

Nodal Masterplan for Eastern Node

Southern Environs, Tullamore, Co. Offaly

A vision for creating a new sustainable community which connects the existing and planned employment areas in the Southern Environs of Tullamore With existing retail services and the Town Centre

Stephen Ward
 Town Planning Consultants

 Park Hood




 vanDijk
 Architects

September 2021 Rev A



Tullamore Southern Environs Eastern Node - Nodal Masterplan

Contents

1.0 Nodal Masterplan—Planning Policy Context

- | | |
|--|---|
| 1. Overview—National, Regional and Local Planning Policy | 6 |
| 2. Core Strategy and Phasing | 7 |

2.0 Nodal Masterplan—Building the Evidence Base

- | | |
|---------------------------------|----|
| 1. Nodal Masterplan Preparation | 10 |
| 2. Site Location and Context | 11 |
| 3. Transportation Linkages | 14 |
| 4. Heritage/Environment | 15 |
| 5. Zoning and Development Plan | 16 |
| 6. Vision and Principles | 17 |
| 7. Site Analysis | 18 |
| 8. Development Opportunities | 20 |
| 9. Concept Structures | 21 |

3.0 Nodal Masterplan for Eastern Node of Tullamore Southern Environs Expansion Area

- | | |
|---|----|
| 1. Masterplan Evolution | 23 |
| 2. Nodal Masterplan | 24 |
| 3. Green Infrastructure | 25 |
| 4. Transport and Movement | 26 |
| 5. Neighbourhood and Community | 29 |
| 6. Built Form | 31 |
| 7. Density | 32 |
| 8. Character Areas | 33 |
| 9. Residential Typologies | 34 |
| 10. DMURS and Street Sections | 36 |
| 11. Infrastructure—Surface Water Drainage | 37 |
| 12. Infrastructure—Foul Drainage | 38 |
| 13. Infrastructure—Water Supply | 39 |

4.0 Phasing and Implementation

- | | |
|-------------------|----|
| 1. Phasing | 41 |
| 2. Implementation | 43 |

5.0 Conclusion



Charleville Castle Grounds, Tullamore

[Appendix A—Baseline Studies—Ecology](#)

[Appendix B—Baseline Studies—Archaeology](#)

[Appendix C—Community Appraisal](#)

[Appendix D—Landscape Masterplan for the Eastern Node](#)

[Appendix E—Indicative Route of Link Street & Bridge Crossing Point](#)

[Appendix F—Correspondence with Landowners within the Eastern Node](#)

Executive Summary

This Nodal Masterplan will provide a structure for the co-ordinated development of the Eastern Node by various landowners/developers. Proposed development will need to demonstrate the manner in which the development of that segment will facilitate the achievement of the Nodal Masterplan and will not impede the delivery of adjoining segments.

The requirement for this Nodal Masterplan originates from the Tullamore Town and Environs Development Plan 2010-2016 (as varied and extended) Policy TTEP-04-07 and is guided by a hierarchy of planning policies as contained in Chapter 5. The policies and objectives of the TTEDP together with the baseline studies completed for the Eastern Node form the basis of this Nodal Masterplan and inform the Key Principles contained within it.

The Nodal Masterplan is formed around a central neighbourhood centre and school site with the main arterial street through the centre of the Eastern Node with future connection planned for across the railway towards Chancery Lane to the north. The relationship between the buffer zone to the N52 and railway line and the built-form of the Eastern Node is an important consideration. The mixture of squares, mews and crescents creates a dynamic cloister of street patterns allowing for smaller individual character areas with the new community.

The Nodal Masterplan is an appropriate sustainable response to developing the Eastern Node in an efficient manner while creating distinctive places and facilities which will make this a lasting successful community.

The Key Principles contained in this Nodal Masterplan set out how it is planned to develop the Eastern Node under the headings - Green Infrastructure, Transport and Movement, Community Focus and Built Form.

As in the case of all such non-statutory documents, the policy context of this Nodal Masterplan is set by the statutory development plans. It is not intended for Development Management but with the objective of providing a detailed design guide.

In line with the Tullamore Town and Environs Development Plan 2010-2016 the Vision for the Eastern Node is as follows-

“It is foreseen that the Eastern Node will be developed as a high quality residential area characterised by a landscape setting and open space character”.

Summary of Key Urban Design and Planning Principals adopted in this Nodal Masterplan

Green Infrastructure

- Maintain buffer area indicated by Development Plan as a wildlife corridor and recreation area.
- Create a hierarchy of open space and enhance biodiversity.
- Meet the recreational needs of new residents through the creation of usable public open spaces that encourage physical activity and social interaction.
- Provide playgrounds in tandem with the residential development of each phase/sector to cater for recreation needs of children.
- Provide a high quality landscaped space/square at neighbourhood centre.
- Create a green boulevard character that is aligned with avenue trees, landscape areas
- All planting to be native and support the All-Ireland Pollinator Plan.
- Allow for shared playing fields at school.
- Provide surface water areas as amenity features which can operate as surface water attenuation (SUDS) systems.

Transport + Movement

- Provide for future connection to adjacent residential areas.
- Enhance cycle-way connections to Tullamore Town Centre along Clonminch Road from the Eastern Node.
- Prioritise sustainable modes of transport.
- Creation of “Greenway” network through interconnected open spaces and parklands that provide a safe environment for walkers, runners and cyclists.
- In the development of sectors within the Eastern Node, all roads and pedestrian/cycle routes must be brought to the site boundary to allow for future connectivity to adjoining lands.
- Facilitate the construction of the link street and bridge crossing from Clonminch Road to Chancery Lane.
- Facilitate the extension and creation of public bus routes through the Eastern Node.
- Provide a clear hierarchy of roads for vehicular movement in compliance with DMURS.

Community Focus

- Develop a self-sustaining neighbourhood with a mix of land uses which facilitates the provision of local services that will reduce the requirement for car trips and helps foster a sense of community among local residents.
- The provision of the neighbourhood centre shall occur concurrent with the provision of residential development within this node.
- Identify and assess the suitability of lands zoned Public/Community/ Recreation for provision of a primary school to service new residents in this node. The identification and suitability assessment of the site for a primary school should include evidence of consultation with the Department of Education in relation to the provision of schools in this node.
- Provide childcare facilities in line with National Guidelines. Where a childcare facility is not provided this must be supported by a viability assessment based on local capacity and demand.

Built Form

- Average residential density within any one phase/sector should be at least 35 dwellings/hectare
- Create a strong urban edge along buffer zones.
- Require increased height at the neighbourhood centre to clearly identify the commercial core.
- Encourage increased height adjoining public open spaces to provide for passive surveillance and enclosure.
- Layouts should encourage natural surveillance of the public realm by providing street activity with house types that turn corners and no blank facades to the public realm.
- Provide for a variety of housing types suitable for people at a range of life stages.
- Avoid mono-type building typologies (e.g. two storey or own-door houses only).
- Provide for adaptability and flexibility in design of new dwellings.
- Building finishes should be varied, high quality and durable.
- Use landmark elements to help support local legibility

1.0 Nodal Masterplan—Planning Policy Context

1.2 Nodal Masterplan - Core Strategy and Phasing

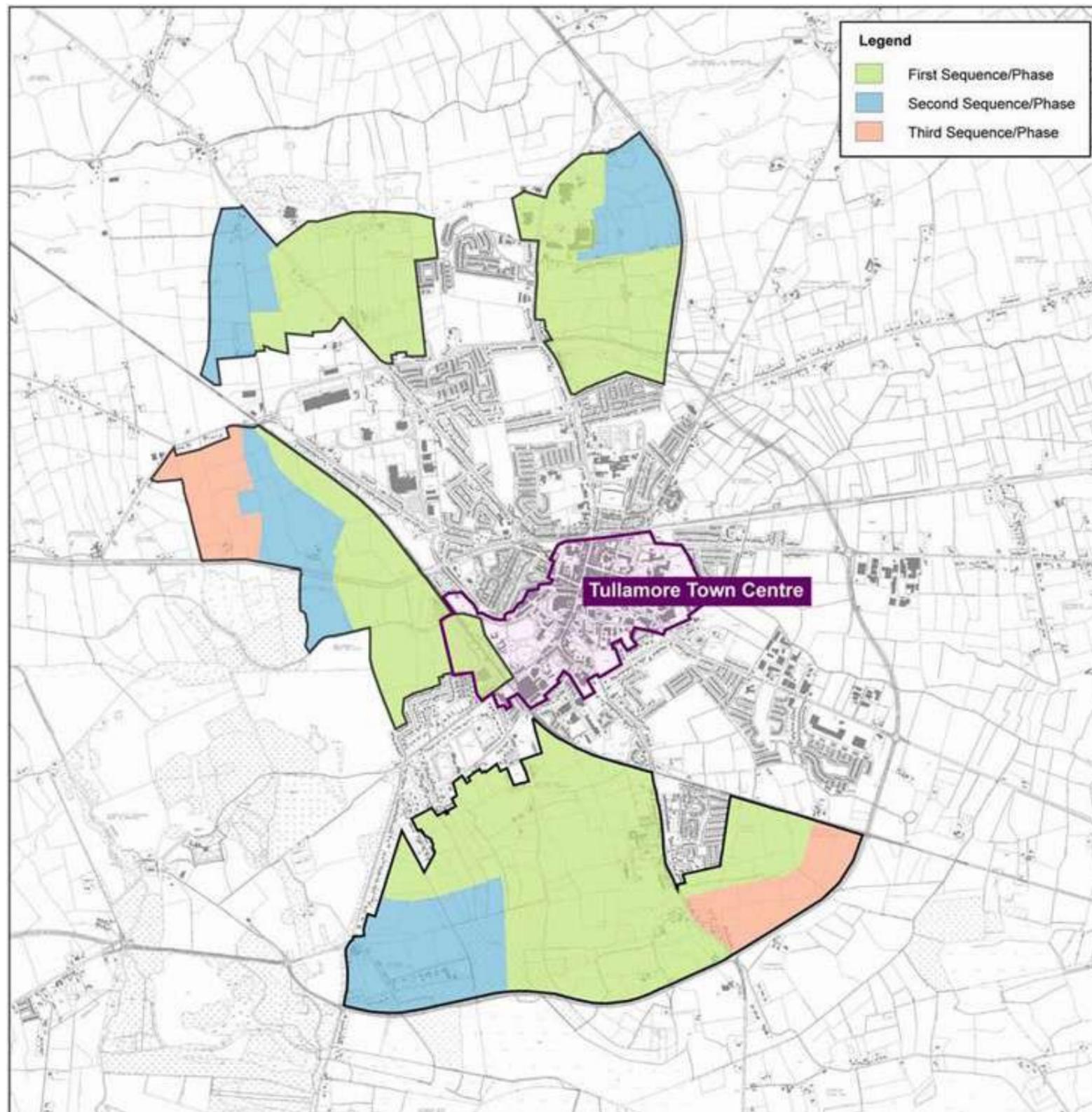


Figure 2: Masterplan Lands Sequencing—extract from Chapter 8 Tullamore Town and Environs Development Plan 2010-2016 (as varied and extended)*

The Core Strategy for the Tullamore and Environs Development Plan was introduced to the Plan in 2013 by way of a variation to the Development Plan. The Development Plan itself is dated from 2010 though it has been extended to 2020. Table 3.2 of the Core Strategy allocates 129ha of lands for residential development over the period 2010 – 2016 of which 40ha are allocated to Sequence Phase 1 residential zoned lands within designated Masterplan areas. To date there has been no multi-unit residential development within any of the Masterplan areas.

This Masterplan for the Eastern Node extends to c58ha including the school site, the neighbourhood centre, the Link Street and the Buffer areas. Lands identified as Sequence Phase 1 within the Eastern Node MP area extend to c17ha.

This Nodal Masterplan for the Eastern Node provides for development in a small portion (3.5ha) of the Sequence Phase 3 lands within the Eastern Node in Phase 1. This represents c1.2 per cent of the overall residentially zoned lands in the Masterplan areas (290ha) and 6 per cent of the Eastern Node MP area (58ha). The overall area of the Southern Environs Masterplan is 322ha so the area of Sequence Phase 3 lands being incorporated into the Nodal Masterplan Phase 1 lands is just 1 per cent.

Taking the above figures into account, in quantitative terms this is considered minimal and immaterial. In terms of land-use, urban design and architecture it is considered appropriate and beneficial as approaching the development of the Eastern Node with the minor quantitative adjustments to the phasing as proposed is justified as it has significant layout, design and place-making advantages without undermining any of the objectives of the Core Strategy phasing.

*It should be noted that significant tranches of the 'First Sequence Phase' lands are zoned/designated for uses other than residential uses.

Justification for Incorporation of 3.5ha of Sequence Phase 3 Lands into Phase 1 Nodal Masterplan Phasing

The justification and resultant design advantages may be summarised as follows –

- The 'phasing line' that demarcates Sequence Phase 1 from Sequence Phase 3 is based on an indicative road line for the Link Street. In land-use and design terms the 'phasing line' is arbitrary and purely diagrammatic and does not follow any field or other topographical boundaries. The phasing map includes existing residential development on the Clonminch Road in Sequence Phase 3.
- If developed as per the phasing diagrams in the Southern Environs Masterplan area with the Link Road forming the boundary between Sequence Phase 1 and Sequence Phase 3 lands then lands immediately abutting and to the south of the Link Street at the entrance to this Masterplan area would remain undeveloped for a considerable period of time. There would in effect be a 'left-over' area of land on the south side of the Link Street. This area would then most likely have to be hoarded off and/or become very difficult to maintain and would likely in time display the characteristics of unused urban-edge lands. Furthermore, single sided development would lack a sense of identity, which is especially important at this key entrance to the overall Nodal Masterplan Lands.
- A further advantage in utilising the 3.5ha of Sequence Phase 3 lands as proposed is that the development would not proceed in an elongated manner away from the Clonminch Road with lands (the 3.5ha of the Sequence Phase 3 area) unused whilst being in proximity to Clonminch Road, linkages to the town centre and bus routes (as well as the cycle lanes that are proposed on Clonminch Road as part of the Nodal Masterplan Phase 1 development of the Eastern Node Masterplan lands). Clonminch Wood has not been taken in charge and whilst the proposed Nodal Masterplan Phase 1 development application area is designed to allow connection to Clonminch Wood such connections are unlikely to be available in the immediate short-term.
- If developed as per the phasing map, the early phases of the development would hug the existing residential area in an extended linear fashion making for an elongated development pattern and severely restrict and negatively impact on opportunities for quality place-making that are facilitated by a deeper development form as opposed to the linear form that would otherwise occur. This would be very pronounced at the important entrance area to the Nodal Masterplan Land at the interface with the Clonminch Road. An elongated development pattern severely restricts opportunity for variety in layout and house-types reducing opportunities for developing building forms that provide variety and strong legibility in a development.
- As part of the detailed design of the proposed Nodal Masterplan Phase 1 development of the Eastern Node Masterplan lands the indicative position of the Link Road has been adjusted and moved slightly north. This greatly improves quality of the built form and delivers a much better and far more aesthetically pleasing entrance to this important new development area for the town of Tullamore.
- The Southern Environs Masterplan calls for Nodal Masterplans for each of the four identified nodes within that Southern Masterplan lands. It is reasonable to expect that as development typologies are refined and design detail applied there would inevitably be adjustments from the much higher level 'broad-brush' content of the Southern Environs Masterplan area.
- Incorporating the lands as proposed allows physical boundaries to demarcate the development area.
- The Link Street through the area is a development objective of the Development Plan. The provision of this Link Street requires a critical mass of development on both sides of the street as otherwise the construction costs could be prohibitive. The economics of the construction costs of the road are far more positive when the road serves in-depth development on both sides.

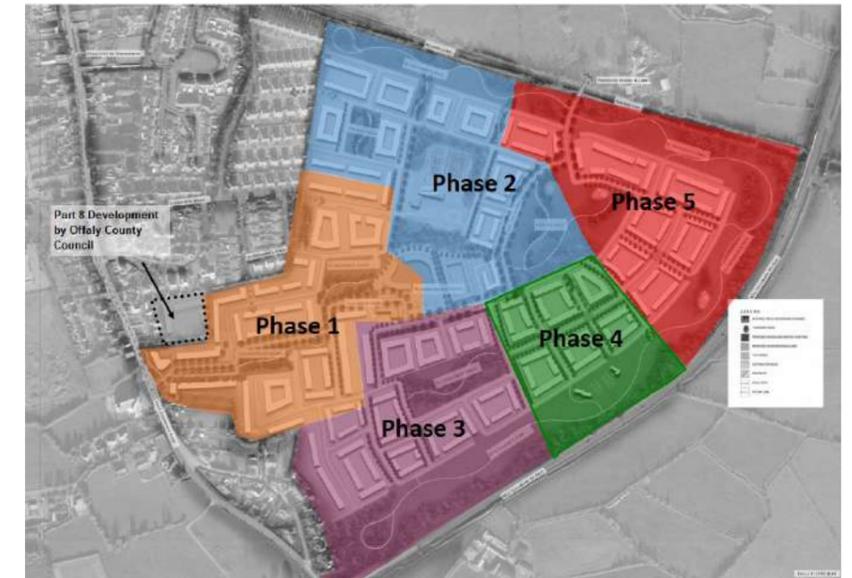


Figure 3: Nodal Masterplan Phasing

Given that this area has been allocated for development since 2004 and there has been no multi-unit residential development on any of the Masterplan lands (290ha) over all this time including any of the 160ha of Masterplan lands allocated for Sequence Phase 1 residential development, it is considered it is not necessary to reduce the amount of Sequence Phase 1 lands elsewhere to adjust for the re-allocation of these 3.5ha into the Nodal Masterplan Phase 1 development area of the Eastern Node Masterplan. In any event, given sales projections it will take some time for the proposed Masterplan Phase 1 development area to be completed in any case.

2.0 Nodal Masterplan—Building the Evidence Base

2.1 Nodal Masterplan Preparation

This Masterplan is prepared for the Eastern Node of Tullamore Southern Environs and shall be referred to as the 'Nodal Masterplan' throughout this document.

Nodal Masterplan Context within Tullamore Southern Environs

This document is a Nodal Masterplan for the development of the Eastern Node of the Southern Environs of Tullamore, Co. Offaly and has been prepared in accordance with Chapter 5 – Masterplans for the Tullamore Town and Environs Development Plan 2010-2016 (TTEDP) (as varied and extended to 2020).

The TTEDP incorporates a Masterplan for Tullamore Southern Environs. This higher level Masterplan provides an urban design strategy and indicative built form for all Masterplan Lands within the Tullamore Southern Environs which extend to c.322 hectares.

The Tullamore Southern Environs is sub-divided into four 'nodes'. The Tullamore Southern Environs Masterplan contains specific objectives for each individual node which must be adhered to in the development of the individual nodes in addition to Development Control Guidelines contained in Chapter 14 of the TTEDP. It is the policy of the Council that a detailed Masterplan shall be prepared for each of the nodes in consultation with the Planning Authority prior to the submission of a planning application for the development of that node (para. 5.4.3:15).

The Eastern Node extends to c58 hectares. This Nodal Masterplan incorporates the specific objectives for the Eastern Node as contained in the Tullamore Southern Environs Masterplan. These specific objectives are not dependent on the other three nodes. It is the intention of the Tullamore Southern Environs Masterplan to provide an east-west route from Charleville Road to Clonminch Road (SN2). The link street and junction with the Clonminch Road from the Eastern Node is aligned with this future road proposal to the west of the Clonminch Road as well as taking account of the long term objective of the Southern Environs Masterplan to provide a bridge crossing at the railway within the Eastern Node.

The key elements to be contained in the Nodal Masterplan are-

- Neighbourhood Centre
- Primary School Site
- Link Road from Clonminch Road to railway line and reservation for future bridge across the rail line to link with Chancery Lane
- Buffer Park abutting the N52 and rail line
- Central Park

Public Consultation

Developers and landowners are required to coordinate and work together in order to achieve an integrated masterplan area for the Eastern Node.

The Eastern Node is divided between six landowners including Offaly County Council and the lead developer preparing this Nodal Masterplan. All landowners were informed of the intention to develop a nodal masterplan for this Eastern Node and sent a copy of the draft Nodal Masterplan by registered post (May 2020). Offaly County Council have provided feedback, however none of the other landowners have responded.

According to the TTEDP, "*where the joint approach does not prove possible, development proposals must include details of efforts made to engage with other landowners*".

Details of correspondence with land owners is included at Appendix F.

The TTEDP requires the relevant developers to work in cooperation with Iarnród Éireann and other relevant agencies and bodies to ensure that a bridge is delivered in tandem with the long term development of the Southern Environs Masterplan. It is noted the bridge is to be provided in the context of the wider Southern Environs Masterplan area (322ha) and implementation of the bridge is not a prerequisite for development of the Eastern Node.

Details of the preliminary Link Street Design and Bridge Crossing is provided at Appendix E. These details have been provided to Iarnród Éireann.

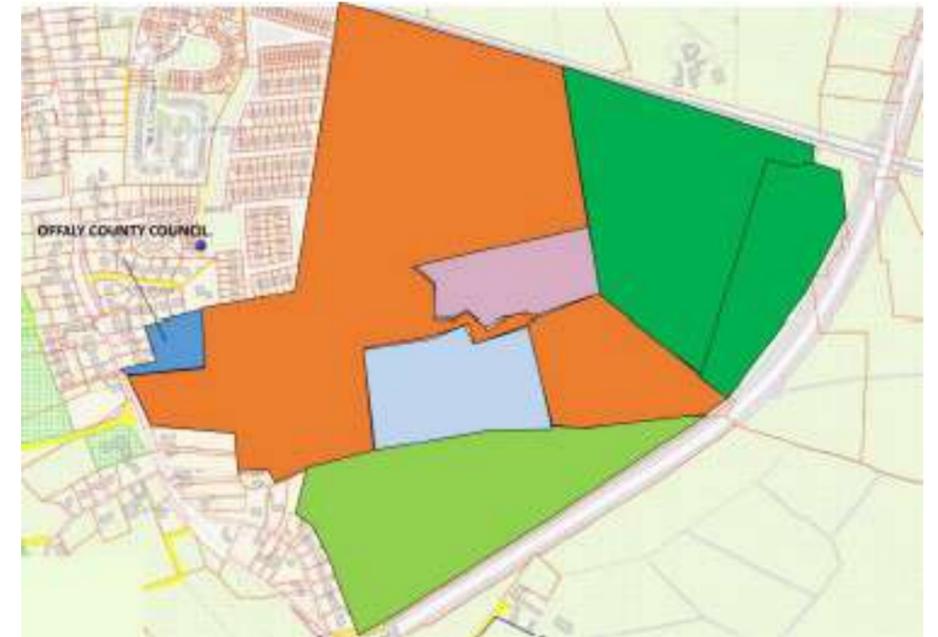


Figure 4: Diagram showing ownership parcels within Nodal Masterplan Lands

The Eastern Node contains a school reservation site. A feasibility study was undertaken to ensure the future school site can be provided in line with Departmental Guidelines and is fully integrated into the new neighbourhood in terms of urban design, road hierarchy and services. In the interest of completeness this Nodal Masterplan has provided an indicative school layout to illustrate how the school will knit into the Eastern Node Development Area. According to correspondence received from the Department, the school site is acceptable for the provision of a 16-24 classroom school.

Details of the school study and DOES correspondence is provided at Appendix C.

Permitted Development

Part of the Nodal Masterplan Lands in the ownership of Offaly County Council has been approved under Part 8 for the construction of 19no. Dwellings. This development will have a separate vehicular entrance onto Clonminch Road to the north of the main entrance to the Nodal Masterplan Lands. The location of this site is identified by the Nodal Masterplan drawing. Consideration was given to this planned development however, due the approved design and relative proximity to the main entrance to the Nodal Masterplan Lands, an internal link was not considered to offer improved permeability.

2.2 Site Location and Context



Figure 5: Eastern Node shown on Satellite view of Tullamore

Location

The Eastern Node is located to the South East of Tullamore Town Centre and extends to c.58 hectares of zoned Greenfield land. There are footpaths and public lighting from the site entrance to the town centre. The carriageways are separated by chevrons such that on-street cycle lanes could be accommodated.

The Eastern Node is a distinct development pocket bounded on the West by existing housing development and the R443, the South and East by Tullamore Bypass and on the North by the Dublin—Galway railway line.

Landscape Features

The Eastern Node is relatively featureless with a flat topography that generally slopes from the west at the Clonminch Road towards the north east. There are no mature hedge or trees noted within the Nodal Masterplan Area with the most obvious feature being various electricity poles and overhead ESB lines. There are distant views of church steeples. The wider Southern Environs Masterplan notes no feature of interest within the Eastern Node (TTEDP, p.14)

Existing Services

There is an existing 225mm diameter public foul sewer located along the Clonminch Road to the west of the Nodal Masterplan Lands which discharges northwards towards Church Road Pumping Station.

There is an existing 12" asbestos watermain, 9" asbestos watermain and 6" cast iron watermain located along the Clonminch Road to the west of the Nodal Masterplan Lands

Surface Water and Flooding

Surface gradients in the Nodal Masterplan area generally fall from the west (Clonminch Road) towards the north (railway line).

The Nodal Masterplan Lands currently drain into open ditches/drains along the north western boundary and eastern boundary.

A preliminary flood risk assessment has been carried out by review of the relevant Tullamore CFRAMS Fluvial Flood Extent Maps. No fluvial flooding is shown within the site.

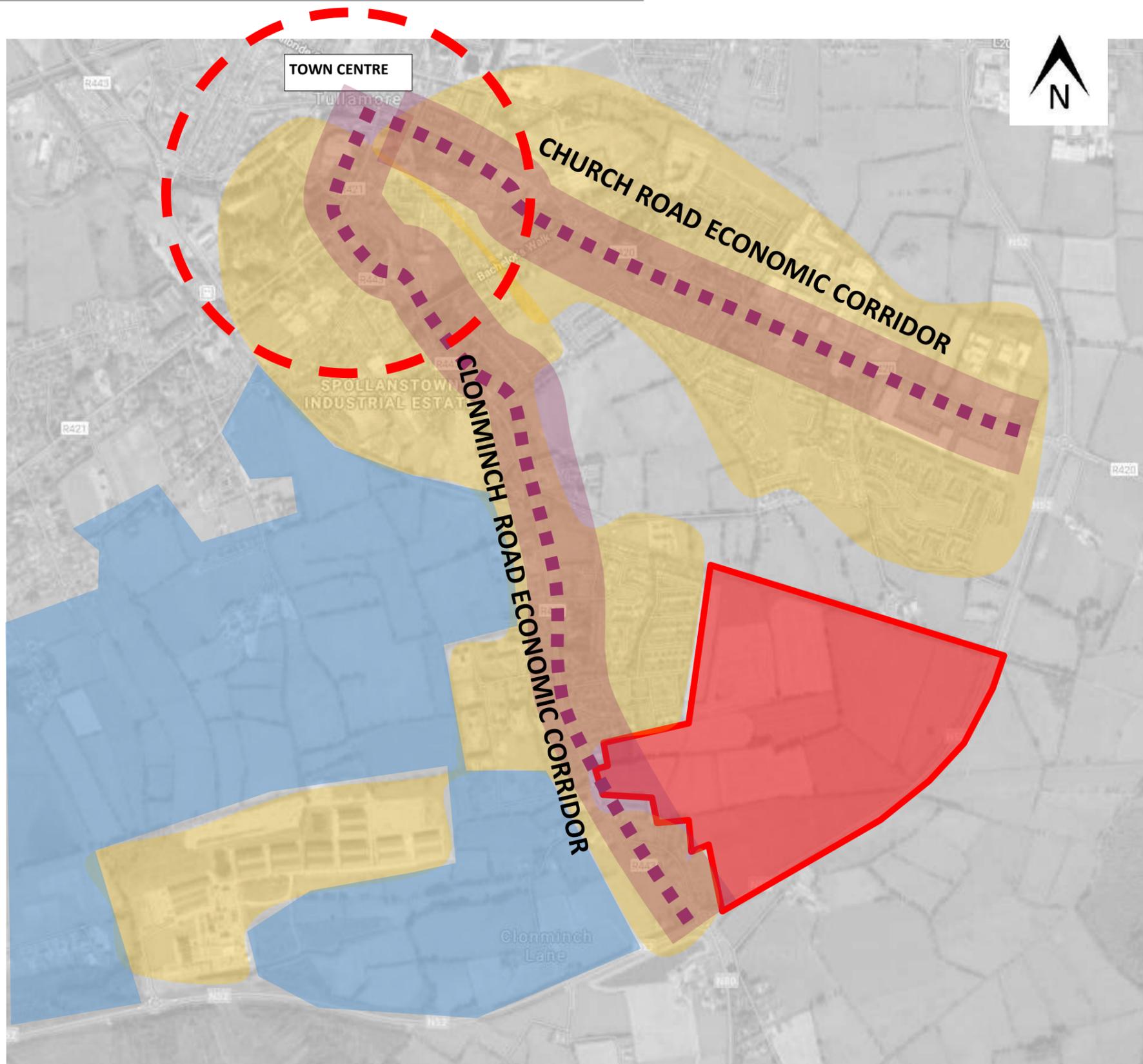


Figure 6: Eastern Node-Functional Relationship with Tullamore



Relationship to Town Centre

The Eastern Node of the Southern Environs forms a significant body of land lying between the two main residential and economic corridors leading from the Tullamore By-pass to Tullamore Town Centre.

While in the medium/long term, the new 'Link Street' within the Eastern Node will connect those two corridors, initially the primary relationship with the Town Centre will be by way of the Clonminch Road Corridor.



Colaiste Choilm, Clonminch Road



Tullamore College



Clonminch Business Park



Tullamore Primary Care Centre

Connections to existing and planned services

Whilst being developed as a self-contained neighbourhood, the Nodal Masterplan Lands are intended to connect to the established built form of Tullamore to the north by way of urban mass and the creation of a "Link Street" from Clonminch Road to existing retail and services areas to the east. It will also be connected to existing and planned employment areas which lie to the west of the Clonminch Road. The Link Street has been designed to integrate with the future planned road network of this employment area which is subject to a separate nodal masterplan.

The employment area identified currently includes the Department of Education, the Department of Finance, Clonminch Business Park and Tullamore Distillery.

Facilities along Church Road include a Tesco Superstore, Tullamore Retail Park, Tullamore Leisure Centre, schools, petrol stations and many other services.

Adjoining Residential

The Clonminch Road has a number of traditional ribbon development dwellings including a significant cluster immediately South West of the Eastern Node.

A large existing residential development known as Clonminch Wood adjoins the North Western boundary of the Node. The roads/streets within Clonminch Wood have not been taken in charge. Nevertheless, this Nodal Masterplan proposes links between Clonminch Wood and the Eastern Node Masterplan Lands with the aim of increasing permeability and particularly connections to the proposed neighbourhood centre and school site.

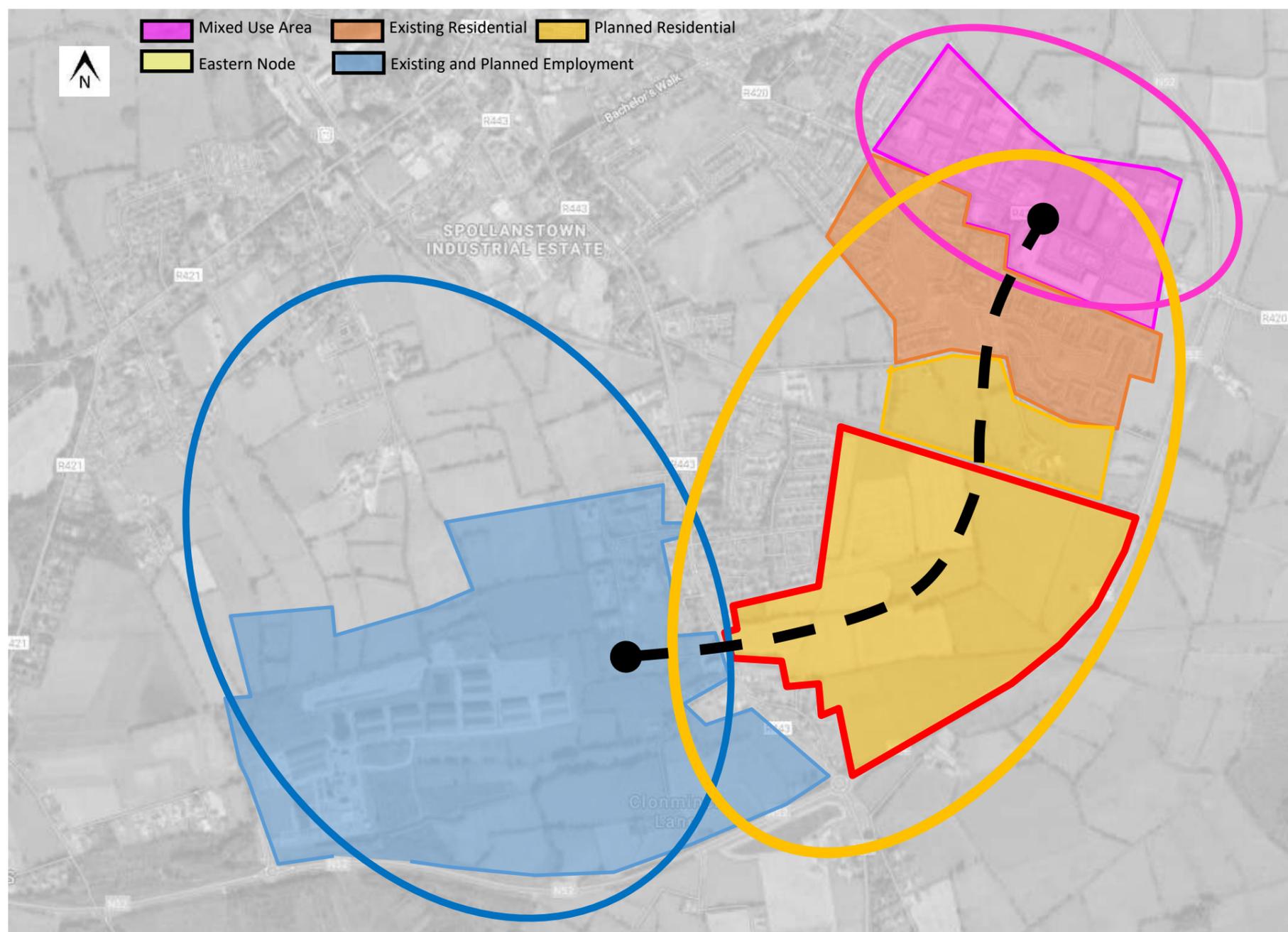


Figure 7: Connection between Employment and Service Areas

Tesco Extra Store



Department Of Education



Tullamore Retail Park



Clonminch Wood

2.3 Transportation Linkages

Public Transport—Bus

The nearest bus interchange to the proposed development site is located at the entrance of Clonminch Wood (approximately 300m north of the access to the Nodal Masterplan lands). This interchange is served by Buggy Coaches which provides a local service within Tullamore.

Bus Eireann services currently connect Tullamore to and from Dublin and are accessible at interchanges at O'Carroll Street (2.6km) and at Tullamore Retail Park (2.5km).

Slieve Bloom Coach Tours provides services between Tullamore Town and destinations including Mullingar, Mountmellick and Portlaoise via Portarlinton. These services are accessible at Tullamore Post Office (2.1km).

Kearns Transport operates services between Tullamore and Dublin / Birr. These services are accessible at various locations in Tullamore Town Centre.

The Nodal Masterplan provides for bus links to penetrate the area, especially the Link Street, school and neighbourhood centre.

Public Transport—Rail

The Nodal Masterplan Lands are located approximately 2.2km south of Tullamore train station. Tullamore has an established rail infrastructure that provides linkages to Dublin City in the east, and Galway City / Mayo to the west including other intermediate destinations.

Road Network

The R443 operates in a north-south direction along the western boundary of the Nodal Masterplan Lands site. Travelling in a northerly direction from the proposed site access provides access to Tullamore Town Centre located approximately 2.2km away. Travelling in a southerly direction along the R443 leads to the N52 national road corridor via the N52 / R443 / N80 roundabout junction.

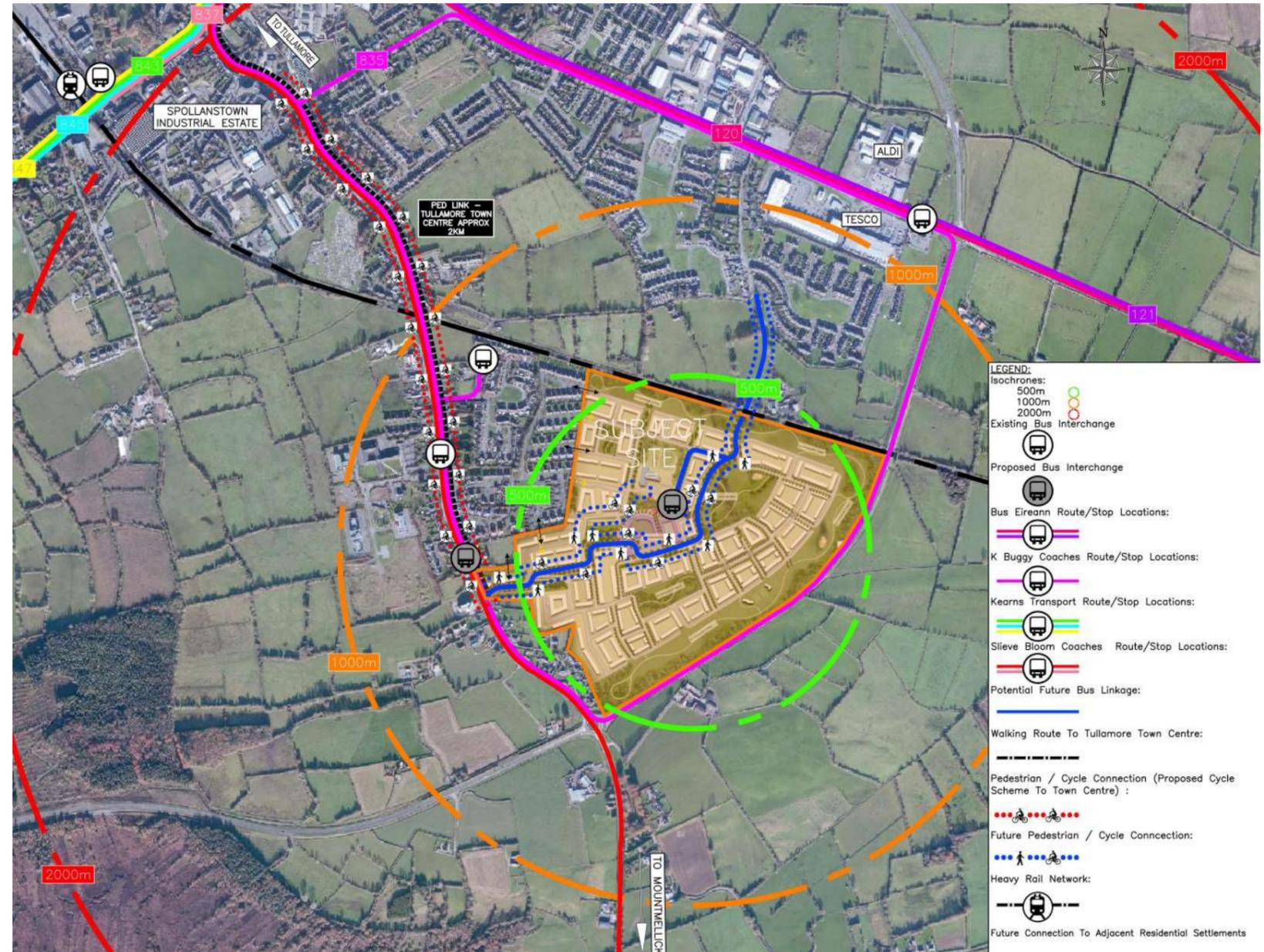


Figure 8: Transport Linkages

Cycle Facilities

There are currently no cycle lanes between the town centre and the Eastern Node. Clonminch Road is wide enough to accommodate cycle lanes and these will be provided in development phase 1.

2.4 Heritage / Environment



Figure 9 : Site Analysis



Ecology

Ecologist Mr. R. Goodwillie undertook a site visit in May 2019. The Nodal Masterplan lands were found to be typical of agricultural land in the Tullamore area with a mix of pasture and tillage. This assessment found the only features of interest to be the hedgerows which have relatively high biodiversity though not exceptionally so for the area.

The bird fauna was typical of agricultural land with hedges with the rabbit the only large mammal evident on site. No bat roosts were identified with the most likely feeding sites along the railway. No invasive plant species were found on site.

An Ecological Appraisal is provided in Appendix A

Archaeology

The Nodal Masterplan lands have been subject to archaeological assessment by Archer Heritage. This assessment is based on a desk top study and field survey which found the Nodal Masterplan lands to be of moderate-high potential for the survival of buried archaeological remains. A possible enclosure was identified in the eastern part of the Nodal Masterplan. It is recommended that further assessment be undertaken consisting of geophysical survey and test trenching prior to development of the Nodal Masterplan lands. This can occur on the basis of individual parcels of land coming forward.

An Archaeological Appraisal is provided in Appendix B

Landscape

The Development Plan classifies the Eastern Node as a “Landscape of Low Sensitivity” (Map 13.6, TTEDP 2010-2016). This is evidenced in the Tullamore Southern Environs Masterplan that does not identify any trees or hedgerows of character. Notwithstanding this the Nodal Masterplan area has been assessed by a qualified Landscape Architect and whilst, as expected, nothing of landscape interest has been found, some trees and hedgerows have been identified through a professional tree survey undertaken for the Nodal Masterplan and where appropriate the urban structure has been planned so segments of these hedgerows are incorporated.

Landscape Appraisal and Tree Survey Appended at Appendix D together with a Landscape Masterplan.

2.5 Zoning and Development Plan

Zoning and Development Plan Objectives

The primary use for the overall Nodal Masterplan lands is indicated as “residential”. A centrally located block of land has been zoned for the provision of neighbourhood centre facilities adjacent to a plot zoned ‘public/community/education’ for the provision of a primary school.

The Tullamore Town and Environs Development Plan proposes a buffer zone to the Tullamore Bypass and to the Dublin—Galway Rail Line along the South Eastern and North Eastern boundaries of the Node and this is zoned ‘Open Space’.

A strategic linkage is shown passing through the Eastern Node from the Clonminch Road to Chancery Lane on the Northern side of the Dublin—Galway Rail Line.

All of these key elements are incorporated into the Nodal Masterplan.

An analysis of the zoned areas is shown below:

Green Belt / Buffer Zone	12.72 Hectares
Educational	2.37 Hectares
Neighbourhood Centre	2.80 Hectares
Phase 1 Residential	17.02 Hectares
Phase 3 Residential	22.67 Hectares
Total	57.58 Hectares

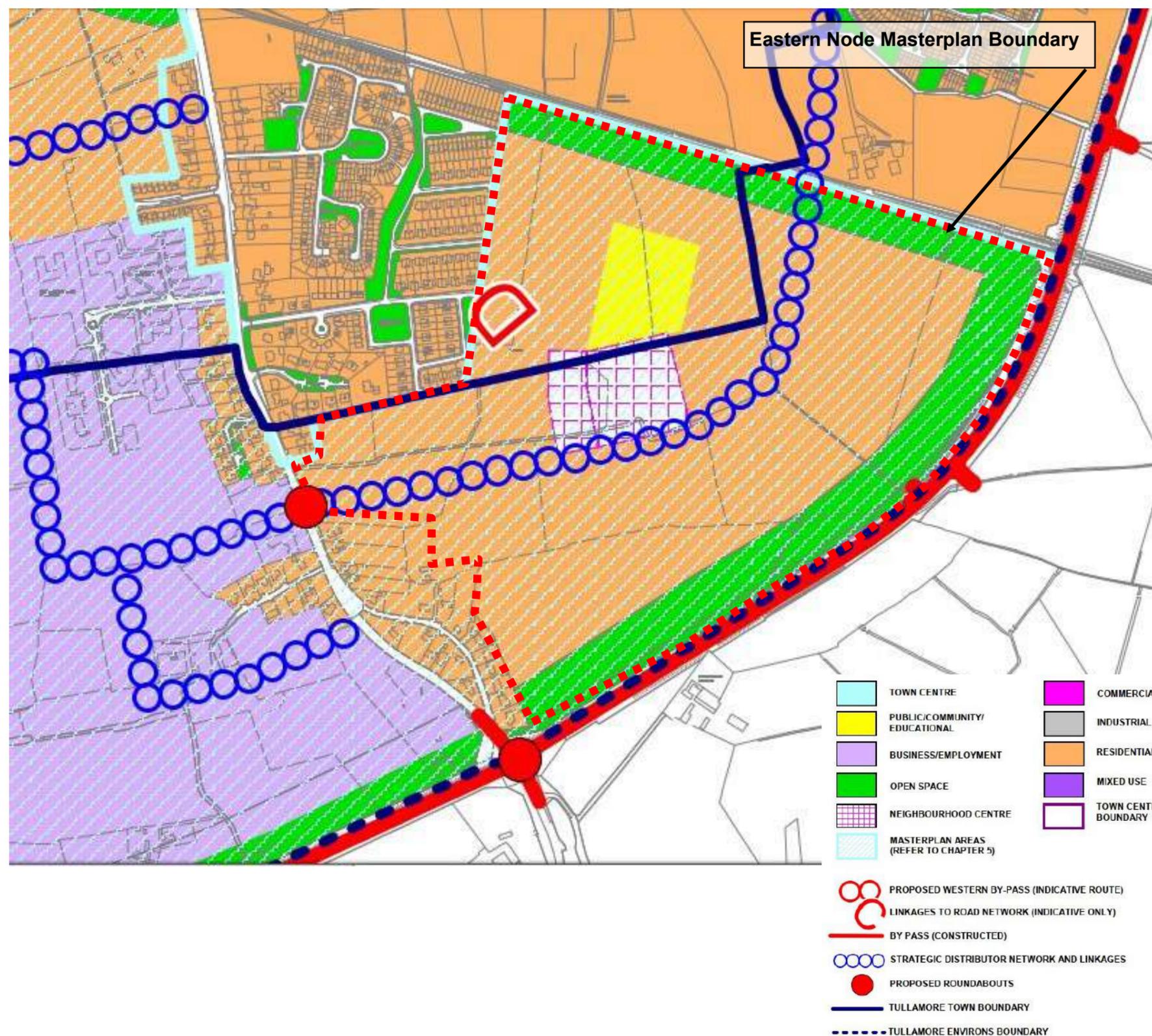


Figure 10: Land Use Zoning Map Extract from Tullamore Town and Environs Development Plan

2.6 Vision and Principles

The following specific objectives are indicated for the Eastern Node-

- **EN1.** Seamlessly integrate into adjacent mature residential areas.
- **EN2.** Provide surface water areas as amenity features which can operate as surface water attenuation (SUDS) systems. The location and construction phasing of such features shall be agreed with the Planning Authority prior to the commencement of development within this node.
- **EN3.** Encourage the provision of a potential bus route connecting peripheral environs areas as well as serving neighbourhood centres and business park users.
- **EN4.** Provide a neighbourhood centre to service new residents in this node. The provision of this neighbourhood centre shall occur concurrent with the provision of residential development within this node.
- **EN5.** Provide a primary level school to service new residents in this node. The development of the primary school shall occur concurrently with the provision of residential development with this node. In addition, as part of the preparation of a more detailed Masterplan for this node, it must be demonstrated that consultation has taken place with the Department of Education in relation to the provision of schools in this node.
- **EN6.** No building shall be occupied within this node prior to the provision of water, foul sewerage and surface water infrastructure to the satisfaction of the Planning Authority.
- **EN7.** Provide a bridge in this node across the railway*.

*The delivery of a bridge across the railway within the Eastern Node is to be delivered in tandem with the long term development of the Southern Environs Masterplan. The TTEDP requires the Nodal Masterplan to provide the following-

- Estimated cost
- Indicative location
- Design detail
- Land reservation to accommodate the bridge and access roads/ ramps



Figure 11: Extract from the Masterplan for Tullamore Southern Environs from Tullamore Town and Environs Development Plan

Again, it is noted that the bridge forms part of the wider Southern Environs Masterplan (322ha) and its provision is not a prerequisite for development of the Eastern Node (58ha). In accordance with the Southern Environs Masterplan, this Nodal Masterplan for the Eastern Node provides indicative costs, location, design detail and land reservations for the bridge.

2.7 Site Analysis

Boundaries

- Cognisance of the relationship between proposed development and the existing well established residential development forming a part of the Eastern Node and bounding it to the West will be important.
- Some potential exists for connectivity with the adjoining established development but these would be primarily pedestrian rather than vehicular.
- The potential for noise emanating from the Tullamore Bypass and Dublin-Galway rail line has largely been dealt with by the planned buffer zone shown in the Tullamore Southern Environs Masterplan.

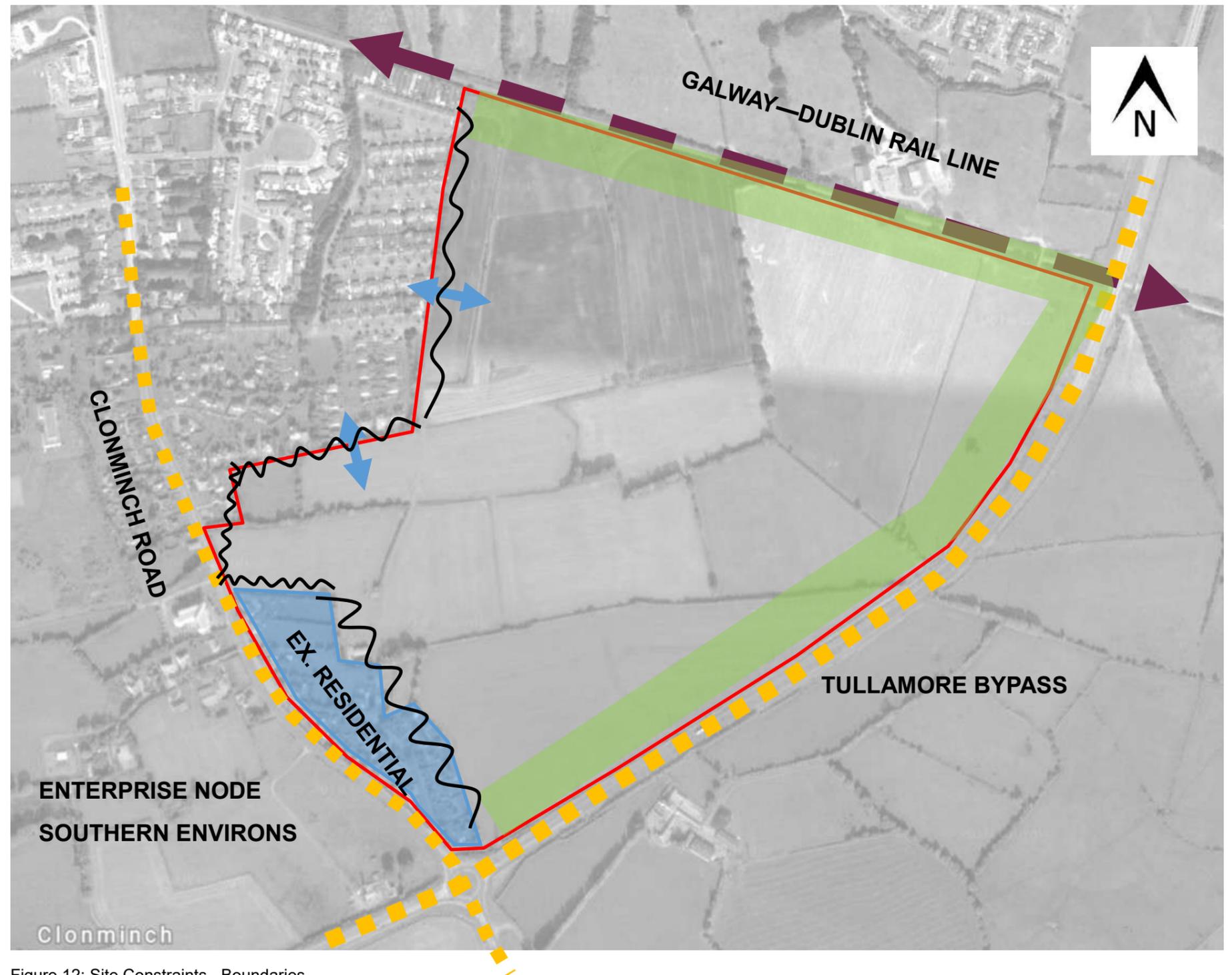
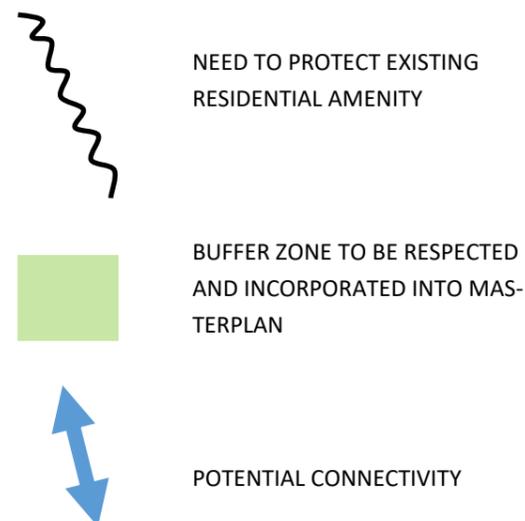
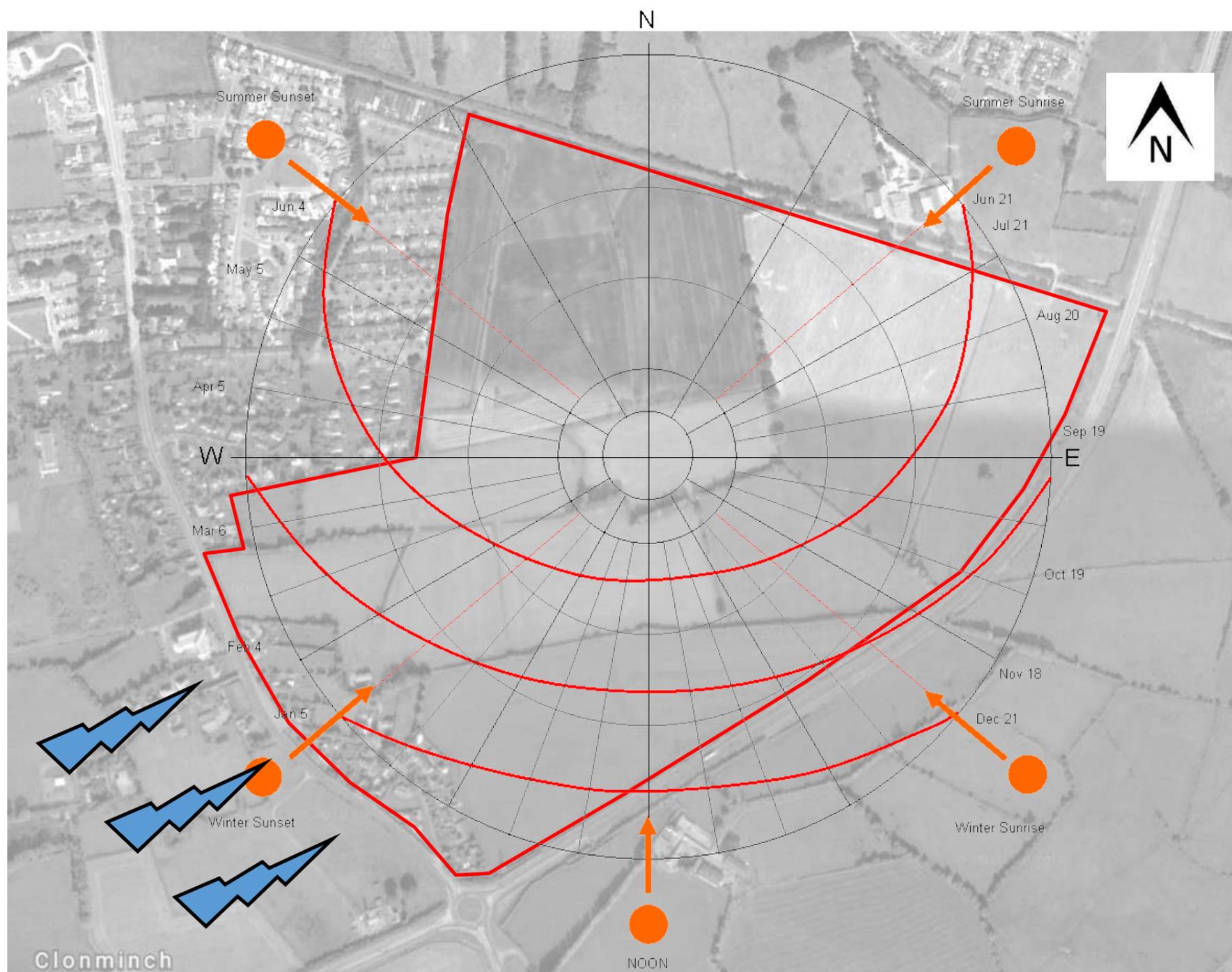


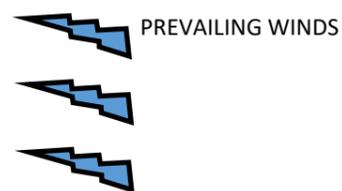
Figure 12: Site Constraints– Boundaries



Environmental—Sunpath

- The site is slightly sheltered from the prevailing winds from the South West because of the existing residential development immediately to the South West. Otherwise these prevailing winds will roughly follow the line of the proposed link street through the Node.
- As the link street will take up a roughly South West to North East orientation, there will be plenty of opportunity to have substantially East-West oriented houses along North –South oriented streets providing an equitable distribution of properties vis a vis sunlight.

Figure 13: Environmental-Sunpath Diagram



2.8 Development Opportunities

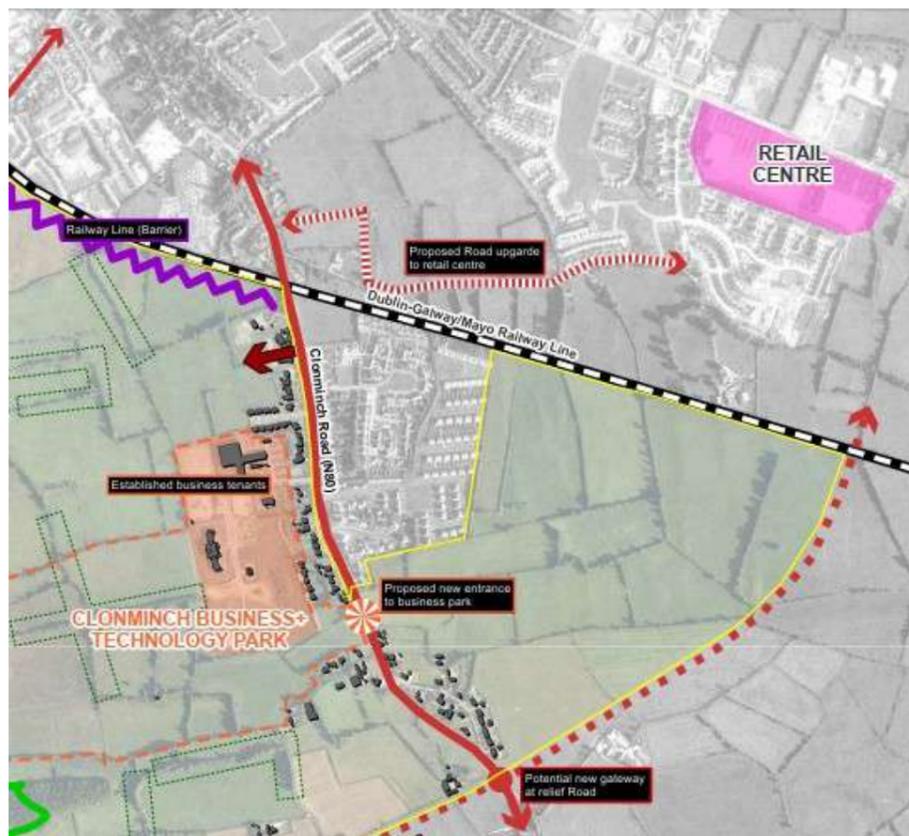


Figure 14: Constraints Map - Chapter 5 of the Tullamore Town + Environs Development Plan

Issues	Opportunity
Connectivity	Clonminch Road can facilitate cycle lands from the Eastern Node to the Town Centre. There is an existing bus service which currently stops at Clonminch Woods that could be extended to serve the Nodal Masterplan area. Planned transport network within the Eastern Node can facilitate access to public bus services. The continuation of the link road through the Eastern Node to the Tesco Retail Park would improve permeability and access to higher level services for residents of the Eastern Node.
Urban Form/Density	The Eastern Node is a substantial and self-contained area that can be developed with its own identity and distinctiveness.
Open Space/Biodiversity	The buffer area can provide an interesting and varied framework of spaces for use by future residents while performing a dual function of a noise buffer. This linear green space can introduce an enhanced biodiversity.
Community/Neighbourhood	The allocation of lands within the Eastern Node to a neighbourhood centre will provide the necessary support services for the Eastern Node to be self-sustaining. Community uses will create a synergy with commercial development where people will gravitate from surrounding residential areas both existing and planned.
School Site	The allocation of lands to education within the Eastern Node provides for a primary school to support the future needs of the new neighbourhood. The school site will be well connected to the surrounding residential lands, both existing and planned and related to the neighbourhood centre in terms of urban design. Playing fields associated with the school site provide additional green space for community use outside school opening hours.

Nodal Masterplan - Developing Opportunities

The Eastern Node has substantial advantages for the development of a new neighbourhood:

- The Tullamore Business Park and substantial employment zoned lands are located to the west of the Eastern Node Masterplan lands.
- The Eastern Node is classified by the TTEDP as a landscape of low sensitivity.
- Masterplan Lands are located at distance from the Charleville SAC.
- There are no recorded monuments situated within or adjacent to the Masterplan lands.
- There are a number of opportunities to connect future development to existing development to the west to improve vehicular and pedestrian connectivity.
- There are good opportunities for connecting sustainable transport nodes north to the town centre.
- There are no “mature hedge/tree growth” designations within the Eastern Node.

2.9 Concept Structure

Concept

A concept was developed from the analysis carried out that formed the foundation of the Nodal Masterplan. As illustrated by figure 15, the key structural elements were in place for the evolution of the Nodal Masterplan—

- School Site
- Neighbourhood Centre
- Link Street and railway crossing
- Connection to existing residential areas
- Buffer zone to N52 and railway line

The next stage was to develop the opportunities the Nodal Masterplan Lands offered to progress the finer structural elements including—

- Street Hierarchy and connectivity
- Open Space Hierarchy
- Built Form
- Character Areas

Section three details the iterative steps to the final Nodal Masterplan to provide a self-sustaining integrated community.

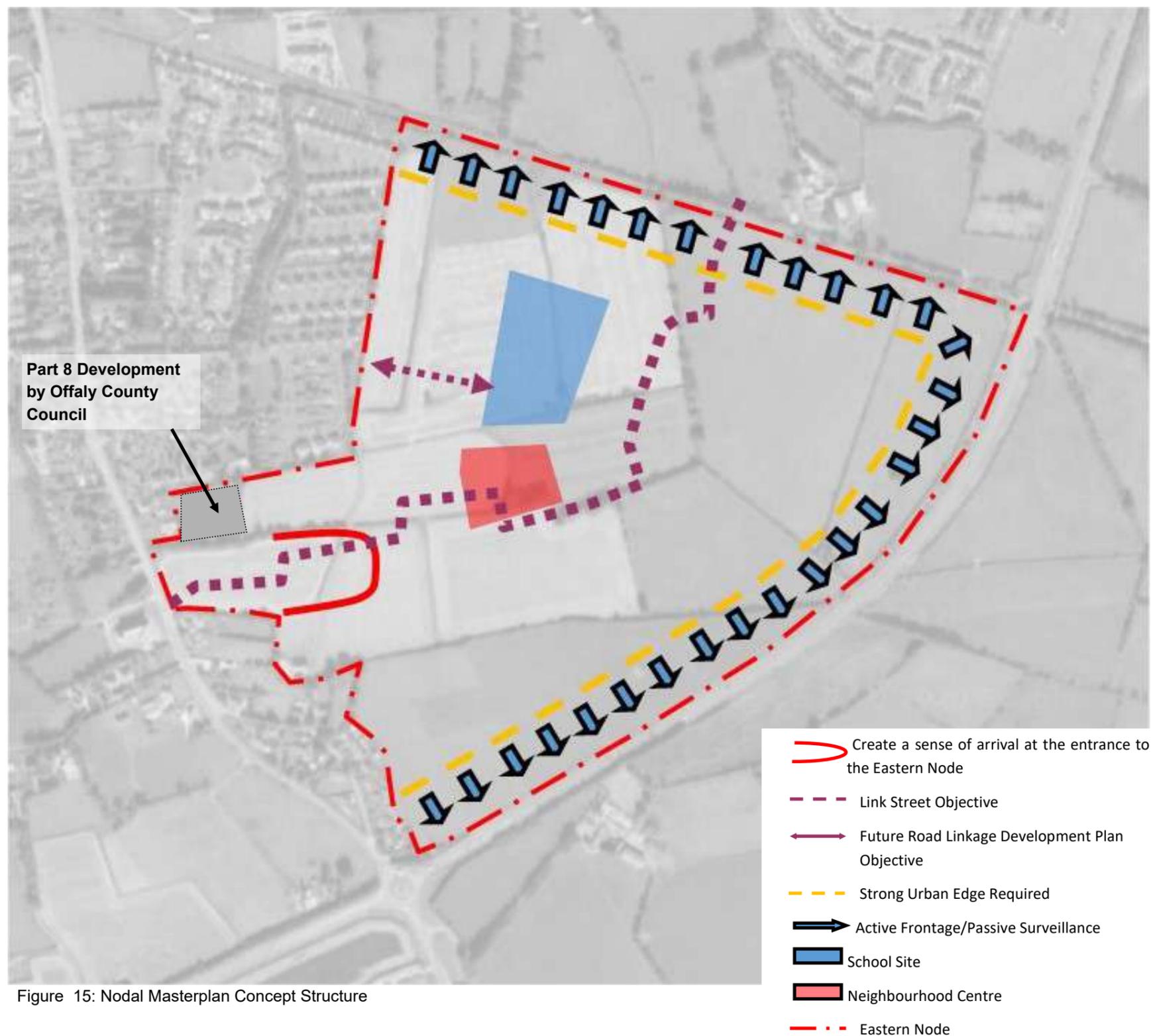


Figure 15: Nodal Masterplan Concept Structure

3.0 Nodal Masterplan for Eastern Node of Tullamore Southern Environs Expansion Area

3.1 Masterplan Evolution

Iterative steps were taken in developing the final Masterplan proposal as survey information became available, and discussions with consultants and stakeholders were had, the overall layout of future developments evolved.

The following three elements were determined by existing planning policy and planning infrastructure objectives of the Development Plan-

- Link Road and Railway Crossing
- School Site
- Neighbourhood Centre
- Buffer Zone Park

Link Street and Railway Crossing

A road alignment has been provided for the link street from Clonminch Road to the west towards Chancery Lane to the east. A bridge location and land reservation area has been identified as required. These detailed were provided to Iarnrod Eireann. Estimated costings for the provision of this bridge crossing and associated road infrastructure is provided at Appendix E.

School Site

A feasibility study has been undertaken to ensure the reserved school site for the Eastern Node is adequate in terms of size, topography and planned roads and infrastructure. The Department of Education and Skills have indicated that this school site is suitable for a 16-24 classroom school. The DES has stated that while they do not currently have a requirement for the development of a school on the site at Clonminch, the site should remain reserved for future identified need.

Neighbourhood Centre

The provision of a neighbourhood centre will enable the Eastern Node to become a self-sustaining neighbourhood with a mix of land uses which facilitates the provision of local services that will reduce the requirement for movement and which helps foster a sense of community among local residents.



Initial Proposal



Masterplan submitted to Offaly County Council



Alterations to take account of Baseline Data (Ecology primarily)



Final Masterplan Layout

3.3 Green Infrastructure



Figure 18: Green Infrastructure

Key Principles	Corresponding Specific Objective for the Eastern Node
<ul style="list-style-type: none"> Maintain buffer area indicated by Development Plan as a wildlife corridor. Create a hierarchy of open space and enhance biodiversity. Meet the recreational needs of new residents through the creation of usable public open spaces that encourage physical activity and social interaction. Provide playgrounds in tandem with the residential development of each phase/sector to cater for recreation needs of children. Provide a high quality landscaped space/square at neighbourhood centre. Create a green boulevard character that is aligned with avenue trees and landscape areas All planting to be native and support the All-Ireland Pollinator Plan. Allow for shared playing fields at school. Provide surface water areas as amenity features which can operate as surface water attenuation (SUDS) systems. 	EN2

The Nodal Masterplan includes a series of different open spaces aimed at meeting the recreational and social needs of the neighbourhood, enhancing biodiversity and fostering a sense of community.

A primary feature of the Node is the provision for a large Buffer zone between the development areas and the Tullamore Bypass and the development areas and the Dublin-Galway Railway Line. This buffer area provides the opportunity for a wildlife corridor and is envisaged as a series of interesting and varied framework of spaces. The recreational open space north of the school provides an opportunity for the community to benefit from these facilities outside school hours while an urban space is planned at the centre of the neighbourhood centre. A substantive piece of Urban Art should be located in the urban square to psychologically re-enforce this space as the focus for the Node.

3.4 Transport and Movement

Key Principles	Corresponding Specific Objective for the Eastern Node
<ul style="list-style-type: none"> Provide for future connection to adjacent residential areas. Enhance cycle-way connections to Tullamore Town Centre along Clonminch Road from the Eastern Node entrance. Prioritise sustainable modes of transport. Creation of “Greenway” network through interconnected open spaces and parklands that provide a safe environment for walkers, runners and cyclists. In the development of sectors within the Eastern Node, all roads and pedestrian/cycle routes must be brought to the site boundary to allow for future connectivity to adjoining lands. 	EN1
<ul style="list-style-type: none"> Facilitate the construction of the link street and bridge crossing from Clonminch Road to Chancery Lane. 	EN7
<ul style="list-style-type: none"> Facilitate the extension and creation of public bus routes through the Eastern Node. Provide a clear hierarchy of roads for vehicular movement in compliance with DMURS. 	EN3

The Nodal Masterplan includes a hierarchical street network conforming to the principles contained in Design Manual for Urban Roads and Streets (DMURS). The Primary Link Street through the node has a horizontal alignment to naturally slow traffic. It links a series of open spaces which are interspersed with buildings fronting directly onto the Link Street in a DMURS compliant manner. Parking and turning areas for school and neighbourhood facilities access are provided for.

Access into the residential areas of the site is provided by way of a series of local access with raised footpaths clearly indicating to motorists that they are entering a pedestrian priority zone. Finally cul-de-sacs and quiet low trafficked areas are intended to have shared surface street to highlight the importance of the pedestrian. Cul-de-sacs are designed to be permeable to pedestrians and cyclists but not allow through routes for vehicles.

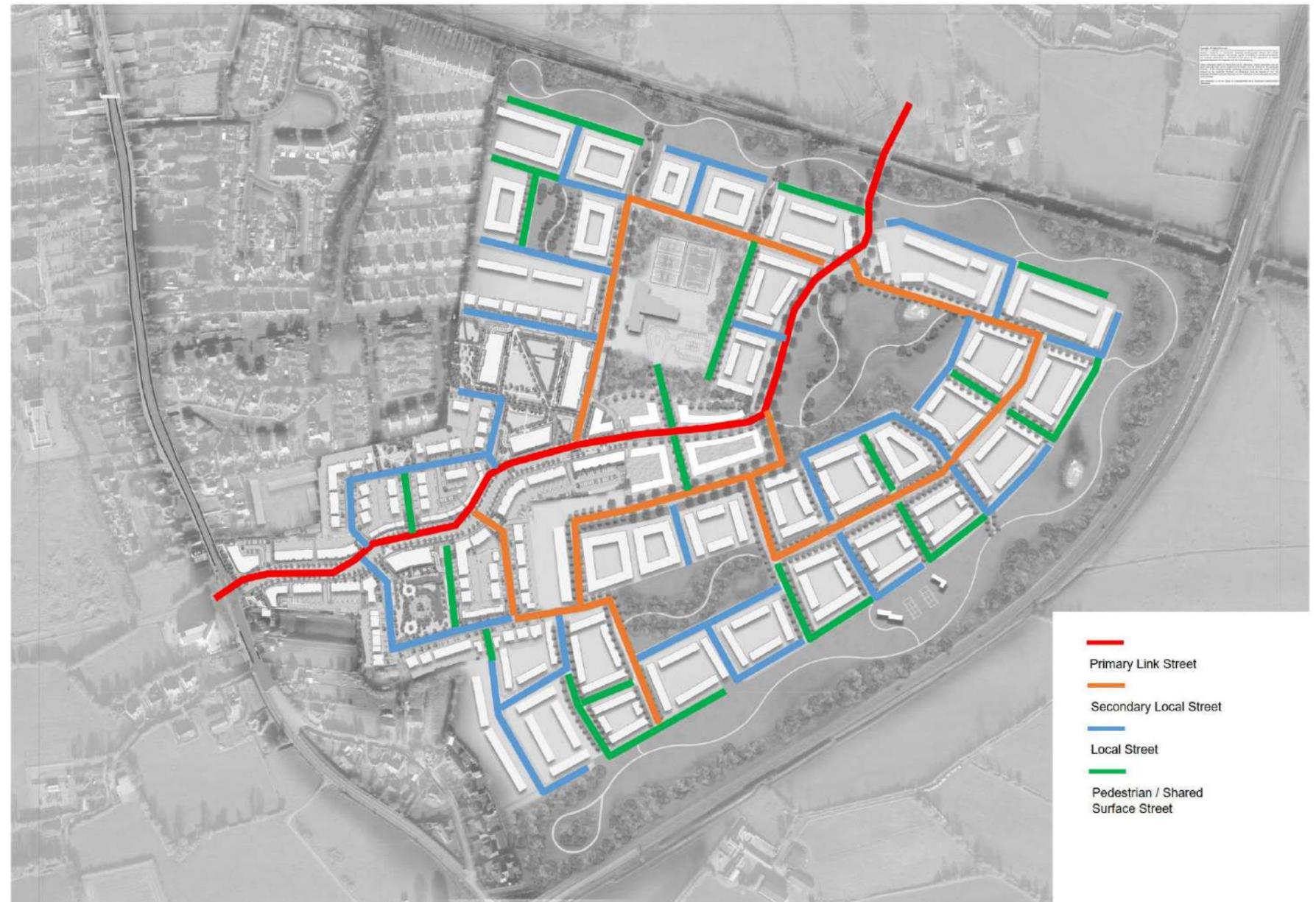
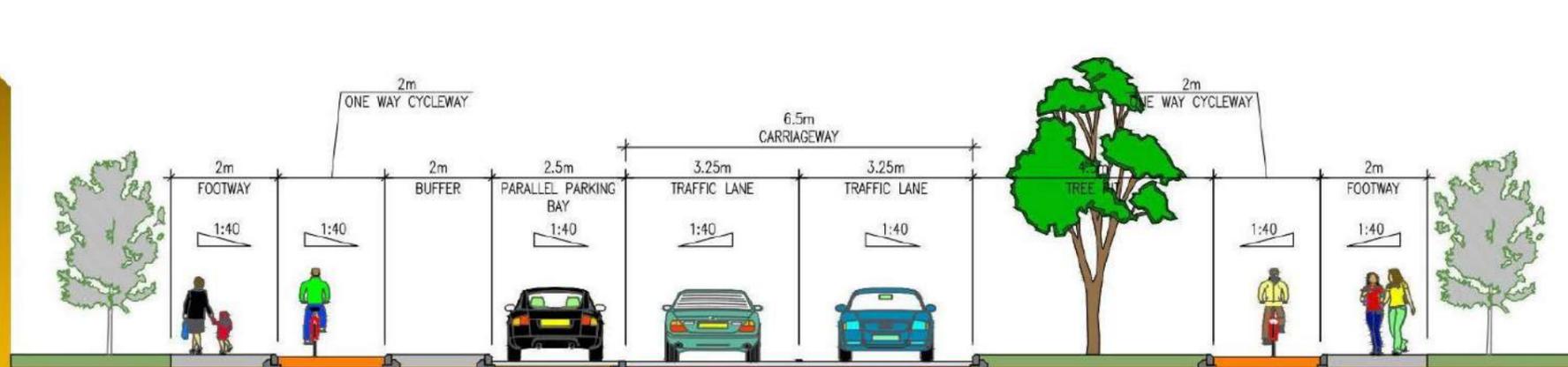
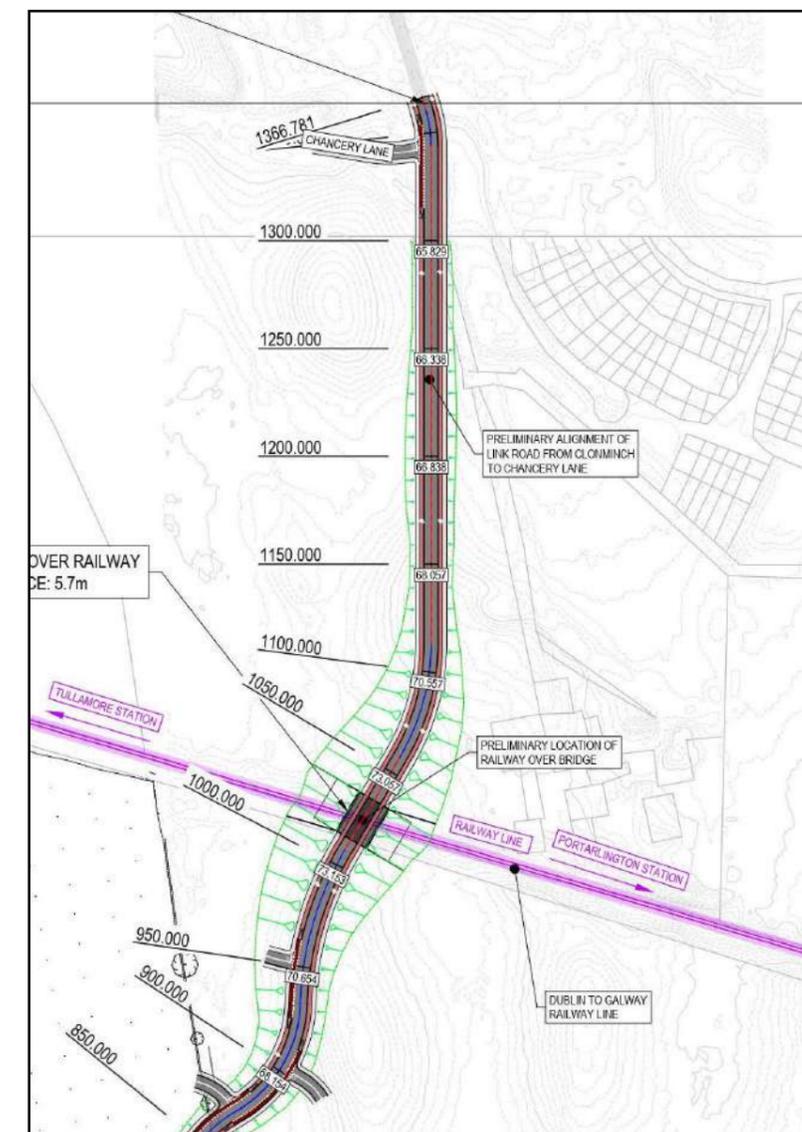
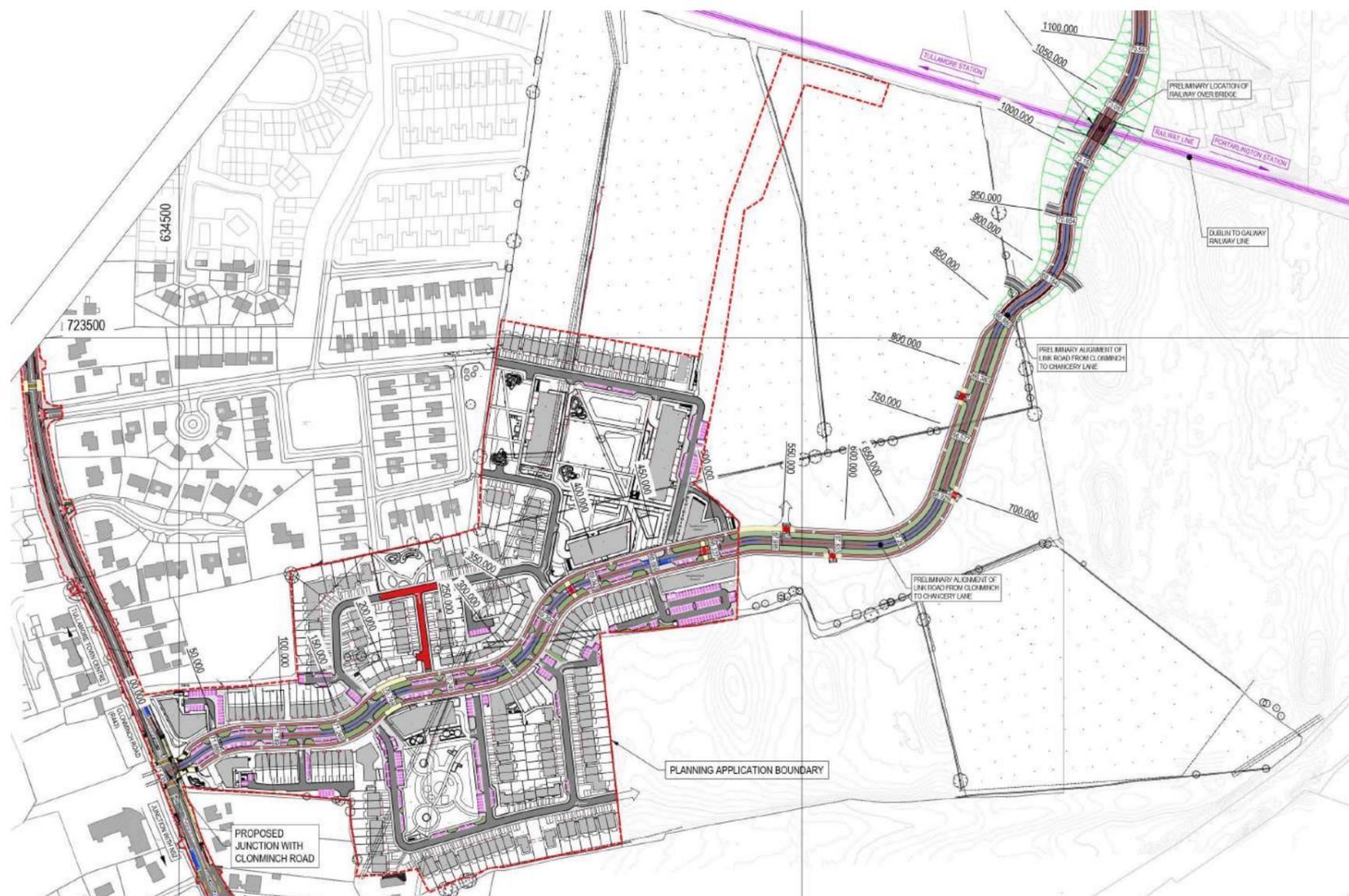


Figure 19: Street Hierarchy

Proposed Link Street

This Nodal Masterplan will facilitate the delivery of a road linkage between the Clonminch Road and Chancery Lane aligning with "Point H" to "Point G" as shown on Map 8.1 in the Tullamore Town and Environs Development Plan. This Link Street will include high quality cycle infrastructure along its entire length.



PRIMARY LINK STREET - TYPE A

Figure 22: Indicative Bridge crossing and access ramps with link street to Chancery Lane

Figure 20 (above): Indicative alignment of Link Street within the Eastern Node

Figure 21 (below): Typical Cross-Section of Link Street

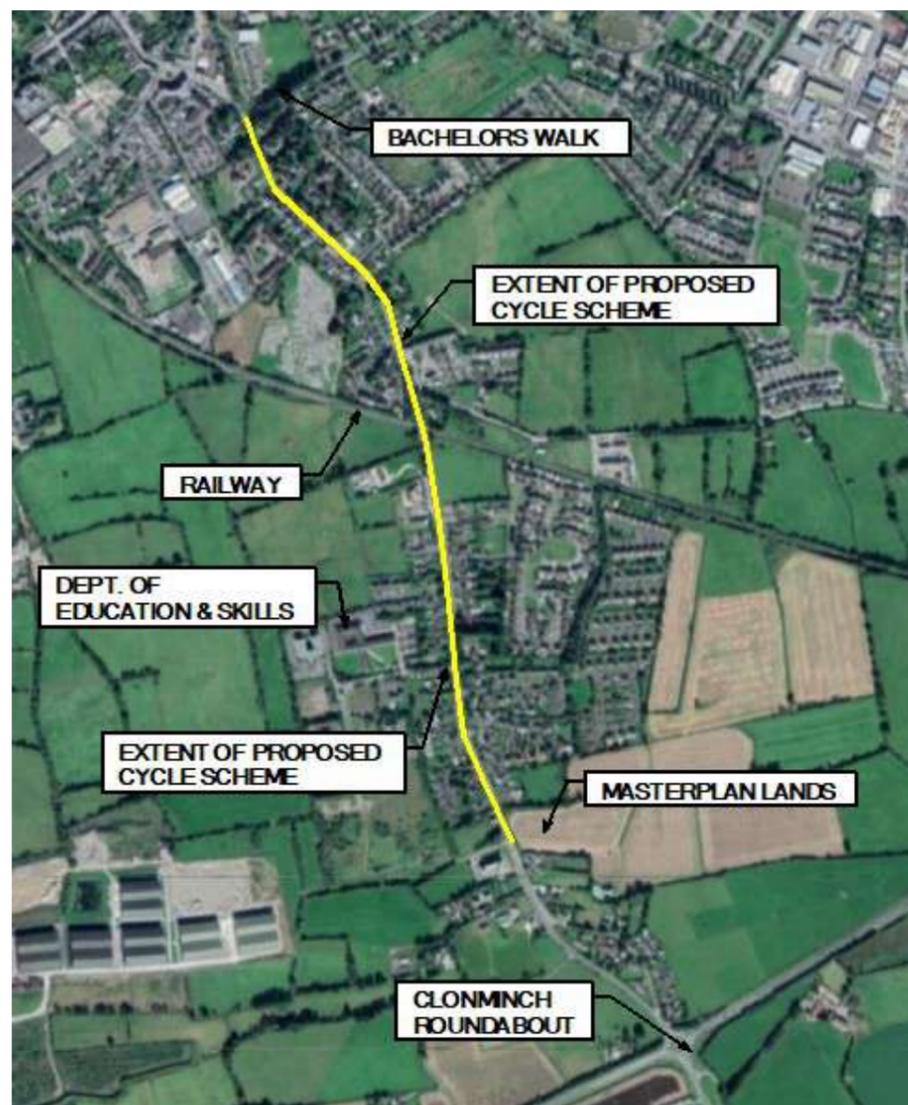


Figure 23: Yellow line indicating approximate extend of proposed cycle scheme on the Clonminch Road



Figure 24: Junction arrangement at the entrance to the Eastern Node on

Proposed Cycle Scheme

The Tullamore Town and Environs Development Plan recognizes the opportunity for Tullamore to become a “green cycle /transport town” and seeks to support and promote the use of bicycles. As such this Nodal Masterplan has assessed options for provision of cycle infrastructure along the Clonminch road. This will provide seamless cycle connectivity between the Nodal Masterplan Lands and the Town Centre of Tullamore.

The Clonminch Road enhancements commence approximately 100m south of the access junction to the Nodal Masterplan Lands and continue along Clonminch Road northwards where they tie into the existing road carriageway at a location approximately 80m northwest of the Bachelor’s Walk junction.

The cycle facilities comprise predominantly on-road cycle lanes however, on approach to the town centre where the available carriageway width narrows, a shared cycle / pedestrian facility is proposed in the northbound direction over a distance of approximately 190m. For a short 90m section south of the Bachelor’s Walk junction, the narrow carriageway width at this section results in southbound cyclist having to share the road with vehicular traffic.

The guidance of the National Cycle Manual has been incorporated into the cycle scheme design. Cycle lanes are generally 2m in width with the exception of a short 50m section to the northwest of Colliers Brook where the reduced carriageway width results in a narrower 1.75m wide cycle lane in both directions. The proposed shared cycle / pedestrian section on approach to Tullamore Town Centre is generally 3m wide and at its narrowest point reduces to 2.6m due to the existing carriageway width restrictions.

Vehicular traffic lanes have been designed to a standard width of 3m in each direction as per the standards set out in the Design Manual for Urban Roads and Streets. Existing right turn pockets have been retained at Limefield, Clonminch Wood, Central Business Park, The Willows and St. Columba’s Place. The remaining existing right turn pockets have been removed to accommodate the proposed new cycle facilities. In general footpath widths are a minimum of 2m however at locations where footpaths reduce to below 2m, they do not reduce to a width less than the existing footpath widths.

3.5 Neighbourhood + Community

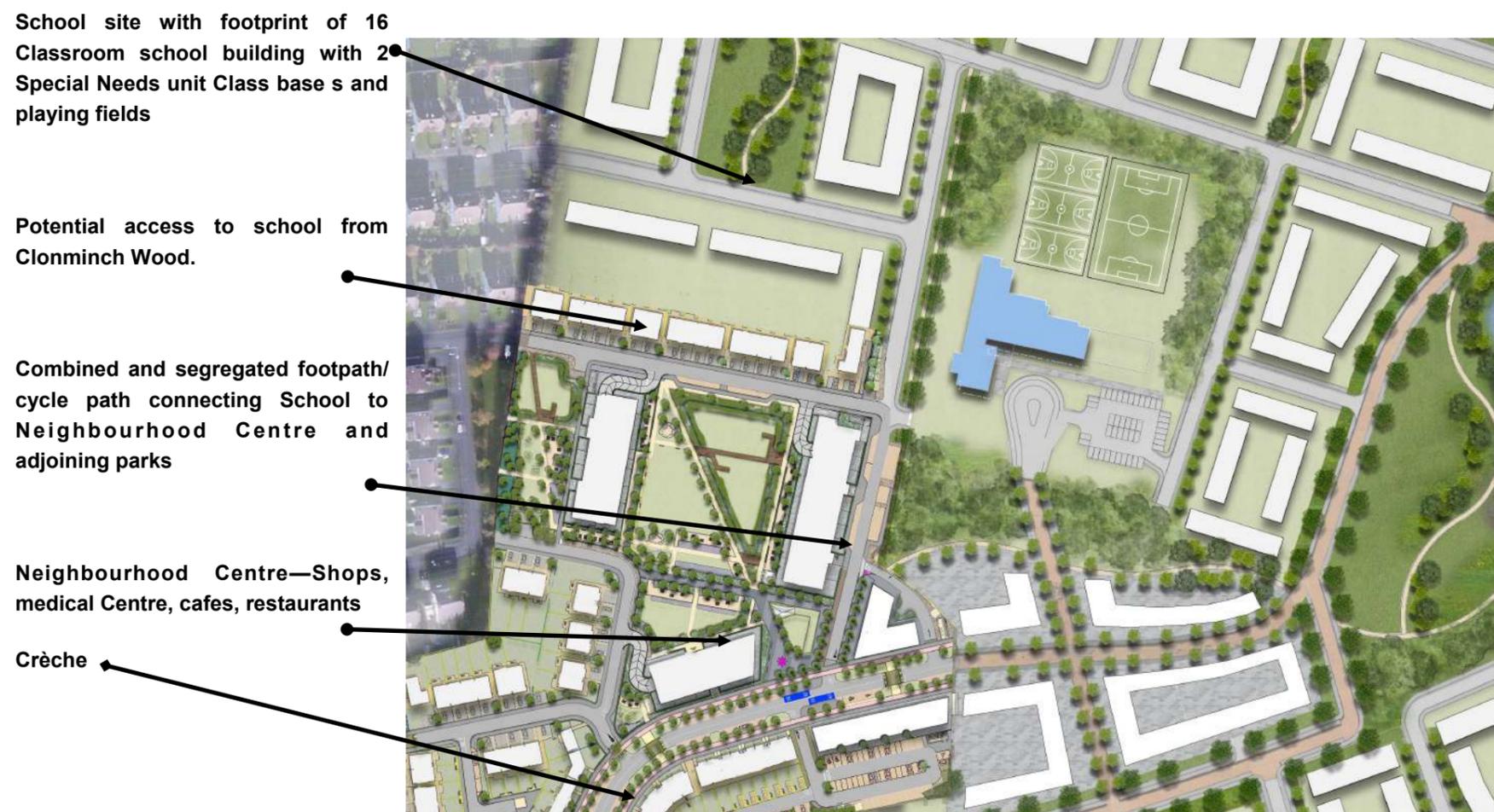


Figure 25: Neighbourhood and Community Facilities

Neighbourhood Centre

The provision of local facilities within the Nodal Masterplan is one of the means to increase vitality, provide a sense of community and enhance the social and economic sustainability of the development. It also reduces the need to travel outside the neighbourhood for such services.

The Neighbourhood Centre should include a mix of uses including Local shops, Pharmacy, Medical centre, Gym / Leisure facilities, small office units and residential. It is proposed to be laid out as a series of buildings to allow it develop as needs arise with the Link Street and associated cycle/pedestrian route passing to the south to ease vehicular access and the cycle / pedestrian route .

Childcare Facilities

It is envisaged that the childcare facility serving the Nodal Masterplan Lands will be located close to the Neighbourhood Centre and School Site to take advantage of the synergy between these areas and to be central to the overall Eastern Node, and in recognition that a childcare facility must be commercially viable.

Key Principles	Corresponding Specific Objective for the Eastern Node
<ul style="list-style-type: none"> Develop a self-sustaining neighbourhood with a mix of land uses which facilitates the provision of local services that will reduce the requirement for car trips and helps foster a sense of community among local residents. 	EN4
<ul style="list-style-type: none"> The provision of the neighbourhood centre shall occur concurrent with the provision of residential development within this node. 	EN4
<ul style="list-style-type: none"> Identify and assess the suitability of lands zoned Public/Community/Recreation for provision of a primary school to service new residents in this node. The identification and suitability assessment of the site for a primary school should include evidence of consultation with the Department of Education in relation to the provision of schools in this node. 	EN5
<ul style="list-style-type: none"> Provide childcare facilities in line with National Guidelines. Where a childcare facility is not provided this must be supported by a viability assessment based on local capacity and demand. 	

This Nodal Masterplan provides for a Self-Sustaining Neighbourhood containing community and supporting uses including childcare facilities, neighbourhood centre and school site.

An examination into the thought process behind the development of a self sustaining neighbourhood for the Eastern Node with Community and Supporting Uses is contained within Appendix C.

School Site

In keeping with Guidelines and Technical Notes issued by the Department of Education and Skills, a preliminary site feasibility study has been undertaken. The location within the Eastern Node was determined by Development Plan policy. Through baseline studies it was determined that this site had no obvious signs of archaeology, is not in a flood zone and in common with the entire Nodal Masterplan Lands is relatively featureless with a level topography.

The Nodal Masterplan provides for a 2.4 Ha site for a 16 Classroom + 2 SNU Classbase Primary School and associated sports facilities. There will be full pedestrian and cycle connectivity to the school site including sections off road cycle paths. The road hierarchy facilitates the provision of a public bus service to the school and includes potential links to the existing residential area of Clonminch Wood. Services will be brought to the school site boundary in Phase 1.



Figure 26: Indicative layout for a 16-Classroom primary school with two SNU Class bases

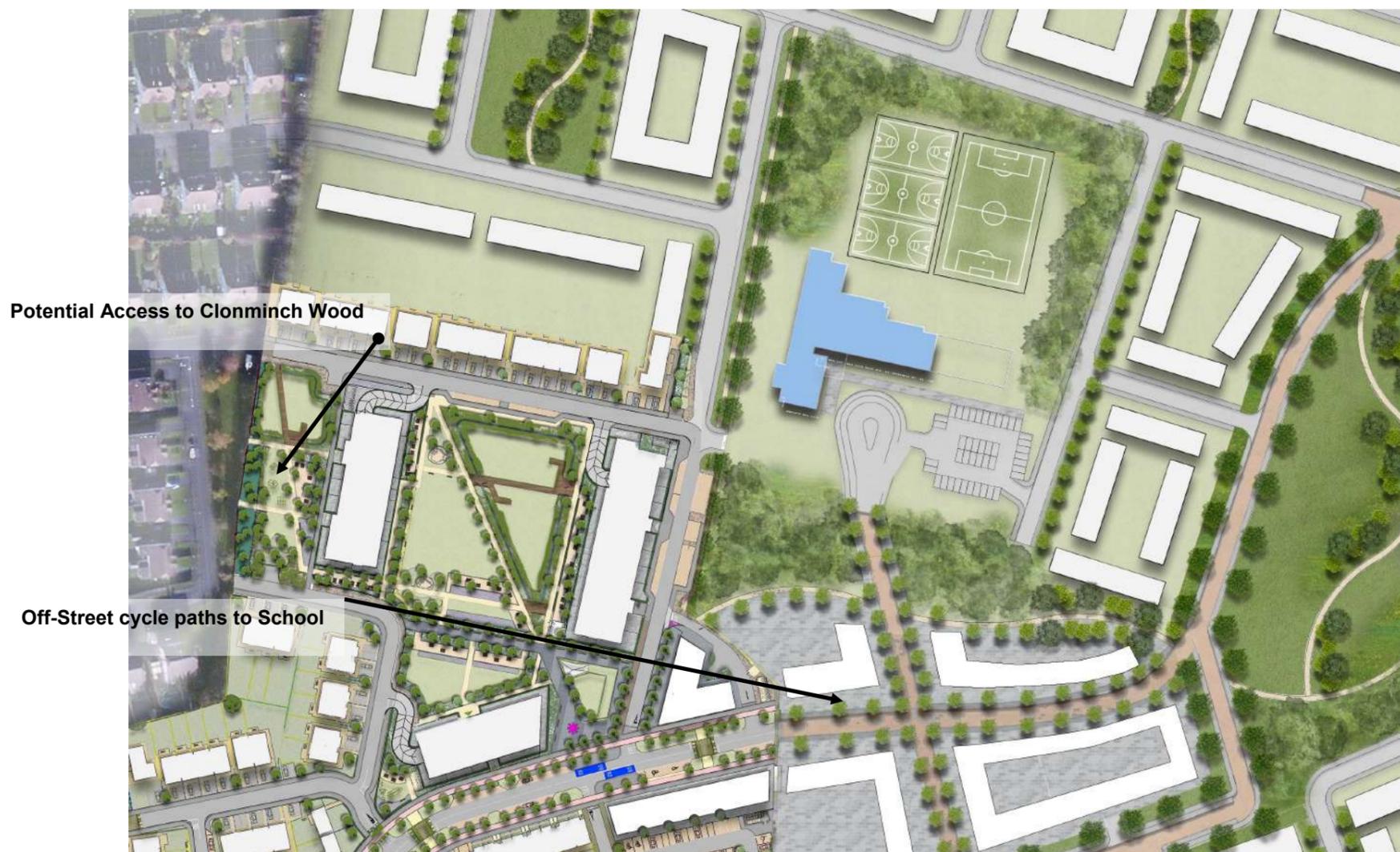


Figure 27: School Site Context



Figure 28: O Growney National School Designed by Van Dijk Architects

3.6 Built Form



Figure 29: Nodal Masterplan Building Height Strategy

Key Principles	Corresponding Specific Objective for the Eastern Node
<ul style="list-style-type: none"> • Average residential density within any one phase/sector should be at least 35 dwellings/hectare • Create a strong urban edge along buffer zones. • Require increased height at the neighbourhood centre to clearly identify the commercial core. • Encourage increased height adjoining public open spaces to provide for passive surveillance and enclosure. • Layouts should encourage natural surveillance of the public realm by providing street activity with house types that turn corners and no blank facades to the public realm. • Provide for a variety of housing types suitable for people at a range of life stages. • Avoid mono-type building typologies (e.g. two storey or own-door houses only). • Provide for adaptability and flexibility in design of new dwellings. • Building finishes should be varied, high quality and durable. • Use landmark elements to help support local legibility 	

The Building Height Strategy reflects the key principles to create a strong urban edge along the buffer areas and future linear park and clearly identify the civic centre of the neighbourhood. Increased height along the primary link street and public open spaces provides for enclosure of these spaces while four and five storey structures provide a sense of identity by creating landmarks in this new landscape for people to orientate themselves within the neighbourhood.

3.7 Density

Approach

Higher density residential development consisting primarily of Apartments and Duplex Units (50-80 Units per Hectare) are located at strategic locations within the Nodal Masterplan relating directly to the larger neighbourhood open space areas or in close proximity to the Community Facilities.

Medium to High Density development consisting of primarily Duplex units (40-50 units per Hectare) is proposed as a defining edge to the central park and in close proximity to the Community Facilities forming a higher density “edge” to the St. Catherines Park and Crofton Park.

Medium density residential development consisting of primarily detached, semi-detached and terraced housing relating to the existing adjoining residential areas.

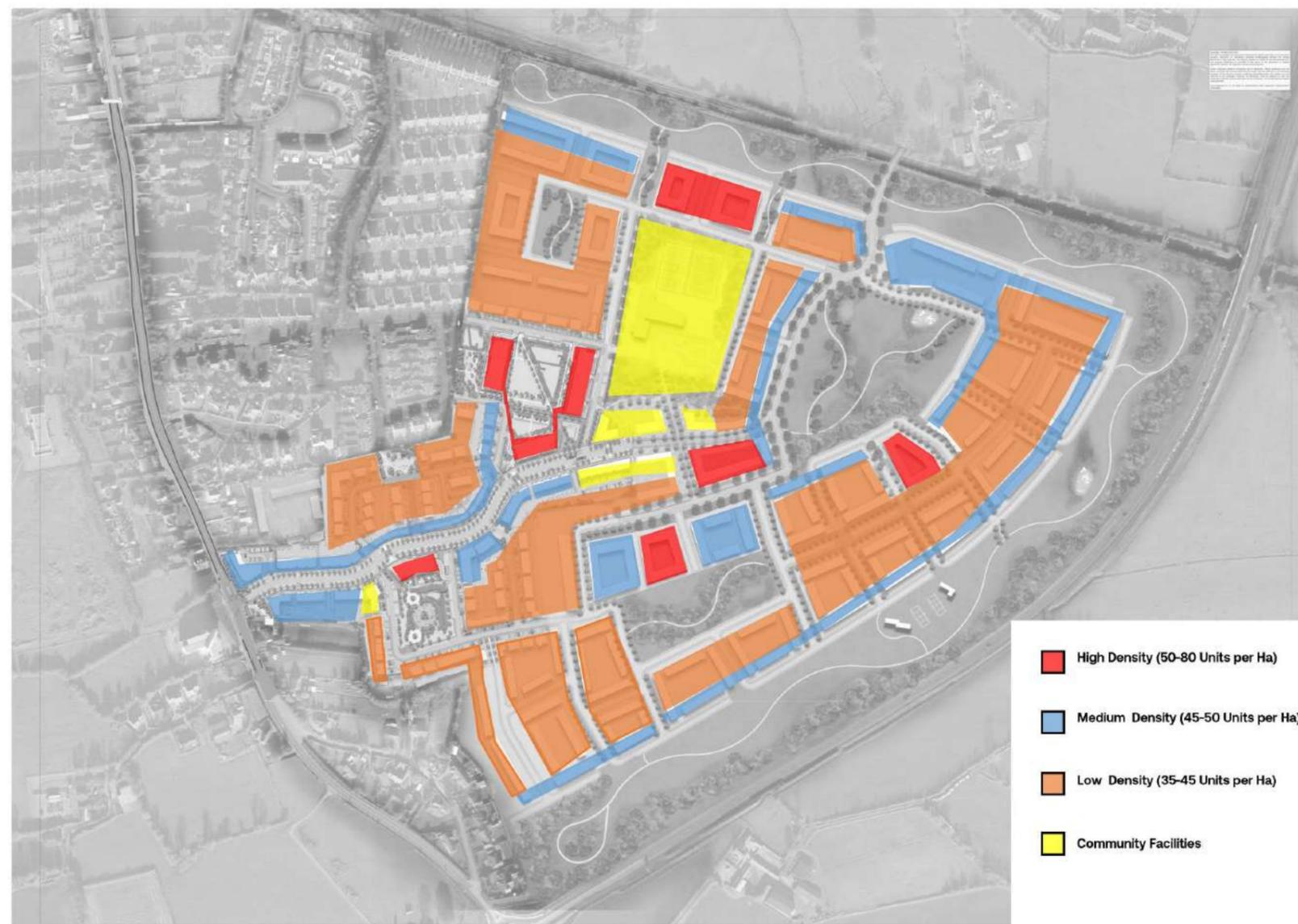


Figure 30: Nodal Masterplan Density Strategy



High Density
50-80 Units Per Hectare



Medium-High Density
40-50 Units per Hectare



Medium Density
35-40 Units Per Hectare



Community Facilities

3.8 Character Areas

Approach to Defining Character Areas

Traditionally, character areas within Masterplans are defined as development pockets. This Masterplan envisages an integrated community with a matrix street network in compliance with DMURS so the definition of a development pocket is less obvious than would have been the case in the past.

It is therefore proposed to use variety in architectural style interspersed throughout character areas, while materials, colour and a sense of place in terms of layout are used as the key components to define character areas within the Nodal Masterplan as a whole.

The four main character areas—Clonminch, Railway, St. Catherine's and Park are intended to have quite different characters. These main character areas are then sub-divided into sub-character areas (illustrated by colour variation) where a more subtle change in character is appropriate. The Civic character area features the school site, neighbourhood centre and civic space.

Where appropriate higher density blocks are given a different sub-character to the lower density surrounding areas.

A street naming and numbering scheme should be provided with each planning application in a manner appropriate to and coinciding with character areas where possible.

The Link Street passing through the entire Nodal Masterplan is to be known as **Crofton Avenue** in memory of one of the first people to build houses in Tullamore. This avenue will link the Clonminch Road to Church Road via Chancery Lane which is part of extant development to the South of Church Road.

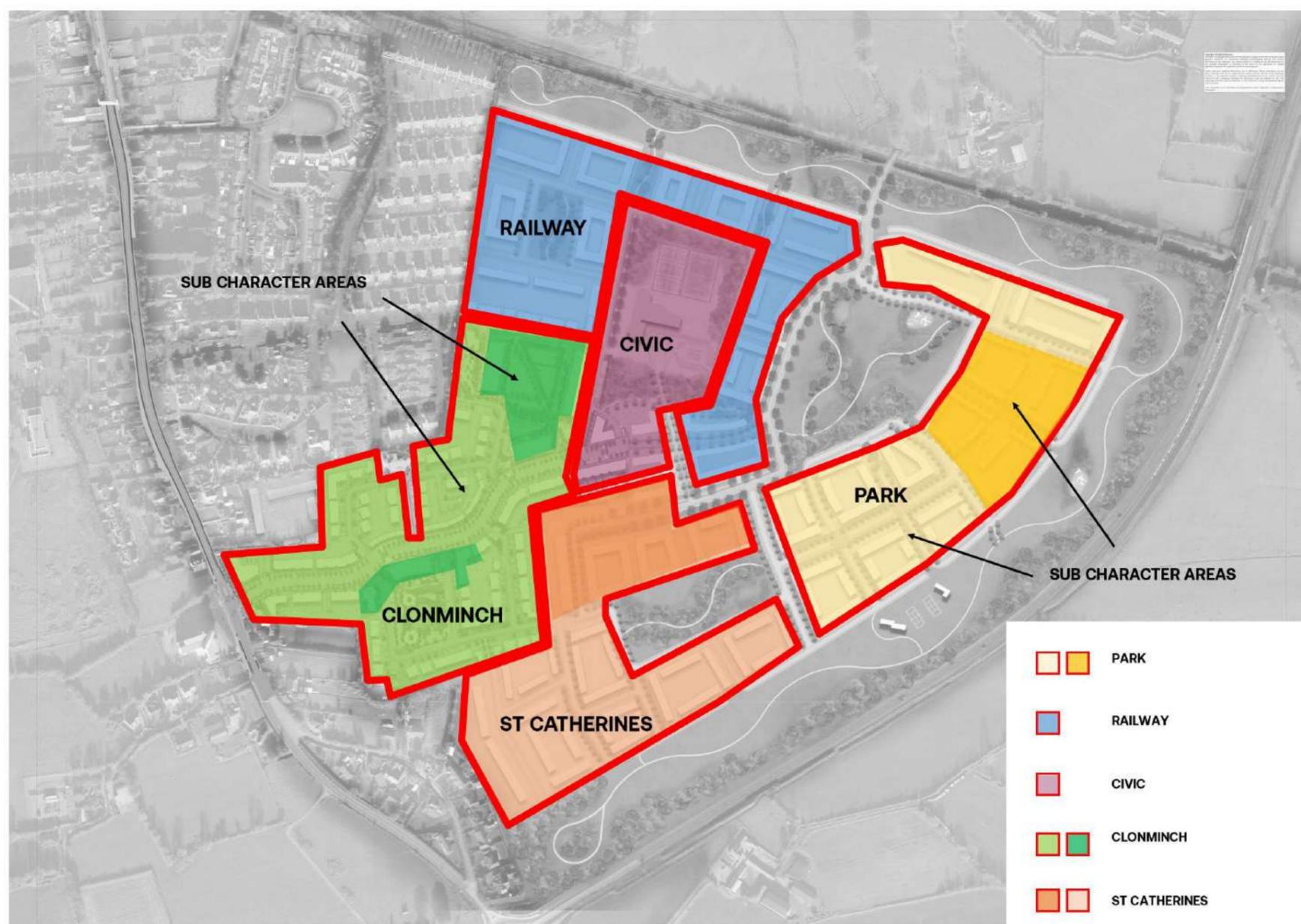
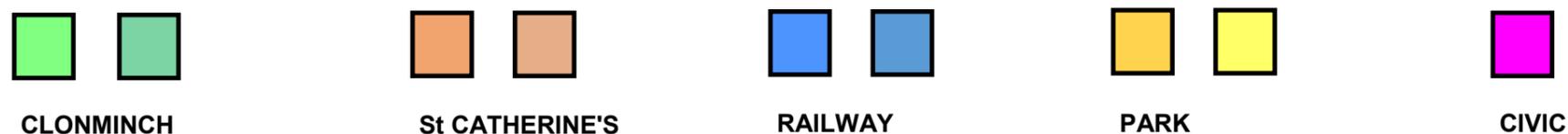


Figure 31: Nodal Masterplan Character Areas



3.9 Residential Typologies

While it is not the intent of this Masterplan to be prescriptive it is envisaged that the Masterplan lands will consist of a range of residential typologies to allow for a varied community including multi-storey apartments, duplex apartments and own door dwellings. Private open space for future residential development shall be provided in accordance with the Development Plan Standard and/or National Guidelines.



Similar Typologies creating rhythm



Communal Courtyards in Duplex Blocks



Tree lined cycle paths



High quality communal open spaces



Mix of Apartments, Duplex Units and Traditional Housing at Ballymakenny Road, Newbridge by van Dijk Architects



Apartments connected to Open Space at Abbeylands, Kilkenny by van Dijk Architects



Apartments integrated into Housing, Dunshaughlin by van Dijk Architects



Mix of Typologies on frontage, Mounthamilton, Dundalk by van Dijk Architects



PRIMARY TYPOLOGIES TO BE ADOPTED



L-Shaped Corner Detached Houses



Detached Houses



Single Aspect Semi-Detached Houses



Semi Detached Houses



Terraced Houses



Corner closing houses



End of Block Houses



Internal Corner Houses



Small Apartments (Single Level)



Large Apartments (Single Level)

Residential Typologies are employed not just to provide a variety of living accommodation targeted at specific individual or family needs but also to resolve urban design issues such as “turning the corner” and avoiding blank gables, providing “passive surveillance” to all four sides of residential urban blocks and to achieve greater “density” in key locations near to amenities or where scale is required from an urban design point of view. In order to achieve these goals within the Nodal Masterplan it is envisaged that the Typologies shown on the diagram here will be employed. Architects and Design Teams for differing phases or development areas of the development of this Node may of course employ additional typologies as necessary to achieve specific architectural or urban design in keeping with the key principles of the Nodal Masterplan.



Figure 32: Typologies used to provide “Passive Surveillance” on all four sides of urban blocks

3.10 DMURS and Street Sections

Hierarchy of Street Network / Street Sections

The hierarchical street network includes a primary link street, a series of local accesses and shared surface streets. The link street typically consists of a 6.5m carriageway with a 2m cycleway and a 2m footway each side. The local accesses comprise of a 5.5m carriageway, 2m raised footpaths with permeable paved parking at either side and the shared surface has a 4.8m carriageway and 1.2m footpath flush with the street and permeable parking each side. The following sections illustrate the typical arrangement for each street type.

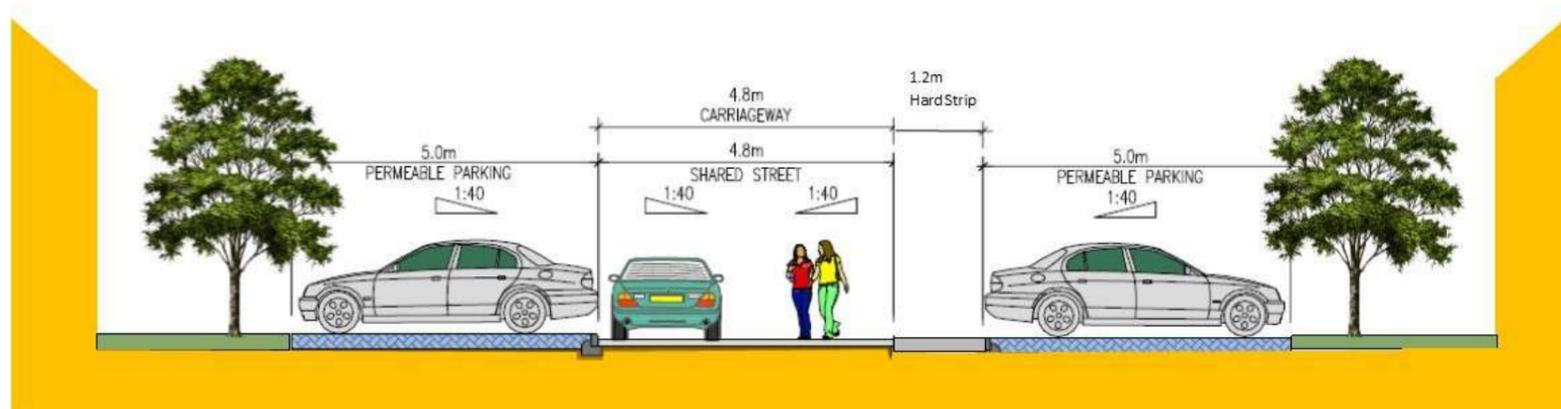


Figure 33: Local Access—4.8m carriageway

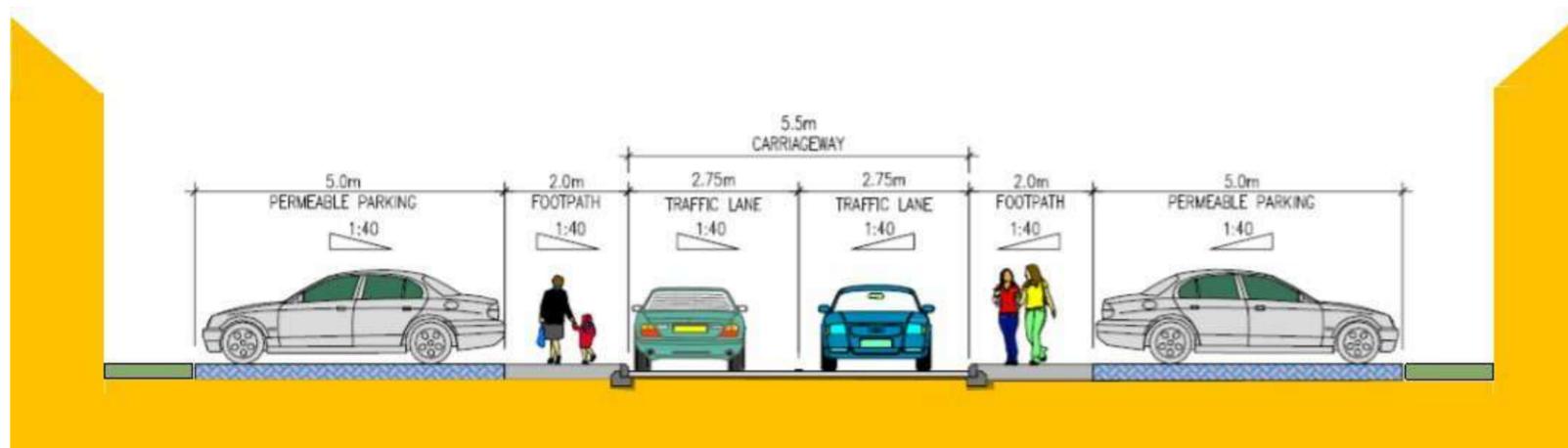
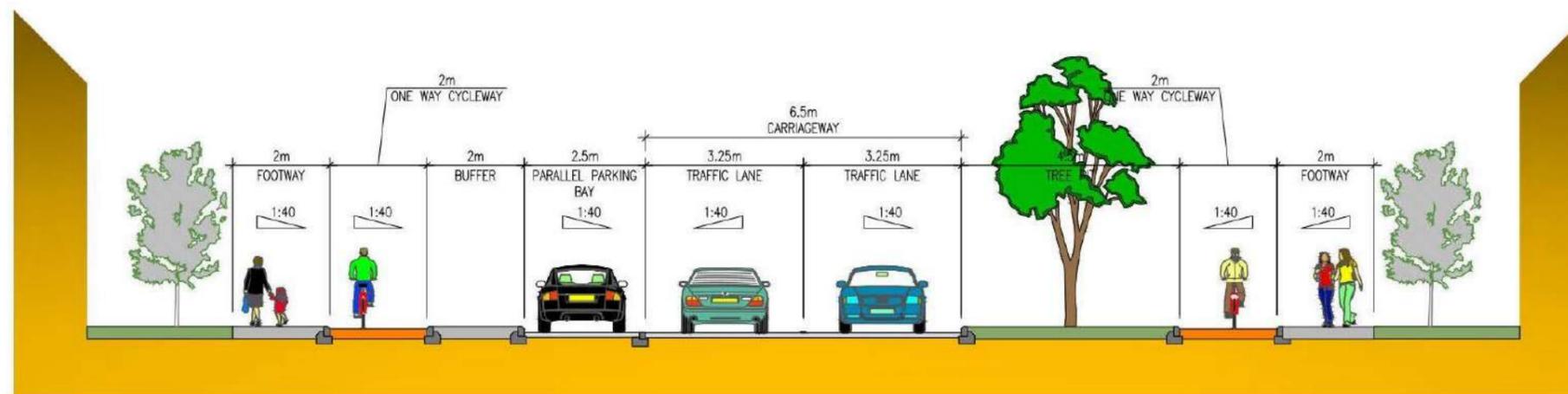


Figure 34: Local Access—5.5m carriageway



PRIMARY LINK STREET - TYPE A

Figure 35: Link Street

3.11 Infrastructure - Surface Water Drainage



Surface Water Strategy

The surface water management strategy is based on discharging attenuated surface water runoff to the existing open ditch /drainage network in the northern portion of the Nodal Masterplan lands at Greenfield runoff rate.

Surface water discharge rates will be controlled by a vortex flow control device and associated underground attenuation tanks. Underground attenuation tanks are sized to attenuate the 1 in 30 year storm event. The difference between the 1 in 100 year event and the 1 in 30 year event will be attenuated above ground in shallow basins (200mm-300mm). Surface water discharge will also pass via a full retention fuel / oil separator.

Proposed SUDS Methodologies

Runoff from the road network will be directed to tree pits via conventional road gullies (with high level overflow to the piped surface water network).

Runoff from driveways will be captured by permeable paving.

Runoff from apartment roofs will be captured by green roofs (sedum blanket) prior to being routed to the surface water drainage network.

Runoff from other dwelling roofs will be routed to the surface water network via the porous aggregates beneath permeable paved driveways (providing an additional element of attenuation).



Figure 36: Nodal Masterplan Surface Water Drainage Strategy

Figure 37: Existing Open Drains North of Nodal Masterplan Lands

3.12 Infrastructure - Foul Drainage

Foul Drainage Strategy

The topography of the Nodal Masterplan Lands generally falls from west to north east. The proposed foul drainage discharge point is along the western boundary which is elevated above the Nodal Masterplan Lands and as such a strategic foul pumping station and associated rising main will be required to service the Nodal Masterplan Area. The proposed foul drainage network will comprise of a series of 225mm diameter pipes, discharging to the pumping station and each residential unit will be serviced by an individual 100mm diameter connection.

Pre-Connection Feedback received from Irish Water confirms that connection to the existing foul drainage network can be facilitated for Phase 1 of the Nodal Masterplan Lands (subject to a valid connection agreement being put in place).

Possible options to facilitate development of the Nodal Masterplan area ahead of Irish Water network upgrades include:

- Separation works on existing combined sewers between the masterplan lands and Church Road Pump Station.
- Linking telemetry between the proposed on-site pump station and Church Road Pump Station (i.e. activate on-site storage during periods of high flow (rainfall events) through Church Road Pump Station).
- Phasing of development of the masterplan lands in conjunction with progress of any upgrades to the foul drainage network in Tullamore serving the Masterplan Lands.

These options could also be implemented as part of development of other lands in the Tullamore Southern Environs area. As such development of the nodal masterplan lands / c350 dwellings in phase one would not impede the development of other lands in the Tullamore Southern Environs area.

Furthermore these proposals can be implemented in advance of and without impact on any proposed Irish Water network upgrade plans for the area which emerge from the Tullamore Drainage Area Plan.



Figure 38: Nodal Masterplan Foul Drainage Strategy

Engagement with Irish Water

Irish Water has been consulted with regard to assessment of the Nodal Masterplan lands. Irish Water is currently completing their Drainage Area Plan (DAP) for Tullamore. The strategic network modeling has commenced, and Irish Water are now focusing on the solution for the Southern Catchment.

Irish Water advised in its letter in advance of the tripartite meeting for Phase 1 of the Nodal Masterplan that *“upgrades will relate to the upsizing of existing sewers”* and *“will not require third party or statutory consents”*.

In tandem with development proposals coming forward, we understand that the Drainage Area Plan (DAP) being prepared by Irish Water will address all zoned lands within the various drainage catchments leading to the Tullamore Treatment Plant including the Clonminch Road catchment shown on the diagram opposite.

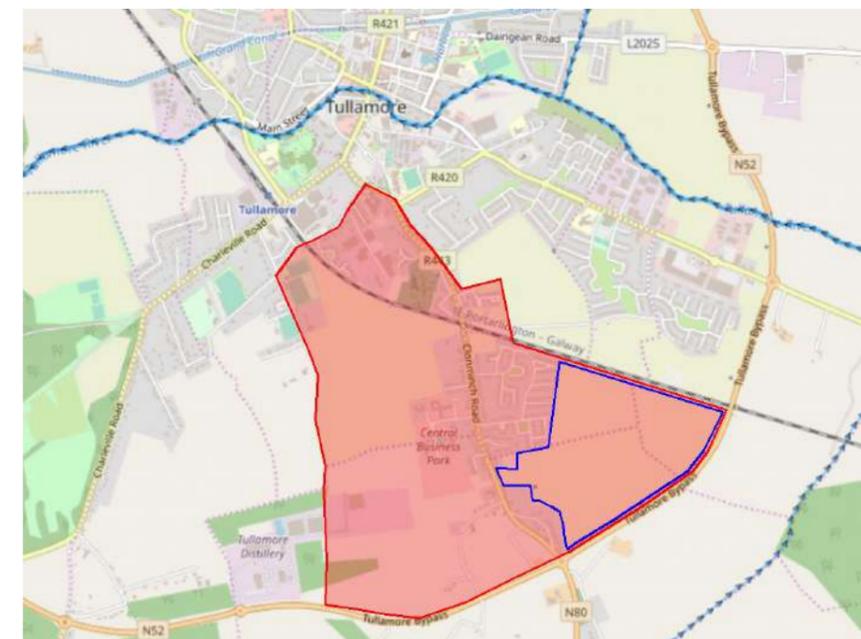


Figure 39: Clonminch Road Foul Drainage Catchment

3.13 Infrastructure - Water Supply

Water Supply Strategy

It is proposed to take a 200mm diameter connection (including provision of a bulk flow meter) off the existing watermain on Clonminch Road.

Hydrants are to be provided in accordance with the requirements of Department of the Environment's Building Regulations "Technical Guidance Document Part B Fire Safety" and the requirements of BS 750:2012.

Water supply infrastructure is to be installed in accordance with Irish Water's Code of Practice and Standard Details.

Engagement with Irish Water

Pre-Connection Feedback received from Irish Water confirms that following upgrade works at Clonsalee Water Treatment Works to be completed by Q3 2020, there will be available capacity to meet the water supply requirements for Nodal Masterplan Phase 1.



Figure 40: Nodal Masterplan Water Supply Strategy

4.0 Phasing + Implementation

4.1 Phasing

Phasing

This Nodal Masterplan for the Eastern Node shows five phases extending sequentially from the R443 with the first definable development pocket (using existing field boundaries) between the R443 and including a part of the Neighbourhood Centre zoned lands extending Northwards to include a potential vehicular connection to the adjoining existing residential development. Phase 1 should include local neighbourhood facilities to support the initial phase of development of the node.

Phase 2 includes the remainder of the Neighbourhood Centre, a primary school site and further lands extending to the Railway line which forms the Northern boundary of the Eastern Node. Phase 2 also extends South-eastwards to provide a public park.

The provision of the Primary School will be at the discretion of the Department of Education and the site will remain undeveloped until such time as it is brought forward for such purpose. Services will be brought to the boundary of the school site in Phase 1 and Phase 2.

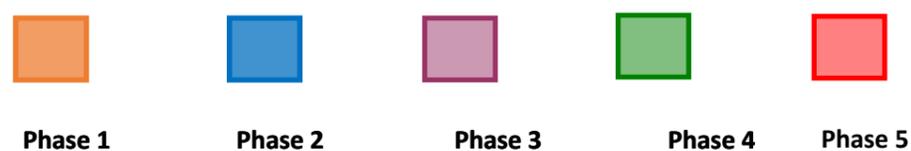
Phase 3 completes the Southern portion of the Eastern Node while Phase 4 and complete the Eastern portion which is furthest from the existing access and services. Phase 5 includes the provision of the bridge over the railway line and the balance of public open space within the Eastern Node.

The entire lands form a development area (including the buffer park and link street) of c.58 Hectares.

The purpose of phasing is to ensure that infrastructure, services, facilities and amenities are provided together with residential development. To ensure flexibility, the proposed phasing schedule is sequential rather than time specific. The Number of dwellings in each phase is based on the density/form/layout plan and an average residential density of 35 dwellings per hectare.



Figure 41: Nodal Masterplan Development Phasing



Phased development within Nodal Masterplan Area

The diagrams opposite show how the built form (in terms of figure—ground diagrams) might develop over time to physically connect the existing employment and service facilities on the Southern side of Tullamore with the Nodal Masterplan lands.

Use Based Diagrammatic Section

A use based diagrammatic section is provided below which shows how the different uses outside the Nodal Masterplan area relate to the proposed uses and spaces within the Nodal Masterplan area to create a coherent range of complementary activities connected by the new Link Street and pedestrian / cycle trail through the Eastern Node.

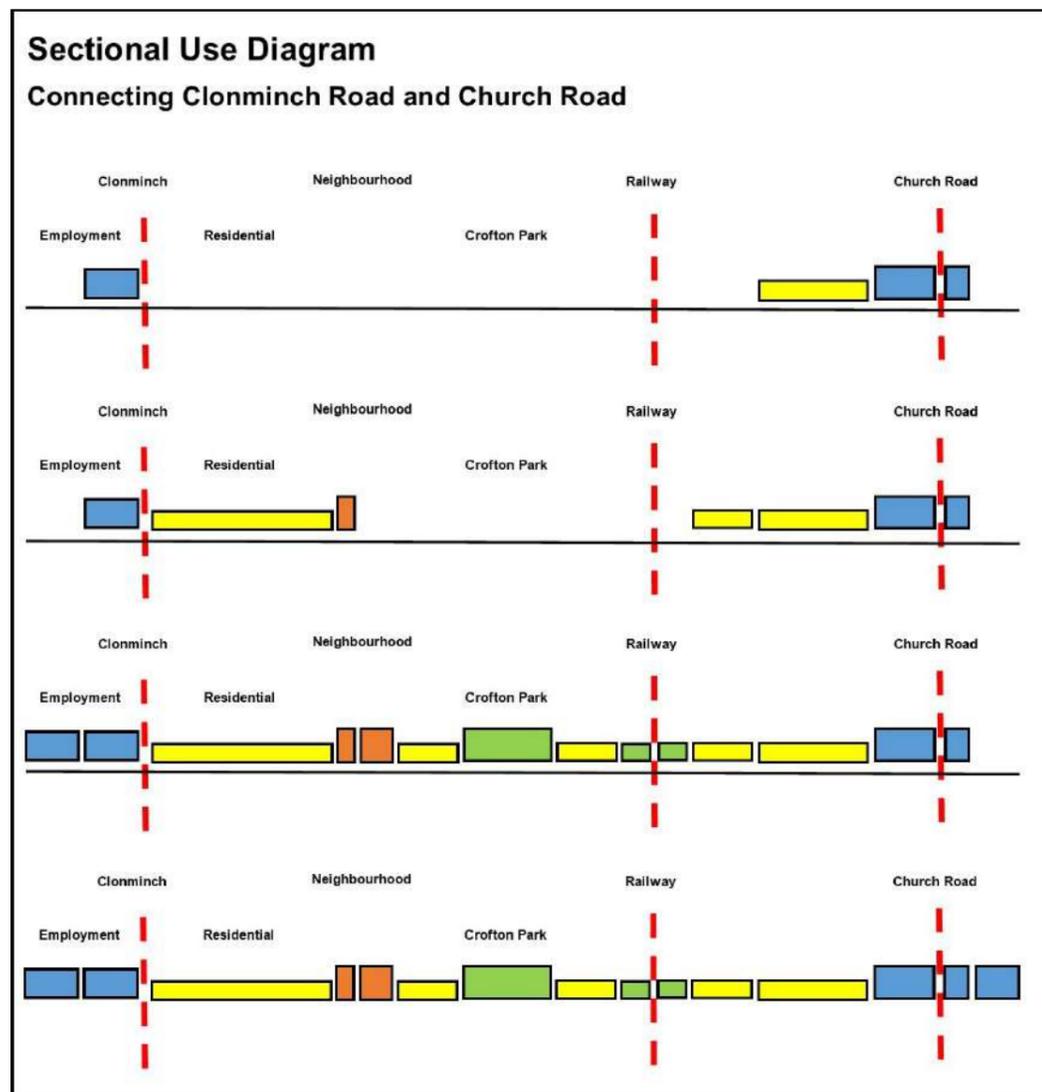


Figure 42 : Use Based Diagrammatic Section

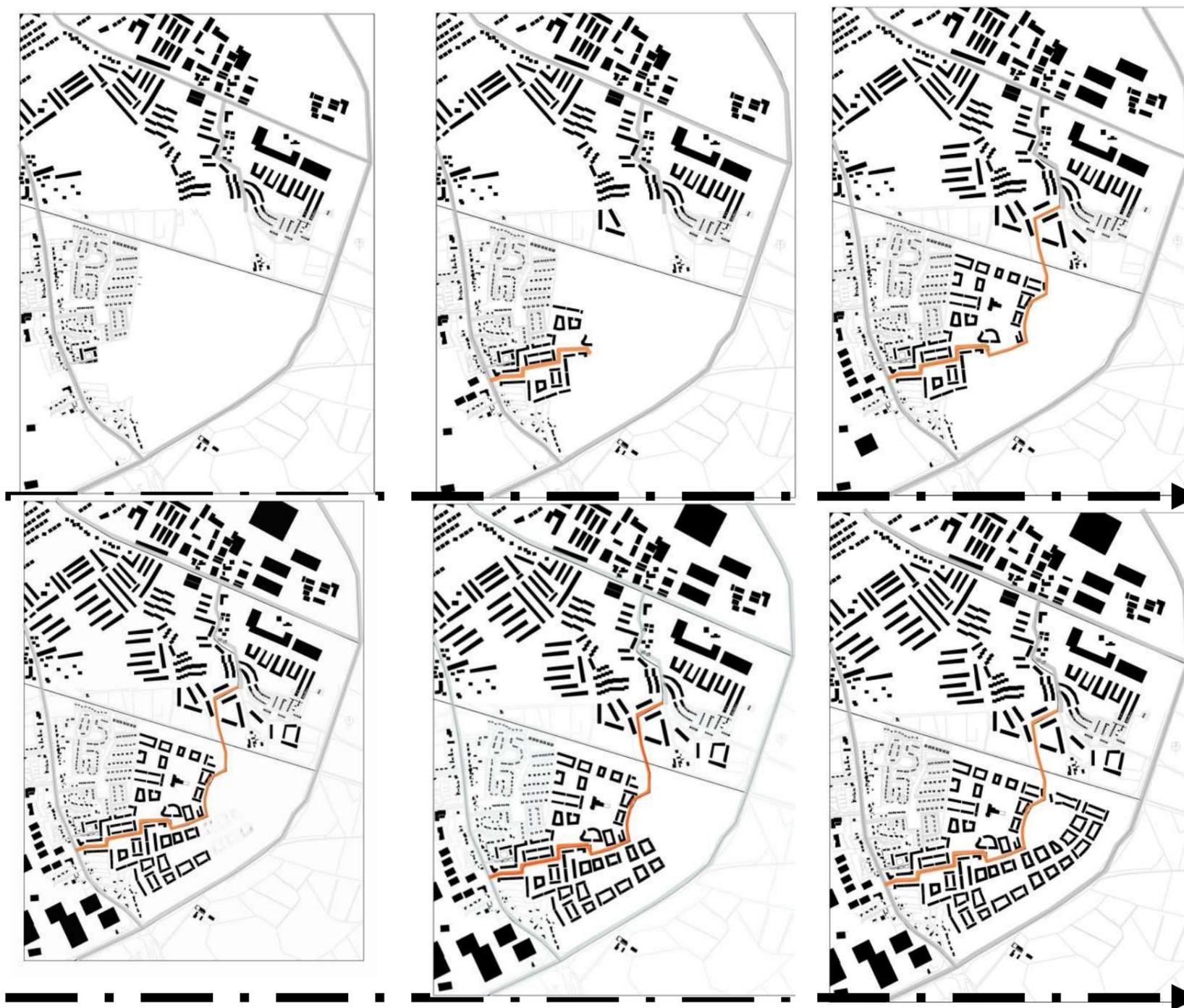


Figure 43 : Figure Ground Plans for development of the connection between Employment and Service Areas

4.2 Implementation

Phase 1

The development of the Phase 1 lands of the Nodal Masterplan could accommodate c.350 residential units. Two public open space areas are provided within Phase 1—Clonminch Square and St.Columba's Green. Phase 1 will also see the first section of the link street developed with associated cycle and pedestrian facilities and cycle lanes along the Clonminch Road. The first phase of the neighbourhood centre and crèche will ensure this new neighbourhood is self-sustaining.

Phase 2

Phase 2 includes the site reserved for the provision of a primary school. Crofton Park will provide a high quality open space area for this phase which could provide a further 270 residential units. In addition to the first section of the linear park Development of this phase will further extend the link street towards its potential crossing point over the railway line. This phase includes the final build out of the Neighbourhood Centre.

Phase 3

Phase 3 will complete the southern section of the Eastern Node bound by existing residential development fronting Clonminch Road to the west and the N52 Tullamore Bypass to the south. The provision of c.330units will be supported by the completed neighbourhood centre and further public open space in the form of St.Catherine's Green and part of the linear park.

Phase 4

Phase 4 will provide additional residential development providing frontage onto Crofton Park and continue the linear park to the south of the eastern node.

Phase 5

Phase 5 will complete the Eastern Node. As the neighbourhood centre and school site are in place, this phase is residential with supporting public open space and completing Crofton Park. The main contribution to the Eastern Node during Phase 5 is the crossing over the railway line and completion of the link street.

Phased Provision of Facilities

PHASE	GROSS AREA	NETT RESIDENTIAL AREA	NUMBER OF RESIDENTIAL UNITS	NEIGHBOURHOOD FACILITIES	OPEN SPACE
1	13 Hectares	10 Hectares	350 Units	Crèche and Phase 1 of Neighbourhood Centre	2 x Open Spaces
2	14 Hectares	9 Hectares	270 Units	Primary School if DES requires. Phase 2 of Neighbourhood Centre	1 x Open Space + Phase 1 Buffer Park
3	14 Hectares	11 Hectares	330 Units		1 x Open Space + Phase 2 Buffer Park
4	6 Hectares	4.5 Hectares	160 Units		Phase 3 of Buffer Park
5	11 Hectares	8 hectares	240		Completes buffer park and final open space
TOTAL	58 Hectares*	36.74 Hectares	1350 Units	Full range of facilities appropriate within residential community.	Full range of Buffer Park, Neighbourhood Parks, and Pocket Parks.

Note: Gross areas above include lands zoned for the buffer park, school and neighbourhood centre.

Planned numbers of residential units are based on the nett residentially zoned land in each phase with a density of approx. 30-35 units per Hectare.

* The draft Nodal Masterplan area was stated to extend to 62ha as it included an existing built up housing area beyond the south-western area of the Plan lands.

5.0 Conclusion

5.1 Conclusion

This detailed Masterplan will act to provide a structure for the co-ordinated development of the Eastern Node. It will facilitate delivery of key elements of the Southern Environs Masterplan as they relate to the Eastern Node including a link street, primary school site, neighbourhood centre and parks as well as an urban structure that is compliant with both the Design Manual for Urban Roads and Streets and the Urban Design Manual. This will enable the area to be developed in a coordinated manner by various landowners/developers. Proposed development will need to demonstrate the manner in which the development of that segment will facilitate the achievement of the Nodal Masterplan and will not frustrate the delivery of adjoining segments.

The Nodal Masterplan aims to produce a scheme which follows the Specific Objectives of the TTEDP producing a series of interesting streetscapes connected by a hierarchy of green spaces. The design provides for a mixed use development of residential, commercial and community land uses. A variety of residential densities including houses, duplexes and apartments will provide a successful community by catering for all life stages. The relationship of the landscape buffer zone to the urban structure has also been key consideration.

The Nodal Masterplan is formed around a central neighbourhood centre and school with the main arterial street through the centre of the development for future connection allowed for across the railway. The mixture of squares, mews and crescents creates a dynamic cloister of street patterns allowing for smaller individual neighbourhood areas with the new community.

The Nodal Masterplan is an appropriate sustainable response to developing regional urban centres in an efficient manner while creating distinctive places and facilities which will make this a lasting successful community.



Figure 44: Nodal Masterplan

Appendix A—Baseline Studies—Ecology

Ecology and Biodiversity Assessment

For a Masterplan

EASTERN NODE

Southern Environs, Tullamore, Co.Offaly

Report prepared by Mr. R. Goodwillie MCIEEM

July 2019

1. INTRODUCTION

This report is written to describe and evaluate the habitats of the Masterplan area which lies on the south-eastern side of the town south of the railway and inside the ring-road (N52). It has been prepared following a site visit in May 2019 by Roger Goodwillie, a full member of the Chartered Institute of Ecology and Environmental Management.

2. DESCRIPTION OF AREA

2.1 Vegetation & habitats

The area is entirely agricultural land with a mix of pasture (improved agricultural grassland, GA1 in Fossitt 2000) and tillage (arable crops BC1) mostly under wheat. The field are divided by hedgerows (WL1) often with a drain beneath (drainage ditches, FW4).

The grassland fields are generally formed of ryegrass *Lolium perenne* and rough-stalked meadowgrass *Poa trivialis* with the characteristic mix of broad-leaved dock *Rumex obtusifolius*, sticky mouse-ear *Cerastium glomeratum* and chickweed *Stellaria media*. There are places, however, where thinner soils or former disturbance prevents the normal management and a greater variety of herbs persists, for example daisy *Bellis perennis*, bulbous buttercup *Ranunculus bulbosus* or ribwort plantain *Plantago lanceolata*. Other species occur on the disturbed soils of field gateways such as knotgrass *Polygonum aviculare*, red deadnettle *Lamium purpureum*, shepherd's purse *Capsella bursa-pastoris* or, close to a watering point celery-leaved buttercup *Ranunculus sceleratus*.

The tillage crops had been recently sprayed so weed species were few. Field speedwell *Veronica persica*, cut-leaved deadnettle *Lamium hybridum*, hedge mustard *Sisymbrium officinale*, scutch grass *Elytrigia repens*, nipplewort *Lapsana communis* and fumitory *Fumaria* sp occurred on a few field edges.

The hedgerows provide the main source of biodiversity on site. Some, around the tillage fields, are clipped but others carry tall ash *Fraxinus excelsior* or, occasionally, beech *Fagus sylvatica*. Some of the best grown trees follow an old laneway coming off the Clonminch Road (see aerial photo below). The woody species here include ash, blackthorn *Prunus spinosa*, holly *Ilex aquifolium*, wild apple *Malus domestica*, wild plum *Prunus domestica*, privet *Ligustrum vulgare* and hazel *Corylus avellana*. Elsewhere hawthorn *Crataegus monogyna* and bramble *Rubus fruticosus* predominates in the hedges with blackthorn and holly. Locally there is some grey willow *Salix cinerea*, spindle tree *Euonymus europaeus*, honeysuckle *Lonicera periclymenum* and roses, both *Rosa arvensis* and *R.canina*. The railway cutting at the northern end adds goat willow *Salix caprea* and silver birch *Betula pendula* and hazel *Corylus avellana* though this is probably off-site.

The smaller plants in the hedges are varied and in rough order of abundance are

<i>Ficaria verna</i>	lesser celandine
<i>Arum maculatum</i>	lords-and-ladies
<i>Vicia sepium</i>	bush vetch
<i>Rumex sanguineus</i>	wood dock
<i>Galium aparine</i>	goosegrass
<i>Potentilla reptans</i>	cinquefoil
<i>Veronica chamaedrys</i>	germander speedwell
<i>Stellaria holostea</i>	greater stitchwort
<i>Allium ursinum</i>	wild garlic
<i>Potentilla sterilis</i>	barren strawberry
<i>Aquilegia vulgaris</i>	columbine
<i>Asplenium scolopendrium</i>	hart's-tongue
<i>Polystichum setiferum</i>	shield fern
<i>Primula veris</i>	cowslip
<i>Filipendula ulmaria</i>	meadowsweet
<i>Brachypodium sylvaticum</i>	wood false-brome
<i>Glechoma hederacea</i>	ground ivy
<i>Primula vulgaris</i>	primrose
<i>Conopodium majus</i>	pignut
<i>Ranunculus auricomus</i>	goldilocks

Alexanders *Smyrniolus olusatrum* has invaded along some hedge lines from the Clonminch Road while a colony of rose-bay *Chamerion angustifolium* occurs in the hedge between two tillage fields in the north centre.

Most of the drainage ditches have seasonal flow only but there is enough water to promote a few aquatic species of plant especially in the south centre and southeast. Flow is towards the east to a depression filled by cutover bog and forestry but is taken north to the Tullamore River within a short distance which becomes the Brosna, entering the Shannon at Shannonbridge.

Within the site great willowherb *Epilobium hirsutum* generally grows in the few wetter drains with sweet grass *Glyceria fluitans*, watercress *Nasturtium officinale* and bulrush *Typha latifolia* at the N52 culvert. In many cases the drains are overgrown by brambles which shade out the smaller plants.

2.2 Fauna

The rabbit was the only large mammal with evidence on site and there a number of burrows in the drier hedges. Foxes are very likely to visit the site but no signs of residence were seen; likewise for badgers.

There are no buildings on site suitable for bat roosts and the most of the likely feeding sites are along the railway cutting in the north and the old laneway entering from the Clonminch Road. Numbers would be very limited however in view of the prevailing habitat.

The bird fauna was typical of agricultural land with hedges. Woodpigeon, rook, jackdaw and magpie were the larger species seen while the hedges support blackbird, robin, wren, blue tit, chaffinch, bullfinch and goldfinch. A chiffchaff was singing from one of the taller trees in the east centre while a blackcap was heard along the old laneway.

In winter snipe would be associated with the farmland as they are all over the country. There is no roosting site however and the visits would be mostly be by night. Numbers of other waders or wildfowl would be small as there is no surface water available to attract them.



Masterplan area showing line of old laneway (yellow), best part of internal hedge (red) and drainage outflow (blue)

2.3 Evaluation

The site is typical of agricultural land in the Tullamore area with field drains keeping the water table lower than it would otherwise be. The only features of interest are the hedgerows which have relatively high biodiversity though not exceptionally so for the area. Maps of plant distribution (BSBI Atlas hub) show the less common species such as columbine *Aquilegia vulgaris*, goldilocks *Ranunculus auricomus* and ramsoms *Allium ursinum* as quite widespread around the town.

The more interesting parts of the site are indicated above in yellow and red. The fields themselves have no importance to wintering flocks of waders or wildfowl.

No invasive plant species were found on site though the spread of alexanders *Smyrnium* should be of concern as it dominates other hedgerow plants.

Appendix B—Baseline Studies—Archaeology

Clonminch Masterplan, Tullamore, Co. Offaly
Archaeological Impact Assessment

Client: Bennett Properties Ltd.

Licence No: n/a

Archaeologist: Liam Coen

Author: Liam Coen

Report Date: 4th March 2019

Our Ref: 2019_02

Clonminch Masterplan, Tullamore, Co. Offaly

SITE NAME	Clonminch Masterplan, Tullamore, Co. Offaly
CLIENT	Bennett Properties Ltd.
INVESTIGATION TYPE	Archaeological Impact Assessment
LICENCE NO	N/A
PLANNING REF	N/A
TOWNLAND	Clonminch, Gayfield, Cloncollog
IRISH TRANSVERSE MERCATOR	635030, 723330
RMP NO	N/A
RPS NO	N/A
ARCHAEOLOGICAL CONSULTANT	Archer Heritage Planning Ltd.
ARCHAEOLOGIST	Liam Coen
DATE OF ISSUE	4 th March 2019
JOB REF.	2019_02

CONTENTS

CONTENTS	1
SUMMARY	3
1. INTRODUCTION	4
1.1 PROPOSED DEVELOPMENT	4
2. SITE DESCRIPTION	4
3. METHOD STATEMENT	4
4. ARCHAEOLOGICAL BACKGROUND	5
4.1 BRIEF ARCHAEOLOGICAL & HISTORICAL BACKGROUND	5
4.2 RECORD OF MONUMENTS & PLACES	5
4.3 CARTOGRAPHIC SOURCES	6
4.4 AERIAL PHOTOGRAPHY	7
4.5 PREVIOUS ARCHAEOLOGICAL EXCAVATIONS	7
4.6 ARCHITECTURAL HERITAGE	9
4.7 TOPONYMS	10
4.8 SITE VISIT	10
5. IMPACTS	11
6. RECOMMENDATIONS	11
7. REFERENCES	12
7.1 BIBLIOGRAPHY	12
7.2 WEB REFERENCES	12

List of Tables

Table 1: Archaeological sites within 1km of the proposed development
Table 2: Cartographic sources relating to the site
Table 3: Aerial Photographs
Table 4: Previous archaeological investigations in the wider area
Table 5: Recorded Structures from NIAH in vicinity of proposed development

List of Figures

Figure 1: Location of site
Figure 2: Surrounding RMP/SMR sites within 1km of the proposed development
Figure 3: Historical maps
Figure 4: Aerial photographs

List of Plates

Plate 1: Field 1 looking north
Plate 2: Field 2 looking north
Plate 3: Field 4 looking west
Plate 4: Field 5 looking north
Plate 5: Field 7 looking north-west
Plate 6: Field 9 looking west
Plate 7: Field 10 looking west
Plate 8: Field 14 looking east
Plate 9: Possible enclosure

SUMMARY

A desk-based study and field survey was carried out on a site located on the southern outskirts of the town of Tullamore in Co. Offaly (ITM 644476, 751538). The site covers an area of c. 61.5 hectares. This Archaeological Impact Assessment report sought to identify and describe known and potential archaeological or cultural heritage constraints within and/or immediately adjacent to the site. The following factors were identified in the course of desktop study:

- The site is large in scale occupying an area of roughly 61.5 Ha.
- There are no recorded monuments situated within the site boundaries.
- A possible Enclosure was noted on Google Earth Pro between Fields 12 and 13.
- Examination of the cartographic sources indicates several early 19th Century settlement clusters that are no longer extant.
- No archaeological excavations have been undertaken previously within the subject site.
- There are no Protected or Recorded structures in or adjacent to the site.

These factors indicate that there is moderate-high potential (based on the scale of the site and the possible enclosure) for the survival of buried archaeological remains at this site.

RECOMMENDATION

It is recommended that the site be subject to further assessment consisting of geophysical survey and test trenching prior to development.

NOTE: All conclusions and recommendations expressed in this report are subject to the approval of The Department of Culture, Heritage and the Gaeltacht (DCHG) and the relevant local authorities. As the statutory body responsible for the protection of Ireland's archaeological and cultural heritage resource, the DCHG may issue alternative or additional recommendations.

Revision	Status	Date	Prepared by	Reviewed by	Approved by
1	Final	4 th March 2019	LC (Archer)	AOC (Archer)	CMG

1. INTRODUCTION

This archaeological impact assessment undertaken for the Clonminch Masterplan, Tullamore, Co. Offaly (ITM 635030, 723330, Figure 1) has been prepared by Archer Heritage Planning Ltd for Bennett Properties Ltd. The desk based study and field survey for this assessment was undertaken in March 2019 by Liam Coen of Archer Heritage Planning Ltd. It aims to identify and describe known and potential archaeological and cultural heritage constraints within the site and offer recommendations for the mitigation of such impacts.

1.1 Proposed Development

A Masterplan is being produced to inform future development for the site.

2. SITE DESCRIPTION

This site is on the south-eastern outskirts of the town of Tullamore, Co. Offaly. It is bounded along the north-east by the Dublin-Galway railway line; along the east by the N52 road; along the south-west by the R443 road; and along the north-west by a series of housing estates at Gayfield. The site is predominantly agricultural land in a mixture of arable and pasture with a cluster of domestic houses along the R443 road. The landscape is gently undulating with mature hedgerows comprising the field boundaries.

3. METHOD STATEMENT

The following sources were consulted in the preparation of this report:

- Record of Monuments and Places (RMP)/ Sites and Monuments Record¹
- Topographical Files of the National Museum of Ireland
- Aerial photography
- Historical maps
- Documentary research
- Relevant on-line databases (e.g. Excavation Bulletin; NRA Archaeological Database).

¹ Archive Unit National Monuments Service, Department of Culture, Heritage and the Gaeltacht ,

SUMMARY

A desk-based study and field survey was carried out on a site located on the southern outskirts of the town of Tullamore in Co. Offaly (ITM 644476, 751538). The site covers an area of c. 61.5 hectares. This Archaeological Impact Assessment report sought to identify and describe known and potential archaeological or cultural heritage constraints within and/or immediately adjacent to the site. The following factors were identified in the course of desktop study:

- The site is large in scale occupying an area of roughly 61.5 Ha.
- There are no recorded monuments situated within the site boundaries.
- A possible Enclosure was noted on Google Earth Pro between Fields 12 and 13.
- Examination of the cartographic sources indicates several early 19th Century settlement clusters that are no longer extant.
- No archaeological excavations have been undertaken previously within the subject site.
- There are no Protected or Recorded structures in or adjacent to the site.

These factors indicate that there is moderate-high potential (based on the scale of the site and the possible enclosure) for the survival of buried archaeological remains at this site.

RECOMMENDATION

It is recommended that the site be subject to further assessment consisting of geophysical survey and test trenching prior to development.

NOTE: All conclusions and recommendations expressed in this report are subject to the approval of The Department of Culture, Heritage and the Gaeltacht (DCHG) and the relevant local authorities. As the statutory body responsible for the protection of Ireland's archaeological and cultural heritage resource, the DCHG may issue alternative or additional recommendations.

Revision	Status	Date	Prepared by	Reviewed by	Approved by
1	Final	4 th March 2019	LC (Archer)	AOC (Archer)	CMG

1. INTRODUCTION

This archaeological impact assessment undertaken for the Clonminch Masterplan, Tullamore, Co. Offaly (ITM 635030, 723330, Figure 1) has been prepared by Archer Heritage Planning Ltd for Bennett Properties Ltd. The desk based study and field survey for this assessment was undertaken in March 2019 by Liam Coen of Archer Heritage Planning Ltd. It aims to identify and describe known and potential archaeological and cultural heritage constraints within the site and offer recommendations for the mitigation of such impacts.

1.1 Proposed Development

A Masterplan is being produced to inform future development for the site.

2. SITE DESCRIPTION

This site is on the south-eastern outskirts of the town of Tullamore, Co. Offaly. It is bounded along the north-east by the Dublin-Galway railway line; along the east by the N52 road; along the south-west by the R443 road; and along the north-west by a series of housing estates at Gayfield. The site is predominantly agricultural land in a mixture of arable and pasture with a cluster of domestic houses along the R443 road. The landscape is gently undulating with mature hedgerows comprising the field boundaries.

3. METHOD STATEMENT

The following sources were consulted in the preparation of this report:

- Record of Monuments and Places (RMP)/ Sites and Monuments Record¹
- Topographical Files of the National Museum of Ireland
- Aerial photography
- Historical maps
- Documentary research
- Relevant on-line databases (e.g. Excavation Bulletin; NRA Archaeological Database).

¹ Archive Unit National Monuments Service, Department of Culture, Heritage and the Gaeltacht ,

4. ARCHAEOLOGICAL BACKGROUND

4.1 Brief archaeological & historical background

The site lies less than 1.5km south-east of the centre of Tullamore. Tullamore itself was founded in the late 18th Century by the local landowners, the Moore's, following a fire engulfing an earlier village that lay on the site (Lewis 1837). By 1833, Tullamore now in the hands of the Burys, had become the county town and administrative centre of the county.

Tullamore lies in the ancient district of *Fear Ceall*, translating as 'men of the woods' or 'men of the churches' and in the Early Medieval period there were numerous famous monastic centres in the wider area, including Durrow, Clonmacnoise, Birr and Lynally (Simms & Andrews 1995). The subject site lies in the parish of Kilbride, part of the lands of the monastery of Durrow prior to the Dissolution of 1534 (Lewis 1837).

No recorded archaeological monuments occur inside or adjacent to the proposed development site.

4.2 Record of Monuments & Places

The Record of Monuments and Places (RMP) is a statutory inventory of archaeological sites protected under the National Monuments Acts 1930-2004 (Section 12, 1994 Act), compiled and maintained by the Archaeological Survey of Ireland (ASI). The inventory concentrates on pre-1700 AD sites and is based on a previous inventory known as the Sites and Monuments Record (SMR) which does not have legal protection or status (see www.archaeology.ie).

There are no recorded monuments located within the application area.

SMR No	Class	Townland	ITM	Distance to site
OF017-009---	Redundant record	Tullamore	634579,724745	980 m to NW
<p>The identification of a 'habitation site' at this location (listed in the SMR (1988)) was based on a survey report by Oliver Davies in 1942 who recorded: 'On the sides of the path leading up to the church on S.W. which is the steepest and highest end I found that the natural very fine sand (on loamy clay), interspersed with streaks of lime deposit, is overlain with about 18 inches of humus. At about 6 inches above the till I found pottery fragments and very occasional pieces of charcoal. There was no definite layer, and any finds at this level would have slipped down from a habitation site on top of the hill where there is a wide platform S.W. of the church.' (copy of ITA Survey 1942, SMR file). The church is nineteenth century in date, has no graveyard attached and there was no earlier church located on top of this hill. Archaeological testing in 2004 (licence no. 04E0065) and 2006 (licence no. 05E1198) revealed no evidence for this 'habitation site' (Delaney 2007; Sullivan 2008). An examination of the 'pottery' fragments in the National Museum of Ireland has identified them as 'in fact, mortar or plaster and probably cement-based' (pers. comm. A. Halpin, 8 May 2015). There is no evidential base to support the identification of this site as a monument. Compiled by: Paul Walsh Date of upload: 8 May 2015</p>				
OF017-010---	Ringfort-rath	Cloncollog	635928, 723647	340 m to NE
<p>Located on high ground with extensive views in all directions. Poorly preserved oval shaped enclosure (74m E-W by 54m N-S) enclosed by earthen bank (Wth 3 - 1m, int. H 1.5m), fosse (Wth 2 ; int. H 1.5m) and poorly preserved</p>				

SMR No	Class	Townland	ITM	Distance to site
<p>external bank visible at N only. No entrance feature visible. Possible ringfort. The above description is derived from the published 'Archaeological Inventory of County Offaly' (Dublin: Stationery Office, 1997). In certain instances the entries have been revised and updated in the light of recent research. Date of upload: 23 May 2011</p>				
OF017-041---	Metalworking site	Cloncollog	635832, 732492	220 m to E
<p>Cloncollog 2 is located approximately 2.5km east-south-east of Tullamore town centre. The pasture field was irregular in plan and sloped gently from north-east to south-west. A pit was identified (Context 006) in Trench 26 c. 375m from the south-western end of the centre-line trench and was excavated by Linda Hegarty of Headland Archaeology under licence No. E2850 in February 2007. This pit was situated 150m north-east of the building recorded as Cloncollog 1 (see No. 1450 above). The pit was circular in plan measuring 0.45m in diameter and 0.38m in depth. It had sharp breaks of slope on the top with near vertical sides. The base was flat with sharp breaks of slope. Around the surface and sides of the pit was between 0.05 and 0.1m of oxidised clay, suggesting intense in situ heat. It contained two fills. The primary fill consisted of loose black/brown silt with approximately 50% charcoal inclusions. Lumps of highly vitrified slag/ conglomerated material and solid metal material (non-magnetic) were identified throughout this fill. This fill was 0.2m deep and covered the base of the pit. Overlying this fill was moderately compact grey/brown silt with approximately 15-20% charcoal inclusions. Lumps of highly vitrified slag/conglomerated material were identified around the edges of this fill, which reached a depth of 0.2m. Due to the high archaeological content of this feature an additional trench (26a) was stripped of topsoil. It was excavated south-west of pit (006) measuring 17.6m, running parallel with the centre-line trench and connecting with Trench 25. Nothing of further archaeological significance was identified (Bennett 2010, 400). Compiled by Caimin O'Brien</p>				

Table 1: Archaeological sites within 1km of the proposed development

4.3 Cartographic Sources

Analysis of historic mapping can show human impact on landscape over a prolonged period. Large collections of historical maps (pre- and early Ordnance Survey maps as well as estate or private maps) are held at the Glucksman Map Library, Trinity College and other sources (UCD Library, Ordnance Survey Ireland, local libraries and published material). The development of the site and its vicinity recorded through nineteenth and twentieth century cartography are described in Table 2 below (Figure 3). **No potential archaeological features were recorded within the subject site.**

Map	Date	Description
Historic 6inch	1838	The site is comprised of more numerous smaller fields than currently exist and there are several buildings along the east/west running laneway that bisects the site as well as another cluster in the northern part.
Historic 25inch	1909-10	Some consolidation of the field pattern has taken place with the majority of buildings noted in the earlier map now no longer extant.

Table 2: Cartographic sources relating to the site

4.4 Aerial photography

Aerial photography (or other forms of remote sensing) may reveal certain archaeological features or sites (earthworks, crop marks, soil marks) that for many reasons may not be appreciated at ground level. Online orthostatic photographs of the site were examined (Ordnance Survey Ireland 1995, 2000 & 2005; Google/Bing Maps 2018).

Aerial Photograph	Date	Description
OSi	1995	Black and white photograph. The site is shown in its current layout with some relict field boundaries visible. The housing estates to the north-west are only partially developed with the N52 yet to be constructed.
OSi	2005	The housing estates to the north-west are in their current form, otherwise no change.
OSi Digital Globe	2013	Some relict field boundaries are visible and the N52 has been constructed along the south-eastern boundary.
Google Earth	2019	No change
Google Earth Pro	2018	A circular feature (possible enclosure) is shown between Fields 12 and 13 (aerial dated 26/06/2018) see Plate 9

Table 3: Aerial Photographs

4.5 Previous Archaeological Excavations

There were no previous archaeological excavations within the subject site but several have taken place within the subject and neighbouring townlands.

Excavation No.	RMP	OS Ref	Location	Ex. Bulletin Ref.	Author
99E0152	N/A	E 629385m, N 725039m	Tullamore/Ballycowan	1999:751	Rob Lynch
An assessment was undertaken to define the potential adverse affects on the archaeological resource as a result of the Tullamore Water Supply Improvements, Contract No. 5. This involved the monitoring of excavations carried out during the site investigation contract. Twenty-five trial-pits and sixteen slit-trenches were monitored between 4 and 28 March 1999, both within the town centre and in outlying areas. The walkover survey revealed that much of the proposed development runs along pre-existing road surfaces and through Tullamore town centre. The northern end of the pipeline runs through a forested area, while the southern end of the scheme, in the area of the Clonminch water tower, runs through green-field and wetland areas. Nothing of archaeological significance was revealed during the site investigation programme.					
A033, E2493	N/A	E 633855m, N 725319m	Tullamore	2006:1701	Tom Janes
Testing was carried out in advance of the proposed N52 Tullamore bypass national road scheme in County Offaly. The proposed road is to consist of 11.5km of standard single carriageway and 2.5km of wide single carriageway road, link road. A sample of approximately 15% of the land-take was trenched. Where there were no previously identified sites, testing comprised a continuous trench measuring 2m in width along the centre of the road-line with off-set trenches across the centreline trench extending to the edge of the CPO at an angle of 90° to the centreline trench. This general strategy was altered to take account of on-site conditions, for example to test topographic features or geophysical anomalies of possible archaeological interest, or to avoid overhead and underground services where machine testing was impossible on health and safety grounds. Where archaeological remains were encountered the trench layout was altered in order to establish their extent. Centreline testing (including metal detecting and topographic surveys) took place between 8 August and 15 September 2006. Due to tree coverage it was not possible to test the entire route. The completion of the site clearance contract enabled the remaining areas to be tested between 15 and 19 of October 2007. A total of 43,798.65 linear metres were					

Excavation No.	RMP	OS Ref	Location	Ex. Bulletin Ref.	Author
excavated. Thirteen areas of archaeological potential were identified in the testing. Five of these areas were shown to comprise isolated small features and consequently were fully excavated during test excavation works.					
A033; E2849	N/A	E 635743m, N 723279m	Clonminch	2007:1450	Linda Hegarty
Cloncollog 1 is located c. 2.5km east-south-east of Tullamore in an irregular pasture field which sloped gently from north-east to south-west and was excavated in February 2007. The rubble footings of a building (Context 009) were identified 265m from the south-western end of the centre-line trench and 150m south-west of a pit at Cloncollog 2 (see No. 1451 below). Context 009 comprised the corner footing stones of a stone structure. The remains of the house identified consisted of a right-angled corner with both lengths measuring 2.5m. The cut for the foundation was c. 0.45m in width and consisted of moderately compact mid-dark-brown silty clay with inclusions of large sub-angular stones. This footing may have continued into Trench 19b but appears off line on the 1:50 scale drawn plan, proving difficult to ascertain its true extent without further archaeological works. A house is marked on the first-edition OS map of 1838; it is most likely to be this house identified in the testing, especially as a field boundary marked on the OS map immediately north-east of the house orientated north-west/south-east was also identified in the centre-line test-trench 0.4m north of the house structure. The boundary consisted of mid-brown silty clay measuring 0.7m wide and 0.26m deep. Three additional trenches (19a-c) were excavated parallel to the centre-line trench. Trench 19a connected Trenches 19 and 20 together on the northern side, Trench 19b was 3.5m short of connecting Trench 19 and 20 on the south-eastern side together and Trench 19c connected Trench 19 and 18 together, also on the south-eastern side. These trenches measured a total of 38.1m and were opened to get the extent of the building and other possible surrounding buildings; the remains identified proved incoherent.					
A033; E2850	N/A	E 635793m, N 723329m	Clonminch	2007:1451	Linda Hegarty
Cloncollog 2 is located approximately 2.5km east-south-east of Tullamore town centre. The pasture field was irregular in plan and sloped gently from north-east to south-west. A pit was identified (Context 006) in Trench 26 c. 375m from the south-western end of the centre-line trench and was excavated in February 2007. This pit was situated 150m north-east of the building recorded as Cloncollog 1 (see No. 1450 above). The pit was circular in plan measuring 0.45m in diameter and 0.38m in depth. It had sharp breaks of slope on the top with near vertical sides. The base was flat with sharp breaks of slope. Around the surface and sides of the pit was between 0.05 and 0.1m of oxidised clay, suggesting intense in situ heat. It contained two fills. The primary fill consisted of loose black/brown silt with approximately 50% charcoal inclusions. Lumps of highly vitrified slag/conglomerated material and solid metal material (non-magnetic) were identified throughout this fill. This fill was 0.2m deep and covered the base of the pit. Overlying this fill was moderately compact grey/brown silt with approximately 15–20% charcoal inclusions. Lumps of highly vitrified slag/conglomerated material were identified around the edges of this fill, which reached a depth of 0.2m. Due to the high archaeological content of this feature an additional trench (26a) was stripped of topsoil. It was excavated south-west of pit (006) measuring 17.6m, running parallel with the centre-line trench and connecting with Trench 25. Nothing of further archaeological significance was identified.					
A033; E2851	N/A	E 634118m, N 722682m	Clonminch	2007:1454	Linda Hegarty
Clonminch 1 is located c. 1.5km south of Tullamore in gently undulating farmland under pasture at the time of testing. A spread of charcoal-rich silt and oxidised clay was identified 47m from the western end of the centre-line trench and was excavated in February 2007. This was a subcircular deposit of compact charcoal-rich sandy silt with frequent inclusions of burnt clay and an area of oxidation at its centre. It measured 1.5m east-west by 1.4m and was 0.05m deep. An area measuring 4m by 4m was opened around the feature but no further archaeological deposits were identified. A small sample was recovered for environmental analysis.					
E003818	N/A	E 632654m, N 722407m	Ballard to Clonminch	2008:101	Ross MacLeod
Peatland monitoring was undertaken on behalf of Offaly County Council as part of the advance archaeological works contract for the N52 Tullamore bypass. The work was in the townlands of Ballard to Clonminch, Co. Offaly, 0.25km south of Tullamore town. Monitoring took place on 1.25km stretch of peatland which had previously been under commercial forestry. No archaeological features or deposits were identified during the course of this investigation.					
12E0181	N/A	E 633841m, N 723059m	Clonminch	2012:499	Tony Cummins
Test trenching at the site of a proposed distillery and warehouse complex at Clonminch, Tullamore was undertaken as part of an EIS for the development. This entailed the excavation of seventeen linear test trenches in the marginal green field area to be impacted by construction works. There are no recorded archaeological sites within 800m of the site					

Excavation No.	RMP	OS Ref	Location	Ex. Bulletin Ref.	Author
boundary and no archaeological features were uncovered in the section of the Tullamore Bypass to the south of the site excavated by Tom Janes, Headland Archaeology (Excavations 2006, No. 1701, E2493). Test trenching indicated that the low-lying areas of the site had been extensively impacted by modern reclamation works and many field drains were uncovered in the subsoil. Nothing of archaeological significance was noted.					

Table 4: Previous archaeological investigations in the wider area

4.6 Architectural Heritage

The National Inventory of Architectural Heritage (NIAH) was established on a statutory basis under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999. Its purpose is to identify, record, and evaluate the post-1700 architectural heritage of Ireland, uniformly and consistently as an aid in the protection and conservation of the built heritage. It is intended to provide a basis for recommendations of the Minister of Culture, Heritage and the Gaeltacht (DCHG) to Local Authorities for the inclusion of particular structures in Records of Protected Structures (RPS).

Local Authorities have a statutory responsibility to safeguard architectural heritage in accordance with Part IV of the Planning and Development Act 2000. Under S.51 (1), a Council must compile a Record of Protected Structures (RPS), which lists all structures which are of special *architectural, historical, archaeological, artistic, cultural, scientific, social or technical* interest. The protection, unless otherwise stated, includes the exterior and interior of the structure, lands lying within its curtilage (boundary), other structures and their interiors within the curtilage, plus all fixtures and fittings which form part of the interior or exterior of any of these structures. Buildings can be added to, or deleted from the RPS at any time, though generally this occurs when the development plan is being reviewed.

There are no Protected Structures or Recorded Structures within the Clonminch Masterplan site.

St Catherine's Cemetery, Clonminch is a Protected Structure; Offaly County Council RPS no. 33-08. This cemetery lies 100m to the south of the Clonminch Masterplan site beyond the N52 road. There are mature hedgerows and road infrastructure, *i.e.* signage and sound-barrier fencing, associated with the N52/R443 roundabout between the cemetery and Clonminch Masterplan site.

There would be no significant impact from development on this Protected Structure.

Recorded structures from the NIAH in the immediate environs of the Clonminch Masterplan site include St. Catherine's Cemetery, NIAH Reg. No. 14917027; Violet Cottage, Reg. No. 14917018; and St. Joseph's Cemetery, Reg. No. 14917017.

The details are shown below in Table 5

NIAH Reg. No.	Address	Description	Date	Distance from site
14917027	St. Catherine's Cemetery, Clonminch	Saint Catherine's Cemetery at Clonminch, opened in 1852, is bounded by random rubble wall with tooled capping and cast-iron gates. Varied grave markers and obelisk stone monuments and cast-iron railings throughout graveyard.	1850-1860	100m to south
14917018	Violet Cottage, Clonminch	Detached three-bay single-storey house, built c.1860, with attic, extension and outbuildings to rear. Pitched slate roof with terracotta ridge tiles, rendered chimneystacks, gable finials and bargeboards to gable eaves, half dormer windows with bargeboards and timber finial. Timber sash windows with stone sills and flat-headed arch. Red brick above windows. Round-headed door opening with red brick arch surround, timber spoked glazed fanlight and replacement timber double doors. Random rubble front wall with random rubble gate piers wrought-iron railing to driveway and wrought-iron pedestrian gate.	1840-1880	80m to West
14917017	St. Joseph's Cemetery, Spollanstown, Tullamore	Cemetery, established c.1860, accessed by gates. Ruled-and-lined render to walls with painted capstones. Pair of tooled limestone gate piers capped with stone crosses on limestone plinth. Cast- and wrought-iron gates. Pedestrian gate to north. Flat, recumbent and standing grave markers. Central cross monument and a large number of high cross style grave markers.	1840-1880	750m to north-west

Table 5: Recorded Structures from NIAH in vicinity of proposed development

4.7 Toponyms

Research into a site or areas place name (or toponym) can provide information relating to an areas heritage or previous land use. Many townland names were anglicised by the time the Ordnance Survey (OS) began in the 1830s and when townland names were standardised in the Townland Index (1851).

- Clonminch translates as *Cluain na mBinnse* meaning Plain of the Benches. *Binnse móna* are benches of turf for cutting and perhaps indicates an area where turf was harvested in the past.
- Gayfield gets its title from a personal name.
- Cloncollog translates as *Cluain Colg* meaning meadow or pasture of the sword.

Details were taken from www.logainm.ie.

4.8 Site Visit

The site was visited by Liam Coen of Archer Heritage Planning Ltd on 30th Nov 2018 in dry, overcast conditions (Plates 1–8). The site is comprised of fourteen fields (Figure 1) in an undulating landscape in a mixture of arable and pasture fields. The field boundaries comprise mature hedgerows with some of

the larger pasture fields, e.g. Field 14, divided into paddocks with simple post and wire fences. The remains of a former laneway extends eastwards into the site from the R443 road and is now overgrown. There are two large overhead powerlines running through the site, their presence will restrict the available area for any potential geophysical survey. No further archaeological features were identified during the walk-over survey of the site

5. IMPACTS

A desk-based study and field survey was carried out on a site located in the south-eastern outskirts of the town of Tullamore, Co. Offaly (ITM 644476, 751538). The site covers an area of c. 61.5 hectares. This Archaeological Impact Assessment report sought to identify and describe known and potential archaeological or cultural heritage constraints within and/or immediately adjacent to the site. The following factors were identified in the course of desktop study:

- The site is large in scale occupying an area of roughly 61.5 Ha.
- There are no recorded monuments situated within the site boundaries.
- A possible Enclosure was noted on Google Earth Pro between Fields 12 and 13.
- Examination of the cartographic sources indicates several early 19th Century settlement clusters that are no longer extant.
- No archaeological excavations have been undertaken previously within the subject site.
- There are no Protected or Recorded structures in or adjacent to the site.

These factors indicate that there is moderate-high potential for the survival of buried archaeological remains at this site (due to the scale of the site and the possible enclosure).

Development at this site, particularly during groundworks associated with the construction phase, may result in direct negative impacts on any unknown buried archaeological remains.

6. RECOMMENDATIONS

It is recommended that the site be subject to further assessment namely geophysical survey and test trenching prior to development.

NOTE: All conclusions and recommendations expressed in this report are subject to the approval of The Department of Culture, Heritage and the Gaeltacht (DCHG) and the relevant local authorities. As the statutory body responsible for the protection of Ireland's archaeological and cultural heritage resource, the DCHG may issue alternative or additional recommendations.

7. REFERENCES

7.1 Bibliography

Lewis, S. (1837) *A topographical dictionary of Ireland*, London
Simms, A. & Andrews, J.H. (eds.) (1995) *More Irish Country Towns*, Dublin.

7.2 Web references

Online Excavations bulletin www.excavations.ie [accessed 04th March 2019]
Aerial Photography <http://map.geohive.ie/mapviewer.html> [accessed 04th March 2019]
Online Archaeological Survey of Ireland www.archaeology.ie [accessed 04th March 2019]
Architectural Heritage www.buidingsofireland.ie [accessed 04th March 2019]

Liam Coen

Liam Coen BA 4th March 2019

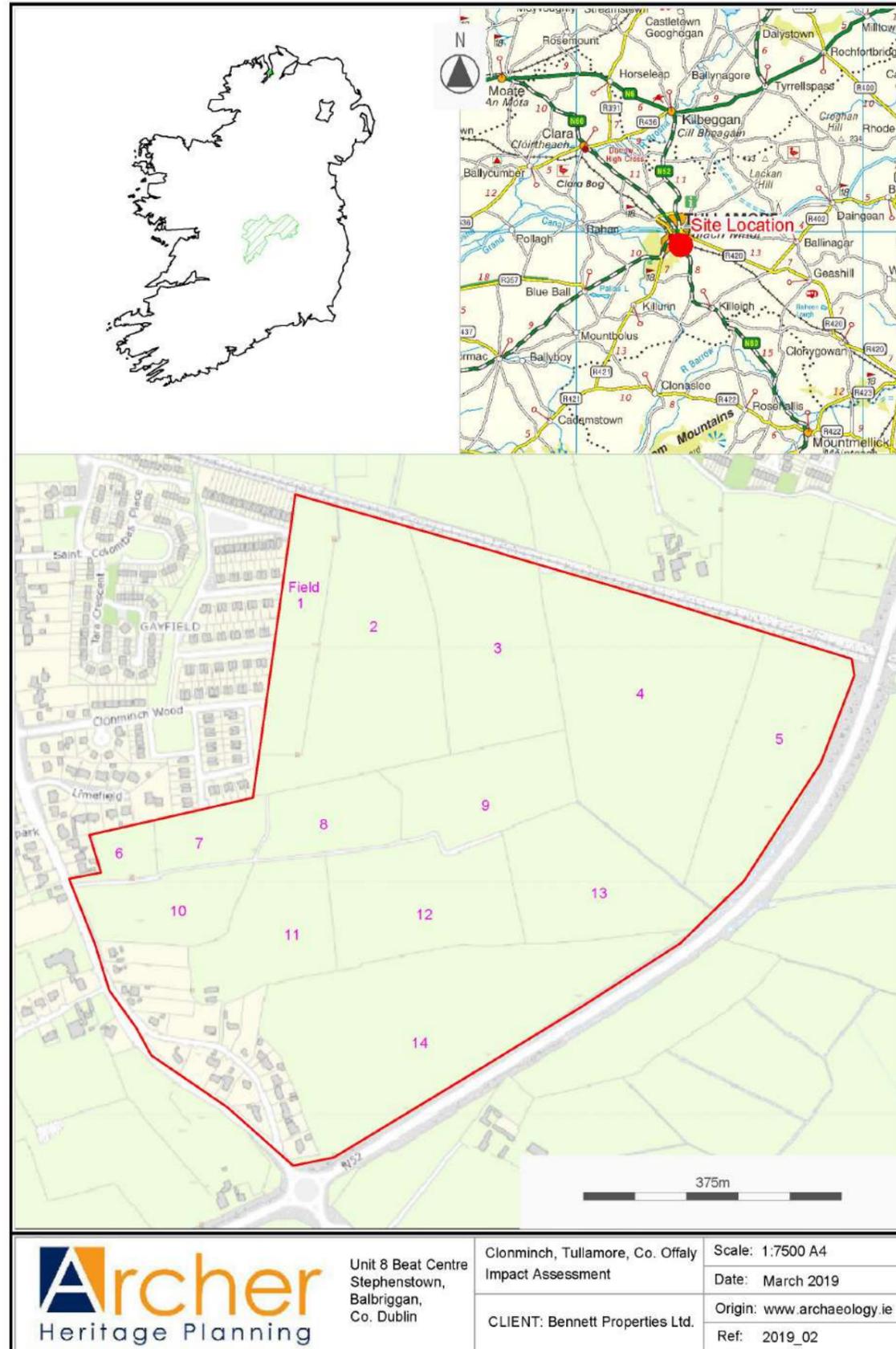


Figure 1: Site Location

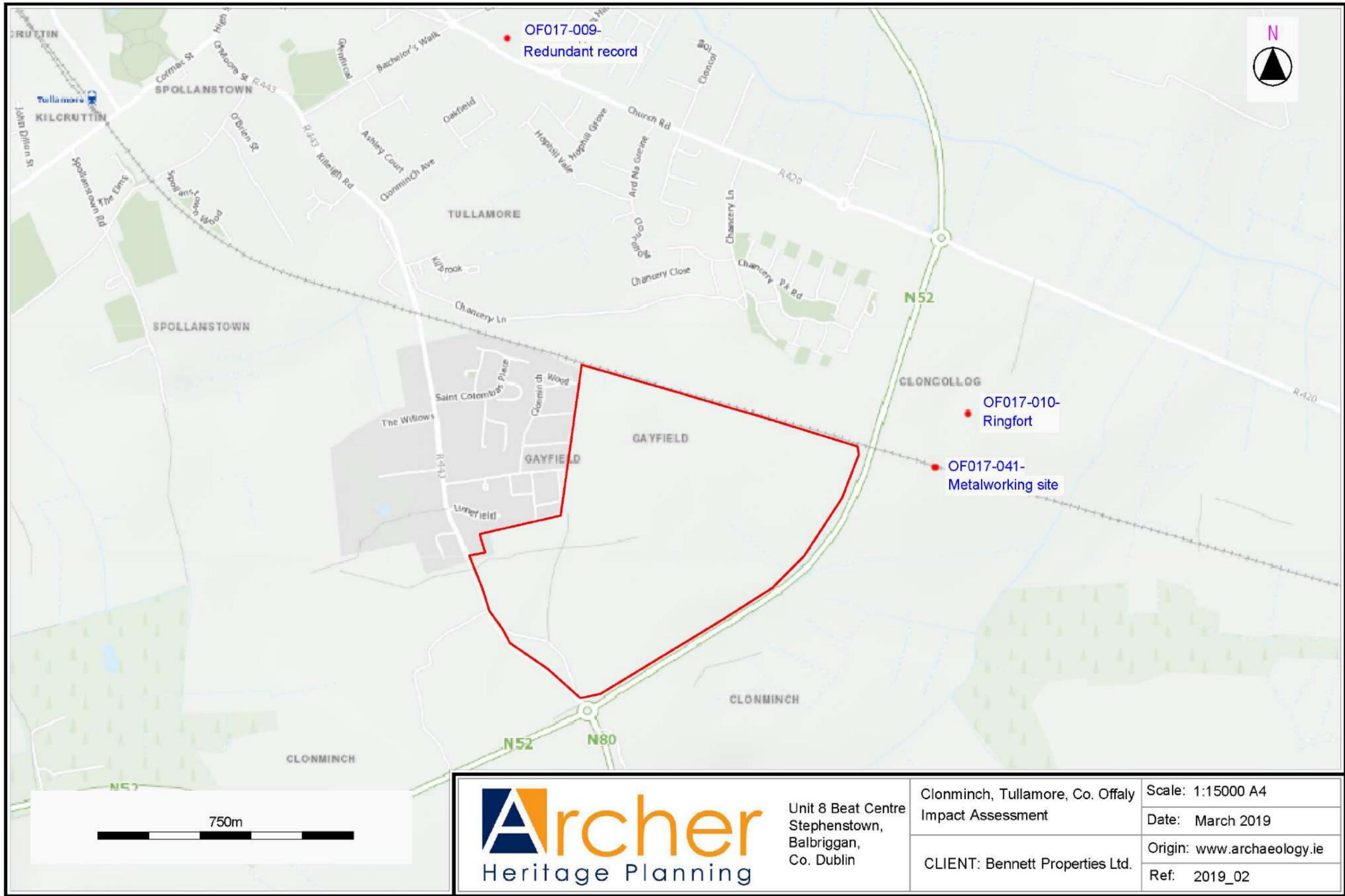


Figure 2: RMP/SMR sites within 1km of site

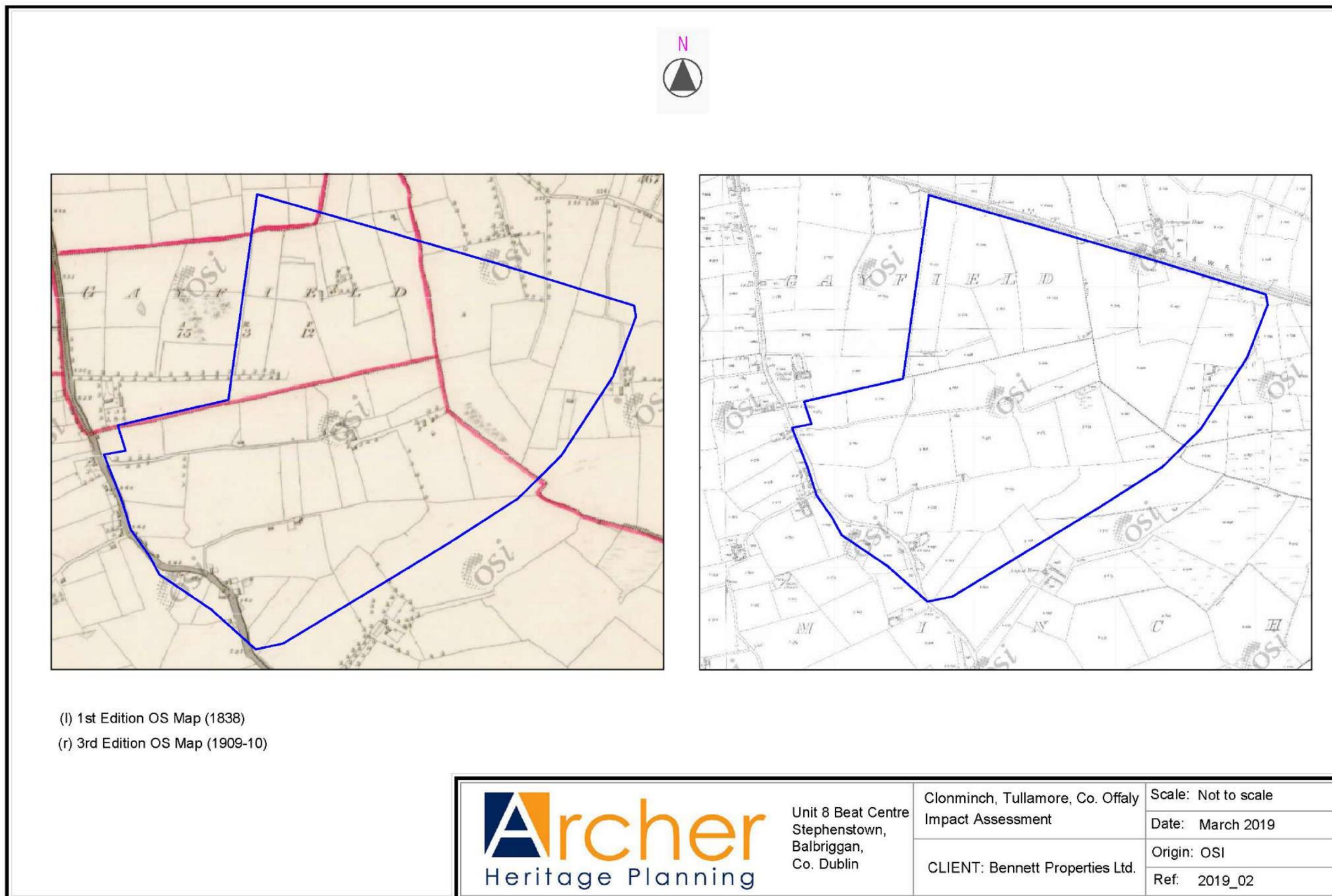


Figure 3: Extracts from early historical maps



(l) 1995 Aerial Photography

(r) 2019 Google Earth

Archer
Heritage Planning

Unit 8 Beat Centre
Stephenstown,
Balbriggan,
Co. Dublin

Clonminch, Tullamore, Co. Offaly
Impact Assessment

CLIENT: Bennett Properties Ltd.

Scale: Not to scale

Date: March 2019

Origin: OSI/Google Earth

Ref: 2019_02

Figure 4: Aerial photography



Plate 1: Field 1 looking north



Plate 2: Field 2 looking north



Plate 3: Field 4 looking west



Plate 4: Field 5 looking north



Plate 5: Field 7 looking north-west



Plate 6: Field 9 looking west



Plate 7: Field 10 looking west



Plate 8: Field 14 looking east



Plate 9: Possible enclosure (Google Earth Pro 26.06.18 mapping)

Appendix C—Community Appraisal

1.0 Introduction

A review of Development Plan Policy and a community audit was undertaken as part of the baseline for the Nodal Masterplan. This section will outline the analysis that provided the structure and defined the uses provided for in the Nodal Masterplan to support a new self-sustaining community including a Reserved School Site and Neighbourhood Centre.

1.1 Zoning Objectives

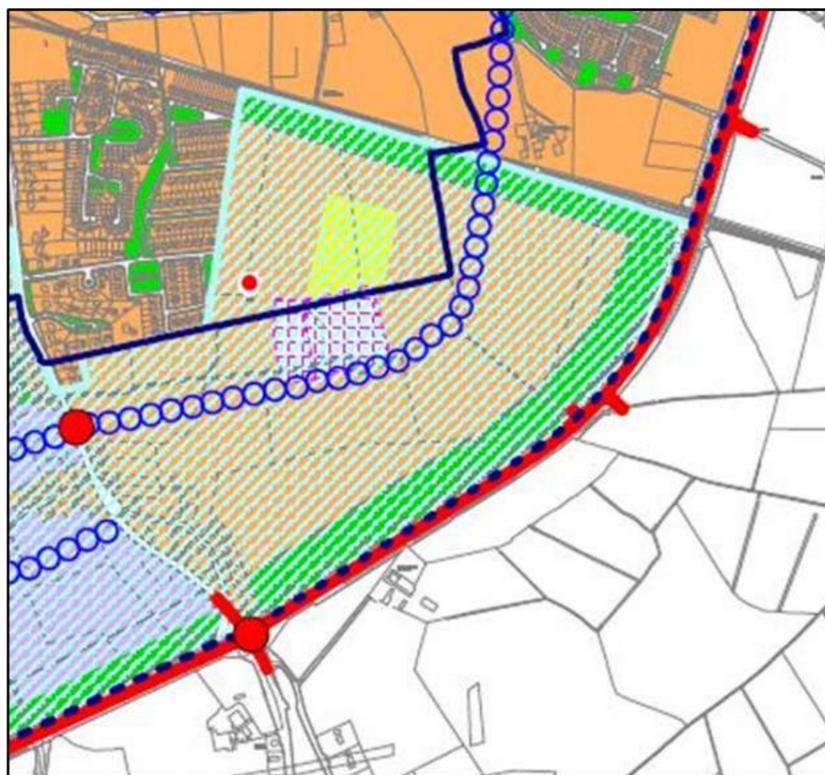


Figure 1; Extract from the Tullamore Town and Environs Development Plan 2010-2016 (as varied and extended)

The requirement for the inclusion of a primary school and neighbourhood centre as part of the Eastern Node stems from the zoning objectives of the Tullamore Town and Environs Development Plan 2010-2016 (as varied and extended).

Approximately 2 hectares of the Nodal Masterplan area are zoned Public/Community/Education and a further c.3 hectares are zoned Neighbourhood Centre.

1.2 Primary School Site

According to the TTEDP (para. 11.2.1.4), the DoES considers that the existing schools in Tullamore will be required to cater for the educational needs of the existing population for the medium to longer term. Further to this, the planning framework, as set out at Chapter 5 of the Development Plan notes that more than adequate lands zoned for public/educational uses are provided for and facilitate changing educational needs with that of an emerging population within the town.

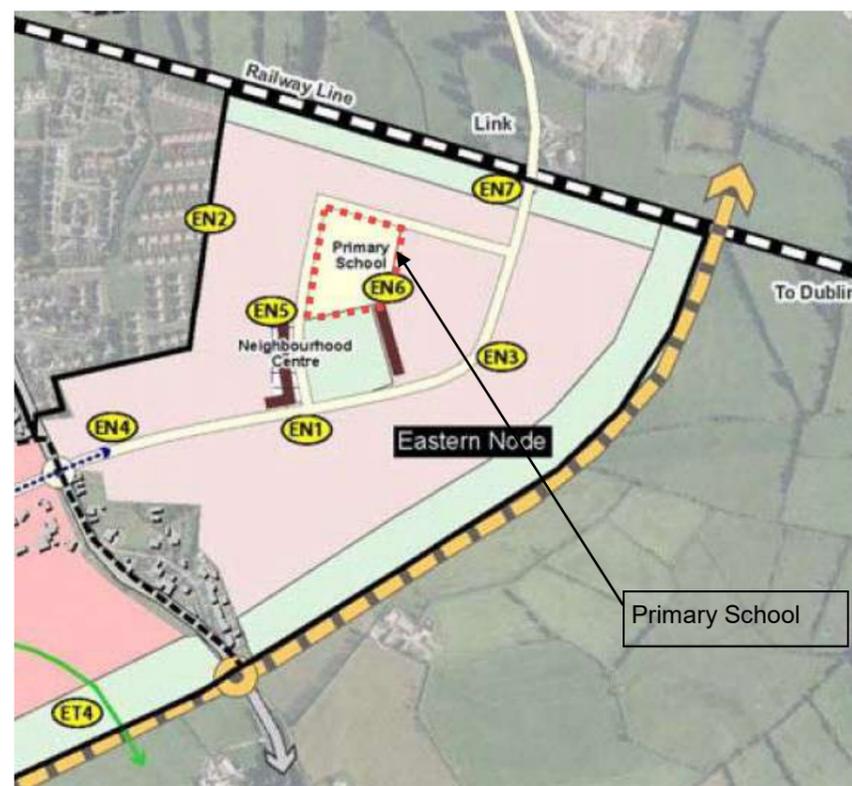


Figure 2: Extract from the Tullamore Southern Environs—Indicative Built Form diagram contained in Chapter 5 of the Tullamore Town and Environs Development Plan 2010-2016 (as varied and extended)

The Southern Environs Masterplan contained within Chapter 5 of the TTEDP identifies the lands zoned for Public/Community/Education for provision of a Primary School.

Section 2 of this Appendix to the Nodal Masterplan provides further detail on the development of the primary school site as part of the Nodal Masterplan evolution.

1.3 Neighbourhood Centre

According to the TTEDP (para. 15.3.9), Neighbourhood Centres have been identified at six locations throughout the town and environs area. The zoning provides principally for the development of new neighbourhood centres to serve the needs of the residential areas in which they are located. **A mix of retail, community and recreational uses** will be encouraged within these areas. **The neighbourhood centres are intended to serve the immediate needs of a localised catchment** i.e. the local working and residential population and complement, rather than compete with the similar retail uses within the established town centre.

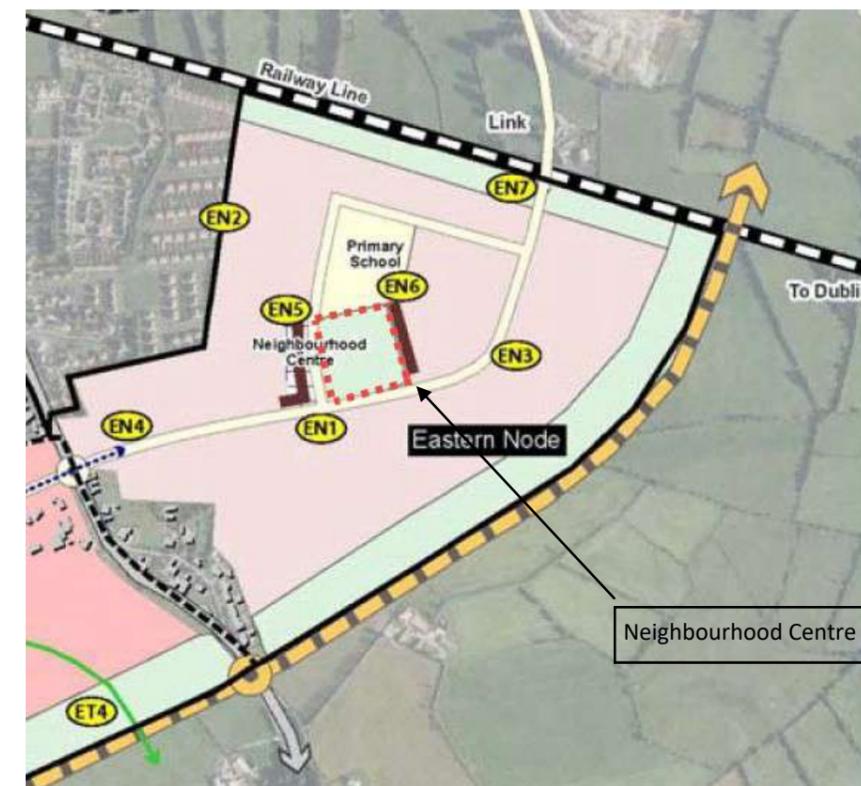


Figure 3: Extract from the Tullamore Southern Environs—Indicative Built Form diagram contained in Chapter 5 of the Tullamore Town and Environs Development Plan 2010-2016 (as varied and extended)

The Southern Environs Masterplan identifies the lands zoned Neighbourhood Centre as the location for the Eastern Node Neighbourhood Centre, forming a strong building edge to an area of public open space.

Section 3 of this Appendix to the Nodal Masterplan provides further detail on the development of the Neighbourhood Centre site as part of the Nodal Masterplan evolution.

2.0 Primary School Site

Lands Zoned Public/Community/Education
Normally Permitted
Bring Banks; Cemetery; Cultural Use; Community Facility (Hall/Centre/Recreation); Education (School); Health Centre/Clinic; Hospital; Library; Open Space/Playground (outdoor); Place of Worship; Recreational Facility/Sports Club; Swimming Pool.
Open for Consideration
Childcare Facilities – Crèche, nursery, playschool; Cinema; Club House & Associated Facilities; Craft Industry; Dentist Surgery/Doctor Surgery; Funeral Home; Hostel; Office based-Industry; Research & Development; Restaurant/Café; Retirement Home/Village.

Table 1: Content extracted from the Land use Zoning Matrix at para. 15.9 of the TTEDP

According to the Development Plan, the use of land as 'Public/Community/Education' shall be taken to include the use of land for the above stated uses, which generally include community related development (including the provision of schools, community halls, health care facilities, utilities, libraries and development for other community uses). Ancillary facilities such as dedicated open space or sports facilities will normally be facilitated within this zoning objective. The Southern Environs Masterplan as contained at Chapter 5 of the TTEDP specifically identifies this area for the provision of a primary school under Specific Objective EN5.

EN5. Provide a primary level school to service new residents in this node. The development of the primary school shall occur concurrently with the provision of residential development with this node. In addition, as part of the preparation of a more detailed Masterplan for this node, it must be demonstrated that consultation has taken place with the Department of Education in relation to the provision of schools in this node.

The Nodal Masterplan incorporates a reserved school site for a primary school. To illustrate and demonstrate that the location of the school knits into other Masterplan uses, a preliminary school design has been completed. The design is in keeping with Department of Education design guidelines for primary schools.

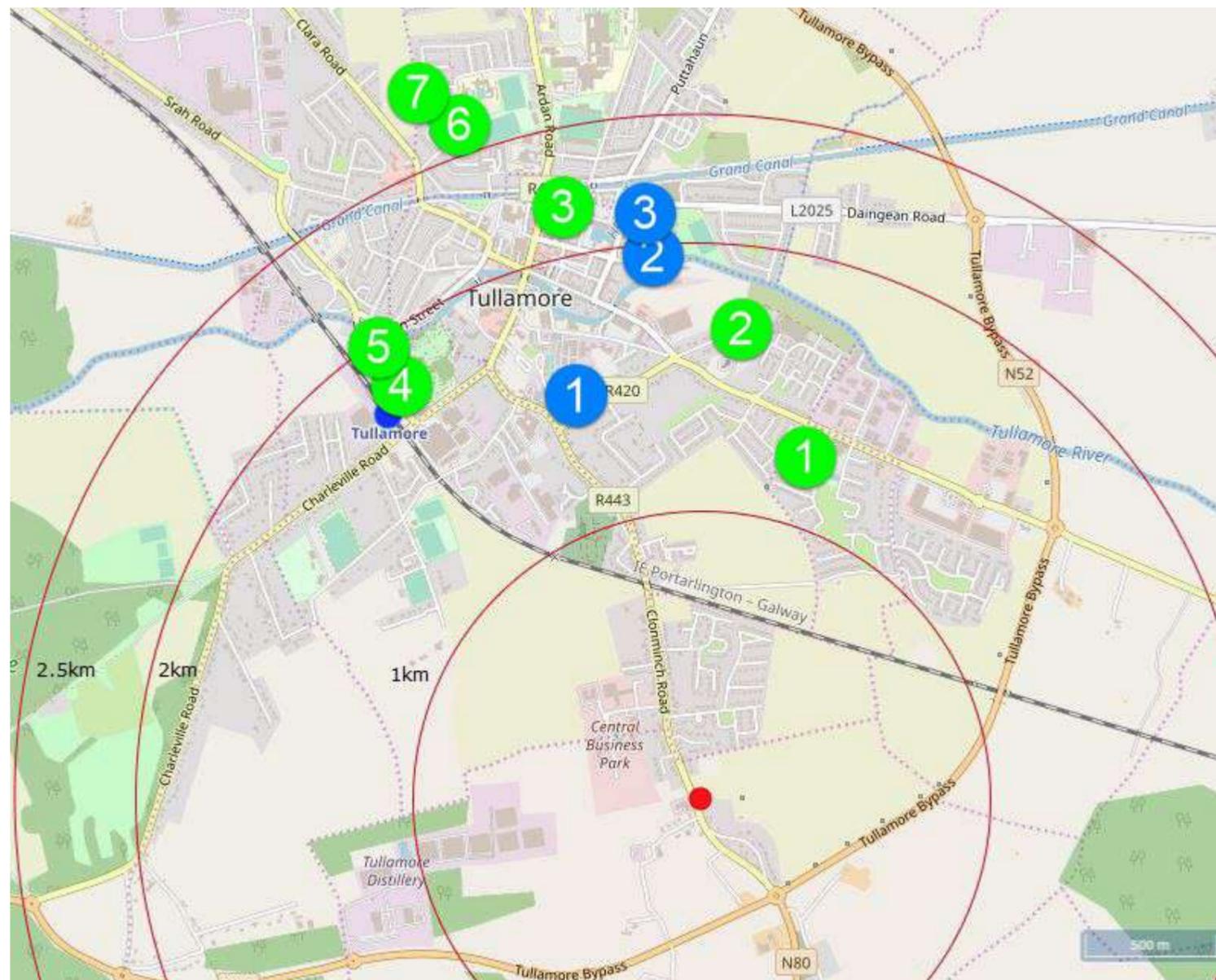


Figure 4

Primary Schools				Secondary Schools			
No.	School	Boys	Girls	No.	School	Boys	Girls
1	Gaelscoil an Eiscir Riada	90	115	1	Colaiste Choilm	608	N/A
2	Charleville National School	46	46	2	Tullamore College	317	345
3	St. Philomena's National School	N/A	164	3	Sacred Heart Secondary School	N/A	590
4	Scoil Mhuire	77	240				
5	Scoil Bhríde	168	N/A				
6	St. Joseph's National School	216	179				
7	Scoil Eoin Phoill	202	N/A				
	Sub-Total	799	744		Sub-Total	925	935
	Total	1,543			Total	1,860	

Table 1

2.1 Estimate of Demand for Primary School Places

While the provision of the identified primary school is ultimately to be determined by the Department of Education and Skills, an assessment of potential demand for primary school places has been undertaken for the Nodal Masterplan.

The proposed development of 1,350no.* residential units has the potential to yield a total population of 3,645no. on completion based on the State average household size of 2.7 determined by the 2016 Census(CSO). This new community could potentially include 984no. children. Approximate 437no. of these children could be of primary school age.

Based on the phased development of the Nodal Masterplan Lands, the estimated demand for primary school places would develop as follows-

- Phase 1 350 units 113 children of primary school age
- Phase 2 470 units 152 children of primary school age
- Phase 3 330 units 107 children of primary school age
- Phase 4 200 units 65 children of primary school age

2.2 Existing Primacy School Capacity

As illustrated overleaf by Table 2, current enrolments in primary schools in Tullamore within a 2.5km catchment amount to 1,543 students. In addition, according to the Department of Education and Skills, there are three additional 80m² classrooms being constructed at St.Joseph's National School, Arden View, Tullamore (no. 6 figure 4) and two additional 80m² classrooms at design stage for Scoil Eoin Phoil (no.7 figure 4). These two projects would cater for an additional 150no. primary school children based on a typical 80m² classroom plan.

On this basis, it is considered that existing primary schools in Tullamore can cater for the potential demand generated by Phase 1 of the Nodal Masterplan Lands as per Chapter 5 of the Development Plan. The provision of a primary school has been included in the development of phase 2 though will remain reserved until required by the Department of Education and Skills. At the same time there is nothing in the Masterplan that would preclude bringing the school forward earlier.

*Based on average density of 35 dwellings per hectare (net)

2.3 Reserved School Site

In order to ensure the provision of a primary school is feasibility on the reserved site, a preliminary design has been undertaken by Van Dijk Architects who are experienced at school design. The indicative layout is of a 16 Classroom Primary School catering for two streams with 2 Class base Special Needs Units (SNU) with the capacity for expansion to a 24 Classroom School and additional SNU class based on the DoES Generic Repeat Design and Standard SNU plans. Using average class size 2018-2019 as an estimate, the 16 Classroom Primary School could cater for approximately 400 children.



Figure 5: Indicative Layout for School Site

2.4 Consultation

As stated in the Technical Guidance Document TGD-025 The Planning and Building Unit in the Department of Education and Skills is tasked with determining the size of Primary Schools to be provided based on projected enrolments and other relevant demographic information and should be consulted in all instances where the size of a school is to be clarified / determined.

The Department was contacted during the preparation of this Nodal Masterplan for their opinion in relation to the reserved school site. The Department state by correspondence dated 18-06-20 (attached) that while there is no requirement for the development of a school at Clonminch currently, it remains a requirement to reserve this site for future need. Based on the preliminary drawing and selected school site as indicated in the Nodal Masterplan, the Department consider the "school site area of 2.46 hectares/6.1 acres should be satisfactory for the provision of a 16-24 classroom primary school".

3.0 Neighbourhood Centre

Lands Zoned Neighbourhood Centre
Normally Permitted
Advertising & Advertising Structures; Bring Banks; Car Park; Childcare Facilities – Crèche, Nursery, Playschool; Civic Amenity Sites; Cultural Use; Community Facility (Hall/Centre/Recreation); Craft Industry; Dentist Surgery/Doctor Surgery; Drive-through Restaurant; Hair dressing salon; Health Centre/Clinic; Library; Licenced Premises (Public House); Open Space/Playground (outdoor); Place of Worship; Recreational Facility/Sports Club; Restaurant/Café; Shop (Large- including supermarket); Shop (local); Take-away; Veterinary Surgery.
Open for Consideration
Apartments; Bank/Building Society; Betting Office; Residential; Service Station (Petrol); Training Centre.

Table 1: Content extracted from the Land use Zoning Matrix at para. 15.9 of the TTEDP

According to the TTEDP (para. 15.3.9) Neighbourhood Centres are envisaged to contain medical clinics, professional offices, childcare facilities (crèche), small convenience stores, local shops and cafes. The threshold or floor area proposed for each neighbourhood centre will be assessed in relation to the nature and extent of retail provision in accordance with the current retail strategy as set out at Chapter 7 of the Development Plan, the intended catchment area for the neighbourhood centre and the impact that the proposal may have on the vitality and viability of the established town centre. Residential is also open for consideration and provides a living core with activity throughout the day.

The Southern Environs Masterplan as contained at Chapter 5 of the TTEDP specifically identifies the Eastern Node for the provision of a neighbourhood centre under Specific Objective EN4.

EN4. Provide a neighbourhood centre to service new residents in this node. The provision of this neighbourhood centre shall occur concurrent with the provision of residential development within this node.

The creation of a Neighbourhood Centre within the Nodal Masterplan Lands offers the opportunity to reduce the need to travel and foster a sense of community by providing commercial, leisure and community uses, including local employment located in close proximity to residents homes.

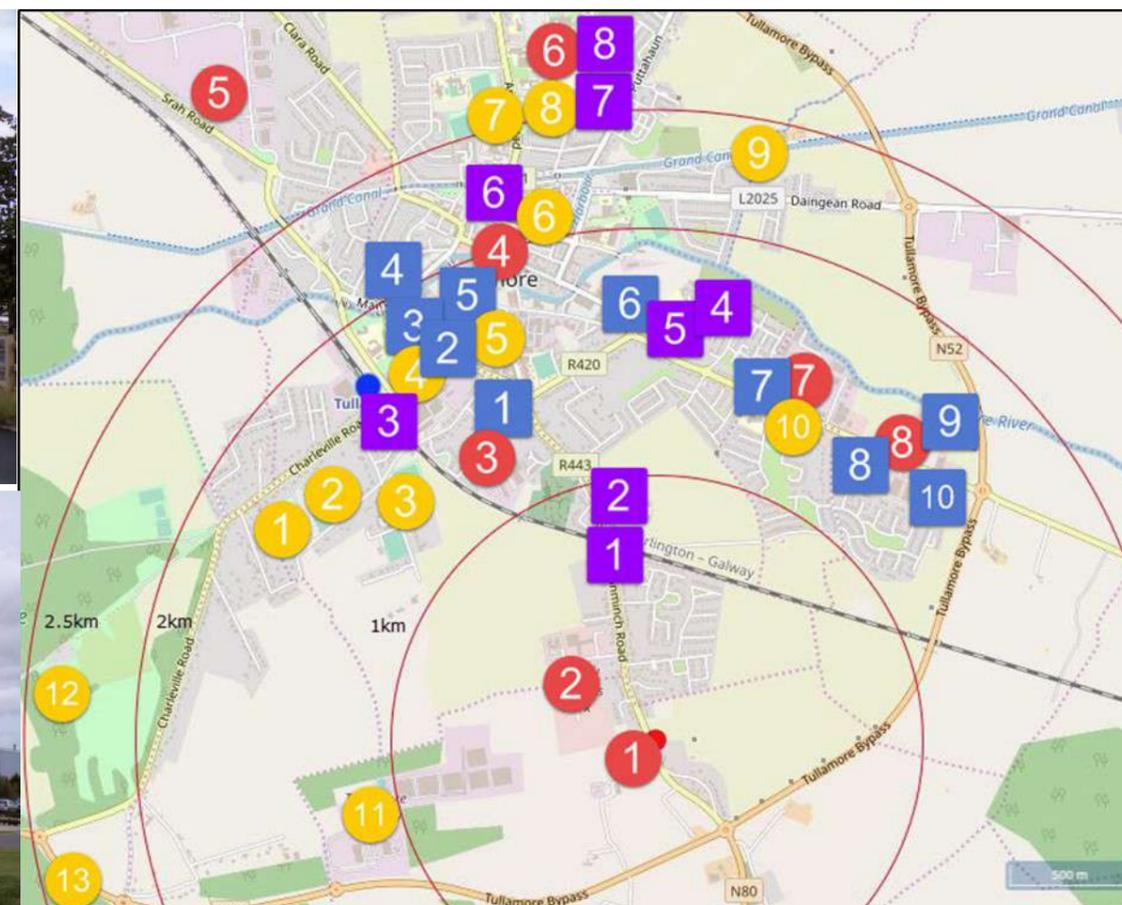


Figure 6: Tullamore Community Audit

Enterprise and Employment		Sports, Recreation and Leisure	
1	Clonminch House-	1	Tullamore Harriers Athletics
2	Central Business Park-	2	Astroturf Pitches
3	Spollenstown Industrial Estate	3	Tullamore Rugby Club
4	Town Centre with associated offices, retail and service industry employment.	4	Lloyd Town Park
5	Srah (IDA) Industrial Estate-	5	IMC Cinema
6	Midlands Regional Hospital	6	Library
7	Cloncollig Industrial Estate	7	Tullamore GAA
8	Tullamore Retail Park	8	O'Connor Park
		9	Grand Canal Walk
		10	Aura Tullamore Leisure Centre&Tennis
		11	Tullamore Dew Visitors Centre
		12	Charville Forest & Castle
		13	Tullamore Golf Club
Retail and Services		Community/Health Services	
1	Tullamore Court Hotel	1	Community Pharmacy
2	The Bridge Centre	2	Offaly Centre for Independent Living
3	Central Hotel	3	Offaly County Council
4	Lidl	4	Tullamore Primary Care Centre
5	Bridge House Hotel	5	Charville Community Centre
6	Dunnes Stores	6	HSE Community Health Centre
7	Spar	7	The Health Centre
8	Tullamore Retail Park-	8	Midland Regional Hospital Tullamore
9	Riverview Commercial Park		
10	Tesco Extra		

Table 2: Community Audit

3.1 Potential Neighbourhood Centre Uses

In order to provide for a self-sustaining community it was necessary to consider the type of uses envisaged for the Neighbourhood Centre for the Eastern Node. As stated by the Sustainable Residential Development in Urban Areas—Guidelines for Planning Authorities, “sustainable neighbourhoods require a range of community facilities, and each district/neighbourhood will need to be considered within its own wider locality, as some facilities may be available in the wider area while others will need to be provided locally” (para.4.1). In keeping with the Guidelines, it is the policy of the TTEDP (CD4) to;

“Support the services requirements of new and existing residents in the Masterplan areas by creating neighbourhood centres that contain the services necessary to facilitate the emergence of partially self-sustaining neighbourhoods”.

3.2 Community Audit

In order to establish what existing facilities were located in the wider area of the Nodal Masterplan Lands an Audit was undertaken. As illustrated by Table 2, this Audit took account of employment, retail, sports and community services and facilities within c.2.5km of the Nodal Masterplan Lands.



Figure 7: Tullamore Retail Park

COMMUNITY SERVICES

Access to school from Crofton Avenue and potentially (subject to taking in charge) with Clonminch Wood.

Combined Footpath / Cyclepath connecting School to Neighbourhood Centre and to adjoin parks.

Neighbourhood Centre—Shops, Medical Centre, Creche, Cafes and Restaurants.

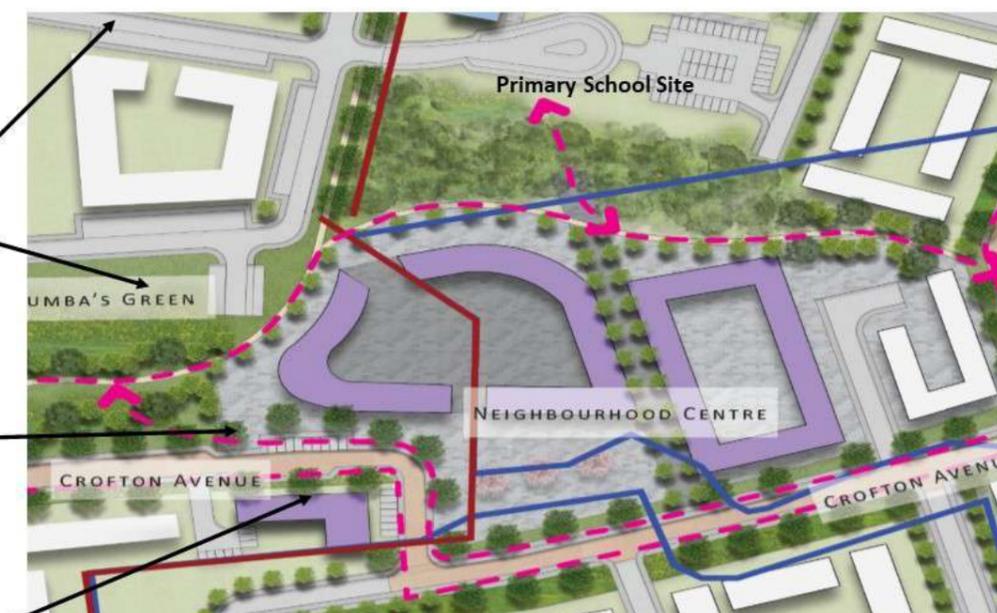


Figure 8: Neighbourhood Centre Connectivity

Summary of Audit Findings

Employment: The Nodal Masterplan Lands have the advantage of being located in direct proximity to an existing employment area west of Clonminch Road. In addition, a large area is identified for future employment development to the west of Clonminch Road.

Retail: In terms of retail services provision, the two main locations are the Town Centre of Tullamore and the development to the east of the Nodal Masterplan Lands along the R420 consisting of the Tullamore Retail Park and Riverview Commercial Park. This location offers higher order convenience and comparison shopping with a large Tesco extra and Aldi together with bulky goods stores selling home furnishings and clothing outlets.

Community/Health: There is an existing pharmacy on the Clonminch Road approximate 600m from the entrance to the Nodal Masterplan Lands. Major services are provided mainly within the Town Centre and north of the Town Centre including a Regional Hospital

Sports/Recreation: There are a large number and variety of established sports and recreational facilities in Tullamore such as playing pitches, cinema and leisure centre with swimming pool.

Neighbourhood Centre Uses

The Central Statistics Office have compiled data on the average distance of residential dwellings to selected services and infrastructure by Region and County. These figures have been used to gauge the type of community services normally proximate to residential dwellings having regard to the definition of a Local Centre or Neighbourhood Centre contained within the Retail Planning—Guidelines for Planning Authorities (2012) as follows-

“Comprise a small group of shops, typically comprising newsagent, small supermarket/general grocery store, sub-post office and other small shops of a local nature serving a small, localised catchment population” (Annex 1).

The provision of part of the neighbourhood centre in phase 1 will provide the foundation for the development of a self-sustaining neighbourhood and discourage trips by car for local services. The Neighbourhood Centre is centrally located within the Node and it is envisaged that this will be developed out as critical mass increases and the demand and viability for uses such as a post office or larger convenience store emerges.

Judith Horgan

Subject: FW: Masterplan and Primary School Provision,Tullamore,Co.Offaly

From: Hanlon, Alan [mailto:Alan_Hanlon@education.gov.ie]

Sent: 18 June 2020 17:00

To: 'Judith Horgan' <jhorgan@wardconsult.com>

Cc: Cusack, Aine <aine_cusack@education.gov.ie>; 'Alaine Clarke' <AClarke@offalycoco.ie>

Subject: RE: Masterplan and Primary School Provision,Tullamore,Co.Offaly

Judith,

Thanks for your query.

This Department does not currently have a requirement for the development of a school on the site at Clonminch. However, school place requirements across the country are kept under continuous review and a requirement for the development of a school on the site in question may emerge at some time in the future. In that context, this Department requires the continued reservation of the school site at Clonminch.

It is not possible to definitively identify capacity of existing schools as, in the first instance, the majority of school buildings are outside the ownership of the Minister for Education and Skills and secondly, the capacity of schools is subject to constantly changing circumstances.

In respect of the suitability of the subject site, the Department notes that this development forms part of the Tullamore Town and Environs Development Plan 2010-2016 (extended until 2020) and specifically this proposed housing scheme forms part of the Tullamore Southern Environs (eastern node) masterplan area. Specific commentary on the site is below:

School Site Size: It is considered that, subject to proper planning and adherence to development management standards for the school and its curtilage as well as the proper planning of adjacent developments, that the indicated school site area of 2.46 Hectares/6.1 Acres should be satisfactory for the provision of a 16-24 classroom primary school.

Strategic Planning and Provision for future school: The provision of a primary school in this location is consistent with the DP stated EN5 masterplan objective. It is noted that EN5 states that the school shall be provided in conjunction with the supply of housing. But it is also noted that the school site does not form part of the current proposed SHD application, and whether it is in phase 2, or phase 3 is unclear. That is also consistent with the overall Proposed Phasing Map of the Masterplan.

However that creates a fragmentation risk regarding the future development of the school site. The proposed future school site remains isolated from ready independent and technically sufficient access, services and utilities to the existing public realm as envisaged in the current phased approach. The proposed positioning of the school site in the later phases further isolates it and could potentially jeopardise its orderly and timely development. An Bord Pleanala is requested to ensure through conditions that the phase one (PL19. 305919) hard infrastructure is designed, developed and implemented by the Applicant/Developer (PL19. 305919) to take cognisance and facilitate the future development of the school in the design and construction of the masterplans overall transport and wider mobility planning, as well as services and utilities infrastructure networks, including capacity of sewers and service mains, and surface water attenuation where the school can rely on the pre-existing infrastructure for its development in

1

order to deliver value for money to the Exchequer/State in accordance with the objectives of Project Ireland 2040, and in the interests of proper planning practice. Where this cannot be achieved in the current phased design approach An Bord Pleanala is asked to consider (i) the detailed design provisions of the overall masterplan area including all future phases where it supports the provision of the school, or (ii) to consider a modification and extension of the phase 1 development boundary to include the school site from an infrastructure point of view.

Property Ownership: It is noted from the information submitted by Stephen Ward Town Planning & Development Consultants Ltd that the site is in multiple ownership. The Department must consider this in any site acquisition, and An Bord Pleanala is requested through conditions that any planning consents (current and future phases) protect and assert the integrity and importance of the school to the viability of the surrounding developments, and the Development Plan Masterplan as a whole, making it a shared obligation for all property owners/developers in order to facilitate an orderly and simple property acquisition.

Finally, the Department would request that the observations on the school site in Clonminch would be included as part of any ABP application that is submitted.

Regards

Alan
Site Acquisitions and Property Management

An Roinn Oideachais agus Scileanna
Department of Education and Skills

Bóthar Phort Laoise, An Tulach Mhór, Co. Uíbh Fhailí, R35 Y2N5.
Portlaoise Road, Tullamore, Co Offaly, R35 Y2N5.

T +353(57)93 2 4474
www.education.ie

2

Appendix D—Landscape Masterplan

MASTERPLAN - EASTERN NODE

SOUTHERN ENVIRONS, TULLAMORE, CO. OFFALY

APRIL 2020/ PROJECT NO. 6473

LANDSCAPE CONCEPT MASTERPLAN



Park Hood Chartered Landscape Architects

parkhood.com

Design and Implementation

LANDSCAPE MASTERPLAN



LEGEND

-  EXISTING TREES/ HEDGEROWS RETAINED
-  PROPOSED TREES
-  PROPOSED WOODLAND BUFFER PLANTING
-  PROPOSED MEADOW/GRASSLAND
-  PLAY AREAS
-  DISTRIBUTOR ROAD
-  FOOTPATH
-  CYCLE PATH
-  FUTURE LINK

The Masterplan has been developed by Park Hood Landscape Architects in conjunction with Van Dijk Architects with input from key technical and environmental consultants. The site assets and constraints were established in conjunction with the client and design team that included ecology (R. Goodwillie), tree assessment (A. Boe) and Archaeology (Archer)

- LEGEND:
-  EXISTING TREES/HEDGEROWS RETAINED
 -  PROPOSED TREES
 -  PROPOSED WOODLAND BUFFER PLANTING
 -  PROPOSED MEADOW/GRASSLAND
 -  PLAY AREAS
 -  DISTRIBUTOR ROAD
 -  FOOTPATH
 -  CYCLE PATH
 - FUTURE LINK

Design and Implementation

PLANNING OBJECTIVES - LANDSCAPE MASTERPLAN

DESIGN RATIONALE

Public Open Space

The key area of open space will be the linear park that comprises a belt of approximately 50 to 75m wide that extends to nearly 2km aside the railway line and the N52 Road. This will include trim trails, cycling and pedestrian paths, meadows, woodland planting with nodes of formalised activity at strategic locations. The proposed woodland will mature to screen the adjacent transport corridors and provide a buffer and green edge to the Eastern Node. This will connect through to internal open spaces and public realm areas located in and around residential areas providing opportunities for informal recreation, play and nature. The proposed development includes for a high level of tree planting and landscape development which will be based on species lists and guidance within the All Ireland Pollinator Plan 2015-2020.

The collective areas will be physically and aesthetically linked by green corridors with tree lined avenues to encourage an overall sense of place and connection. This will include connectivity with open spaces in the adjacent Gayfield housing estate and linkages to the Clonminch Road.

While the majority of open spaces will have a soft and green characteristic, the development will include for a more formal and hard landscaped urban space which will create a focus for the Neighbourhood centre. In this area, planting and landscaping will be of a formal nature and the focus will be on durable materials and design to ensure that this area can provide a civic and functional role at the heart of the development.

There are opportunities to incorporate pieces of artwork at key locations such as the neighbourhood square and open spaces off the main access point from Clonminch Road. These can act as focal points and orientation as well as bring an aesthetic quality and sense of identity to this part of Tullamore.



Balanced hard and soft materials



Connectivity - a permeable layout creates links between areas of open space



Natural & formal connectivity or linkages through overall site



Identity - coherent design of public realm can give a sense of place

Design and Implementation

PLANNING OBJECTIVES - OPEN SPACE LANDSCAPE MASTERPLAN

The Eastern Node is part of the Tullamore Southern Environs as set out in the Tullamore Town and Environs Development Plan 2010-2016. The Clonminch Masterplan includes significant areas of Public Open Space which is largely focused on the north boundary (aside the railway line) and east (aside the N52) of the site as per the "Open Space" as annotated on the Tullamore Southern Environs – Urban Design Strategy Map (Chapter 5 Masterplans in Development Plan).

The objectives are tied in with those within the Development Plan and include the following:-

Amenity and Sense of Place

- New recreational and amenity spaces will be designed to be accessible and usable;
- A linked hierarchical network of open spaces and recreational areas;
- Provision of playgrounds as to cater for the recreational and educational requirements of children resident in these areas;
- Creation of public realm areas designed with primary consideration given to future area users in terms of aesthetics and utility;
- The layout and design of the scheme respects and utilises existing topographical and ecological features. The use of recognisable landmarks will assist in the creation of an identity and a sense of place;
- Retention of existing natural features to form part of public open space where feasible (based in part on information from Tree Survey Report – Boe 2019 and Ecology Assessment – Goodwillie 2019);
- Each area of public space will have specific features, giving it a distinct sense of place;
- Providing a distinction between public, communal and private spaces. Public spaces will feel welcome to all, while communal spaces will be differentiated from the public either physically or perceptively;

Movement and Access

- Encourage 'access for all' - all streets, open green areas, playgrounds, and major pedestrian routes within the Eastern Node site will be accessible to all members of the community;
- Provide a clear hierarchy of roads for vehicular movement;
- Adequate provision for the requirements of cyclists;
- Pedestrian circulation will be provided by conventional roadside footpaths, greenways (linking open spaces directly and providing alternative routes) and innovative urban spaces with pedestrian movement prioritised;
- Public realm design will provide natural surveillance, a feeling of security, and encourage positive social behaviour.

Maintenance

- Durability and low maintenance will be the primary considerations of all materials and products within the public realm areas and a Management & Maintenance Plan will be set in place by the developers for the initial stages of development.

Safety

- Layouts will encourage street activity. Dead areas without direct supervision will be avoided;
- Public realm design will provide natural surveillance, a feeling of security, and encourage positive social behaviour;
- All age groups will be catered for, from young children to teenagers and older people. Public and semi private spaces will be safe and complement interaction between varied groups. This can be achieved by placing these areas in highly visible, public places. The objective is to promote the safe integration of different age groups;
- Children's' play areas will be designed to be secure and overlooked, and will be situated in appropriate locations.



Different age groups and abilities can co-exist in harmony



Utilise existing features such as existing trees and hedgerows

Creation of defensible space and hierarchy of use



Public display art examples creates a unique a sense of place

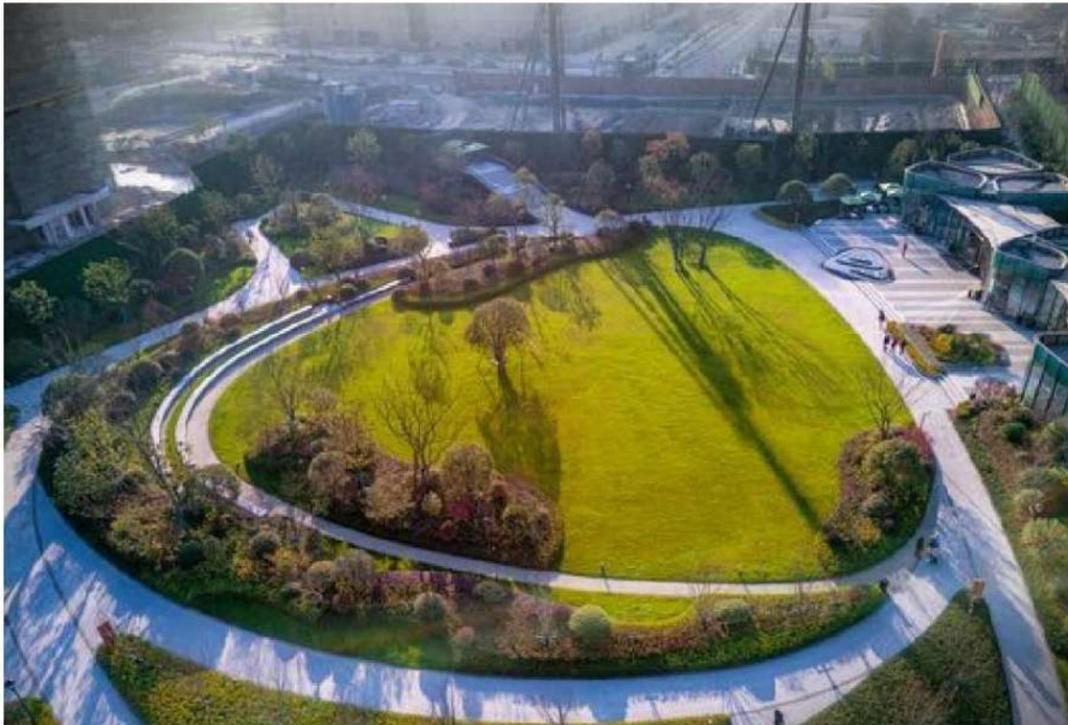


Formal arrangement

Informal linear arrangement

Design and Implementation

OPEN SPACE CONCEPT IMAGERY



Design and Implementation

PLAY AREAS: PLAY PROVISION NEAPS/LEAPS/LAPS

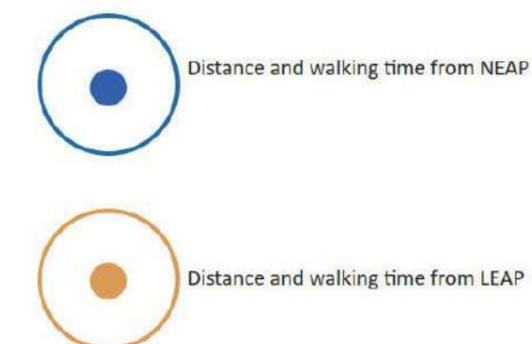


Play provision can be categorised into LEAPs and NEAPs. Local Equipped Areas of Play and Neighbourhood Equipped Area of Play. There will be 5 LEAPs and 1 NEAP within the development. The majority of dwellings are not more than 5 minute walking distance from a LEAP, and 15 minutes walking distance from a NEAP. Refer to map Left.

Initial consideration will allow play areas to be easily maintained. They will be enclosed by fencing and a self-closing gate. Different groups will be catered for.

The NEAP will incorporate provisions for a small sport pitch or MUGA (Multi USE Games Area) and a level informal kick about area. NEAPs and LEAPs will be located where they can be easily overlooked by passers-by and nearby dwellings, but will maintain an appropriate distance.

Lower order facilities such as LAPs (Local Areas of Play) will be given consideration at a later stage.



Design and Implementation

PLAY AREAS: PRECEDENT IMAGES



Character:

It is proposed that the playground offers a range of: physical play, sensory play and social play. Natural untreated timber is a preferred material throughout the play areas. Play equipment should be of Robinia type or equal and approved.

The proposed playgrounds should:

- make use of natural landscape elements - boulders, tree trunks, grass mounds etc. - for creative, imaginative play, climbing, hiding, balance, chasing, role play etc.
- contain a range of robust manufactured equipment, and be designed to accommodate multiple play opportunities / imaginative play with a high level of accessibility and inclusive design.
- not expose users to unacceptable levels of risk of serious injury but should be provided with equipment that allows for some risk taking and extended challenge as a child's skills/abilities / confidence develop.
- comply with best practice guidelines and standards including but not limited to; BS EN 1176, BSEN 117, BS 7188.
- consider maintenance, inspection and insurance regimes.
- consider the wider landscape of the park, its aesthetic and overall site layout when designing the playgrounds.
- comply with the requirements of this brief and incorporate where appropriate, suggestions made in this brief.
- appear to be co-ordinated in design with the wider park and themselves.
- use a simple restrained palette of materials and colours such as galvanised and white powder coated steel, hot-dip galvanised steel, stainless steel or untreated timber. If play safety surfacing is a requirement either natural materials, such as woodchip surfacing or alternatively perforated rubber mat type surfacing should be proposed.



Design and Implementation

NEIGHBOURHOOD URBAN SQUARE

This is a formal urban space which will create a focus for the Neighbourhood centre. A multitude of uses can be carried out in this space to consolidate its CIVIC and social importance. Planting and landscaping will be of a formal nature. There is a high potential for built form to frame and address this space. Quality, durable materials will be used in the creation of this square.

The selection of hard landscaping materials has been chosen after much consideration of their suitability, long term use and suitability for water management. All of the specified materials are robust in nature in order to maximise the longevity of the development and minimise maintenance issues. Specified materials include:

- Permeable resin bound surfacing
- Permeable concrete slabs
- Permeable concrete setts

A consistent selection of materials is specified throughout the design, with variations being provided in the form of shape unit size, mix and colour.



Neighbourhood Urban Square from Landscape Masterplan



Design and Implementation

PLANNING OBJECTIVES -LINEAR PARK



1. Meandering paths along the park connect the user between the spaces with meadow planting, bulb planting and glades proposed to provide seasonal interest.



2. Smaller pocket parks and break out areas create interesting spaces for passive recreation and 'stopping moments'. Natural play or trim trail could also be incorporated along with seating and picnic element.



3. An outdoor 'sports hub' could be proposed along the N52 boundary where more formalised MUGA and sports pitches are proposed for community use.



Linear Park from Landscape Masterplan



Detail extract from Linear Park

Design and Implementation

EXISTING TREES AND HEDGEROWS TO BE REMOVED/RETAINED



Existing trees and hedgerows, watercourses and ecological features of the site were fully assessed in the design process. In terms of the trees, the Tree Survey (Boe 2019) noted "From an amenity, arboricultural and landscape point of view the trees are not noteworthy."

A large percentage of the trees have only established through self-seeding". The hedgerows were surveyed for ecology and they were noted as having a "...relatively high biodiversity though not exceptionally so for this area" (Goodwillie 2019).

The Masterplan identified some key internal hedgerows and trees and these have been integrated into the designed open space areas. All boundary hedgerows (apart from a section aside Clonminch Road) will be retained. Any losses of existing vegetation will be vastly offset with proposed new tree planting and boundary woodland planting.



Site photo of example area of existing trees and hedgerow to be retained

KEY

- Trees and Hedgerows removed
- Trees retained
- Hedgerows retained

Design and Implementation

TREE PLANTING

The landscape plan proposes a mix of tree species to create a natural and welcoming environment for residents. The proposed tree planting schedule will add a layer of colour and seasonal interest within the site which is currently non-existent.

Trees are used to provide a natural buffer between spaces also punctuate pedestrian routes to reinforce the paths, whilst also creating shelter and focal points within the landscape.

The use of semi-mature tree planting ensures the site will provide an instant positive contribution to the surrounding environment.

Below is a reference to the Pollinator Friendly Planting Code - All Ireland Pollinator Plan 2015-2020. This offers guidance for native and Pollinator friendly planting species.



PYRUS CALLERYANA 'CHANTICLEER'



PRUNUS TAI-HAKU



MALUS TSCHONOSKII 'PILLAR CRAB'



AESCULUS HIPPOCASTANUM
'HORSE CHESTNUT'



AMELANCHIER x GRANDIFLORA



SORBUS SARGENTIANA



TILIA EUCLORA

Design and Implementation

SOFT LANDSCAPE DESIGN

High Ornamental Mix.

Combination of deciduous and evergreen flowering shrubs



Pyracantha 'Orange Glow'
Dense, spiny, fast growing evergreen hedge with clusters of white flowers in June and masses of bunches of spherical, very colourful berries in autumn.



Cornus alba 'Sibirica'
Medium-sized suckering deciduous shrub forming a thicket of slender red stems, becoming bright crimson in winter. Leaves ovate, turning reddish in autumn.



Eleagnus ebbingel
Fast growing evergreen with very attractive, large, leathery leaves metallic grey-green above and silver underneath.



Photinia x fraseri 'Red Robin'
Brilliant red glossy young leaves, which give a spectacular display in spring and summer before maturing to dark green.



Sarcococca hookeriana
Evergreen shrub or groundcover, it is low-growing, usually between 30-60 cm high. It produces aromatic white flowers throughout winter followed by black berries.



Berberis darwinii
Deciduous or evergreen shrubs with spiny shoots bearing simple, often spine-toothed leaves, and small yellow or orange flowers in axillary clusters or racemes, followed by small berries



Cotoneaster conspicuus
Deciduous or evergreen shrubs or small trees, with simple, entire leaves and clusters of small white or pink flowers in spring and summer, followed by showy red, purple or black berries

Medium - Low Mix.

Low maintenance mix of evergreen shrubs, perennials and grasses providing year round interest



Skimmia japonica
Small bushy evergreen shrub with dark green leaf, red buds in late winter with white flowers in spring.



Euonymus fortunei 'Emerald 'n' Gold'
Dwarf evergreen shrub with spreading habit, produces some small greenish flowers.



Potentilla fruticosa 'Goldfinger'
Bushy deciduous shrub, up to 1m high with small leaves and yellow flowers in the summer and autumn.



Spiraea japonica 'Goldmound'
Dwarf deciduous shrub with bright green foliage and pink flowers between July and August.



Hebe 'Green Globe'
Compact evergreen shrub with tight mossy green foliage.



Skimmia 'Kew Green'
A hardy evergreen shrub with clusters of greenish-white flowers that burst open in spring.



Lavandula angustifolia 'Hidcote'
Bushy dwarf evergreen shrub with narrow silvery leaves and deep violet-purple aromatic flowers. Grows up to 0.5m high.

Native Planting

Native mix of woodland buffer planting, Hedgerow and wildflower meadow following all Ireland Pollinator Plan 2015-2020 (<https://pollinators.ie/>).



Crataegus monogyna
Deciduous trees and shrubs, usually with spiny branches, lobed or toothed leaves, and clusters of creamy-white flowers colour



Salix caprea
Common named goat willow, Salix are deciduous shrubs and trees of diverse habit, with simple leaves and tiny flowers.



Prunus spinosa
'Purpurea' is a deciduous, spiny shrub or small tree, to 6m tall, with ovate leaves that emerge bright red



Prunus Avium
Deciduous or evergreen trees or shrubs with showy flowers in spring, and often good autumn foliage colour



Sorbus Aucuparia
Sorbus can be deciduous trees or shrubs with simple or pinnate leaves and clusters of small white or pink flowers



Irish wildflower
Wild flowers enhance the countryside and add visual impact to gardens, estates, meadows, parks and roadsides





Park Hood

Chartered Landscape Architects

Head Office

Hawarden House
163 Upper Newtownards Road
Belfast BT4 3HZ

Other offices in London and Dublin

T: +44 (0)28 9029 8020

E: info@parkhood.com

parkhood.com

OCTOBER 8, 2019

Site at Clonminch, Tullamore.

Survey details

This updated BS 5837 2012 tree survey report concerns the tree population of the above site. The extended site is designated by the red line shown in **Figure 1**. Part one of the survey was completed in June 2019 and part two was completed in October 2019.



Fig. 1. Site red line.

All information proved to the author of this report is assumed to be accurate.

The scope of this report is to complete a BS5837 2012- Trees in relation to construction-specification tree survey of the trees and make recommendations for any tree management required.

The survey was carried out using Visual Tree Assessment (VTA) methodologies from ground level only. No below ground, invasive or destructive tests were undertaken. No soil / root samples were taken for analysis.

Weather conditions on the day were dry with a light wind.

Due to the changing nature of trees and other site circumstances this report and any recommendations made are limited to a 1-year period. Any alteration to the subject site, trees or

BS5837 TREE SURVEY REPORT

Site at Clonminch, Tullamore – Mr. K. Maguire / Park Hood

ANDREW BOE BSC (HONS) MARBORA
INDEPENDENT ARBORICULTURAL CONSULTANT
Tel: 07834895556 / Email: ajboe@hotmail.co.uk

any development could change the current circumstances and may invalidate this report and any recommendations made.

The report is valid only for normal weather conditions. Healthy trees or parts of healthy trees may fail in normal weather situations although the risk is significantly increased in storm conditions and as the consequences of such weather phenomena are unforeseeable the tree surveyor cannot be held liable for any such failures.

Any alteration or deletion from this report shall invalidate it as a whole.

Tree details

This site is made up of multiple individual fields bordered by hedgerows of predominantly Hawthorn, and occasional hazel and Elder. Some small fruit trees and blackthorn can be found in the western part of the site. There are a number of private properties bordering the site. This survey has been completed on the basis that the locational information provided on the topographical survey is correct. The Eastern part of the site has not yet been included in a topographical survey so the trees have been placed using aerial photos.

The site has a population of 198 trees surveyed as individual trees and as groups. The species breakdown can be explored in Figure 2. The majority are self-seeded.

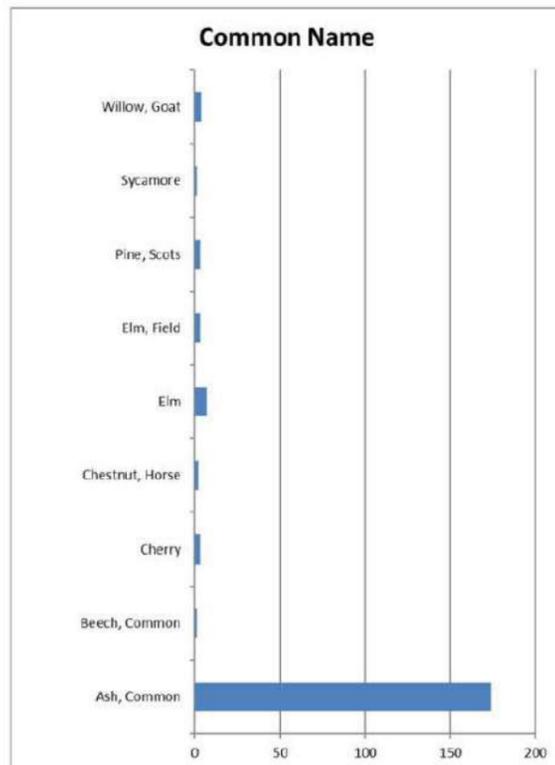


Figure 2. Species make up.

The tree population has a diversity of ages with the majority being semi-mature and early mature.

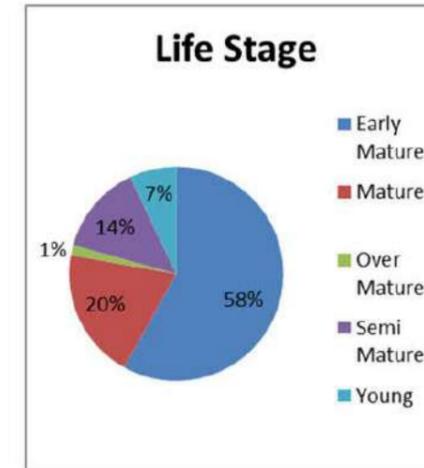


Figure 3. Tree population age range.

In summary, 90% of trees or groups are categorised as C, 6% trees or groups are classed as B. 4% are categorised as U-see Figure 4. No trees are classified as A. See Appendix 1 for definitions of each category.

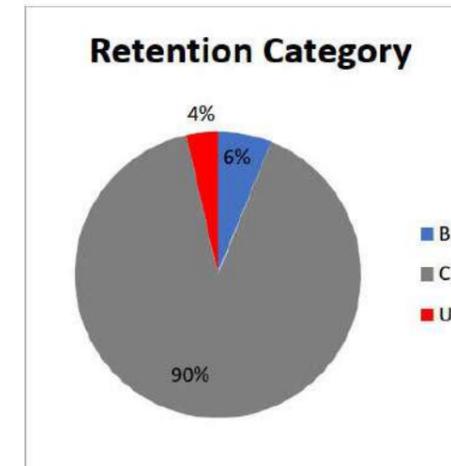


Figure 4. Retention category summary.

From an amenity, arboricultural and landscape point of view the trees are not noteworthy. A large percentage of the trees have only established through self-seeding. Over 80% have a remaining contribution of over 10+ years. See figure 5.

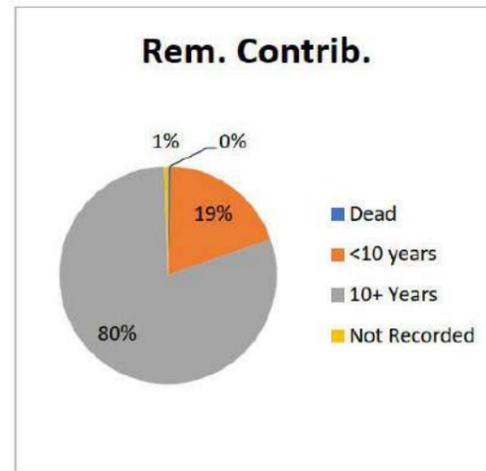


Figure 5. Remaining contribution.

For a complete list of observations and recommendations on a tree by tree basis please consult the attached tree survey schedule.

Recommendations

All recommendations are as per the survey schedule below. Recommendations are based on the site at present and may change as its usage develops.

Andrew Boe BSc (Hons) MArborA

Photographic record.



Photograph 1. Looking East along a hedge, which has a typical makeup for this site. (Photo A.Boe July 2019)



Photograph 2. Looking South towards tree No. 3 (Photo A.Boe July 2019)



Photograph 3. Looking East towards tree No.2 (Photo A.Boe July 2019)



Photograph 4. Looking East towards dual carriageway (Photo A.Boe October 2019)



Photograph 5. Looking East towards dual carriageway, mature Ash within a hedgerow (Photo A.Boe October 2019)

Ref.	Species	Measurements	General Observations	Category	Recommendations
T004	Ash, Common (Fraxinus excelsior)	Height (m): 8 Stem Diam (mm): 300 Spread (m): 4N, 4E, 3S, 4W Life Stage: Early Mature	A Single stemmed tree. Healthy spreading crown. Partially overgrown with Ivy. Overhangs adjacent property. Suspected root disturbance due to ploughing of nearby fields. The base of the tree is inaccessible due to heavy undergrowth. Tree in the hedge.	C1 RPA Radius: 3.6m. Area: 41 sq m.	Sever ivy at base.
T005	Ash, Common (Fraxinus excelsior)	Height (m): 9 Stem Diam (mm): 300 Spread (m): 4N, 4E, 4S, 4W Life Stage: Early Mature	A Single stemmed tree. Healthy spreading crown. Minor decay pockets. Suspected root disturbance due to ploughing of nearby fields. Partially overgrown with Ivy. Overhangs adjacent property.	C1 RPA Radius: 3.6m. Area: 41 sq m.	Sever ivy at base.
T006	Cherry (Prunus sp. (Cherries))	Height (m): 13 Stem Diam (mm): 500 Spread (m): 4N, 5E, 2S, 3W Life Stage: Mature	A Single stemmed tree. Healthy spreading crown. Minor decay pockets. Partially overgrown with Ivy. Overhangs adjacent property. Deadwood in the crown.	B1 RPA Radius: 6.0m. Area: 113 sq m.	Sever ivy at base.
T007	Cherry (Prunus sp. (Cherries))	Height (m): 13 Stem Diam (mm): 400 Spread (m): 3N, 3E, 3S, 3W Life Stage: Mature	A Single stemmed tree. Healthy spreading crown. Minor decay pockets. Partially overgrown with Ivy. Deadwood in the crown.	B1 RPA Radius: 4.8m. Area: 72 sq m.	Sever ivy at base.
T008	Cherry (Prunus sp. (Cherries))	Height (m): 13 Stem Diam (mm): 400 Spread (m): 2N, 4E, 5S, 4W Life Stage: Mature	A Single stemmed tree. Healthy spreading crown. Minor decay pockets. Partially overgrown with Ivy. Deadwood in the crown.	B1 RPA Radius: 4.8m. Area: 72 sq m.	Sever ivy at base.
T009	Elm, Field (Ulmus minor)	Height (m): 10 Stem Diam (mm): 200 Spread (m): 3N, 1E, 2S, 1W Life Stage: Early Mature	Tree in the hedge. A Single stemmed tree. Healthy spreading crown. Partially overgrown with Ivy.	C1 RPA Radius: 2.4m. Area: 18 sq m.	No action required.

Andrew Boe BSc (HONS) MARBORA | INDEPENDENT ARBORICULTURAL CONSULTANT

Ref.	Species	Measurements	General Observations	Category	Recommendations
T001	Ash, Common (Fraxinus excelsior)	Height (m): 16 Stem Diam (mm): 600 Spread (m): 4N, 4E, 6S, 4W Life Stage: Over Mature	A Single stemmed tree. Healthy spreading crown. Heavily overgrown with Ivy. Deadwood in the crown. Minor decay pockets. Base is hidden by heavy undergrowth. Tree in the hedge.	B1 RPA Radius: 7.2m. Area: 163 sq m.	Crown reduction by 3m. Dead wood (minor less than 25mm). Dead wood (major greater than 25mm). Sever ivy at base.
T002	Ash, Common (Fraxinus excelsior)	Height (m): 10 Stem Diam (mm): 300 Spread (m): 4N, 4E, 4S, 2W Life Stage: Early Mature	A Single stemmed tree. Healthy spreading crown. Partially overgrown with Ivy. Deadwood in the crown. Heavy undergrowth at the base. Suspect root disturbance due to ploughing of surrounding fields. Wounding on main stem is well callused and moving towards sealing. Twin-stemmed tree.	C1 RPA Radius: 3.6m. Area: 41 sq m.	Dead wood (major greater than 25mm). Sever ivy at base.
T003	Ash, Common (Fraxinus excelsior)	Height (m): 16 Stem Diam (mm): 400 Spread (m): 3N, 4E, 4S, 3W Life Stage: Mature	Healthy spreading crown. Partially overgrown with Ivy. Overhangs adjacent road Dieback - poor foliage to the west side. Suspected root disturbance due to ploughing of nearby fields.	C1 RPA Radius: 4.8m. Area: 72 sq m.	Crown reduction by 3m. Sever ivy at base.

Ref.	Species	Measurements	General Observations	Category	Recommendations
T010	Elm, Field (Ulmus minor)	Height (m): 10 Stem Diam (mm): 180 Spread (m): 3N, 1E, 2S, 1W Life Stage: Early Mature	Tree in the hedge. A Single stemmed tree. Healthy spreading crown. Partially overgrown with Ivy.	C1 RPA Radius: 2.2m. Area: 15 sq m.	No action required.
T011	Elm, Field (Ulmus minor)	Height (m): 10 Stem Diam (mm): 200 Spread (m): 3N, 3E, 2S, 1W Life Stage: Early Mature	Tree in the hedge. A Single stemmed tree. Healthy spreading crown. Partially overgrown with Ivy.	C1 RPA Radius: 2.4m. Area: 18 sq m.	No action required.
T012-13	Ash, Common x7 (Fraxinus excelsior)	Height (m): 7 7 stems, avg.(mm): 300 Spread (m): 4N, 3E, 3S, 3W Life Stage: Semi Mature	7 self-seeded trees growing on both sides of an old overgrown lane. The eastern end of the group grows under powerlines and has been reduced. Ivy and minor deadwood throughout.	C1 RPA Area: 961.46 sq m.	No action required.
T014	Sycamore (Acer pseudoplatanus)	Height (m): 10 Stem Diam (mm): 300 Spread (m): 3N, 3E, 2S, 1W Life Stage: Mature	Tree in the hedge. Twin-stemmed tree. Healthy spreading crown. Partially overgrown with Ivy.	B1 RPA Radius: 3.6m. Area: 41 sq m.	Sever ivy at base.
T015	Ash, Common (Fraxinus excelsior)	Height (m): 16 Stem Diam (mm): 600 Spread (m): 5N, 5E, 7S, 5W Life Stage: Mature	Tree in the hedge. A Single stemmed tree. Healthy spreading crown. Minor decay pockets. Partially overgrown with Ivy. Deadwood in the crown.	B1 RPA Radius: 7.2m. Area: 163 sq m.	Sever ivy at base.
T016	Ash, Common (Fraxinus excelsior)	Height (m): 16 Stem Diam (mm): 600 Spread (m): 5N, 3E, 5S, 6W Life Stage: Mature	A Single stemmed tree. Healthy spreading crown. Minor decay pockets. Partially overgrown with Ivy. Deadwood in the crown.	B1 RPA Radius: 7.2m. Area: 163 sq m.	Sever ivy at base.
T017	Ash, Common (Fraxinus excelsior)	Height (m): 16 Stem Diam (mm): 600 Spread (m): 4N, 4E, 4S, 4W Life Stage: Mature	A Single stemmed tree. Healthy spreading crown. Minor decay pockets. Partially overgrown with Ivy. Deadwood in the crown.	B1 RPA Radius: 7.2m. Area: 163 sq m.	Sever ivy at base.

Andrew Boe BSc (HONS) MARBORA | INDEPENDENT ARBORICULTURAL CONSULTANT

Ref.	Species	Measurements	General Observations	Category	Recommendations
T018	Ash, Common (Fraxinus excelsior)	Height (m): 16 Stem Diam (mm): 650 Spread (m): 3N, 3E, 4S, 4W Life Stage: Mature	A Single stemmed tree. Healthy spreading crown. Minor decay pockets. Deadwood in the crown. Heavily overgrown with Ivy.	B1 RPA Radius: 7.8m. Area: 191 sq m.	Sever ivy at base.
T019	Ash, Common x14 (Fraxinus excelsior)	Height (m): 6 14 stems, avg.(mm): 200 Spread (m): 3N, 3E, 3S, 3W Life Stage: Young	A group of 14 Ash growing along the back of a barn. Self-seeded. Will eventually damage the building.	C1 RPA Area: 29.69 sq m.	No action required.
T020	Ash, Common x5 (Fraxinus excelsior)	Height (m): 6 5 stems, avg.(mm): 200 Spread (m): 3N, 3E, 3S, 3W Life Stage: Semi Mature	A group of Ash self-seeded within a hedge. The Southern tip is adjacent to Powerlines so will be reduced regularly to keep them clear. Heavily overgrown with Ivy.	C1 RPA Area: 226.35 sq m.	No action required.
T021	Ash, Common (Fraxinus excelsior)	Height (m): 8 Stem Diam (mm): 250 Spread (m): 3N, 3E, 3S, 3W Life Stage: Semi Mature	Tree in the hedge. A multi-stemmed tree. Healthy spreading crown. Partially overgrown with Ivy.	C1 RPA Radius: 3.0m. Area: 28 sq m.	No action required.
T022	Ash, Common (Fraxinus excelsior)	Height (m): 8 Stem Diam (mm): 200 Spread (m): 3N, 3E, 3S, 3W Life Stage: Semi Mature	Tree in the hedge. A multi-stemmed tree. Healthy spreading crown. Partially overgrown with Ivy.	C1 RPA Radius: 2.4m. Area: 18 sq m.	No action required.
T023	Ash, Common x5 (Fraxinus excelsior)	Height (m): 8 5 stems, avg.(mm): 200 Spread (m): 3N, 3E, 3S, 3W Life Stage: Semi Mature	5 Ash growing as one continual canopy in a hedge row. Self seeded/	C1 RPA Area: 63.44 sq m.	No action required.
T024	Ash, Common x3 (Fraxinus excelsior)	Height (m): 7 3 stems, avg.(mm): 200 Spread (m): 3N, 4E, 3S, 4W Life Stage: Semi Mature	3 trees. Self-seeded and growing in a hedge. Ivy throughout.	C1 RPA Area: 62.71 sq m.	No action required.

Andrew Boe BSc (HONS) MARBORA | INDEPENDENT ARBORICULTURAL CONSULTANT

Ref.	Species	Measurements	General Observations	Category	Recommendations
T027	Ash, Common x5 (Fraxinus excelsior)	Height (m): 16 5 stems, avg.(mm): 400 Spread (m): 4N, 4E, 3S, 3W Life Stage: Early Mature	A row of mature Ash growing in an adjacent property but overhanging the site. All overgrown with Ivy.	C1 RPA Area: 1168.72 sq m.	No action required.
T028	Ash, Common (Fraxinus excelsior)	Height (m): 6 Stem Diam (mm): 200 Spread (m): 2N, 2E, 2S, 2W Life Stage: Early Mature	Hedge row Ash x7 All squared off as part of hedge.	C1 RPA Radius: 2.4m. Area: 18 sq m.	No action required.
T029	Ash, Common (Fraxinus excelsior)	Height (m): 4 Stem Diam (mm): 150 Spread (m): 2N, 2E, 2S, 2W Life Stage: Semi Mature	A Single stemmed tree. Healthy spreading crown. Hedgerow tree.	C RPA Radius: 1.8m. Area: 10 sq m.	
T030	Ash, Common (Fraxinus excelsior)	Height (m): 16 Stem Diam (mm): 300 Spread (m): 3N, 4E, 3S, 3W Life Stage: Mature	A multi-stemmed tree. Healthy spreading crown. Partially overgrown with Ivy. Powerlines near crown.	C1 RPA Radius: 3.6m. Area: 41 sq m.	Sever Ivy at base.
T031	Ash, Common x6 (Fraxinus excelsior) Willow, Goat x1 (Salix caprea)	Height (m): 15 7 stems, avg.(mm): 400 Spread (m): 3N, 3E, 3S, 3W Life Stage: Early Mature	Seven trees growing as a dense group with a communal crown. Ivy throughout. Deadwood.	C RPA Area: 736.17 sq m.	No action required.
T032	Elm (Ulmus sp.)	Height (m): 8 Stem Diam (mm): 180 Spread (m): 2N, 2E, 2S, 2W Life Stage: Early Mature	A Single stemmed tree. Poor crown with loss of vigour. Deadwood in the crown. Dieback - poor foliage	U RPA none - due to Retention Category of U.	Remove tree
T033	Elm x4 (Ulmus sp.)	Height (m): 10 4 stems, avg.(mm): 300 Spread (m): 3N, 3E, 3S, 3W Life Stage: Early Mature	A group of Elm all with severe loss of vigour in the crown. Suspect Dutch Elm Disease.	U RPA none - due to Retention Category of U.	Remove tree

Andrew Boe BSc (HONS) MARBORA | INDEPENDENT ARBORICULTURAL CONSULTANT

Ref.	Species	Measurements	General Observations	Category	Recommendations
T034	Ash, Common (Fraxinus excelsior)	Height (m): 16 Stem Diam (mm): 500 Spread (m): 3N, 3E, 3S, 3W Life Stage: Early Mature	A Single stemmed tree. Healthy spreading crown. Partially overgrown with Ivy.	C RPA Radius: 6.0m. Area: 113 sq m.	No action required.
T035	Ash, Common (Fraxinus excelsior)	Height (m): 12 Stem Diam (mm): 200 Spread (m): 3N, 3E, 3S, 3W Life Stage: Early Mature	Twin-stemmed tree. Healthy spreading crown. Partially overgrown with Ivy.	C RPA Radius: 2.4m. Area: 18 sq m.	No action required.
T036	Elm (Ulmus sp.)	Height (m): 12 Stem Diam (mm): 220 Spread (m): 3N, 2E, 2S, 2W Life Stage: Early Mature	Dead tree.	U RPA none - due to Retention Category of U.	Remove tree
T037	Ash, Common (Fraxinus excelsior)	Height (m): 12 Stem Diam (mm): 220 Spread (m): 3N, 3E, 2S, 3W Life Stage: Early Mature	A multi-stemmed tree. Healthy spreading crown. Partially overgrown with Ivy.	C RPA Radius: 2.6m. Area: 21 sq m.	No action required.
T038	Ash, Common (Fraxinus excelsior)	Height (m): 10 Stem Diam (mm): 200 Spread (m): 3N, 2E, 3S, 3W Life Stage: Early Mature	A multi-stemmed tree. Healthy spreading crown. Partially overgrown with Ivy.	C RPA Radius: 2.4m. Area: 18 sq m.	No action required.
T039	Ash, Common (Fraxinus excelsior)	Height (m): 14 Stem Diam (mm): 220 Spread (m): 3N, 3E, 3S, 3W Life Stage: Early Mature	A multi-stemmed tree. Healthy spreading crown. Partially overgrown with Ivy.	C RPA Radius: 2.6m. Area: 21 sq m.	No action required.
T040	Ash, Common (Fraxinus excelsior)	Height (m): 10 Stem Diam (mm): 250 Spread (m): 3N, 3E, 2S, 2W Life Stage: Early Mature	A multi-stemmed tree. Healthy spreading crown. Partially overgrown with Ivy.	C RPA Radius: 3.0m. Area: 28 sq m.	No action required.

Ref.	Species	Measurements	General Observations	Category	Recommendations
T041	Ash, Common (Fraxinus excelsior)	Height (m): 8 Stem Diam (mm): 160 Spread (m): 3N, 2E, 1S, 3W Life Stage: Early Mature	A multi-stemmed tree. Healthy spreading crown. Partially overgrown with Ivy.	C RPA Radius: 1.9m. Area: 11 sq m.	No action required.
T042	Ash, Common x20 (Fraxinus excelsior)	Height (m): 16 20 stems, avg.(mm): 220 Spread (m): 3N, 4E, 3S, 3W Life Stage: Early Mature	A group of self-seeded Ash growing around a fragment of an old lane. The trees are dense with a thick understory. They form a communal canopy. Ivy and minor deadwood throughout.	C RPA Area: 1132.79 sq m.	No action required.
T043	Ash, Common x32 (Fraxinus excelsior)	Height (m): 16 32 stems, avg.(mm): 300 Spread (m): 3N, 3E, 3S, 3W Life Stage: Early Mature	Another group growing around a fragment of an old lane. Ivy and minor deadwood throughout. Communal canopy.	C RPA Area: 816.6 sq m.	No action required.
T044	Beech, Common (Fagus sylvatica)	Height (m): 13 Stem Diam (mm): 800 Spread (m): 6N, 6E, 6S, 5W Life Stage: Mature	A Single stemmed tree. Healthy spreading crown. Partially overgrown with Ivy. Hedgerow tree. Deadwood in the crown. Minor decay pockets. Base obscured by vines and hedge.	B RPA Radius: 9.6m. Area: 290 sq m.	No action required.
T045	Ash, Common (Fraxinus excelsior)	Height (m): 13 Stem Diam (mm): 300 Spread (m): 3N, 5E, 3S, 1W Life Stage: Mature	A multi-stemmed tree. Healthy spreading crown. Partially overgrown with Ivy. Base is partially hidden by vines and hedge.	C1 RPA Radius: 3.6m. Area: 41 sq m.	No action required.
T046	Ash, Common (Fraxinus excelsior)	Height (m): 13 Stem Diam (mm): 300 Spread (m): 3N, 3E, 4S, 3W Life Stage: Mature	A multi-stemmed tree. Healthy spreading crown. Partially overgrown with Ivy. Base is partially hidden by vines and hedge.	C1 RPA Radius: 3.6m. Area: 41 sq m.	No action required.
T047	Ash, Common (Fraxinus excelsior)	Height (m): 13 Stem Diam (mm): 300 Spread (m): 3N, 2E, 4S, 3W Life Stage: Mature	A multi-stemmed tree. Healthy spreading crown. Partially overgrown with Ivy. Base is partially hidden by vines and hedge.	C1 RPA Radius: 3.6m. Area: 41 sq m.	No action required.

Andrew Boe BSc (HONS) MARBORA | INDEPENDENT ARBORICULTURAL CONSULTANT

Ref.	Species	Measurements	General Observations	Category	Recommendations
T048	Ash, Common (Fraxinus excelsior)	Height (m): 16 Stem Diam (mm): 700 Spread (m): 5N, 5E, 5S, 5W Life Stage: Mature	A multi-stemmed tree. Healthy spreading crown. Partially overgrown with Ivy. Base is partially hidden by vines and hedge.	C1 RPA Radius: 8.4m. Area: 222 sq m.	No action required.
T049	Ash, Common (Fraxinus excelsior)	Height (m): 10 Stem Diam (mm): 300 Spread (m): 3N, 3E, 3S, 3W Life Stage: Mature	A multi-stemmed tree. Healthy spreading crown. Partially overgrown with Ivy. Base is partially hidden by vines and hedge.	C1 RPA Radius: 3.6m. Area: 41 sq m.	No action required.
T050	Ash, Common (Fraxinus excelsior)	Height (m): 10 Stem Diam (mm): 300 Spread (m): 3N, 3E, 3S, 3W Life Stage: Mature	A multi-stemmed tree. Healthy spreading crown. Partially overgrown with Ivy. Base is partially hidden by vines and hedge.	C1 RPA Radius: 3.6m. Area: 41 sq m.	No action required.
T051	Ash, Common (Fraxinus excelsior)	Height (m): 10 Stem Diam (mm): 300 Spread (m): 3N, 3E, 2S, 3W Life Stage: Mature	A multi-stemmed tree. Healthy spreading crown. Partially overgrown with Ivy. Base is partially hidden by vines and hedge.	C1 RPA Radius: 3.6m. Area: 41 sq m.	No action required.
T052	Ash, Common (Fraxinus excelsior)	Height (m): 12 Stem Diam (mm): 300 Spread (m): 3N, 2E, 3S, 3W Life Stage: Mature	A multi-stemmed tree. Healthy spreading crown. Partially overgrown with Ivy. Base is partially hidden by vines and hedge.	C1 RPA Radius: 3.6m. Area: 41 sq m.	No action required.
T053	Ash, Common (Fraxinus excelsior)	Height (m): 10 Stem Diam (mm): 300 Spread (m): 3N, 3E, 4S, 2W Life Stage: Mature	A multi-stemmed tree. Healthy spreading crown. Partially overgrown with Ivy. Base is partially hidden by vines and hedge.	C1 RPA Radius: 3.6m. Area: 41 sq m.	No action required.
T054	Ash, Common (Fraxinus excelsior)	Height (m): 10 Stem Diam (mm): 300 Spread (m): 3N, 3E, 3S, 3W Life Stage: Mature	A multi-stemmed tree. Healthy spreading crown. Partially overgrown with Ivy. Base is partially hidden by vines and hedge.	C1 RPA Radius: 3.6m. Area: 41 sq m.	No action required.

Andrew Boe BSc (HONS) MARBORA | INDEPENDENT ARBORICULTURAL CONSULTANT

Ref.	Species	Measurements	General Observations	Category	Recommendations
T055	Ash, Common (Fraxinus excelsior)	Height (m): 10 Stem Diam (mm): 300 Spread (m): 3N, 2E, 3S, 3W Life Stage: Mature	A multi-stemmed tree. Healthy spreading crown. Partially overgrown with Ivy. Base is partially hidden by vines and hedge.	C1 RPA Radius: 3.6m. Area: 41 sq m.	No action required.
T056	Ash, Common (Fraxinus excelsior)	Height (m): 10 Stem Diam (mm): 300 Spread (m): 3N, 2E, 3S, 3W Life Stage: Mature	A multi-stemmed tree. Healthy spreading crown. Partially overgrown with Ivy. Base is partially hidden by vines and hedge.	C1 RPA Radius: 3.6m. Area: 41 sq m.	No action required.
T057	Ash, Common x15 (Fraxinus excelsior)	Height (m): 12 15 stems, avg.(mm): 160 Spread (m): 3N, 3E, 3S, 4W Life Stage: Early Mature	Multi-stemmed with sparse crowns. All self-seeded. Ivy, hedgerow.	C RPA Area: 1320.87 sq m.	No action required.
T058	Elm (Ulmus sp.)	Height (m): 8 Stem Diam (mm): 300 Spread (m): 2N, 2E, 2S, 2W Life Stage: Early Mature	A Single stemmed tree. Healthy spreading crown. Partially overgrown with Ivy.	B1 RPA Radius: 3.6m. Area: 41 sq m.	No action required.
T059	Ash, Common (Fraxinus excelsior)	Height (m): 16 Stem Diam (mm): 400 Spread (m): 3N, 3E, 3S, 3W Life Stage: Mature	A Single stemmed tree. Healthy spreading crown. Partially overgrown with Ivy. Base is partially hidden by vines and hedge.	C RPA Radius: 4.8m. Area: 72 sq m.	Sever Ivy at base.
T060	Ash, Common (Fraxinus excelsior)	Height (m): 13 Stem Diam (mm): 400 Spread (m): 3N, 3E, 3S, 3W Life Stage: Early Mature	A Single stemmed tree. Healthy spreading crown. Partially overgrown with Ivy. Hedgerow tree. Deadwood in the crown.	C1 RPA Radius: 4.8m. Area: 72 sq m.	No action required.
T061	Ash, Common (Fraxinus excelsior)	Height (m): 14 Stem Diam (mm): 300 Spread (m): 3N, 3E, 3S, 3W Life Stage: Mature	A multi-stemmed tree. Healthy spreading crown. Partially overgrown with Ivy.	C RPA Radius: 3.6m. Area: 41 sq m.	No action required.

Andrew Boe BSc (HONS) MARBORA | INDEPENDENT ARBORICULTURAL CONSULTANT

Ref.	Species	Measurements	General Observations	Category	Recommendations
T068	Pine, Scots (Pinus sylvestris)	Height (m): 10 Stem Diam (mm): 400 Spread (m): 3N, 4E, 3S, 3W Life Stage: Mature	A Single stemmed tree. Healthy spreading crown. Partially overgrown with Ivy. Deadwood in the crown. Overhangs adjacent property.	B1 RPA Radius: 4.8m. Area: 72 sq m.	Sever Ivy at base.
T069	Ash, Common x12 (Fraxinus excelsior)	Height (m): 8 12 stems, avg.(mm): 300 Spread (m): 3N, 3E, 3S, 3W Life Stage: Early Mature	A group of Ash trees growing within the hedge. All self-seeded and growing as a communal canopy. The Westside overhangs adjacent properties. Ivy throughout and minor deadwood.	C1 RPA Area: 684.99 sq m.	No action required.
T070	Ash, Common (Fraxinus excelsior)	Height (m): 4 Stem Diam (mm): 120 Spread (m): 2N, 2E, 1S, 2W Life Stage: Semi Mature	A Single stemmed tree. Healthy spreading crown. Hedgerow tree.	C1 RPA Radius: 1.4m. Area: 6 sq m.	No action required.

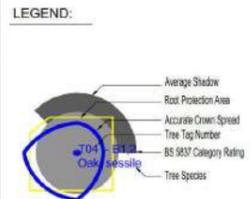
Ref.	Species	Measurements	General Observations	Category	Recommendations
T068	Pine, Scots (<i>Pinus sylvestris</i>)	Height (m): 10 Stem Diam (mm): 400 Spread (m): 3N, 4E, 3S, 3W Life Stage: Mature	A Single stemmed tree. Healthy spreading crown. Partially overgrown with Ivy. Deadwood in the crown. Overhangs adjacent property.	B1 RPA Radius: 4.8m. Area: 72 sq m.	Sever ivy at base.
T069	Ash, Common x12 (<i>Fraxinus excelsior</i>)	Height (m): 8 12 stems, avg.(mm): 300 Spread (m): 3N, 3E, 3S, 3W Life Stage: Early Mature	A group of Ash trees growing within the hedge. All self-seeded and growing as a communal canopy. The Westside overhangs adjacent properties. Ivy throughout and minor deadwood.	C1 RPA Area: 684.99 sq m.	No action required.
T070	Ash, Common (<i>Fraxinus excelsior</i>)	Height (m): 4 Stem Diam (mm): 120 Spread (m): 2N, 2E, 1S, 2W Life Stage: Semi Mature	A Single stemmed tree. Healthy spreading crown. Hedgerow tree.	C1 RPA Radius: 1.4m. Area: 6 sq m.	No action required.

Appendix 1.

BS5837:2012 Table 1 – Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)	Identification on plan
Trees unsuitable for retention (see Note)		
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	<ul style="list-style-type: none"> Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <p><i>NOTE</i> Category U trees can have existing or potential conservation value which it might be desirable to preserve; see [BS5837:2012] 4.5.7.</p>	
Trees to be considered for retention		
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	<p>1 Mainly arboricultural qualities</p> <p>Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)</p> <p>2 Mainly landscape qualities</p> <p>Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features</p> <p>3 Mainly cultural values, including conservation</p> <p>Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)</p>	
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	<p>Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation</p> <p>Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality</p>	
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	<p>Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories</p> <p>Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits</p> <p>Trees with no material conservation or other cultural value</p>	

THE INFORMATION ON THIS DRAWING IS A GENERAL GUIDE AND THE ACCURACY THEREOF CANNOT BE GUARANTEED. NO LIABILITY IS ACCEPTED FOR ANY DISCREPANCY, OMISSION OR DEVIATION FROM THE ACTUAL POSITION OF MAINS AND SERVICES. ALL SERVICES SHOULD BE VERIFIED ON SITE BY TRIAL HOLE/ SLIT TRENCH.



Andrew Bee BSc. (Hons) FAWCIS Email: a.bee@potnail.co.uk
Independent Agricultural Consultant Telephone: 07834895595

Client: **Park Hood**

Project: **Clonminch - Tullamore**

Drawing title: **Tree Constraints Plan**

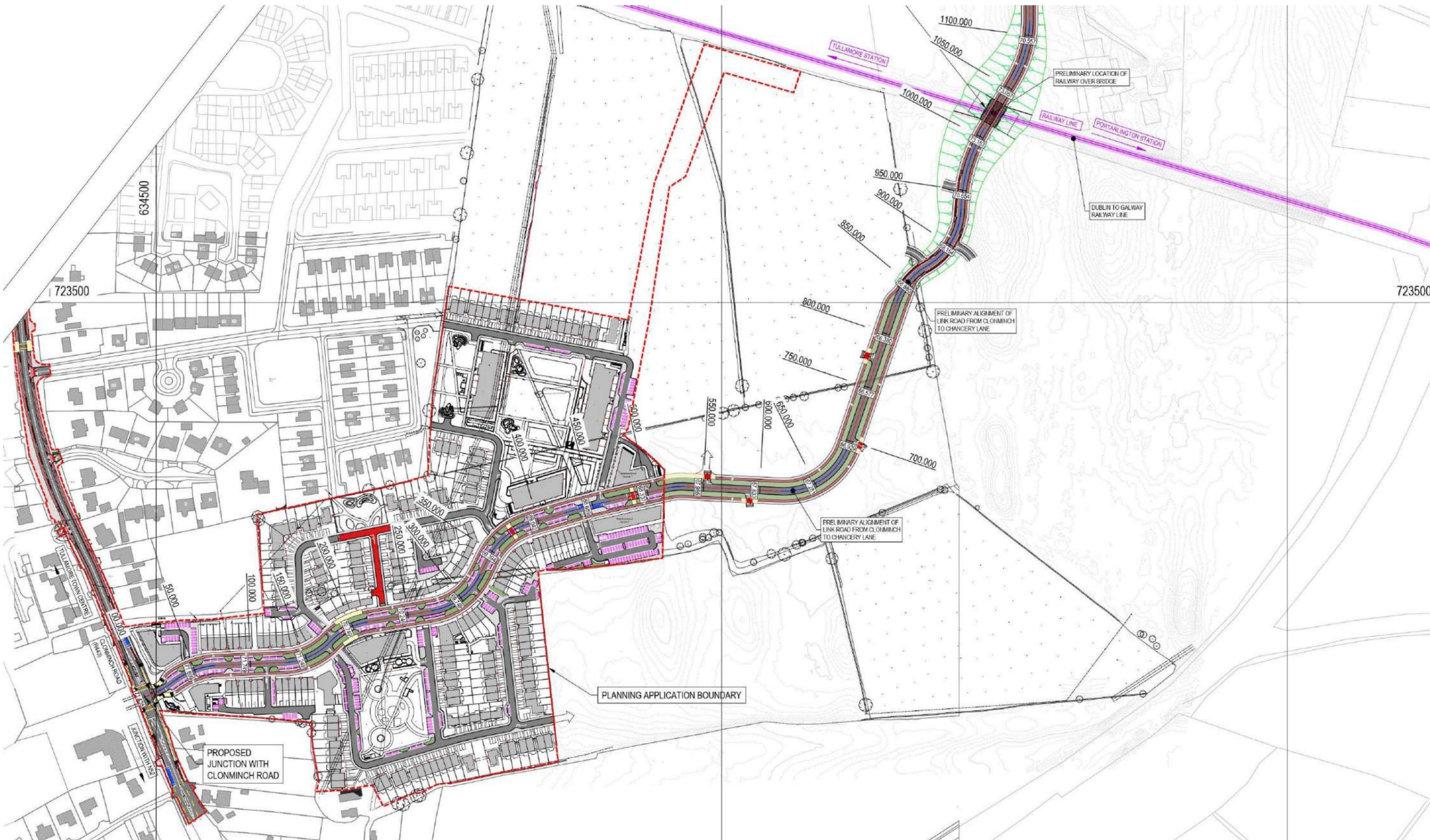
Date: **08/10/2019**

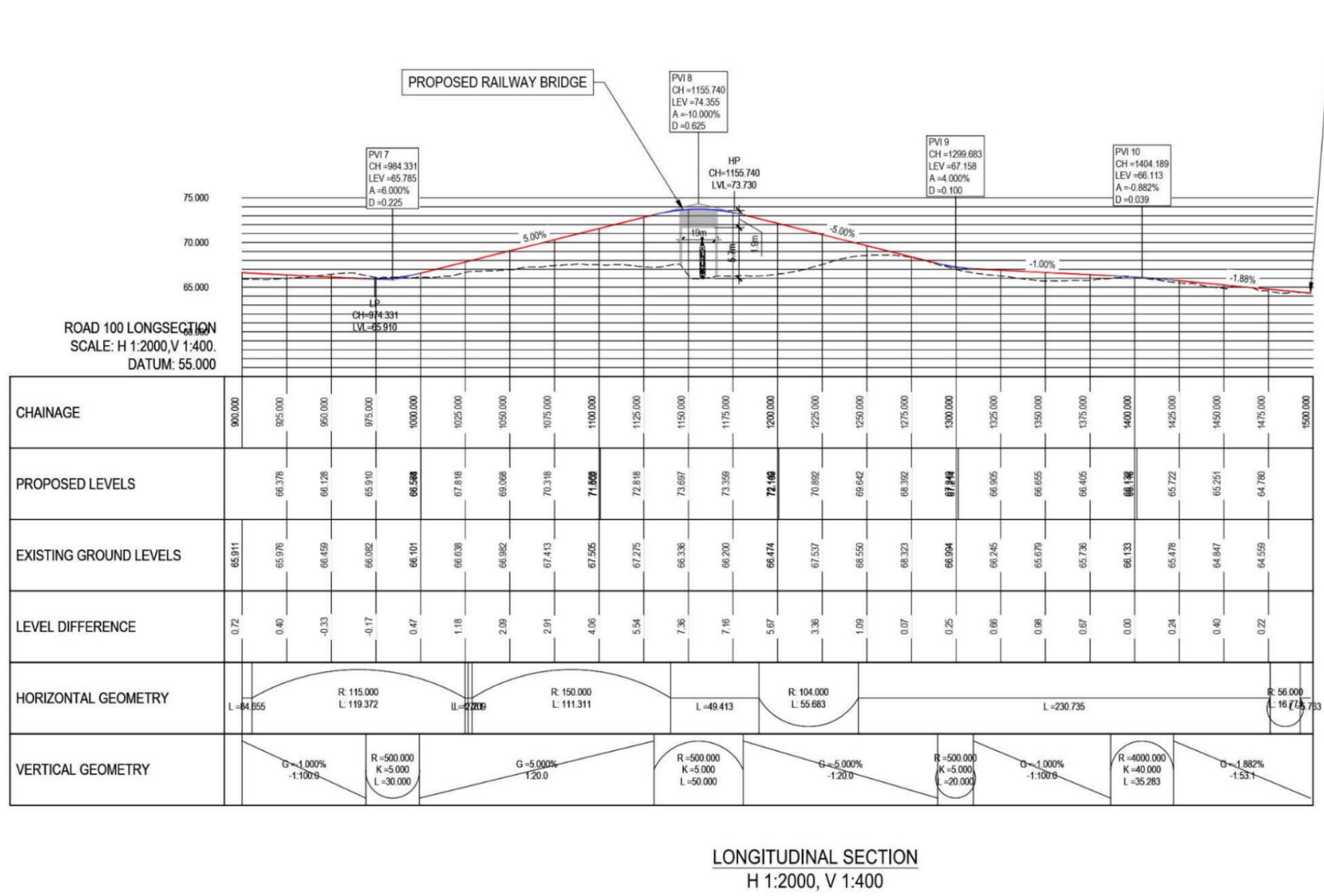
Scale: 1:1500 on A1

Drawing number: **6544_001**

Horizontal Datum: IRLGRID Vertical Datum: OSBM

Appendix E—Indicative Route of Link Street and Bridge Crossing Point





Indicative cross section of proposed railway bridge

JUNCTION WITH CHANCERY LANE

Bridge Crossing Objective EN7 for the Southern Environs Masterplan

The Southern Environs Masterplan requires the Nodal Masterplan for the Eastern Node to include-

- Estimated cost in the form of a proposed scheme,
- Indicative location,
- Design detail and
- Land reservation to accommodate the bridge and access roads/ramps.

DBFL Consulting Engineers have undertaken a preliminary design for the bridge crossing based on an indicative route of the link street through the eastern node to Chancery Lane. The infrastructural cost for providing road/ramps and bridge is estimate to be €1,500,000. This does not include the cost of land acquisition. The position of the bridge crossing point and access road has been taken into consideration in the design of the Nodal Masterplan for the Eastern Node. The final position of the bridge will be subject to further to detailed design as part of the long term objective of the Southern Environs Masterplan.

Based on the Southern Environs development area of 322 hectares, the cost of providing the bridge over the railway would equate to €4,658 per hectare excluding land acquisition costs.

Appendix F—Correspondence with Landowners



BENNETT PROPERTY LTD

Forest Park
Mullingar
Co WestmeathT: +353 44 9346000
F: +353 44 9346040

Clonminch,
Tullamore,
Co.Offaly.

8th May 2020

**RE: NODAL MASTERPLAN FOR THE EASTERN NODE – SOUTHERN ENVIRONS
TULLAMORE, CO.OFFALY.**

Dear Mr. [REDACTED]

Bennett Property wish to make a planning application for the lands they manage within the Southern Environs of Tullamore, Co.Offaly.

As part of that planning application we have prepared a Masterplan document for the Eastern Node of the Southern Environs which we wish to share with you as landowner within the Eastern Node.

Our Masterplan is an effort at interpreting the zoning of the lands and the policies as set out in the Tullamore Town and Environs Development Plan.

The Eastern Node is broken up into two sequences of development in the Tullamore Development Plan. The northern portion of the Eastern Node is in the First Sequence Phase and the southern portion is in the Third Sequence Phase.

Please note that this is a Masterplan, as required to be prepared in advance of a planning application under the Tullamore Development Plan. This is not a planning application, nor do we intend to apply for permission or carry out any development on your lands.

We welcome the opportunity to discuss this proposed masterplan and look forward to hearing from you.

Yours sincerely

Kevin Maguire
Director
Bennett Property Limited
M: 087 225 0390
Email: kevinmaguire@bennettproperty.ie

PSRA
PROPERTY SERVICES
REGULATORY AUTHORITY
PSRA License No.: 003136
Directors: J. Bennett, S. Bennett, K. Maguire
Registered Number: 429861



BENNETT PROPERTY LTD

Forest Park
Mullingar
Co WestmeathT: +353 44 9346000
F: +353 44 9346040

Clonminch,
Tullamore,
Co.Offaly.

8th of May 2020

**RE: NODAL MASTERPLAN FOR THE EASTERN NODE – SOUTHERN ENVIRONS
TULLAMORE, CO. OFFALY.**

Dear Mr. [REDACTED]

Bennett Property wish to make a planning application for the lands they manage within the Southern Environs of Tullamore, Co.Offaly.

As part of that planning application we have prepared a Masterplan document for the Eastern Node of the Southern Environs which we wish to share with you as landowner within the Eastern Node.

Our Masterplan is an effort at interpreting the zoning of the lands and the policies as set out in the Tullamore Town and Environs Development Plan.

The Eastern Node is broken up into two sequences of development in the Tullamore Development Plan. The northern portion of the Eastern Node is in the First Sequence Phase and the southern portion is in the Third Sequence Phase.

Please note that this is a Masterplan, as required to be prepared in advance of a planning application under the Tullamore Development Plan. This is not a planning application, nor do we intend to apply for permission or carry out any development on your lands.

We welcome the opportunity to discuss this proposed masterplan and look forward to hearing from you.

Yours sincerely

Kevin Maguire
Director
Bennett Property Limited
M: 087 225 0390
Email: kevinmaguire@bennettproperty.ie

PSRA
PROPERTY SERVICES
REGULATORY AUTHORITY
PSRA License No.: 003136
Directors: J. Bennett, S. Bennett, K. Maguire
Registered Number: 429861



BENNETT PROPERTY LTD

Forest Park
Mullingar
Co Westmeath

T: +353 44 9346000
F: +353 44 9346040

Mr. [REDACTED],
Clonminch,
Tullamore,
Co.Offaly.

By email: myles.shortall@tidl.ie

8th of May 2020

**RE: NODAL MASTERPLAN FOR THE EASTERN NODE – SOUTHERN ENVIRONS
TULLAMORE, CO. OFFALY.**

Dear Mr. [REDACTED],

Bennett Property wish to make a planning application for the lands they manage within the Southern Environs of Tullamore, Co.Offaly.

As part of that planning application we have prepared a Masterplan document for the Eastern Node of the Southern Environs which we wish to share with you as landowner within the Eastern Node.

Our Masterplan is an effort at interpreting the zoning of the lands and the policies as set out in the Tullamore Town and Environs Development Plan.

The Eastern Node is broken up into two sequences of development in the Tullamore Development Plan. The northern portion of the Eastern Node is in the First Sequence Phase and the southern portion is in the Third Sequence Phase.

Please note that this is a Masterplan, as required to be prepared in advance of a planning application under the Tullamore Development Plan. This is not a planning application, nor do we intend to apply for permission or carry out any development on your lands.

We welcome the opportunity to discuss this proposed masterplan and look forward to hearing from you.

Yours sincerely

Kevin Maguire
Director

Bennett Property Limited

M: 087 225 0390

Email: kevinmaguire@bennettproperty.ie



PSRA License No.: 003136

Directors: J. Bennett, S. Bennett, K. Maguire
Registered Number: 429861



BENNETT PROPERTY LTD

Forest Park
Mullingar
Co Westmeath

T: +353 44 9346000
F: +353 44 9346040

[REDACTED]
Clonminch,
Tullamore,
Co.Offaly.

8th of May 2020

**RE: NODAL MASTERPLAN FOR THE EASTERN NODE – SOUTHERN ENVIRONS
TULLAMORE, CO.OFFALY.**

Dear Mr. [REDACTED],

Bennett Property wish to make a planning application for the lands they manage within the Southern Environs of Tullamore, Co.Offaly.

As part of that planning application we have prepared a Masterplan document for the Eastern Node of the Southern Environs which we wish to share with you as landowner within the Eastern Node.

Our Masterplan is an effort at interpreting the zoning of the lands and the policies as set out in the Tullamore Town and Environs Development Plan.

The Eastern Node is broken up into two sequences of development in the Tullamore Development Plan. The northern portion of the Eastern Node is in the First Sequence Phase and the southern portion is in the Third Sequence Phase.

Please note that this is a Masterplan, as required to be prepared in advance of a planning application under the Tullamore Development Plan. This is not a planning application, nor do we intend to apply for permission or carry out any development on your lands.

We welcome the opportunity to discuss this proposed masterplan and look forward to hearing from you.

Yours sincerely

Kevin Maguire
Director

Bennett Property Limited

M: 087 225 0390

Email: kevinmaguire@bennettproperty.ie



PSRA License No.: 003136

Directors: J. Bennett, S. Bennett, K. Maguire
Registered Number: 429861



Tullamore Southern Environs Eastern Node - Nodal Masterplan