLED TO IW WASTEWATER CODE OF PRACTICE STANDARD DETAIL STD-WW-12.

HDPE TWINWALL PIPES TO BE USED FOR ALL STORM SEWER PIPES UNLESS OTHERWISE SPECIFIED. ALL FOUL SEWER PIPES TO BE IN ACCORDANCE WITH IRISH WATER CODES OF PRACTICE.

WHERE 0.9m COVER TO THE ROADWAY CANNOT BE ACHIEVED, PIPES SHALL BE SURROUNDED IN LEAN MIX CONCRETE.

NOTES

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LEGEND

LEGEND

SITE BOUNDARY shown thus

PROPOSED ON-LINE FIRE HYDRANT (IW-STD-W-18) shown thus

PROPOSED SLUICE VALVE (IW-STD-W-15) shown thus

PROPOSED SCOUR VALVE (IW-STD-W-30B) shown thus

PROPOSED DOUBLE AIR VALVE (IW-STD-W-22) shown thus

PROPOSED BULK WATER METER TO INCL. KIOSK TO STD-W-36 AND METER CHAMBER TO STD-W-26 shown thus

WATERMAIN SUPPLY Ø 110mm OUTSIDE DIAMETER PE100, PIPE MATERIAL SHALL BE IN COMPLIANCE WITH IRISH WATER SECTION 3.9 OF THE CODE OF PRACTICE shown thus

WATERMAIN SUPPLY Ø 180mm OUTSIDE DIAMETER PE100, PIPE MATERIAL SHALL BE IN COMPLIANCE WITH IRISH WATER SECTION 3.9 OF THE CODE OF PRACTICE shown thus

EXISTING Ø 150MM INSIDE DIAMETER uPVC WATERMAIN shown thus

PROPOSED WATER SUPPLY CONNECTION (25mm O.D. PE PIPE) shown thus — Public / Private

PROPOSED LEVELS shown thus

46M HYDRANT RADIUS shown thus

Red Line Area:-
37,960 m^2 3.796 Hectares

ITM Co-Ordinates of site:- 568884, 834363
Irish Grid Co-Ordinates: 168926, 334357

P.05	Revised Site Layout	PC	EM	EM	29.04.24
P.04	Revised Site Layout	KK	EM	EM	24.04.24
P.03	Issued for PLANNING	PC	EM	EM	22.03.24
P.02	Air valve label added	PC	EM	EM	14.11.23
P.01	Issued for LRD	PC	EM	EM	05.10.23
Rev.	Modifications	By	Chkd	Aprvd	Date

Layout Ref.:

File P:\Jod-jobs\6736 Burkes Cornageeha\700 Drawings\703 Planning\01 WIP\6736-JOD-XX-ZZ-DR-C-200-007-Watermain Layout.dwg

Client
JOHN WALTER BURKE

Project
CALTRAGH LRD

Stage
PLANNING

Title
PROPOSED WATERMAIN LAYOUT

Scale
1:400 @ A1

Surveyed	Drawn	Checked	Date
OSI	PC	EM	OCT '23

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Drawing No.	Revision
6736-JOD-XX-ZZ-DR-C-200-007	P.05

YIELD

YIELD SIGN RUS 028 TO 5.3.1 TO 5.3.10 DTTS TRAFFIC SIGNS MANUAL AUG 2019
LOCATED OFF FOOTWAY
MIN 2.3M HIGH

YIELD SIGN MARKING M 115 TO 7.5.4 DTTS TRAFFIC SIGNS MANUAL FEB 2019

YIELD LINE MARKING RRM 018 TO 7.2.13 DTTS TRAFFIC SIGNS MANUAL FEB 2019

STOP

STOP SIGN RUS 027 TO 5.2.1 TO 5.2.9 DTTS TRAFFIC SIGNS MANUAL AUG 2019
LOCATED OFF FOOTWAY
MIN 2.3M HIGH

STOP LINE MARKING RRM 017 TO 7.2.2 DTTS TRAFFIC SIGNS MANUAL AUG 2019

STOP

STOP SIGN MARKING M 114 TO 7.5.3 DTTS TRAFFIC SIGNS MANUAL AUG 2019

30 km/h
Cross Mall
SLOW ZONE

30KM/H SLOW ZONE SIGN F 403 TO 4.5 DTTS TRAFFIC SIGNS MANUAL AUG 2019

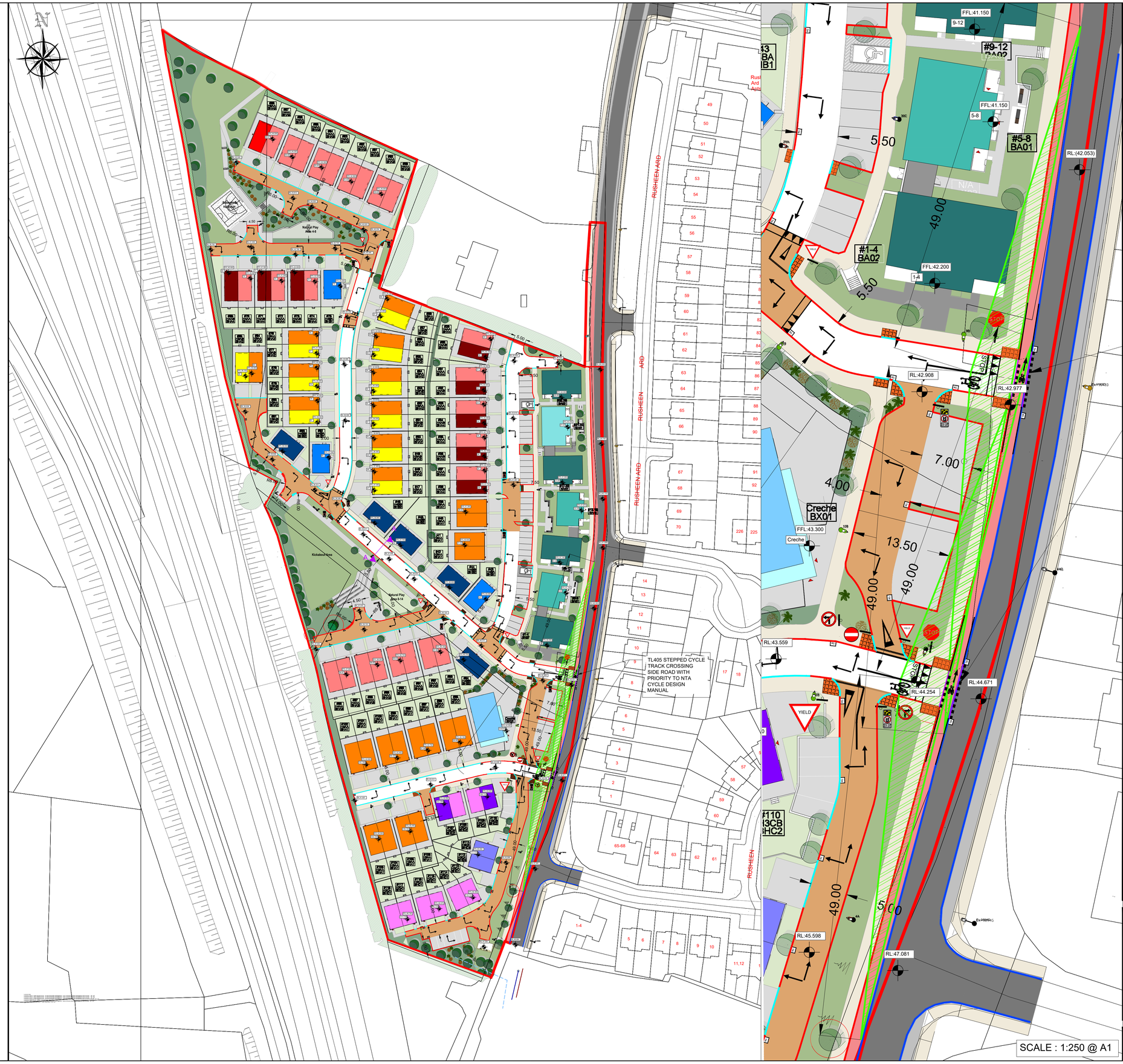
TRAFFIC CALMING TRIANGLES M 112 TO 7.17.3 DTTS TRAFFIC SIGNS MANUAL ON ALL RAMPS

NO ENTRY LINE RRM 019 TO 7.2.19 DTTS TRAFFIC SIGNS MANUAL

NO LEFT TURN RUS 013 TO 5.10 DTTS TRAFFIC SIGNS MANUAL

NO RIGHT TURN RUS 012 TO 5.10 DTTS TRAFFIC SIGNS MANUAL

NO ENTRY SIGN RUS 050 TO 5.9 DTTS TRAFFIC SIGNS MANUAL



SCALE : 1:250 @ A1

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4 THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS AND SPECIFICATIONS.

LEGEND

SITE BOUNDARY shown thus

PROPOSED ROAD GULLEY shown thus

PROPOSED BUFF COLOURED TACTILE PAVING (400MMX400MM) (See TII CC-SCD-05030) shown thus

PROPOSED DIRECTION OF CAMBER shown thus

PROPOSED HOMEZONE OUTLINE shown thus

PROPOSED ROAD KERB shown thus

PROPOSED DROP KERB shown thus

PROPOSED HOMEZONE AREA. FINISH AND COLOR OF ASPHALT TO ARCHITECTS SPECIFICATION shown thus

SIGHT LINE shown thus

ROAD EDGE shown thus

NOTES :

All YIELD and STOP signage line markings are to be thermo plastic and conform with the Department of Transport, Tourism and Sport Traffic Sign Manual.

All line markings are to be thermo plastic and in accordance with the Department of Transport, Tourism and Sport Traffic Sign Manual.

All signage to conform with the with the Department of Transport, Tourism and Sport Traffic Sign Manual.

Red Line Area:-
37,960 m^2 3.796 Hectares

ITM Co-Ordinates of site:- 568884, 834363
Irish Grid Co-Ordinates: 168926, 334357

Rev.	Modifications	By	Chkd	Aprvd	Date
P.06	Site Layout Revised	PC	EM	EM	29.04.24
P.05	Site Layout Revised	KK	EM	EM	24.04.24
P.04	updated to Architects revisions	AW	EM	EM	08.04.24
P.03	Issued for PLANNING	PC	EM	EM	22.03.24
P.02	Amended creche road to one way	PC	EM	EM	10.10.23

Layout Ref.:

File P:\Jod-jobs\6736 Burkes Cornageeha\700 Drawings\703 Planning\01 WIP\6736-JOD-XX-ZZ-DR-C-200-008-Road Layout.dwg

Client
JOHN WALTER BURKE

Project
CALTRAGH LRD

Stage
PLANNING

Title
PROPOSED ROAD LAYOUT

Scale
1:400 @ A1

Surveyed	Drawn	Checked	Date
OSI	PC	EM	OCT '23

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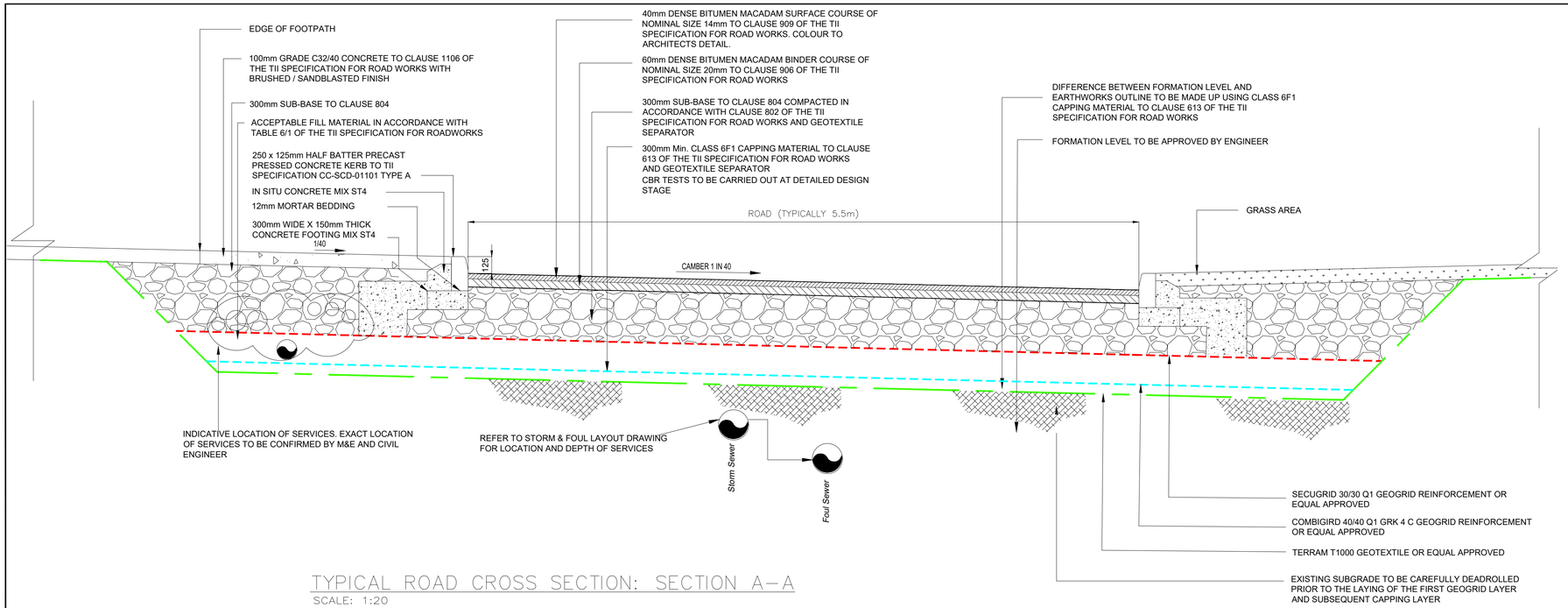
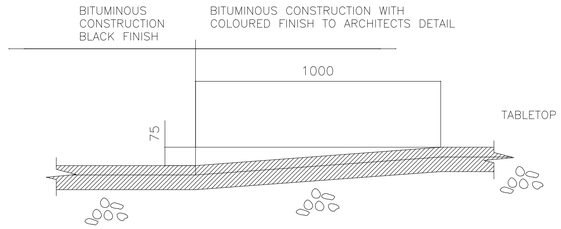
Drawing No. 6736-JOD-XX-ZZ-DR-C-200-008

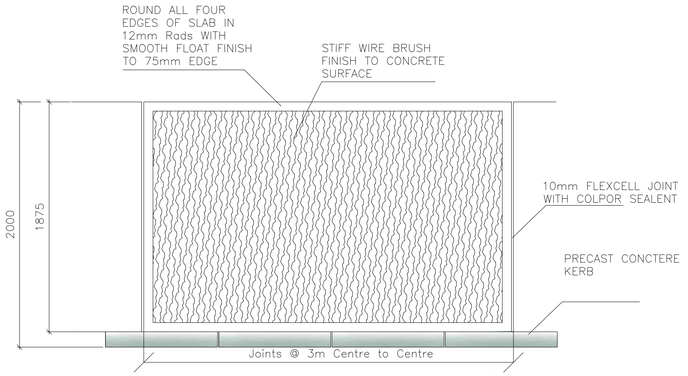
Revision P.06



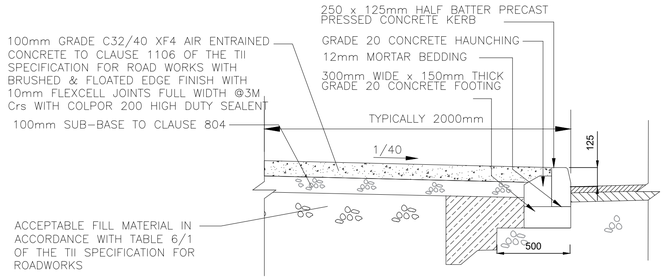
TYPICAL ROAD CROSS SECTION: SECTION A–A
SCALE: 1:20



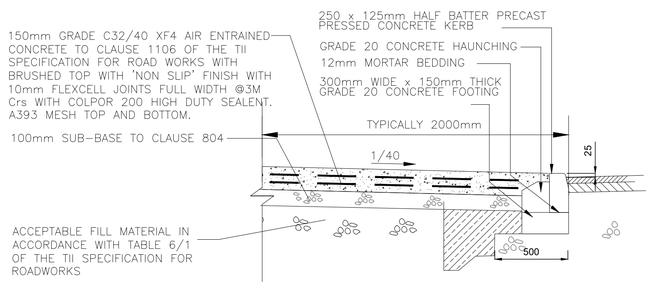
TRANSITION RAMP
SCALE: 1:12.5



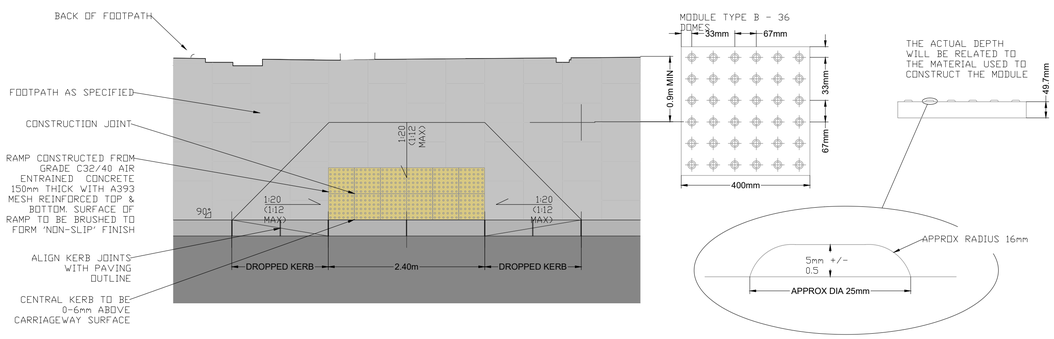
TYPICAL FOOTPATH PLAN CONCRETE
SCALE: 1:25



TYPICAL CONCRETE FOOTPATH CROSS SECTION
SCALE: 1:20



TYPICAL CONCRETE FOOTPATH CROSS SECTION AT DRIVEWAY ENTRANCES
SCALE: 1:20



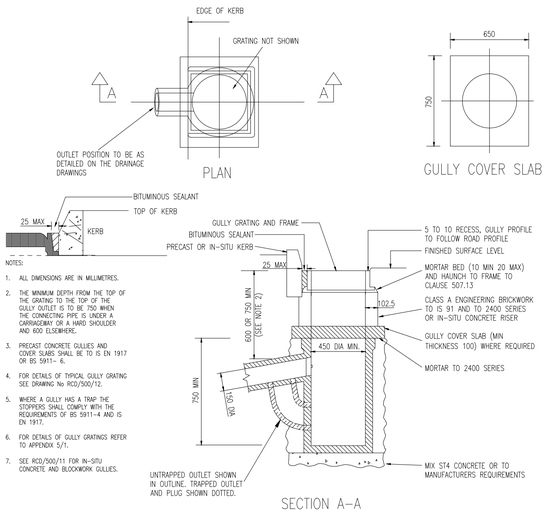
NOTES:

1. THE TACTILE DOMES ON THE TILES MUST BE LINED UP TO GIVE THE DIRECTION OF TRAVEL IN ORDER TO CROSS THE CARRIAGEWAY STRAIGHT
2. UTILITY CABINETS/CHAMBERS MUST NOT BE LOCATED WITHIN THE TACTILE PAVING AREA
3. REFER TO TACTILE PAVING GUIDANCE DOCUMENTATION
4. TACTILE BLISTER PAVING SHALL BE BEDDED ON 25 MM MOIST SAND/CEMENT MORTAR (3:1), JOINTS FILLED WITH 4:1 MIX WITHIN 2mm OF THE PAVING SURFACE

LEGEND

TACTILE PAVIOUR 400x400 BUFF FINISH (5mm JOINT) TACTILE TO BE LAID SO BLISTER PATTERN IS IN LINE WITH CROSSING

DROPPED KERB GEOMETRY AND EXCERPT FROM TII -TACTILE AND PAVING DETAILS AND RECOMMENDED GRADIENTS AT UNCONTROLLED PEDESTRIAN CROSSING CC-SCD-05136



NOTES

GENERAL NOTES:

1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING.
2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
3. ENGINEER/EMPLOYERS REPRESENTATIVE, AS APPROPRIATE, TO BE INFORMED BY THE CONTRACTOR OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
4. THE CONTRACTOR SHALL UNDERTAKE A THOROUGH CHECK FOR THE ACTUAL LOCATION OF ALL SERVICES/UTILITIES, ABOVE AND BELOW GROUND, BEFORE ANY WORK COMMENCES
5. ALL LEVELS SHOWN RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD
6. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS AND SPECIFICATIONS. CONTRACTOR TO VERIFY THE ACCURACY OF THIS PROPOSAL TO THE ENGINEER AND ALLOW FOR MINOR CORRECTIONS AS DEEMED NECESSARY WITH A REASONABLE TIMEFRAME.

Rev.	Modifications	By	Chkd	Aprvd	Date
P.03	Added transition ramp detail	PC	EM	EM	29.04.24
P.02	Issued for PLANNING	PC	EM	EM	22.03.24
P.01	Issued for LRD	PC	EM	EM	05.10.23

Layout Ref.:
File: P:\Jod-jobs\6736 Burkes Cornageeha\700 Drawings\703 Planning\01 WIP\6736-JOD-XX-ZZ-DR-C-200-008-Road Layout.dwg

Client: JOHN WALTER BURKE

Project: CALTRAGH LRD

Stage: PLANNING

Title: PROPOSED ROAD SECTION A-A AND ROAD CONSTRUCTION DETAILS

Scale: As Shown @ A1

Surveyed	Drawn	Checked	Date
	PC	EM	OCT '23

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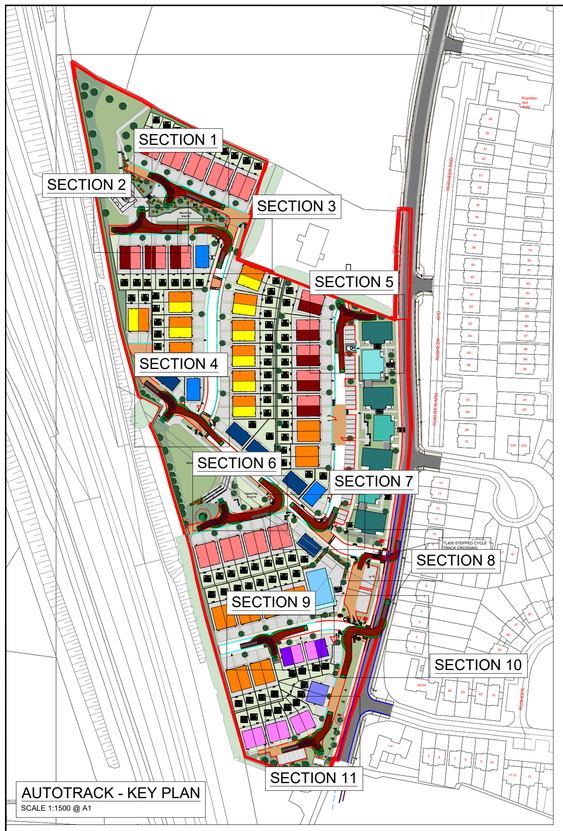
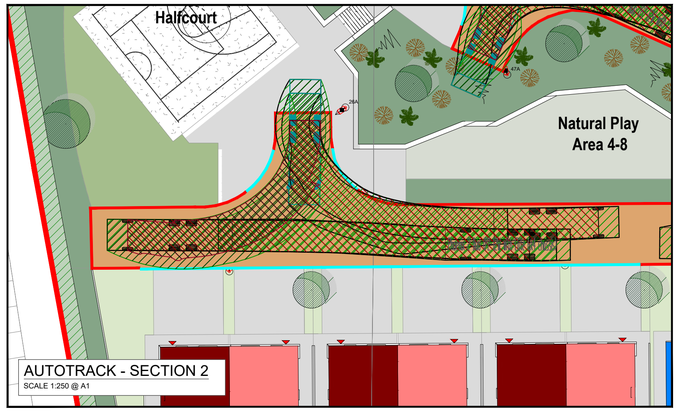
Drawing No.: 6736-JOD-XX-ZZ-DR-C-200-009

Revision: P.02

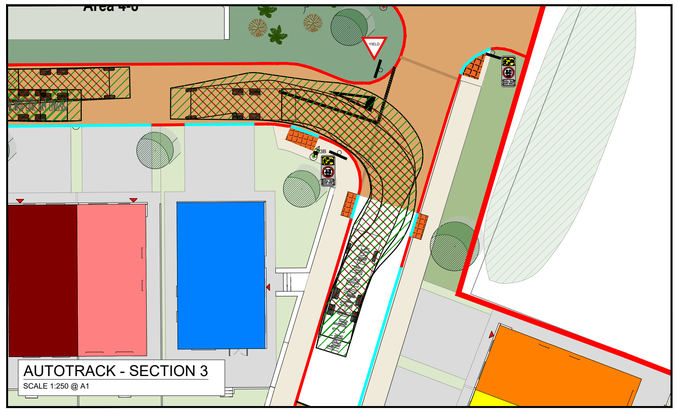


AUTOTRACK - KEY PLAN
SCALE 1:1500 @ A1

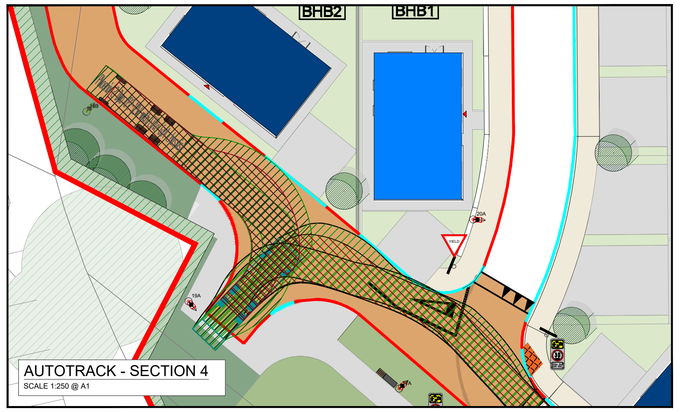
AUTOTRACK - SECTION 1
SCALE 1:250 @ A1



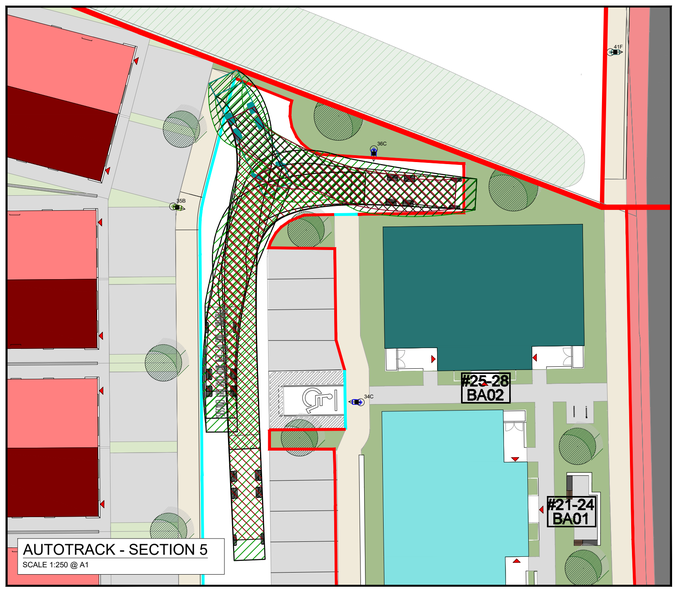
AUTOTRACK - SECTION 2
SCALE 1:250 @ A1



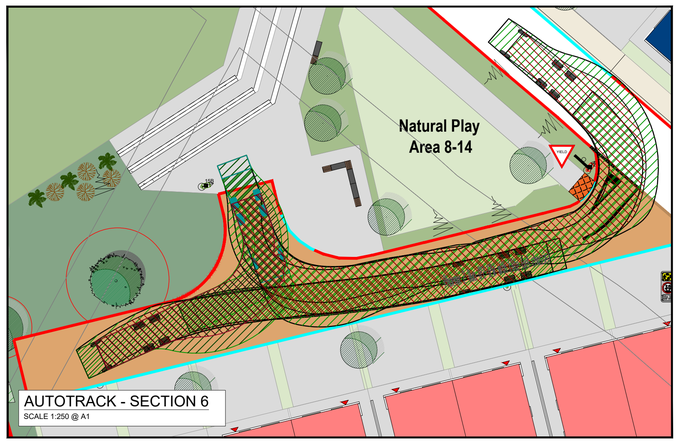
AUTOTRACK - SECTION 3
SCALE 1:250 @ A1



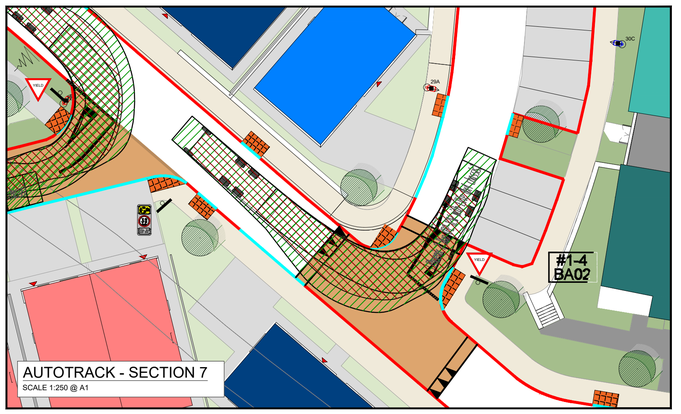
AUTOTRACK - SECTION 4
SCALE 1:250 @ A1



AUTOTRACK - SECTION 5
SCALE 1:250 @ A1



AUTOTRACK - SECTION 6
SCALE 1:250 @ A1



AUTOTRACK - SECTION 7
SCALE 1:250 @ A1

NOTES

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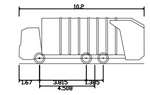
LEGEND



Phoenix 2 Duo (P2-12W with Elite 6x4 chassis)	
Overall Length	10.200m
Overall Width	2.530m
Overall Body Height	3.745m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	7.800m

CHASSIS PATH shown thus

BODY PATH shown thus

Red Line Area:-
37,960 m^2 3.796 Hectares

ITM Co-Ordinates of site:-
568884, 834363

Irish Grid Co-Ordinates:
168926, 334357

Rev.	Modifications	By	Chkd	Aprvd	Date
P.04	Amended site layout	PC	EM	EM	29.04.24
P.03	Issued for PLANNING	PC	EM	EM	22.03.24
P.02	Amended creche road to one way	PC	EM	EM	10.10.23
P.01	Issued for LRD	PC	EM	EM	05.10.23

Layout Ref.:
File P:\Jod-jobs\6736 Burkes Comageeha\700 Drawings\703 Planning\01 WIP\6736-JOD-XX-ZZ-DR-C-200-011-012-Autotrack Analysis.dwg

Client
JOHN WALTER BURKE

Project
CALTRAGH LRD

Stage
PLANNING

Title
PROPOSED ROAD LAYOUT - SWEPT PATH ANALYSIS SHEET 1 OF 2

Scale
AS SHOWN @ A1

Surveyed	Drawn	Checked	Date
	PC	EM	OCT '23

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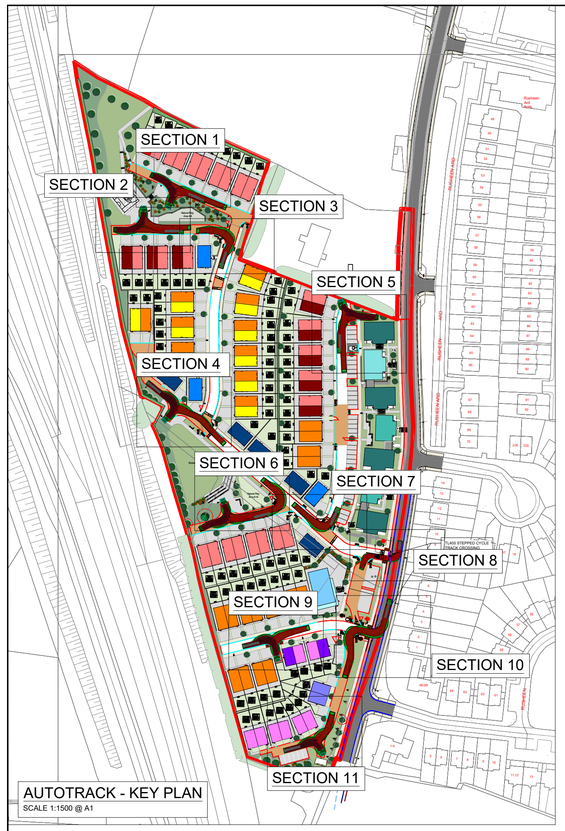
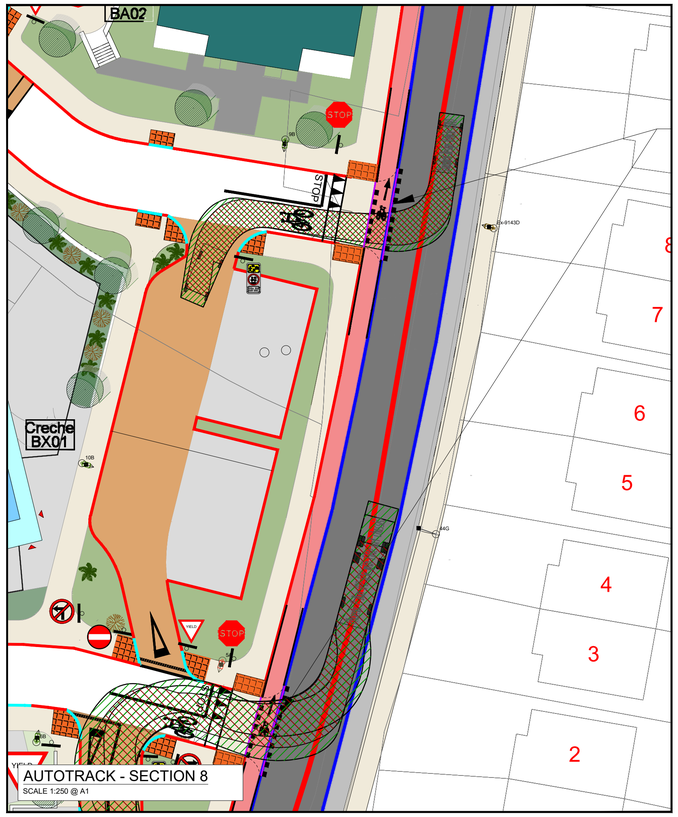
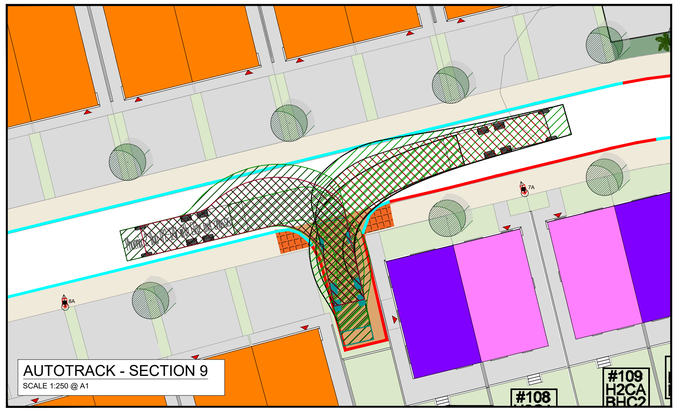
Email: info@jodireland.com

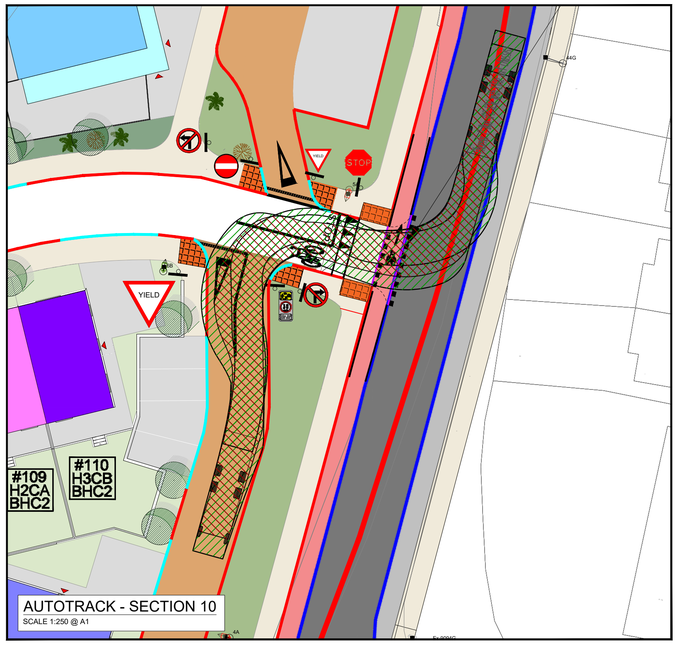
Drawing No.
6736-JOD-XX-ZZ-DR-C-200-011

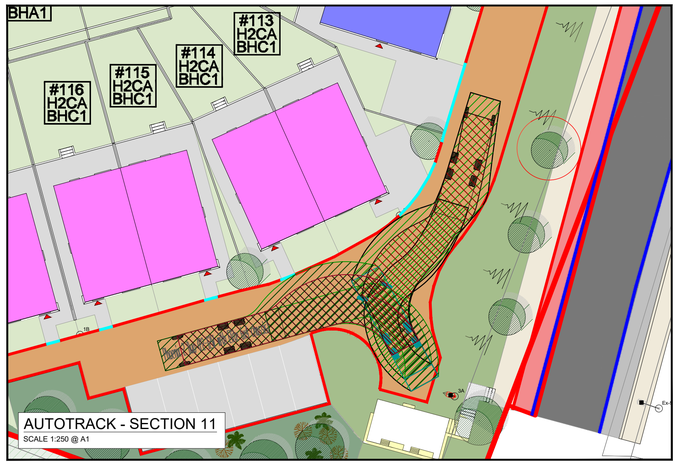
Revision
P.04











NOTES

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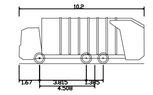
LEGEND



Phoenix 2 Duo (P2-12W with Elite 6x4 chassis)

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Overall Width	2.530m
Overall Body Height	3.745m
Min Body Ground Clearance	0.304m
Track Width	2.500m
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CHASSIS PATH shown thus

BODY PATH shown thus

Red Line Area:-
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ITM Co-Ordinates of site:-
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168926, 334357

Rev.	Modifications	By	Chkd	Aprvd	Date
P.04	Amended site layout	PC	EM	EM	29.04.24
P.03	Issued for PLANNING	PC	EM	EM	22.03.24
P.02	Amended creche road to one way	PC	EM	EM	10.10.23
P.01	Issued for LRD	PC	EM	EM	05.10.23

Layout Ref.:
File P:\Jod-jobs\6736 Burkes Cornageeha\700 Drawings\703 Planning\01 WIP\6736-JOD-XX-ZZ-DR-C-200-011-012-Autotrack Analysis.dwg

Client
JOHN WALTER BURKE

Project
CALTRAGH LRD

Stage
PLANNING

Title
PROPOSED ROAD LAYOUT - SWEPT PATH ANALYSIS SHEET 2 OF 2

Scale
AS SHOWN @ A1

Surveyed	Drawn	Checked	Date
	PC	EM	OCT '23

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Drawing No.	Revision
6736-JOD-XX-ZZ-DR-C-200-012	P.04

APPENDIX II

METHOD STATEMENT

JOHN WALTER BURKE

Caltragh LRD
at Newtownholmes Rd.,
Caltragh and Cornageeha

Co. Sligo

Outline Method Statement

6736-JOD-XX-RP-C-0002

April 2024

Jennings O'Donovan & Partners Limited,

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JENNINGS O'DONOVAN & PARTNERS LIMITED
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IRELAND.

Telephone (071) 9161416
Fax (071) 9161080

Email info@jodireland.com
Web Site www.jodireland.com

DOCUMENT APPROVAL

PROJECT	Caltragh LRD at Newtownholmes Rd., Caltragh and Cornageeha, Co. Sligo	
CLIENT / JOB NO	John Walter Burke	6736
DOCUMENT TITLE	Outline Method Statement	

	Prepared by	**Reviewed/Approved by**
Document **FINAL**	Name Eamon Morrissey	Name Eamon Morrissey
Date October 2023	Signature	Signature

Document **FINAL**	Name Eamon Morrissey	Name Seamus Lee
Date April 2024	Signature	Signature

1 INTRODUCTION

This report has been prepared to give an outline construction method for the Caltragh LRD at Newtownholmes Rd., Caltragh and Cornageeha, Co. Sligo. The proposed development consists of the construction of 118 no. new residential units and 1 no. new Creche. The dwellings are a mixture of semi-detached dwellings, detached dwellings, terraced dwellings, and apartment dwellings. The development also includes public areas to the North and Central sections of the development.

The proposed site, which consists of approximately 3.765 hectares, is a greenfield site. The site is located in Caltragh Co. Sligo, west of Newtownholmes Rd. It is proposed to access the site directly by vehicle via two entrances on the Newtownholmes Rd, at the eastern boundary of the site. There will be pedestrian permeability on the eastern boundary to the Newtownholmes Rd via a footpath / cycleway that will be in line with an Active Travel route.

2 METHOD STATEMENT

This method statement is prepared to give an indicative outline construction methodology, the Contractor carrying out the works will prepare their own detailed Method Statements to set out how they will carry out the works.

The construction tasks will be as follows.

2.1 Site Clearance

- Set up site boundary fencing where required.
- Prepare Contractors compound including parking, offices, and welfare facilities.
- Fell trees and remove vegetation where required, taking appropriate legislation and the Arborist's report into account.
- Clear and stockpile topsoil on site.
- Carry out bulk earthworks to bring site levels to design level.

2.2 Building Construction

- Excavate for foundations.
- Construct building strip foundations.
- Construct service connections.
- Construct rising walls and ground floor slabs.
- Construct above ground portion of buildings.

2.3 Site Services

- Construct main storm and foul water drainage runs including manholes.

- Install storm water attenuation / percolation tanks and petrol interceptor.
- Construct tie-in to existing Irish Water (Uisce Éireann) foul public network.
- Construct watermain network.
- Construct electrical ducting network and erect lighting columns.

2.4 Landscaping and finishing

- Construct garden walls and fences.
- Place topsoil to gardens and public green spaces.
- Construct development roads, footpaths kerbing.
- Plant new trees and hedging.
- Level and seed topsoil.

3 NOTES

The document should be read in conjunction with the associated drawings, layouts and specifications. This document is not intended to be used as a construction stage document.

APPENDIX III

TRIAL HOLES

JENNINGS O'DON & P CONSULTING ENGI	INSPECTION REPORT	
	JOB: Burkes Cornageeha	
	JOB NO.: 6736	DATE: 23-01-24

INSPECTION BY: Patrick Carr	SIGNED: PL	
WEATHER CONDITIONS	Very wet, very windy, rain, cloudy	
INSPECTION RECORD	Comments	
Visual inspection of works to date	No.	Description
	1.	Two trial pits dug for the purpose of Soil Infiltration testing. Calculation in folder 802-1. Appendix A photos in folder 804.
	2.	ITM Location of TP 01 actual = 568852, 834350 ITM Location of TP 02 actual = 568822, 834409
	3.	Infiltration Rate : 0.03370 meters per hour
WORK IN PROGRESS		

LOCATION	DESCRIPTION
Newtownholmes Road, Caltragh, Co. Sligo	Soil Infiltration Test

GENERAL REMARKS

Appendix A

SOIL INFILTRATION TEST - BRE DIGEST 365				
DOCUMENT NO.	**6736-JOD-00-XX-CA-C-3001**			
PROJECT	6736		**START TIME**	12:26
SITE	Caltragh		**FINISH TIME**	09:28
TEST LOCATION	TP03		**FINISH DATE**	24.01.24
ITM COORDINATE (estimate)	568852	834350		
TEST DATE	23.01.24			

	Width(m)	**Length (m)**
Test Pit Top Dimensions	1.4	2.8
Test Pit Bottom Dimensions	1.4	2.8

Test Pit Depth (m)	2.65
Test Pit Water Depth (m)	1.95
Depth to Ground water before adding water (m)	0

Time (HH:MM)	**Time Ascending (HH:MM)**	**Depth of Water in Pit (m)**	**Depth BGL to Water Surface (m)**	**Time Ascending (Min)**
12:26	00:00	1.95	0.7	0
12:27	00:01	1.93	0.72	1
12:28	00:02	1.91	0.74	2
12:30	00:04	1.87	0.78	4
12:31	00:05	1.85	0.8	5
12:32	00:06	1.84	0.81	6
12:34	00:08	1.82	0.83	8
12:36	00:10	1.79	0.86	10
12:37	00:11	1.77	0.88	11
12:39	00:13	1.75	0.9	13
12:41	00:15	1.72	0.93	15
12:43	00:17	1.71	0.94	17
12:44	00:18	1.69	0.96	18
12:43	00:17	1.67	0.98	17
12:48	00:22	1.66	0.99	22
12:50	00:24	1.64	1.01	24
12:55	00:29	1.61	1.04	29
12:58	00:32	1.59	1.06	32
13:02	00:36	1.57	1.08	36
13:04	00:38	1.57	1.08	38

13:09	00:43	1.56	1.09	43
13:13	00:47	1.54	1.11	47
13:19	00:53	1.5	1.15	53
13:22	00:56	1.49	1.16	56
13:27	01:01	1.47	1.18	61
13:35	01:09	1.45	1.2	69
13:39	01:13	1.43	1.22	73
13:43	01:17	1.43	1.22	77
13:52	01:26	1.4	1.25	86
13:56	01:30	1.38	1.27	90
14:05	01:39	1.36	1.29	99
14:36	02:10	1.29	1.36	130
16:04	03:38	1.09	1.56	218
17:20	04:54	0.88	1.77	294

NOTES: Pit sides unstable, sections of the pit wall collapsed during the test
@13:04, pit wall collapse affected water level
@ 240124-09:28 - Pit was fully drained

SOIL INFILTRATION TEST - BRE DIGEST 365

DOCUMENT NO.	**6736-JOD-00-XX-CA-C-3002**			
PROJECT	6736		**START TIME**	15:17
SITE	Caltragh		**FINISH TIME**	09:24
TEST LOCATION	TP04		**FINISH DATE**	24.01.24
ITM COORDINATE (estimate)	568822	834409		
TEST DATE	23.01.24			

	Width(m)	**Length (m)**
Test Pit Top Dimensions	1.3	2.3
Test Pit Bottom Dimensions	1.3	2.3

Test Pit Depth (m)	2.5
Test Pit Water Depth (m)	2.05
Depth to Ground water before adding water (m)	0

Time (HH:MM)	**Time Ascending (HH:MM)**	**Depth of Water in Pit (m)**	**Depth BGL to Water Surface (m)**	**Time Ascending (Min)**
15:17	00:00	2.05	0.45	0
15:23	00:06	1.95	0.55	6
15:25	00:08	1.92	0.58	8
15:28	00:11	1.89	0.61	11
15:30	00:13	1.87	0.63	13
15:32	00:15	1.84	0.66	15
15:33	00:16	1.82	0.68	16
15:38	00:21	1.77	0.73	21
15:42	00:25	1.73	0.77	25
15:45	00:28	1.71	0.79	28
15:48	00:31	1.68	0.82	31
15:52	00:35	1.65	0.85	35
15:56	00:39	1.63	0.87	39
15:59	00:42	1.61	0.89	42
16:09	00:52	1.53	0.97	52
16:14	00:57	1.5	1	57
16:19	01:02	1.48	1.02	62
16:28	01:11	1.45	1.05	71
16:38	01:21	1.41	1.09	81
16:44	01:27	1.39	1.11	87
16:52	01:35	1.36	1.14	95
17:01	01:44	1.34	1.16	104

17:10	01:53	1.32	1.18	113
17:13	01:56	1.31	1.19	116

NOTES: Pit sides unstable, small sections of the pit wall collapsed during the test

09:24	16:11	0.54	1.96	971
17:11	23:56	0.32	2.18	1436

Appendix B

Trial Pit 03

Trial Pit 04

Project:	**Caltragh LRD**	Job No:	**6736**
Prepared by:	**Patrick Carr**	Date:	**05/10/2023**
Approved by:	**Eamon Morrissey**	Date:	**05/10/2023**

TRIAL PIT REPORT

1. INTRODUCTION

This report has been prepared by Jennings O'Donovan & Partners Limited to record the information obtained from two trial pits excavated on the Caltragh LRD site at Newtownholmes Road, Caltragh, Co. Sligo.

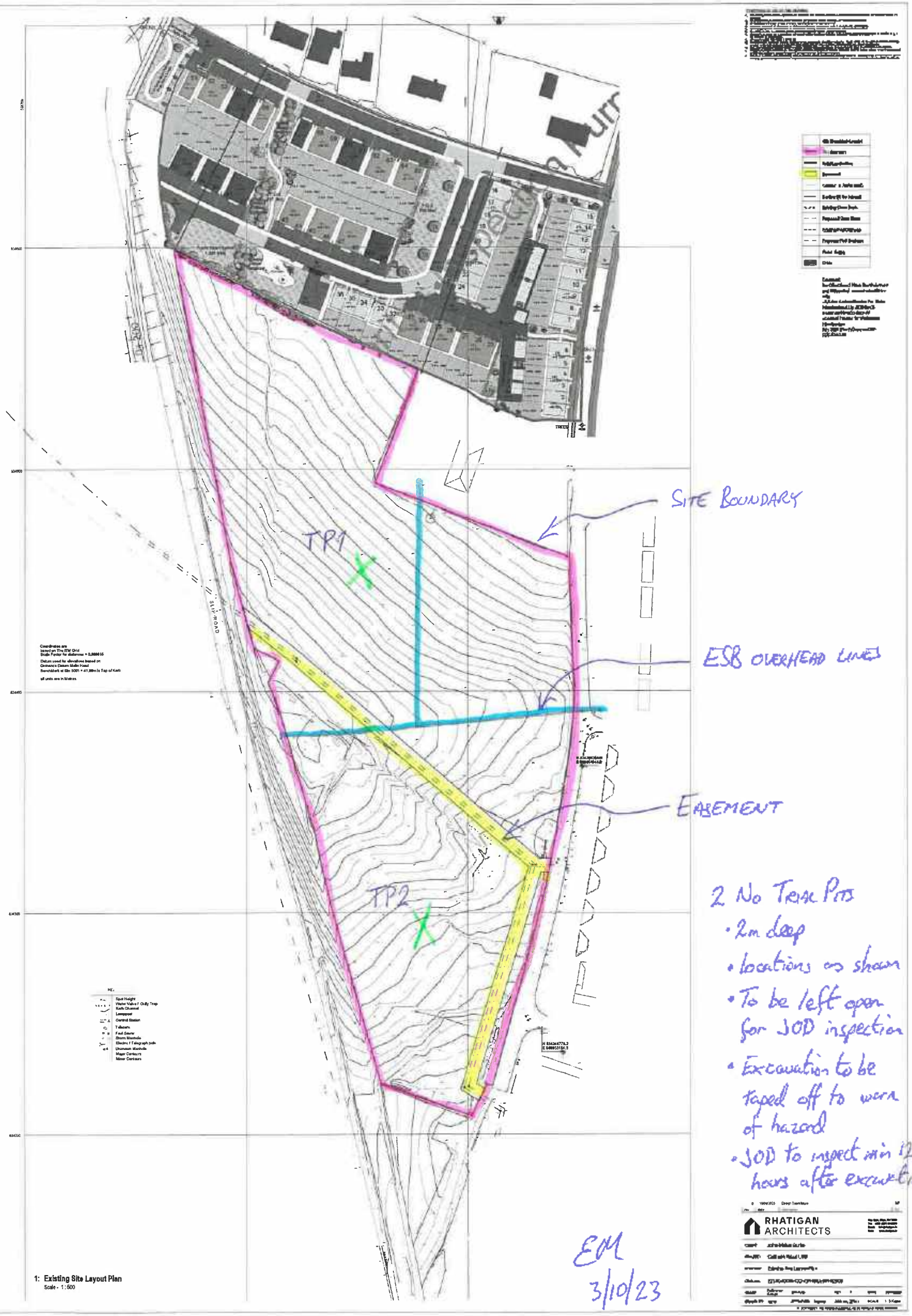
2. SITE NOTES

Two trial pits were excavated in accordance with the attached sketch on the morning of Wednesday 04/10/2023. The trial pit depth of 2m was selected to match the formation level of the deepest excavations to be dug on site. No groundwater ingress was observed.

The trial pits were inspected on the afternoon of Thursday 05/10/2023. No groundwater was present in either of the trial pits. The exposed soil comprised approximately 300mm of topsoil on sandy gravelly clay. As the depth increased cobbles were observed with increasing frequency.

3. SITE PHOTOGRAPHS – TRIAL PIT 1

4. SITE PHOTOGRAPHS – TRIAL PIT 2



2 No Trial Pits
- 2m deep
- locations as shown
- To be left open for JOD inspection
- Excavation to be taped off to warn of hazard
- JOD to inspect min 12 hours after excavation

EM
3/10/23

1: Existing Site Layout Plan
Scale - 1:500

RHATIGAN ARCHITECTS