

Physical Overview And Analysis





4. Physical Overview and Analysis

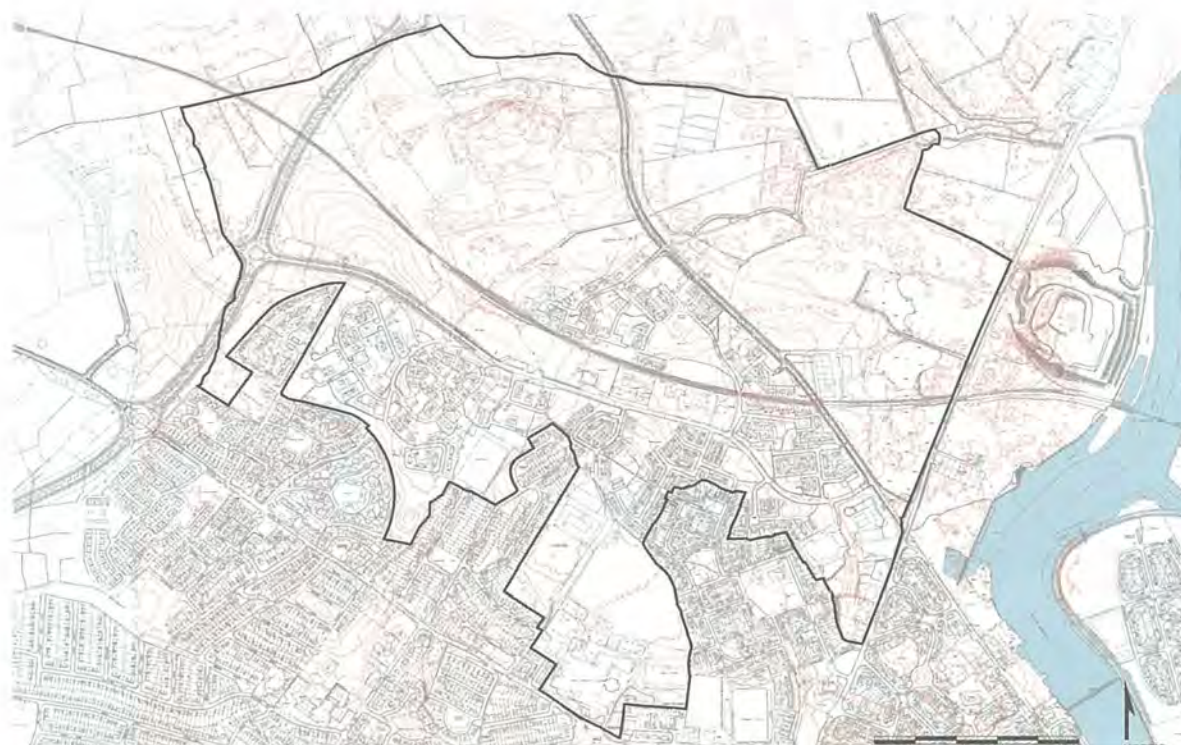


Figure 1.5: Contour Map

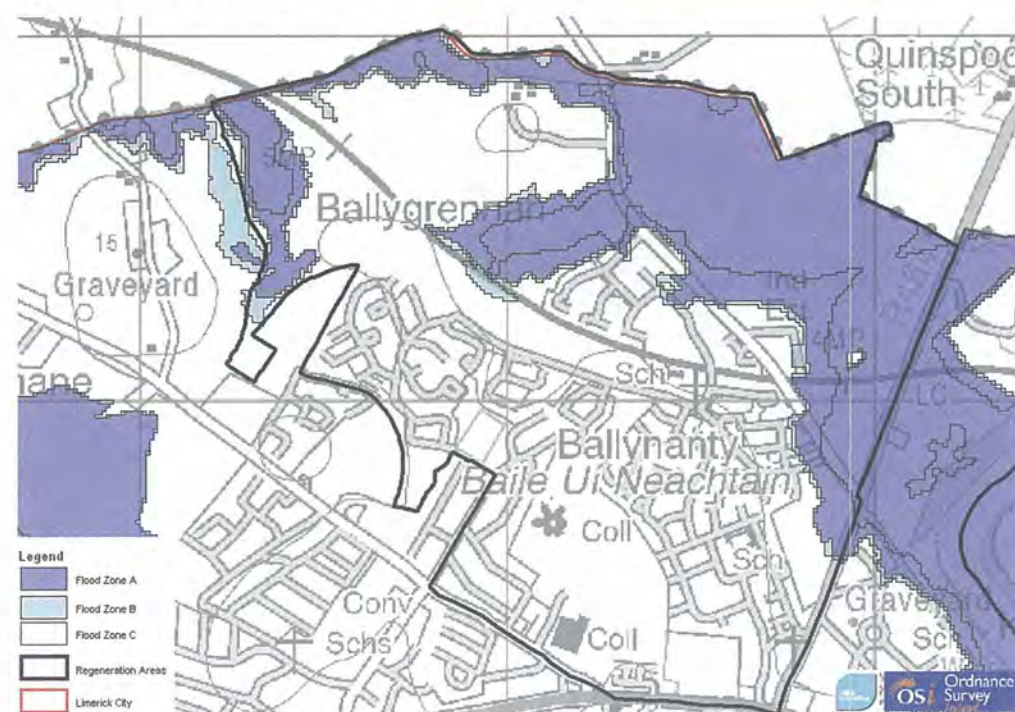


Figure 1.6: Flood Risk Map

4.1.2 Existing Physical Context

Land Use

The predominant land use in the regeneration area of Moyross is residential. As stated in the baseline analysis, the houses in this area generally consist of low density, Council developed estates dating from the 1970s. Other land-uses prevalent in the area are community focussed and consist of Watch House Cross to the south-east which is a designated District Centre as documented in the Retail Strategy for the Mid West Region 2010-2016.

The District Centre contains a food store; SuperValu, pharmacy, library, hairdressers and take-away outlets. Within the heart of the regeneration area is the existing community hub which contains the Corpus Christi Church, Corpus Christi Primary School and the Moyross Community Centre.

Housing Size and Conditions

Moyross was constructed from 1974 to 1987 and this makes the housing stock found here to be the newest units out of the four regeneration areas. Today, the condition of the building stock varies significantly, with a number of areas containing well maintained houses and other areas displaying high levels of dereliction. In terms of design, the majority of houses are two-storey, two-bay structures with small front gardens or paved parking areas entered via individual gates, with linear gardens to the rear. A typical house layout (approx 80m²) in Moyross consists of a ground floor layout of a kitchen/dining area, a living area. The upper floor consists of 3 bedrooms and a bathroom. These houses are typically red brick cavity wall-terraced or end-terraced houses with replacement double glazed windows, a gas boiler and open fire for heating. Further information on the works required to achieve an acceptable energy rating are described as part of the refurbishment strategies for each of the regeneration areas in Volume 2.

Public Realm

In terms of public realm, Moyross is characterised by the following physical features:

- Poor accessibility with adjacent neighbourhoods which has resulted in Moyross becoming physically, economically and socially isolated
- Over-provision of underutilised public open space
- The quality of the public realm is compromised by the tethering of horses
- Several under-used and vacant infill housing sites,

which currently detract from the overall appearance of the estate

- Due to the demolition of some blocks to date, the layout of the houses provide exposed boundaries which provide little in the way of natural surveillance. This undermines the safety and security of the area.

4.1.3 Topography

The topographical area consists of flat to gently sloping ground with gradually increasing height as the study area moves north.

4.1.4 Flooding and Drainage

A desktop study was carried out to determine the flooding risks involved within the study area. The northern boundary of the study area is largely bound by a tributary of the Crompton River. Information from the Limerick City Development Plan 2010-2016 Flood Risk Mapping indicates that a significant portion to the northern boundary of the study area along the tributary is prone to flooding. To the east of the study area is a significant area of wetland, known as Knockalisheen Marsh, which is also prone to flooding. This area drains to the River Shannon, to its east. This wetland at Knockalisheen is designated as a proposed National Heritage Area (pNHA) and a Special Area of Conservation (SAC) for its wetland habitats.

4.1.5 Geology

Information from the Geological Survey of Ireland shows that the Moyross area is underlain by Dinantian Pure Bedded Limestones which is defined as a dark fine limestone and calcareous shale.

4.1.6 Groundwater Vulnerability

Groundwater vulnerability within the study area is mainly "High to Low." "Extreme" small pockets exist to the north and northeast of the study area where rock is near the surface.

4.1.7 Soils

The GSI (Geological Survey of Ireland) Teagasc Sub- Soil database demonstrates that soil types found within the study area range from Marine/Estuarine Silts and Clays, Till derived from Limestone, Made Ground and Bedrock. Active bedrock as shown to the northeast of the site might result in subsidence or instability of the ground surface.

Made ground is also present within the study area to

variable depths and is associated with prior road construction and other development construction. There are two closed landfill sites within the Moyross area. The Long Pavement site covers an area of approximately 2.4 hectares. The site is immediately adjacent to the River Shannon just outside the boundary of the Regeneration area.

On the western side of the Long Pavement Road (R464) opposite the Long Pavement landfill is an earlier landfill site extending over 17.7 hectares (pre 1984 landfill). The site has been covered with topsoil and is predominantly covered with grassland with some small trees and bushes. An area near to the Long Pavement Road was filled and graded to form a soccer pitch. This area is now overgrown, relatively uneven and not presently in use.

A strategy for the Long Pavement Landfill Restoration was prepared in 2000 by ARUP and Partners and remedial works have been completed recently, licensed by the EPA W0076-1. Key activities included collection

and flaring of landfill gases, collection and treatment of leachate, permanent capping of the landfill and landscaping works that will see new wetlands being constructed and the area converted into a recreation and amenity area.

4.1.8 Water, Sewerage and Drainage Infrastructure

All main services such as water, sewage, gas, Eircom and electricity are available in the area. An infrastructural survey was carried out by Tobin Consulting Engineers to ascertain the extent and location of existing services in Moyross and this information is contained within Appendix 7 of this document. All services are available adjacent to the site in the footpaths along the surrounding roadways. However, some services such as surface water sewers traverse sites scheduled for proposed replacement housing in the short term. The cost of redirecting these services have been accounted for at the planning and cost appraisal stage.

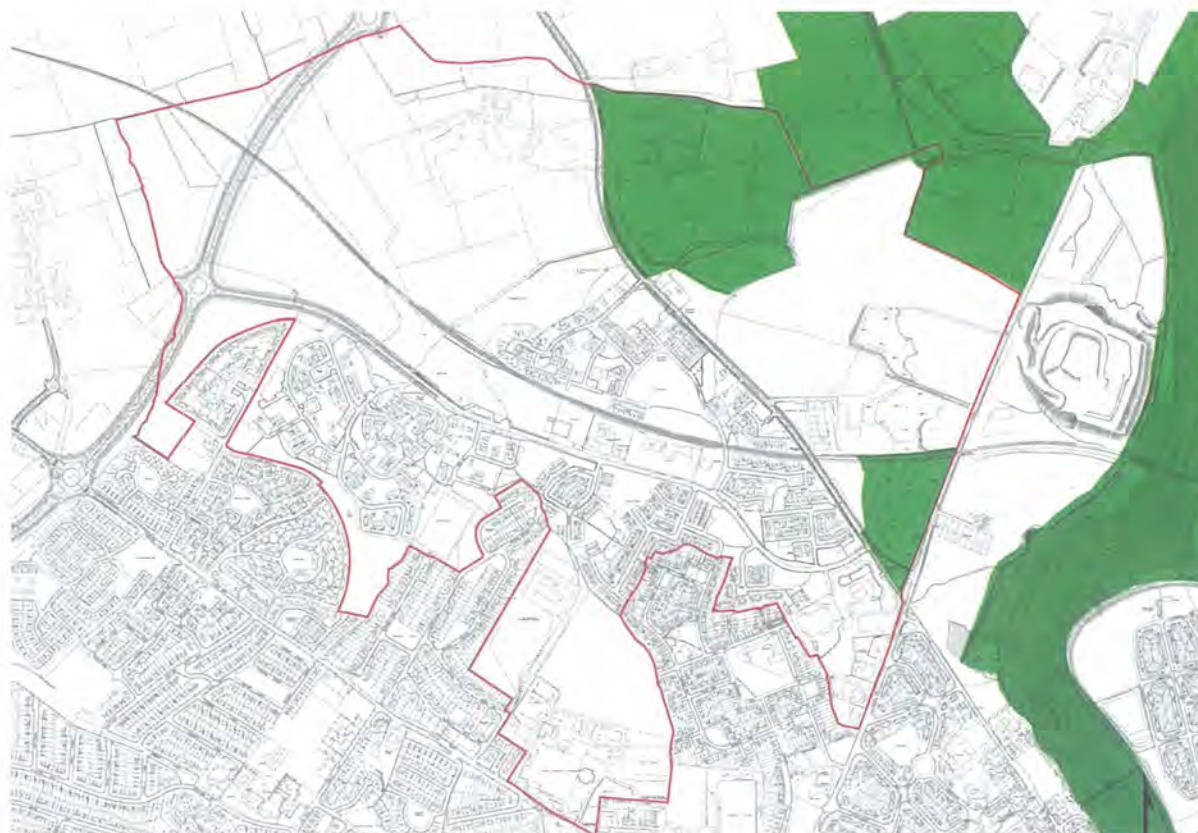


Figure 1.7: Extent of SAC

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4.1.9 Special Area of Conservation

The Lower River Shannon, Special Area of Conservation (SAC) (code 002165) is designated under the EU Habitats Directive. Parts of this designation skirt the study area along the Knockalisheen Road.

4.1.10 Natural Heritage Area

The Knockalisheen Marsh (code 002001) is designated as a proposed Natural Heritage Area (pNHA). The site is situated mostly within Co. Clare but extends to the

north of Limerick City along the Knockalisheen Road. The site consists of grassland that slopes gradually to a wetland area which then drains into the River Shannon.

The upper part of the site consists of pastures while the lower parts near the river are extremely wet and consist of wet grassland and fen communities which are considered species rich. The site is considered important as a good example of grassland/wetland,

with high plant species diversity which is an increasingly scarce habitat, especially close to a large city. In addition, the site serves as feeding ground for common wading species such as snipe. Invasion species such as the Cherry Laurel and Japanese Knotweed can have a hugely detrimental effect on habitats. In the absence of intervention, the advance of these species can destroy surrounding habitats and ecology.

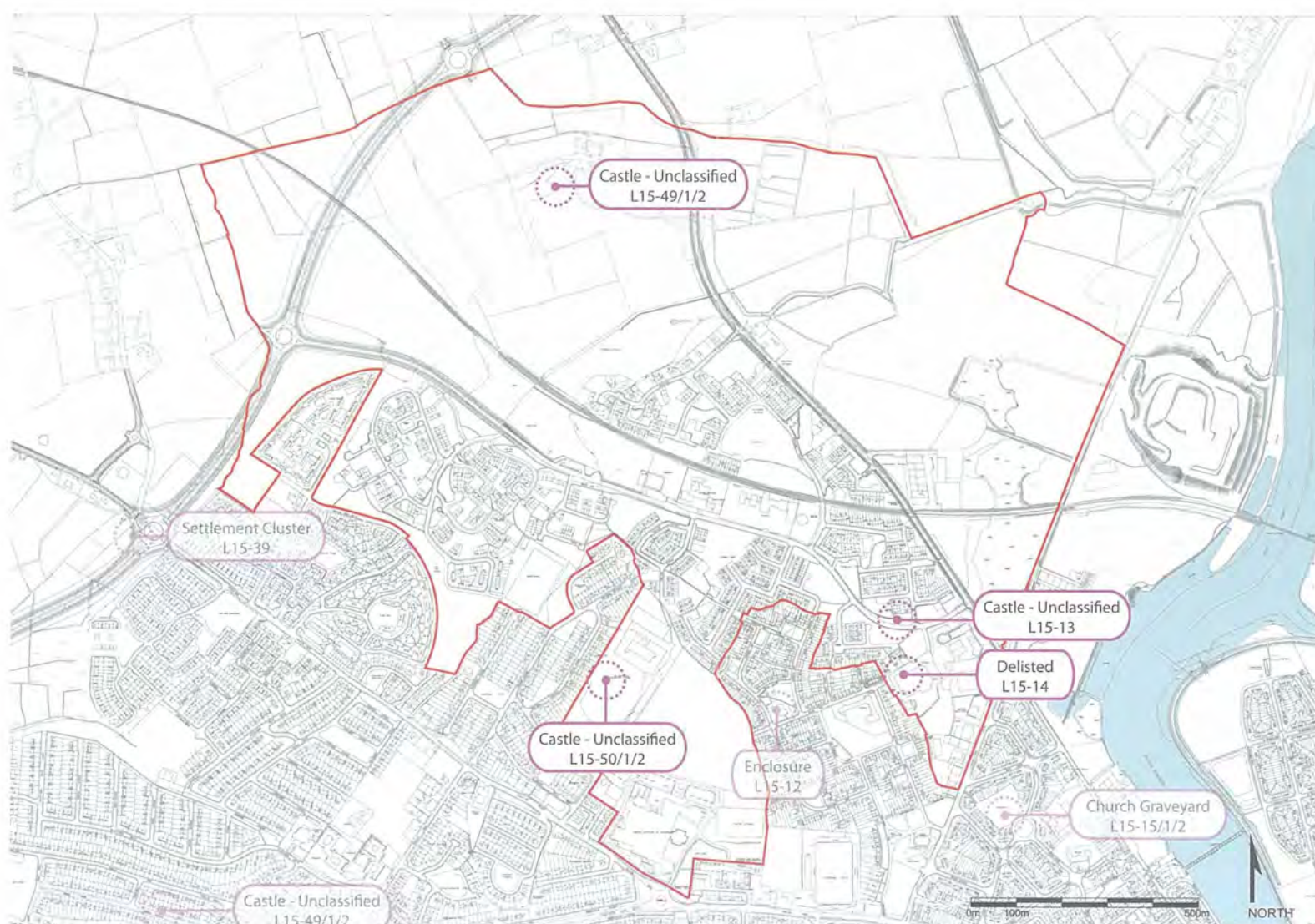


Figure 1.8: Extent of RMP Locations

4.1.11 Record of Monuments and Places

The Archaeological Assessment shows a small number of known archaeological sites distributed across the regeneration area.

The study identified three Recorded Monuments and one delisted site within the regeneration area, consisting mainly of mid to late medieval habitation or castle sites. All the Recorded Monuments have

statutory protection and should be regarded as constraints. Consultation with the Department of Arts, Heritage and the Gaeltacht (DAHG) is required from the outset to determine suitable buffer zones. However, it should be noted that none of the RMP sites within the Assessment Area have been designated as being of National Importance and thus of National Monument status.

The majority of RMP sites within the study area appear to date from the mid to late medieval periods and represent castle or fortified buildings and associated settlements. The locations of the records identified in Figure 1.8 may represent an estimation and as such there is potential for encountering these features anywhere in the general vicinity.

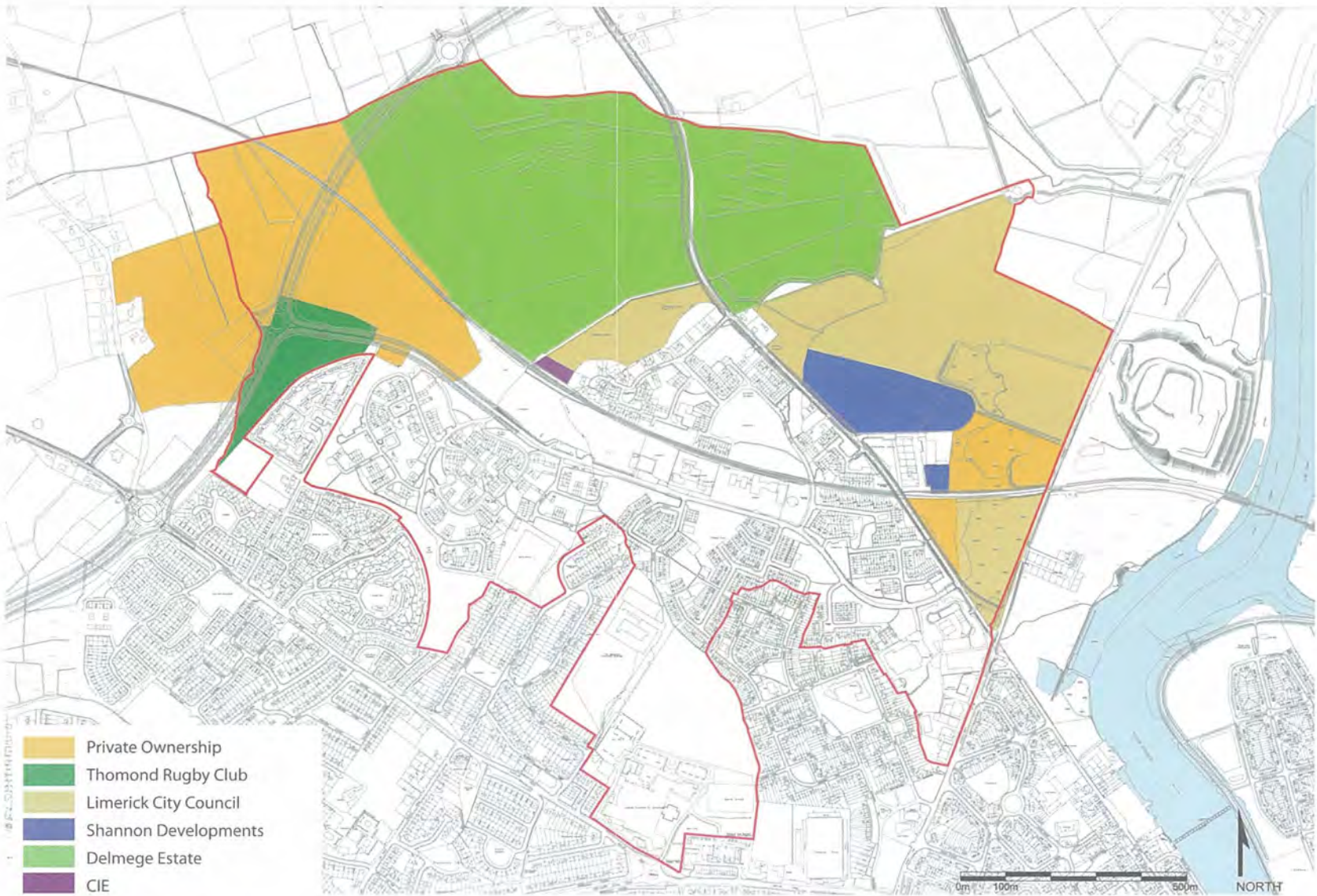


Figure 1.9: Land Ownership

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4.1.12 Existing Movement

Perhaps the biggest single movement issue for Moyross is the lack of connectivity between it and the surrounding neighbourhoods. Even within the study area, it is difficult to get about given the illegible block layout with each sub estate consisting of large cul-de-sacs. This situation is at the heart of most of the major movement problems of the area. Given this lack of permeability into and across the study area, access to employment and services is poor contributing to its social-economic problems.

4.1.13 Public Transport

Section 3.1.7 Transport of Section 3.0 Baseline Conditions and Analysis highlights that in common with other regeneration areas, Moyross exhibits low levels of car usage with a high percentage of private households having no car (50%) and a high use of public transport (11%), above the city average (7%).

Therefore, the continued provision of a good quality public transport system will be essential for the regeneration of the area. There are two Bus Eireann routes which provide a frequent public transport system to and from Limerick City Centre – including



Figure 1.10: Extent of Open Space

Delmege Estate in Moyross



the 302 with approximately 15 services daily (Ennis Road/Thomond Park, LIT, Caherdavin) and the 303 (Pineview/Craeval - City Centre) with approximately 8 services daily.

4.1.14 Open Space Provision

The 2008 Masterplan identified the River Shannon and its rich riparian and wetland habitats as a key strength of the Moyross area. There are significant areas along the River Shannon corridor, in close proximity to Moyross, which are designated as a proposed Natural Heritage Areas (pNHA) and Special Area of Conservation (SAC), including some of the

wetlands that lie between Long Pavement Road and the Knockalisheen Road. There are also two landfill sites in the area, as previously discussed on either side of Long Pavement Road and much of this area is susceptible to flooding.

Figure 1.10 shows the existing open space provision within Moyross. The regeneration areas contain large amounts of passive open space, much of which is underutilised and also open space that is not readily distinguishable as either public or private. There is also an under-provision of active play facilities for those under the age of 15.

4.1.15 Planning Context

Limerick City Development Plan, 2010 - 2016

The Limerick City Development Plan sets out Limerick City Council’s policies for the development of Limerick City to 2016 and beyond. The following policies specifically deal with regeneration and the Moyross area:

- To protect the integrity of all Natura 2000 sites in the vicinity. In this regard the development proposals developed shall be subject to HDAA and SEA.

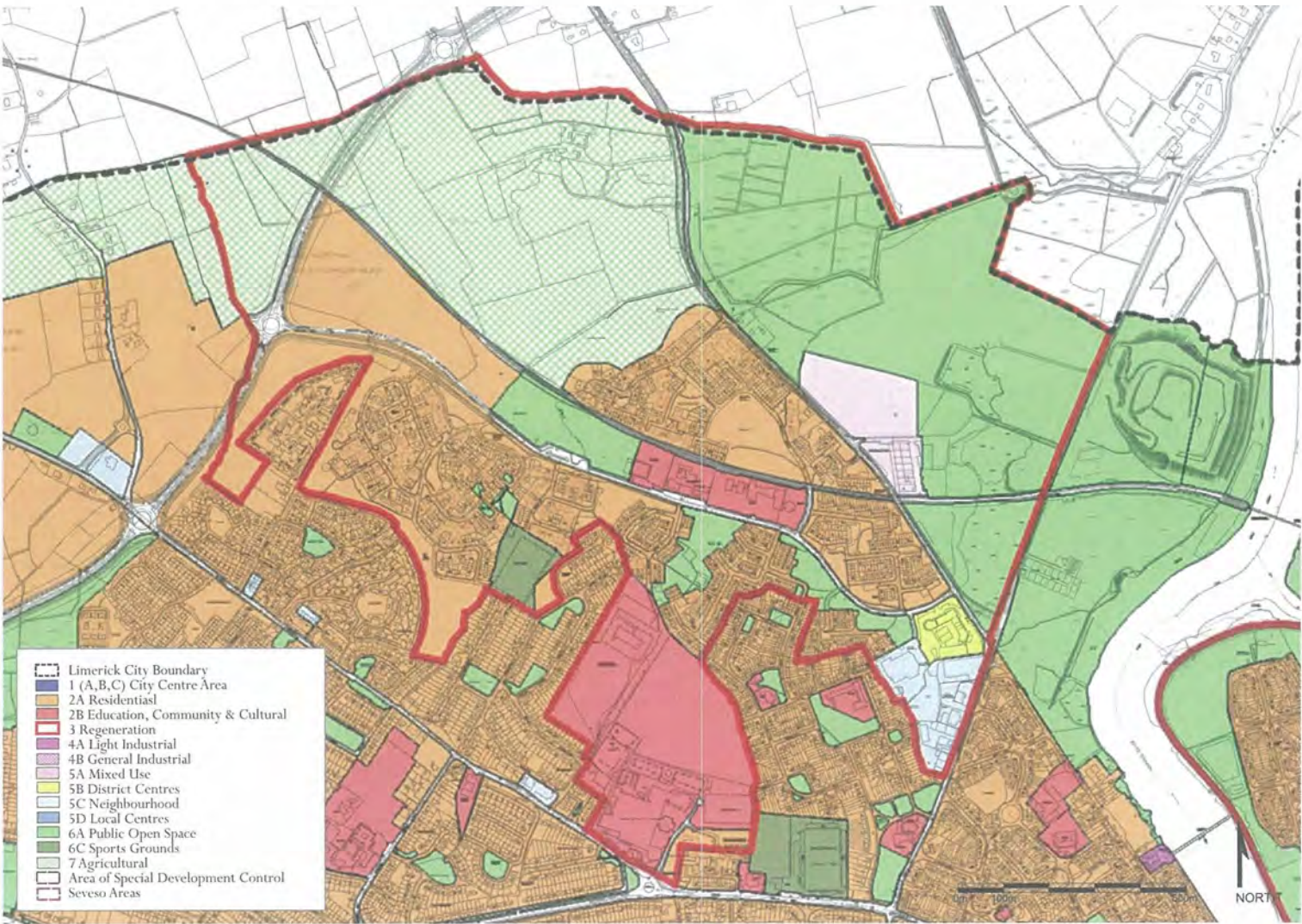


Figure 1.11: Land Use Zoning map extracted from the Limerick City Development Plan 2010-2016

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- To protect the existing biodiversity of the area and to provide interpretation for the public.
- To develop a large public park that connects the river Shannon, Moyross and Caherdavin for a range of active and passive recreational uses.
- To create a civic area of suitable scale in Moyross that can act as a focal point for community, civic and educational facilities including a rail station.
- To promote Watchhouse Cross as the District Centre for the area of Moyross, Kileely, Ballynanty and Parteen in accordance with the Mid West Retail Strategy.
- To complete the northern distributor road and to provide access from it to Moyross.
- To provide for greater linkages between Moyross and the adjacent areas to the west including the educational institutions.
- To protect the existing alignment of the Limerick/Galway rail line.

4.1.17 Key Challenges and Opportunities for Moyross

Challenges

Movement

A key challenge for the LRFIP will be addressing the severance experienced by residents of Moyross, as well as the lack of permeability and legibility within it. The low density and dispersed character of Moyross impacts on the viability of the existing public transport provision.

Open Space

The regeneration areas contain large expanses of passive open space, much of which is underutilised and also open space that is not readily distinguishable as either public or private. This presents a key challenge to Moyross. Much of the open space is poorly overlooked with a lack of active frontage (eyes on the street) which exacerbates anti-social behaviour. There is also an under-provision of active play facilities for those under the age of 15.

Topography

The topography of some sites, within Moyross, is challenging and will need to be approached through thoughtful design.

Flooding and Drainage

The following challenges exist within Moyross in relation to flooding and drainage:

- To the east of Moyross is a significant area of wetland, known as Knocknalisheen Marsh, which is prone to flooding.
- Proposed bridges or culverts crossing the Crompaun River or its tributaries, as part of the physical framework plan for Moyross, will be subject to the approval by the Office of Public Works.
- Surface water run-off from any proposed development will be subject to pollution control and attenuation before it is discharged to the receiving water. Regard should be given to Sustainable Urban Drainage Systems Principles (SUDS).
- All future developments shall have regard to the Flood Risk Management Guidelines (DEHLG/OPW), Shannon Catchment Flood Risk Assessment and Management (forthcoming) and SEA.

Special Area of Conservation

A key challenge in Moyross is to ensure that any development, proposed as part of the LRFIP, does not have a negative impact on the water quality and habitats within Moyross or downstream of the area.

Records of Monuments and Places

Although there are no identified sites of cultural heritage within Moyross, there is always the possibility of subterranean archaeological remains. This presents a challenge for future development within the area. Therefore consultation with the Department of Arts, Heritage & the Gaeltacht (DAHG) is required at project level and, if required, an on-site archaeologist will monitor excavation works at project level stage.

Physical Character

The following key challenges exist in Moyross in relation to the physical realm:

- Poor accessibility with adjacent neighbourhoods which has resulted in Moyross becoming physically, economically and socially isolated
- Over-provision of underutilised public open space
- The quality of the public realm is compromised by the tethering of horses
- Several under-used and vacant infill housing sites, which currently detract from the overall appearance of the estate
- Due to the demolition of some blocks to date, the layout of the houses provide exposed boundaries which provide little in the way of natural surveillance. This undermines the safety and

security of the area

Opportunities

Movement

Efforts to open up adjoining residential areas is key and will require consultation with stakeholders and residents within the area. The extension of Moyross Avenue westwards to Coonagh, to link to the strategic northern distributor road is a strategic opportunity which will increase connectivity as well as open up the potential for inward private investment which in turn will facilitate tenure diversification.

Open Space

Much of the existing amenity land, north of the railway line, is in public ownership and provides an opportunity to create an integrated linear park with active play facilities for all age groups which would be of regional significance. Furthermore, the delivery of this would contribute greatly to the identity of Moyross.

Topography

There is an opportunity to design sensitively within areas that have challenging topography to maximise sightlines and views within and from outside the area.

Flooding and Drainage

A key opportunity exists to preserve the wetlands Knocknalisheen Marsh in its present location for passive amenity. It will be necessary to avoid impacting on the existing ground water levels at this location.

Special Area of Conservation

There is an opportunity to sensitively incorporate sites with statutory environmental designations as part of the an integrated linear park. An Environmental Impact Assessment (EIA) was carried out in relation to the Coonagh-Knocknalisheen bypass and the Environmental Impact Statement (EIS) was assessed by An Bord Pleanála (ABP). The planning application has been approved and there is an opportunity to incorporate key conditions, mitigation measures into the physical framework plan for Moyross.

Physical Character

There is an opportunity to:

- Restructure the existing layout to address gap sites
- Develop existing poor quality frontage sites and vacant land to improve visual quality





- Consider intensive interventions to remove units to improve legibility and permeability
- Address existing poor housing conditions
- Address the lack of integration between areas of new and existing housing
- Remove environmental black spots to the rear of blocks
- Develop streetscape improvements to enhance the public realm and create pedestrian friendly environments
- Provide additional soft landscaping to soften the existing hardness of the public realm
- Introduce new frontage development to non-overlooked routes

4.2 St. Mary's Park

4.2.1 Study Area

King's Island extends over an area of 170 acres and is bounded on the east by the River Abbey and on the west by the River Shannon.

The study area occupies an attractive island site to the north-east of Limerick City centre. Historically, King's Island would have been an important location at the divergent point of the Shannon and the Abbey Rivers. Today, it represents an important asset to the city, particularly in terms of its ecological importance, archaeological significance, and tourism potential. However, it also functions as an important residential and community environment, containing the large housing estate of St. Mary's Park to the north and numerous terraces of houses to the south. There are a number of modern apartment blocks to the south of the island, in proximity to the riverfront.

4.2.2 Existing Physical Context

Land Use

King's Island is an area which contains a variety of land uses including residential, administrative, ecclesiastical, educational, retail, business and tourism. While the southern part of the island is a lively area with a mix of land uses, the area to the north is predominantly residential and due to its poor transport connections, is disconnected from the rest of the city. This has resulted in the isolation of St. Mary's Park.

Nicholas Street is the core town centre street with retail opportunities, connecting the southern part of King's Island to the Castle. It is an important thoroughfare in the regeneration of the area. However,

at present, there are numerous vacant and under-utilised sites and buildings along this street. In terms of community facilities and amenities in the area, there is an upgraded community centre in to the south-west of the island and two playing pitches (Star Rovers) to the east (on short term lease from Limerick City Council).

Although there are extensive areas of open space to the south, it is generally low-lying and liable to flooding. There is, however, a river-side walkway on three sides of the island which has been upgraded from Verdant Place, along the western, northern and eastern shores of King's Island. The recent opening of a new community crèche (2011) adjacent to the Military Cemetery has improved the level of childcare educational facilities in the area. Existing educational facilities include a boys and girls primary school, and two Gael Scoileanna located to the south of the island.

There is a Garda station in Mary Street that has restricted opening hours and is in poor physical condition. The County Courthouse and District Court are located to the west of the island, in proximity to City Hall which houses the offices of Limerick City Council. King's Island features a delicate ecological environment which has been designated as a Special Area of Conservation.

In addition, the island has a significant architectural and archaeological heritage, containing the remains of the Limerick City Walls and a number of surviving buildings from the 12th and 13th Centuries including King John's Castle and St. Mary's Cathedral. The southern portion of King's Island is regarded as the historic core of Limerick City and consequently has strong tourism potential.

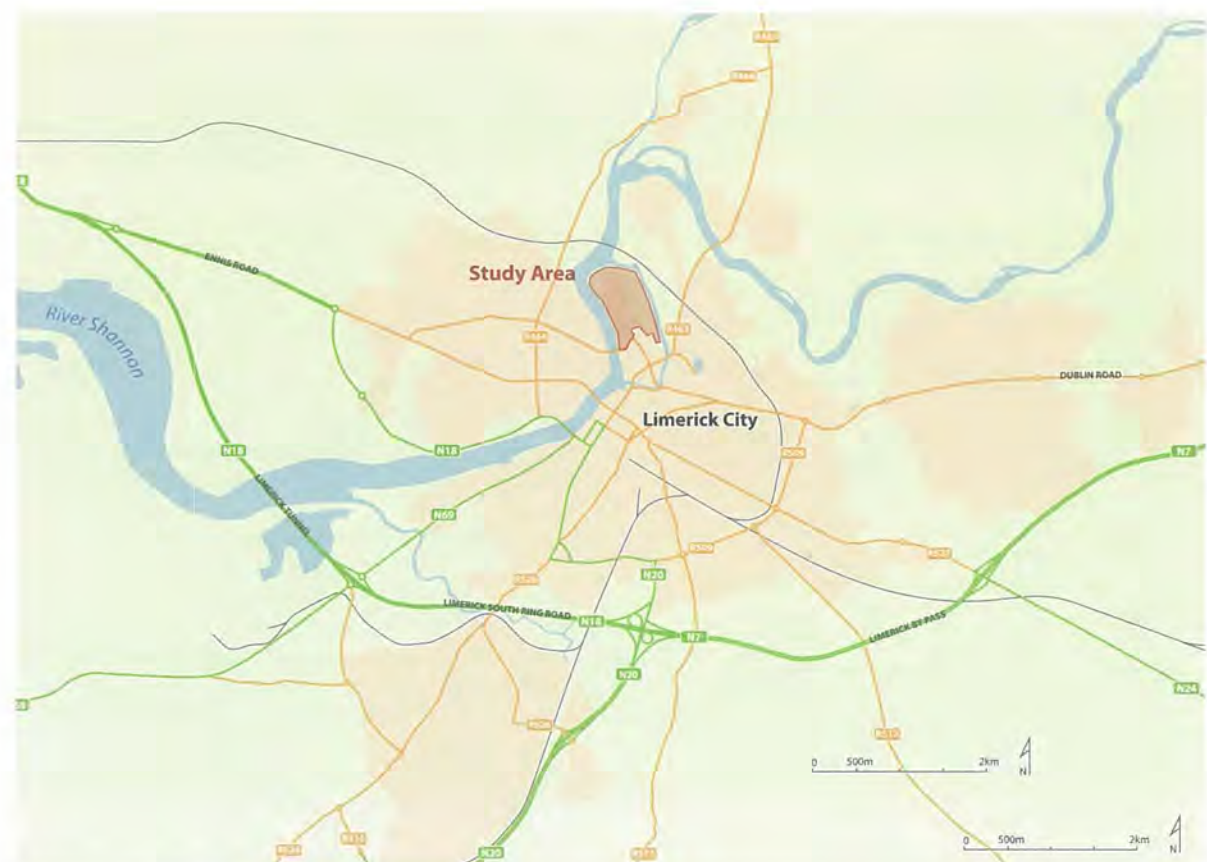


Figure 1.12: St Mary's Park in Context

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Housing Size and Conditions

St. Mary's Park was constructed in 1935 and this makes the units located here the oldest out of the four regeneration areas. Today, the condition of the building stock varies significantly, with a number of areas containing well maintained houses and other areas displaying high levels of dereliction. In terms of design, the majority of houses are two-storey, two-bay structures with small front gardens or paved parking areas entered via individual gates, with long, linear gardens to the rear. A typical house layout (approx 60m²) in St. Mary's Park consists of a ground floor layout of a kitchen/living area/dining area, a bedroom with a single-storey extension to house a bathroom. The upper floor consists of 2 bedrooms. These houses are laid out in terraced blocks (6 blocks in total with a terraced street to the east of St. Munchin's Street) of four to five structures.

The general house construction type within St. Mary's Park consists of mass concrete with no insulation, which perform poorly against current energy performance specifications. Further information on the works required to achieve an acceptable energy rating are described as part of the refurbishment strategies for each of the regeneration areas in Volume 2.

Public Realm

In terms of public realm, St. Mary's Park is characterised by the following physical features:

- Poor accessibility which has resulted in St. Mary's Park becoming physically, economically and socially isolated
- Unattractive public realm with an over-dominance of hard surfaces with limited soft landscaping
- Several under-used and vacant housing sites, which currently detract from the overall appearance of the estate
- Severe environmental black spot to the east of St. Munchin's Street where a strip of land has been used as a landfill site and filled with domestic refuse
- The layout of the houses to the east of St. Munchin's Street backs onto the landfill therefore providing little in the way of natural surveillance. This has potentially exacerbated the issue of illegal dumping

4.2.3 Historical Character Today

The most frequently used image to represent Limerick City is that which captures the view of King's Island

from the west bank of the River Shannon, taking in King John's Castle, Thomond Bridge and St. Mary's Cathedral. This is the oldest part of the city and today is commonly referred to as its 'medieval core'. A number of significant buildings survive from 12th and 13th Century Limerick (in particular the aforementioned castle and cathedral), as well as some remaining extant stretches of the City Wall, which was dismantled in the 1760s. These structures lend an air of grandeur and magnificence to King's Island, making it a distinctive element of the Limerick cityscape.

However, aside from the above mentioned structures, much of King's Island's medieval character has been eroded in the past century. Although traces of the medieval streetscape remain, the majority of the area's medieval buildings have disappeared. The ruins of buildings such as Fanning's Castle (RMP: Castle Tower House L005-017004, and RPS015) on Mary's Street, and the house containing a carved stone fireplace (RMP: House L005-017123) on Nicholas Street, are isolated clues to the appearance of the older city. There is also a military cemetery at the southern edge of St. Mary's Park. This is not marked on the 1st edition six inch Ordnance Survey (1840-1) of the area, so it is likely that it post-dates this map. However, it is referred to in a book dating to 1866 (Lenihan, M, Limerick: Its History and Antiquities, Ecclesiastical, Civil, and Military, 1866), indicating that it dates from the mid Nineteenth Century. In general this cemetery was reserved for the burial of soldiers and ex-soldiers who had no family links in the city or county. There are an estimated sixty burials in the cemetery.

Current Protection for Architectural & Archaeological Heritage

There are currently 28 structures on the RPS. In addition, 10 structures are currently on the National Inventory of Architectural Heritage (NIAH) of Limerick City, but are included under the existing RPS.

Other Statutory Mechanisms

It is evident that there is an adequate level of statutory protection afforded to the built heritage of King's Island. However, there is no Architectural Conservation Area (ACA) in place in King's Island at present. An ACA is defined as 'a place, area, group of structures or townscape, taking account of building lines and heights, that is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or that contributes to the appreciation of a protected structure, and whose



Figure 1.13: Existing Land Use



Figure 1.14: Current Protection for Architectural & Archaeological Heritage

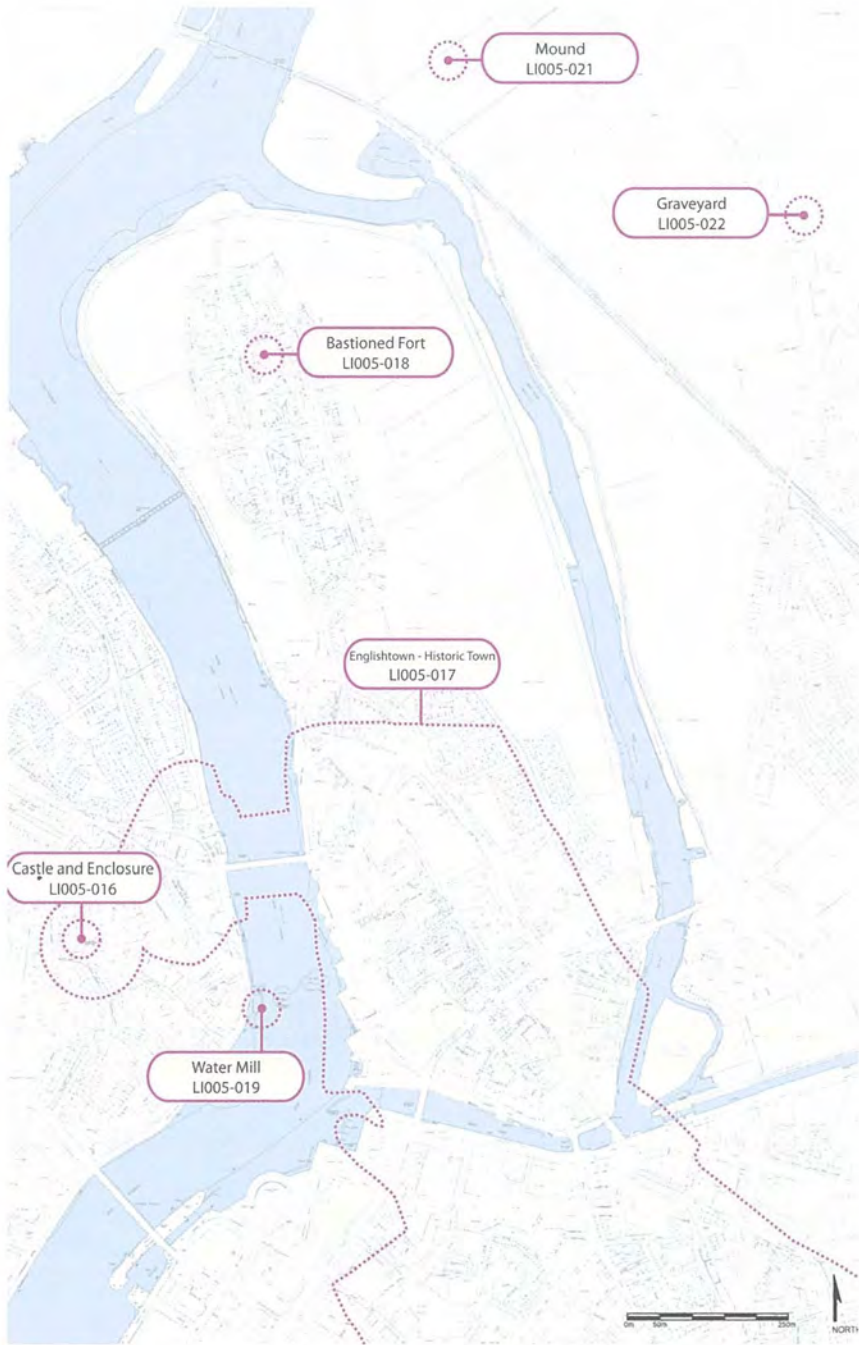


Figure 1.15: Zone of Archaeological Potential

▼ Sunset around Nicholas Street, Limerick



▼ Island View Terrace, St. Mary's Park



▼ Island View Terrace, St. Mary's Park



▼ Nicholas Street, Limerick



▼ Island View Terrace, St. Mary's Park



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character it is an objective of a development plan to preserve' (Architectural Heritage Protection Guidelines 2004, DoEHLG).

However, the south-western portion of King's Island has been included in the Area of Special Planning Control (ASPC) designation. An ASPC is defined as follows as "all or part of an architectural conservation area [which] is of special importance to, or as respects, the civic life or the architectural, historical, cultural or special character of a city or town in which it is situated [and which requires preparation of a] 'scheme' "setting out development objectives for the preservation and enhancement of that area, or part of the area." (Section 84 (1), 2000 Act).

Zone of Archaeological Potential

The Records of Monuments and Places map for Limerick (L005-017) shows that there is a significant amount of archaeology located within the Zone of Archaeological Potential. By and large, this zone follows the line of the medieval core of the city. In this archaeological zone, remains lie within a metre of the modern surface, and these strata can be present to a depth of 3 to 4m in places. In addition to the Medieval Core Monuments there are numerous sites located outside the Zone of Archaeological Potential in the outer suburbs of the city. These are also listed in the Sites and Monuments Record which is an appendix to the Limerick City Council Development Plan (see Figure 2.14). A soon to be published good practice guidance publication, commissioned by Limerick City Council titled "Development and Archaeological Study of King's Island and Limerick" (DASKIL), sets out archaeology and development objectives for the enhancement and preservation of archaeology on King's Island now and into the future.

4.2.4 Existing Movement

King's Island, as the name suggests, is bounded by water on all side. The River Shannon bounds the Island to the west, The Abbey River to the east and south and the confluence of the two rivers bounds the island in the north. The island is situated to the north within the Limerick City Centre environment. There are four main access/egress routes connecting King's Island to the rest of Limerick, all of which are located within the southern half of the Island.

The Island Road and Castle Street form part of the N7 route through the area. This route is heavily trafficked

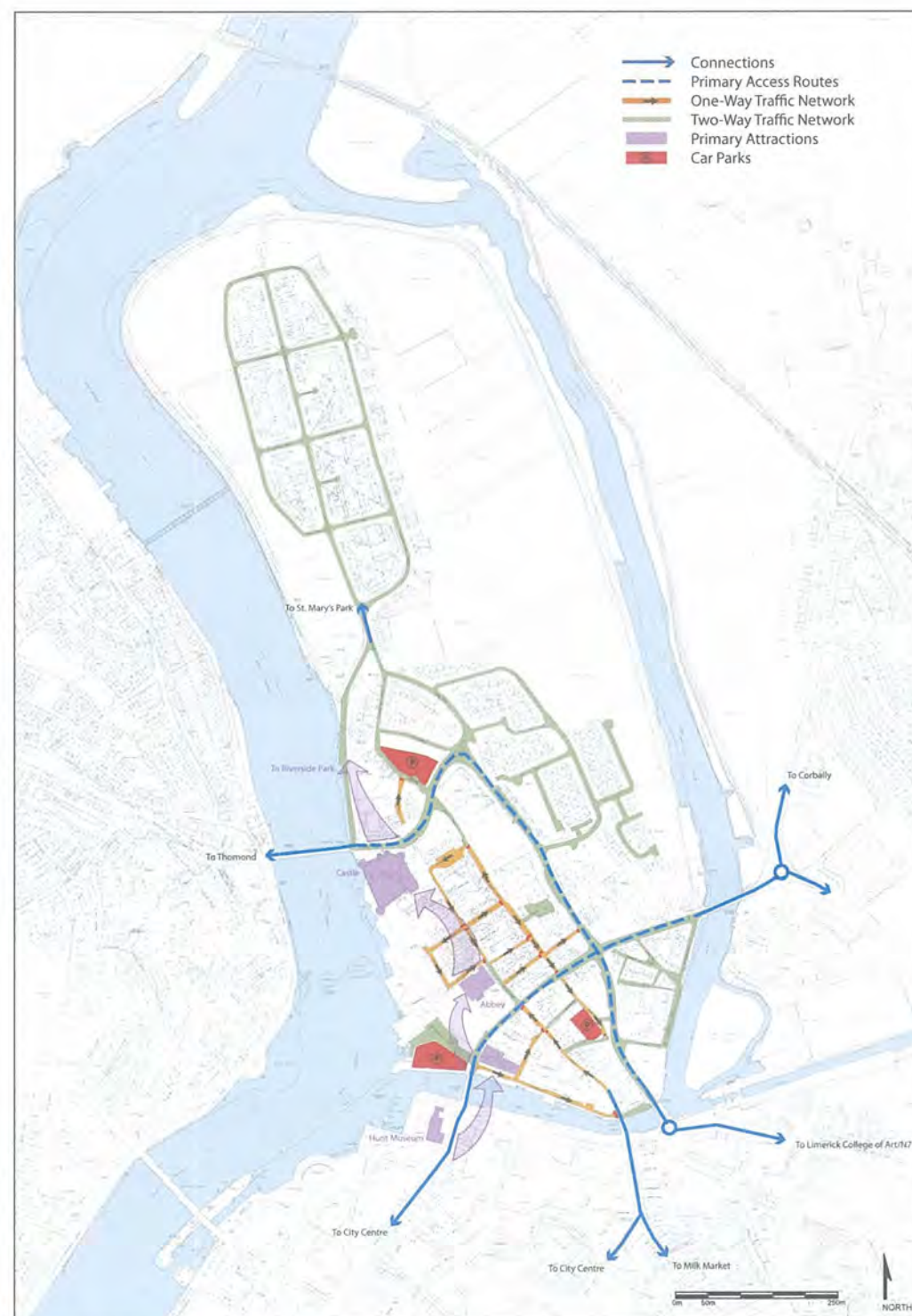


Figure 1.16: Existing Movement

and essentially dissects the north of the island from the south. There is a one-way vehicular system in place within much of the medieval quarter, as the streets are narrow in keeping with the traditional medieval street layout. This is shown on Figure 1.15.

Access to St. Mary's Park is limited to one main entrance from Island Road Roundabout and three other older access routes culminating in essentially one access point at St. Ita's Street to a large cul-de-sac. This has resulted in isolating the northern half of the Island.

Public Transport

Section 3.1.7 Transport of Section 3.0 Volume 1 Baseline Conditions and Analysis highlights that in common with other regeneration areas, St Mary's Park exhibits low levels of car usage with a high percentage of private households having no car (57%) and a generally high use of public transport (6%) which is slightly below the city average (7%). This could be explained by the location of St. Mary's Park within close proximity of the city centre (approx 800m) which suggests that the current bus service provision is adequate compared to the other regeneration areas.

4.2.5 Environmental Considerations

The Lower River Shannon Special Area of Conservation (SAC) surrounds King's Island.

The Lower River Shannon Special Area of Conservation (SAC) surrounds King's Island and, as shown in Figure 1.16, the results of the environmental study carried out on this area reveals indicative habitats. This study found that to the east of the St. Mary's Park estate there is a strip of re-colonising bare ground – ED2. This area has been subject to grazing, dumping and infill and is higher in elevation than the adjacent wet area.

While this habitat can be species rich it is mostly colonised by opportunistic plants that are common and widespread. This area is associated with foraging birds and, during the summer, is likely to attract butterflies and other insects. The habitats and species here are of moderate biodiversity value and are not associated with the SAC or its qualifying interests. It is adjacent to, but outside the SAC boundary.

The stretches of the Shannon and Abbey Rivers surrounding King's Island are lowland/depositing river – FW2 and constitute the primary feature

of the SAC. An Otter *Lutra lutra* was observed swimming in the river along with Mute swan *Cygnus olor*, Moorhen *Gallinula chloropus*, Greylag goose *Anser anser*, Grey heron *Ardea cinerea*, Cormorant *Phalacrocorax carbo* and Little grebe *Tachybaptus ruficollis*. The Otter is listed on Annex II of the Habitats Directive and is one of the SAC's qualifying interests.

Along the river banks, and fringing almost the entire island, there is a strip of riparian woodland – WN5. It is dominated with Willow *Salix* sp. with occasional Alder *Alnus glutinosa* and Ash *Fraxinus excelsior*. On the island's western shore this fringe is narrow and in some places there is open grassland (with Creeping buttercup *Ranunculus repens* and Reed canary grass *Phalaris arundinacea*). This area is wet grassland – GS4 and is a part of the rivers' floodplain. However on the eastern shore it is much more developed and uninterrupted. This habitat is an example of the Annex I priority type Alluvial forests (91E0) and is one of the rarest native woodland types in Ireland (Little et al., unknown year). It is of high biodiversity value and home to a range of woodland species as well as being vital for the preservation of water quality and the prevention of bank erosion.

It can be seen that the area designated as SAC is important for qualifying interests such as freshwater fish, otter and riparian woodland, but also for features outside the qualifying interests – particularly wintering wetland birds, but also kingfisher and possibly an Annex I wetland habitat (hydrophilous tall herbs). These habitats perform important functions in the regulation of water flow and the moderation of water quality as well as being valuable for the maintenance of biodiversity in general.

▼ Illegal Dumping, Island Fields, St. Mary's Park.



▼ Hand Ball Alley, St. Mary's Park.



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Island Fields, St. Mary's Park



Island Fields, St. Mary's Park



Island Fields, St. Mary's Park

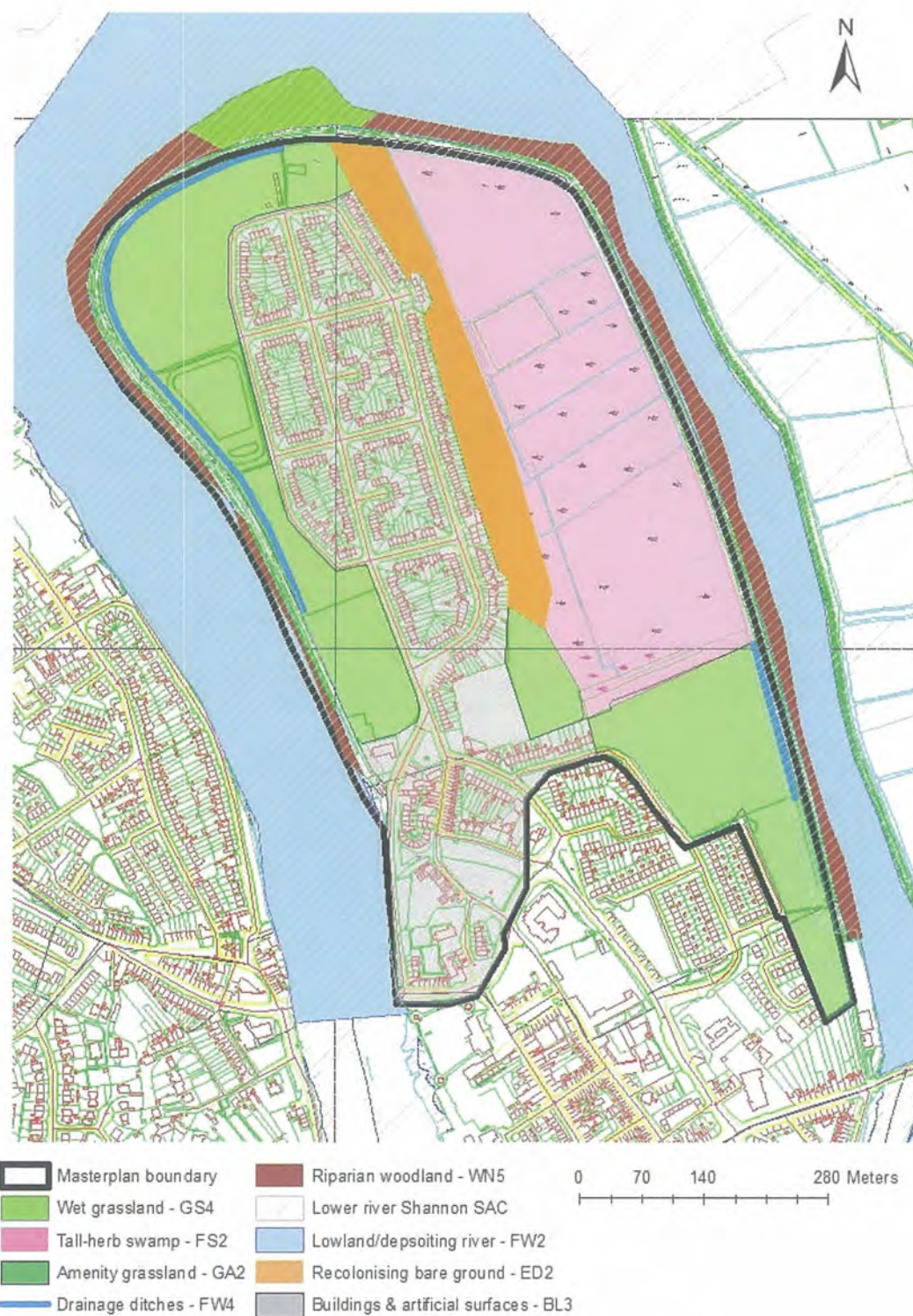


Figure 1.17: Environmental Characteristics of St. Mary's Park

4.2.6 Flooding

St. Mary's Park & Kings Island is an island formed by the waters of the River Shannon and Abbey River. The Abbey River is actually a split of the River Shannon. Both the River Shannon and the Abbey River are tidal in the vicinity of the site of the proposed development and therefore susceptible to both fluvial and coastal flood risk.

There have been a number of instances of flooding in Limerick City centre, including parts of King's Island in the past. The most recent of these events occurred in 1999, 2002 and 2009. The maximum water level observed was in December 1999 where levels were reported to be of the order of 4.4m in the Abbey River. These floods arose from a period of prolonged rainfall, a spring tide and a storm surge which added 1.3m to the tide.

The Limerick City Development Plan 2010-2016 Flood Risk Map adjacent indicates that the subject site is at risk from flooding with Flood Zone A (high probability of flooding) highlighted in dark blue in Figure 1.18. All proposed infill developments will be subject to the requirements of the guidance document "The Planning System and Flood Risk Management 2009" prepared by the Department of Environment Community and Local Government and the Office of Public Works

The guidelines require the planning system at national, regional and local levels to:

- Avoid developments in areas at risk of flooding, particularly floodplains, unless there are proven wider sustainability grounds that justify appropriate development and where the flood risk can be reduced or managed to an acceptable level without increasing flood risk elsewhere.
- Adopt a sequential approach to flood risk management when assessing the location for new development based on avoidance, reduction and mitigation of flood risk, and incorporate flood risk assessment into the process of making decisions on planning applications and planning appeals

There is a lack of substantive flooding data within the four regeneration areas. At this point in time there are no officially publishable Catchment Flood Risk Assessment and Management studies (CFRAMS). However it is understood that a draft CFRAMS may be available in 2014. Furthermore, The OPW recently

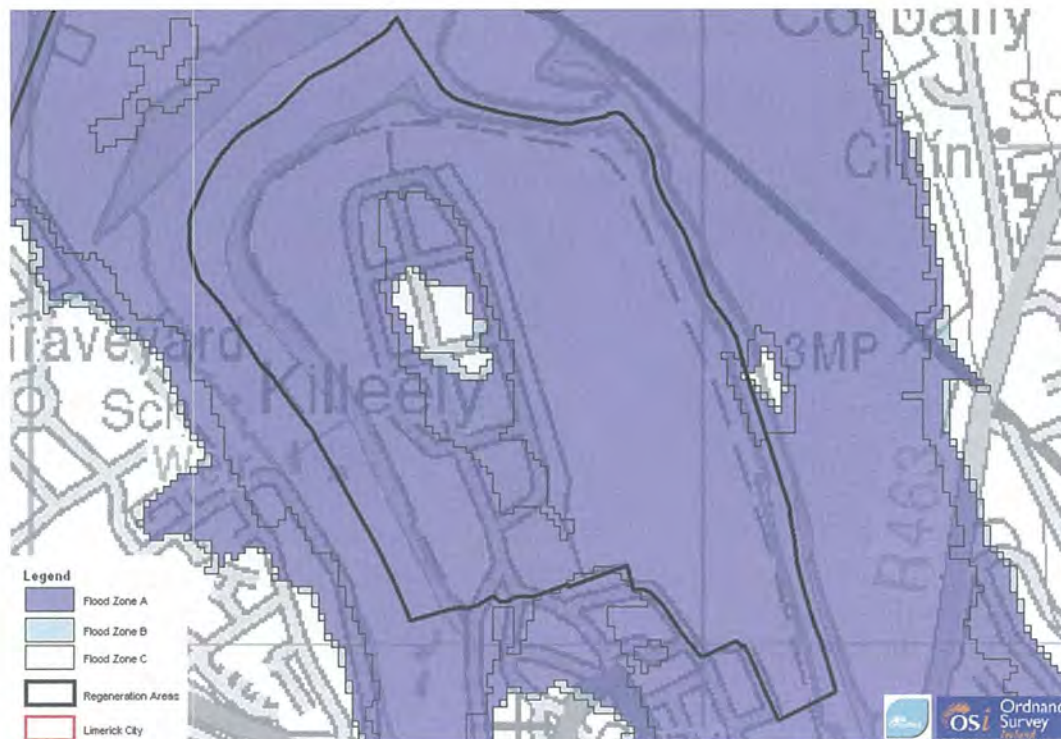


Figure 1.18: Flood Risk Map of St. Mary's Park extracted from the Statutory Limerick City Development Plan 2010-2016

4. Physical Overview and Analysis

commissioned a study to assess coastal flooding and erosion extents in Ireland, known as the Irish Coastal Protection Strategy Study (ICPSS). This study has produced predictive flood maps and levels for flood events with various probabilities of occurrence. The information has not yet been published by OPW. As stated in the Limerick City Development Plan 2010-2016 “until such time as comprehensive information and guidance is available on flooding in the city, a flexible approach is required to take account of flood risk to ensure that appropriate measures are taken wherever the need arises”.

4.2.7 Water and Drainage Infrastructure

St Mary's Park is currently serviced by 3 inch cast iron water main network (which date from the 1930s). The network is insufficient to meet the current demands and fire flow standards. In a report dated from 2004, when St Mary's Park consisted of 459 houses (as opposed to 389 units in 2012), water usage in St Mary's Park was in excess of 600m³/day. Based on a typical consumption rate of 135 litres per person per day by 459 gave an expected usage of 183m³/day, significantly under the actual usage in the estate. The level of water leakage in the estate is in excess of 200%, well above the city-wide level of 46% and the desired level of less than 30%. Limerick City Council is committed to upgrading and sustainably developing the water and drainage infrastructure for St Mary's Park, subject to the availability of finance.

4.2.8 Sewerage Infrastructure

Following the completion of the Limerick Main Drainage Scheme, Phase 1, the City and its Environs is now served by a modern sewer infrastructure. The Limerick Main Drainage infrastructure was designed in 1999 to meet the current and foreseeable need of the City and contiguous areas but the City Council is mindful that continued upgrades to both the foul and surface water drainage systems in the city will be required. A key objective of Limerick City Council is the development of Limerick Main Drainage Phase 2 which will involve assessing the capacities of the current plant, delivering a strategy for reducing the quantity of surface water infiltration into the foul network and extending the network, subject to the availability of finance. The main sewerage system in St Mary's Park is deemed as adequate by Limerick City Council and a key objective as part of any development proposal would be to provide a high quality sanitary wastewater collection and treatment system to meet the existing and future demands.

Island Fields



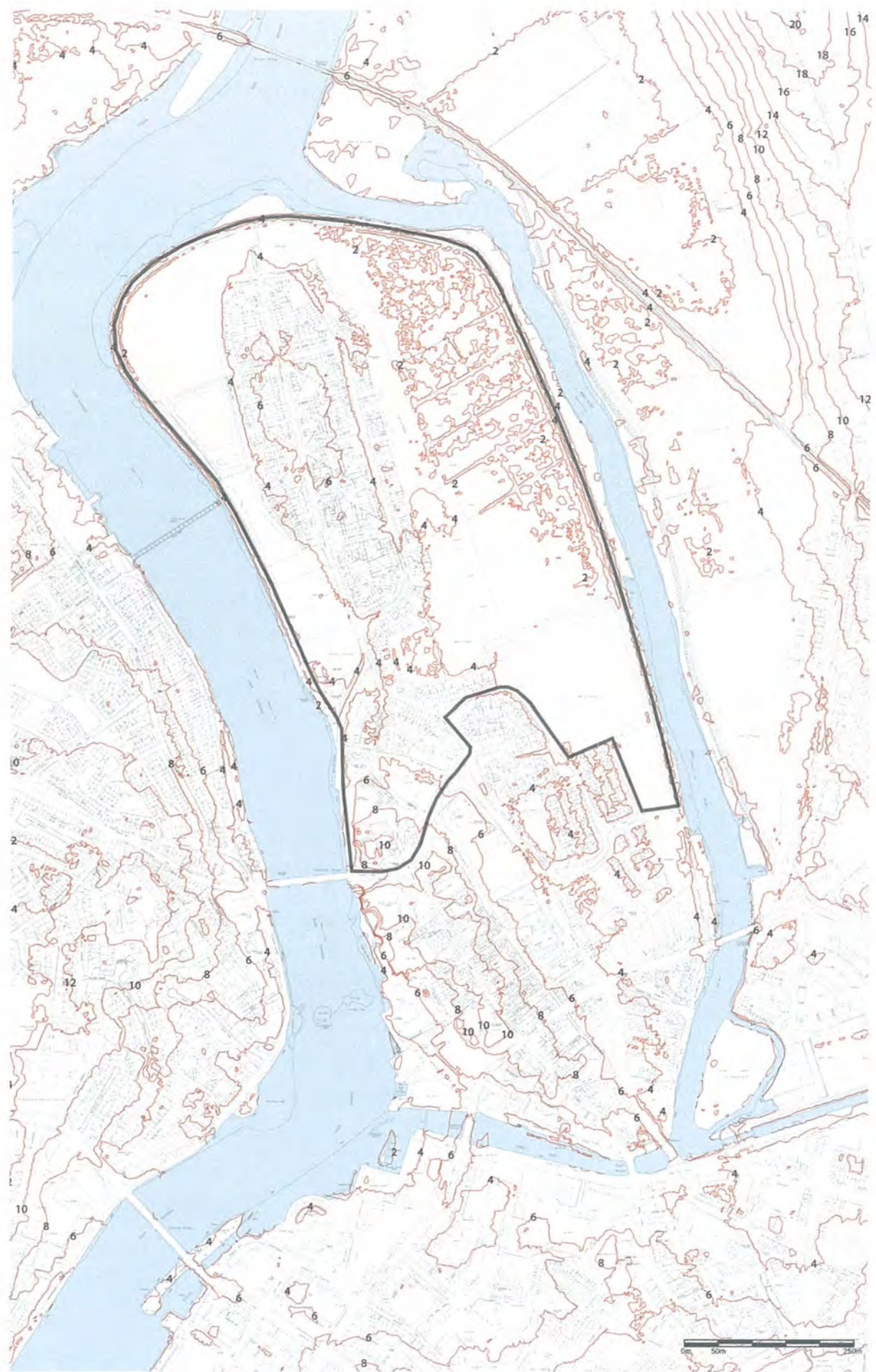


Figure 1.19: Contours of St. Mary's Park

4.2.9 Soils and Geology

The GSI (Geological Survey of Ireland) Teagasc Sub-Soil database demonstrates that the soil type found within the study area consists of 'made ground' and "Till derived chiefly from limestone". Made ground is natural soil altered, partly with fill materials and is associated with prior construction.

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4.2.10 Existing Open Space & Amenity

Open spaces can provide a variety of functions, including active recreation (pursuits such as football, basketball, athletics, etc.) and passive recreation (activities such as strolling, dog walking and birdwatching). Other important elements include visual amenity (important landscape views), ecology (bird and wildlife habitat, biodiversity of plant species), drainage management (particularly stormwater control) and socio-economic needs (such as meeting places).

Passive Open Space

Within King's Island, there are ample amounts of passive open space areas which are accessible to the public and provide a worthwhile visual setting. However, there are some areas of underutilised and undeveloped passive open space that offer little in terms of passive recreation facilities, aside from the earthen embankment topped with a footpath which surrounds three sides of the island.

Much of the land (in particular the north-eastern portion) is covered by the candidate Special Area of Conservation (cSAC - Lower River Shannon) designated under the EU Habitats Directive. It comprises fresh water wetland which floods in winter and slowly drains during spring and summer. Species of interest are also to be found adjacent to the Abbey River. Towards the south of the island, there are a number of areas of green open space which offer amenity value. To the south of King John's Castle is an area of landscaped green space which is used as an informal meeting area, for picnics and other passive recreational uses.

Active Open Space

Existing areas of active open space include a handball alley set in an area of open space to the north of the island, and a large soccer pitch to the east. In addition, there is a community centre set within its own grounds to the west of the island. Athlunkard Boat Club is located to the east of the island, adjacent to Athlunkard Street. Given the amount of public open space in King's Island at present, it would appear that the area is significantly under-resourced in terms of active recreational facilities and areas according to quantitative recommendations outlined in best practice guidelines¹. This is discussed in more detail in Volume 2 Open Space Strategy.

Hard Surface Public Spaces & Thoroughfares

There are a number of well maintained and attractive hard surface public spaces and thoroughfares within King's Island. These are mainly concentrated along the riverside area to the south-west of the island.

1. The area leading from Church Street, features an attractive terrace of Georgian houses and leads into a public space positioned at the entrance to King John's Castle. This public space consists of a hard surface area containing public seating, green landscaping public sculpture, and flagpoles.
2. The area from Castle Lane to the rear of City Hall. This area contains paving, railings along the riverside, public lighting, green spaces and public sculpture.
3. The area focused on St. Mary's Cathedral, from St. Augustine Place, which features large stone steps, leading to Merchant's Quay. This area features landscaping, paving and public sculpture, however the amount of on-street car-parking detracts from this setting and the cars become barriers to pedestrian fluidity.
4. The area running from Matthew Bridge to Baal's Bridge along the length of George's Quay. This is an attractive, pedestrianised space which enjoys a high level of footfall. Further down the quay is a marina. The mature trees, riverside seating and mix of architectural styles combine to make this an interesting and inviting space.

Significant Trees

Trees are important from an urban context, not just from an ecological perspective and can add a vertical, softening dimension within the streetscape. Important existing trees and treelines are located:

- Along George's Quay,
- Merchants Quay and within the grounds of St. Mary's Cathedral.

Figure 1.19 outlines the key areas of open space in Kings Island and some of the more notable environmental features, particularly tree groups.

▼ Hand Ball Alley, St. Mary's Park.



▼ Hand Ball Alley, St. Mary's Park.



▼ Hand Ball Alley, St. Mary's Park.



¹ At present there is no legislation that sets out precisely how much outdoor space is made available per child. However, it is suggested in the publication 'We Like This Place, Guidelines for Best Practice in the Design Of Childcare Facilities' written by the National Children's Nurseries Association on behalf of the Equal Opportunities Childcare Programme (EOCP) 2000- 2006, that a minimum of 9m2 of uninterrupted outdoor space per child should be provided.

Illegal dumping, Island Fields, St. Mary's Park



Figure 1.20: Open Space and Amenity

4. Physical Overview and Analysis

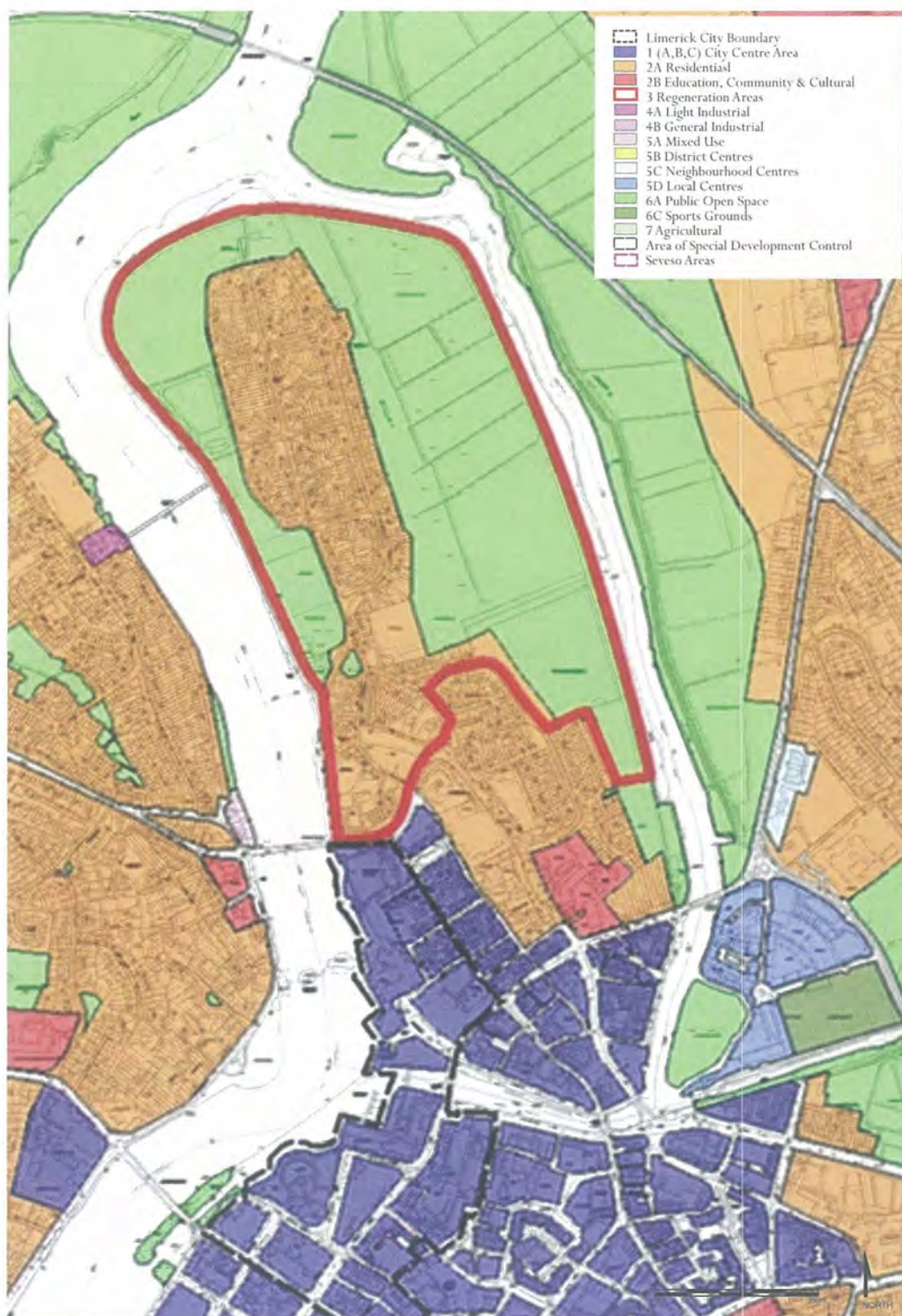


Figure 1.21: Ballinacurra Weston in Context

4.2.11 Planning Context

The following policies specifically deal with regeneration and the King's Island & St. Mary's Park area:

Policy RG.1: Implementation of Regeneration

It is the policy of Limerick City Council to support the implementation of the Regeneration Programme in a coordinated and sustainable manner and to co-operate with the regeneration agencies and the other agencies in the region to delivery the goals and objectives set out in the Regeneration Programme (page 7.4).

Policy RG.2: Zoning

It is the policy of Limerick City Council to zone the regeneration areas in a flexible manner to facilitate the delivery of the masterplans (page 7.3). Fig. 1.2 shows the land use zonings for King's Island & St. Mary's Park, with the thick red boundary line indicating the Regeneration area. (A, B, C) City Centre Area.

This zoning is applicable to the southern portion of King's Island. It is broken down into three different zoning categories, two of which are relevant to the study area

- Objective ZO.1 (B) City Centre Commercial Area (CCCA) and Objective ZO.1(C) Inner City Residential Neighbourhoods (see Fig 1.3).

Objective ZO.1 (B) City Centre Commercial Area (CCCA)

- To support the retention and expansion of a wide range of commercial, cultural, leisure and residential uses in the commercial core area, (apart from comparison retail uses).

Objective ZO.1(C) Inner City Residential Neighbourhoods

- To reinforce the residential character of inner city residential neighbourhoods, while supporting the provision and retention of local services, and civic and institutional functions.

The City Development Plan stated specific key local objectives that the King's Island Framework Plan should address, these include;

- To protect the integrity of all Natura 2000 sites in the vicinity. In this regard the development proposals developed shall be subject to HDAA and SEA.

To prepare a flood risk assessment for King's Island and the general catchment to determine the long term flood remediation solution for King's Island and to identify lands for future development subject to HDAA.

- To develop a strategy to integrate King's Island into the city centre core through selective site redevelopment and improved connections.
- To examine the potential of improved/new multi modal connections to the adjacent area.

The following policies are relevant to Limerick City as a whole and could have a bearing on development within King's Island & St. Mary's Park.

Policy ACT.8 (Requirement for Arts & Cultural Infrastructure)

It is the policy of Limerick City Council to require Arts and Culture Infrastructure to be integrated into large scale re-development of key sites in the city centre area which include lands in the Georgian Quarter, the Medieval Quarter, the Riverside Area, in or near John's Square, the Railway Area and the Docklands.

Policy ACT.22 (Maritime Heritage)

It is the policy of Limerick City Council to promote the maritime heritage of the city.

Policy ACT.25 (Creative Spaces)

It is the policy of Limerick City Council to facilitate the establishment of incubators for start up creative businesses within the city in conjunction with all interested bodies.

Policy ACT.31 (King John's Castle)

It is the policy of Limerick City Council to facilitate the redevelopment of King John's Castle and Nicholas Street as a tourist destination.

Policy ACT.36 (Cultural Quarters)

It is the policy of Limerick City Council to promote and develop cultural quarters in the city and in particular, John's Square, the Georgian Quarter, the Commercial Core, the Medieval Quarter and the Docklands.

Policy BHA.4 (Protection of Limerick's Historic Street Pattern & Medieval Plot Widths)

It is the policy of Limerick City Council to protect Limerick's historic street pattern, and in particular, seek to conserve and enhance the laneways within the

setting of the streetscape and seek to retain and protect historic building lines and traditional plot widths where these derive from medieval origins.

Policy BHA.5 (Survey of Medieval Remains)

It is the policy of Limerick City Council to require a detailed Archaeological Survey of buildings proposed for demolition, where in the opinion of the City Council medieval fabric may be present

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4.2.12 Key Challenges and Opportunities for St. Mary's Park

Challenges

Flooding

A key challenge in St Mary's Park is the designation of the majority of the area under Flood Zone A. Residential use is classed as a highly vulnerable use within this area and new build residential development is not permitted except in exceptional circumstances.

Special Area of Conservation

The following key challenges exist in St Mary's Park in relation to the statutory environmental designations: These include:

- Potential disturbance to birds as a result of amenity use of lands adjacent to the wetland;
- Potential loss and fragmentation of habitat resulting from the construction of new replacement housing, streets and connecting bridges.
- The educational value of the environmental designations has not been maximised upon.

Movement

A key challenge in St. Mary's Park is the lack of permeability to the north of the island, which have resulted in this area becoming socially and economically isolated.

Open Space

A deficiency that exists in St. Mary's Park is the lack of active play facilities for those persons under the age of 15 years and this issue has been raised at public consultation meetings by the residents of St Mary's Park. Furthermore, the following key challenges exist:

- Poor condition of existing recreational facilities such as the handball alley and lack of a modern clubhouse and changing facilities at the soccer pitch
- Lack of non-sporting related open space recreational amenities
- Gated access to some parts of the riverside walkway to the east of the island
- Presence of under-utilised environmental assets, e.g. cSAC wetlands
- Lack of public seating, particularly adjacent to St. Mary's Cathedral.

Historic Character

Stakeholders such as Limerick City Council, Shannon Development and Limerick Civic Trust have been instrumental in promoting the historic image of King's Island. Yet, in terms of the overall character of King's Island architectural heritage, and the management of its archaeological heritage, considerable challenges remain. These include:

- Lack of maintenance, repair and care of the overall historic fabric
- Significant number of derelict sites in key locations, particularly along Mary Street, and vacant properties, particularly along Nicholas Street
- Presence of under-utilised historic assets, e.g. upstanding remains of Fanning's Castle, and remains of house with carved stone fireplace on Nicholas Street
- Use of inappropriate materials on historic facades, e.g. uPVC windows and doors, plastic signage & shop fronts
- Visual problems caused by proliferation of uses such as fast-food outlets, convenience stores and amusement centres.

Physical Character

The following key challenges exist in St. Mary's Park in relation to the physical realm:

- Poor accessibility which has resulted in St. Mary's Park becoming physically, economically and socially isolated
- Unattractive public realm with an over-dominance of hard surfaces with limited soft landscaping
- Several under-used and vacant infill housing sites, which currently detract from the overall appearance of the estate
- Severe environmental black spot to the east of St. Munchin's Street where a strip of land has been used as a landfill site and filled with domestic refuse
- The layout of the houses to the east of St. Munchin's Street backs onto the landfill therefore providing little in the way of natural surveillance. This has potentially exacerbated the issue of illegal dumping

Key Opportunities

Movement

It is recognised that optimal access to the entire King's Island area, and increased permeability within the area, are critical for its future growth and

management. A key opportunity exists to:

- Improve permeability to the northwest and southeast of the island to facilitate the regeneration St. Mary's Park. This will allow for the creation of more balanced and sustainable living environments. The tourism base of St. Mary's Park and King's Island will also benefit from better connectivity and accessibility.

There is an opportunity to increase permeability in the south of King's Island, particularly around Merchant's Quay where the presence of numerous car parks act as a barrier to permeable pedestrian movement.

Open Space

There is an opportunity to retain existing treestands and notable landscape features and incorporate into future development proposals where possible and practical so as to give a certain sense of maturity to the existing environment.

Flooding

Any new housing will need to robustly satisfy the sequential approach and justification test as outlined in the Flood Risk Management Guidelines 2009 for proposed replacement housing use in St Mary's Park.

Special Area of Conservation

A key opportunity exists to minimise potential environmental impacts by careful planning and design of the final proposal. Furthermore, a key opportunity exists to develop environmental training, ecology awareness and eco-tourism within the statutory environmental designations of St. Mary's Park whilst protecting the integrity of the designations.

Historic Character

There is an opportunity to:

- Consider the introduction of an ACA in King's Island – particularly within the environs of Nicholas Street. Such a mechanism would ensure that the varied historic character of what is widely acknowledged to be the oldest part of Limerick city is further safeguarded.
- Ensure that the good practice guidance enshrined within the upcoming publication, "Development and Archaeological Study of King's Island and Limerick" (DASKIL) is mandatory as part of any planning application. The document will provide good practice guidance setting out archaeology and development objectives for the enhancement



4. Physical Overview and Analysis

and preservation of archaeology on King's Island now and into the future.

Physical Character

There is an opportunity to:

- Restructure the existing layout to address gap sites
- Develop existing poor quality frontage sites and vacant land to improve visual quality
- Consider intensive interventions to remove units to improve legibility and permeability
- Address existing poor housing conditions
- Address the lack of integration between areas of new and existing housing
- Remove environmental black spots to the rear of blocks
- Develop streetscape improvements to enhance the public realm and create pedestrian friendly

environments

- Provide additional soft landscaping to soften the existing hardness of the public realm
- Introduce new frontage development to non-overlooked routes

4.3 Ballinacurra Weston

4.3.1 Study Area

The regeneration area of Ballinacurra Weston extends over an area of 14.46 hectares and is located in a suburban residential setting to the south-west of Limerick City Centre. The River Shannon and the Limerick Docklands are situated to the west of the study area at a distance of 1,200 metres. Limerick Railway Station is also an approximate 1,000 metre journey away. There are a number of significant land uses located adjacent to the regeneration area, including Portland Park to the south-west, Caledonian Park to the east and Sarsfield Barracks to the north-west. There are also a number of institutional uses located in close proximity including a large school complex (Our Lady of Lourdes) to the immediate south-west and Mary Immaculate College to the west. A large development of student apartments – 'City Campus' – is located to the north-east of the study area.

Almost 300 metres to the south-east of Ballinacurra Weston is the regeneration area of Southill, which is characterised by a similarly constrained physical layout and a comparable set of socio-economic problems. The Roxboro roundabout – which is surrounded by a mix of land uses including a hotel, supermarket and the LEDP enterprise centre – is located to the east of the study area, at a distance of 1000 metres (10-12 minutes).

Despite the study area's strategic location in the southern fringe of Limerick City Centre, it remains disconnected from its urban surroundings. The reasons why Ballinacurra Weston has failed to successfully integrate into this environment are manifold. Undoubtedly, the complex socio-economic profile of the area has prevented it from progressing and developing in accordance with neighbouring residential areas.



Figure 1.22: Ballinacurra Weston in Context

4.3.2 Existing Physical Context

Land Use

The predominant land use in the regeneration area of Ballinacurra Weston is residential. As stated in the baseline analysis, the houses in this area generally consist of low density, council developed estates dating from the 1950s. However, the estate of Clarina Park – one of the worst affected areas in terms of estate management crime and anti-social behaviour – was developed as a cul de sac in the 1990's. All of this development has been demolished in recent times.

Other land-uses prevalent in the area are community-focussed and consist of Our Lady of Lourdes Catholic Church and parochial house to the south-west, with the community centre, crèche and credit union located alongside to the west. Adapt House Women's Refuge Centre provides services which include emergency refuge, education and training and information and help in relation to housing, finance and legal options. To the immediate east of the regeneration area, opposite the junction of Lenihan Avenue and Hyde Road, there is a small cluster of convenience retail units. At Punches Cross – which is located outside of the regeneration boundary – there is a

neighbourhood centre comprising a large Spar outlet, a butchers, off-licence and pharmacy. In the immediate vicinity, to the east, there is a large supermarket (Lidl), a building supplies outlet (Chadwicks) and a modern office development. There is also a hotel-conference centre (Patrick Punch) located adjacent to the study area on the Ballinacurra Road. These types of uses are important for the overall vitality of the regeneration area. The ESB site forms a substantial presence to the north-west of the area, occupying 2.92 hectares of land. It is outside of the regeneration boundary, but directly borders the housing estates of Weston Gardens and Beechgrove Avenue. The use of this site can be classified as 'Light Industrial'. The structures on this site comprise three warehouse buildings of varying sizes, a large office block and a substantial paved area which is used for storage and vehicle parking.

Housing Size and Conditions

Today, the condition of the building stock varies significantly, with a number of areas containing well maintained houses and other areas displaying high levels of dereliction. There are also some incidences of burnt-out houses. In terms of design, the majority of houses are two-storey, two bay structures with small front

gardens or paved parking areas entered via individual gates, with long, linear gardens to the rear.

A typical house layout (approx 60m²) in Ballinacurra Weston consists of a ground floor layout of a kitchen and living area with an extension to house a bathroom. The upper floor consists of 2 bedrooms. These houses are laid out in terraced blocks of four to five structures. To the north-east of the regeneration area, in Clarina Park, more modern types of houses were found (two-storey and bungalows). However, this park has now been completely demolished.

The general house construction type within Ballinacurra Weston consists of mass concrete, which perform poorly against current energy performance specifications. Further information on the works required to achieve an acceptable energy rating are described as part of the refurbishment strategies for each of the regeneration areas in Volume 2.

Public Realm

In terms of public realm, Ballinacurra Weston is characterised by the following physical features:

- Poor accessibility and/or awareness of routes



Figure 1.23: Ballinacurra Weston Walking Catchment

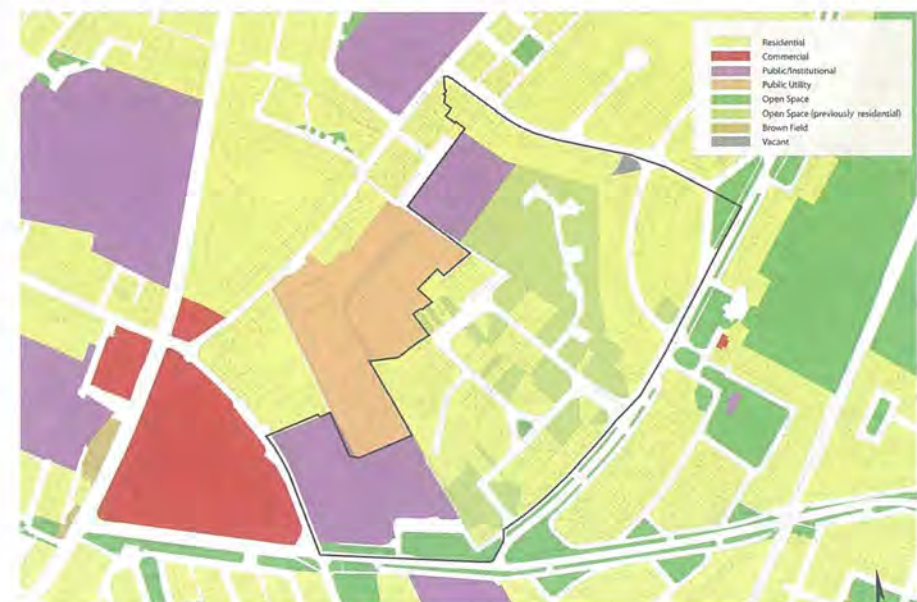


Figure 1.24: Existing Land Use

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▼ Clarina Park and Alley Lane, Ballinacurra Weston



▼ Clarina Park and Alley Lane, Ballinacurra Weston



▼ Clarina Park and Alley Lane, Ballinacurra Weston



to key locations due to the cul-de-sac layout of the area

- Unattractive public realm with an overdominance of hard surfaces (especially to Byrne Avenue) and rock armoury with limited soft landscaping
- Poorly overlooked pedestrian routes
- A significant amount of vacant land within the regeneration area at the site formerly occupied by Clarina Park
- Several under-used and vacant housing sites, which currently detract from the overall appearance of the estate.

4.3.3 Historical Context

Archaeological Heritage

The National Monuments map indicates that there are no statutory protected archaeological sites, monuments or places within the regeneration area of Ballinacurra Weston. The area also falls outside of the Zone of Archaeological Potential identified for Limerick City in the LCCDP 2010-2016.

Built Heritage

There are no structures within the regeneration area of Ballinacurra Weston on the Limerick City Record of Protected Structures (RPS). Similarly, none of the structures within the study area feature on the National Inventory of Architectural Heritage (NIAH) compiled for Limerick City. However, two of the four designated Architectural Conservation Areas (ACAs) under the LCCDP 2010-2016 occur in proximity to Ballinacurra Weston. The ACAs at Ballinacurra Road and O'Connell Avenue are intended to safeguard the architectural character of these residential areas.

Hence, any new development within the regeneration area may need to be respectful of the wider residential environment in which it is situated, particularly with regard to the height of new structures and the palette of materials employed. Analysis of the historic Ordnance Survey maps suggests that the area of Ballinacurra Weston now earmarked for regeneration was, in previous centuries, composed of open fields. In the early Nineteenth Century, the land in the study area was significantly free from development and was situated immediately outside the municipal boundary of Limerick City.

In addition, two parallel routes running in a north-south direction also traversed the site. These are no longer present today. It is apparent that by the early

Twentieth Century, the north-eastern corner of the area was in use for quarrying and the production of lime. It would appear that at this date, the quarry was quite active, with a significant amount of excavated ground being present. By this date, significant development had occurred along the Rosbrien Road to the north-west of the study area. The terraces of Ryan's Cottages and Mountvincent were complete, with Rosbrien Terrace also under construction. The Rosbrien – Greenfields Road forms a substantial presence at this date, running along the western boundary of the study area. It can be seen that the bulk of the land in Ballinacurra Weston is still free of development at the turn of the Twentieth Century. Hence, the construction of social housing at Ballinacurra Weston in the 1950s represents the first major use of the site.

4.3.4 Existing Movement

Traffic Movement

The regeneration area of Ballinacurra Weston is located in a built-up urban environment with good connections into the centre of Limerick City. O’Connell Avenue (N20), which joins up with the city’s main thoroughfare – O’Connell Street – is located to the north-west of the study area, and the Hyde Avenue/Road, which skirts the south-eastern regeneration boundary, leads to Limerick Train Station. Located to the south of the regeneration area are attractors such as the Mid-Western Regional Hospital and the Crescent Shopping Centre.

Therefore, the area is located within the context of a number of major transport axes which carry large volumes of traffic on a daily basis. The regeneration site itself is directly bordered by transport routes on all sides. To the west is the Rosbrien Road, to the north is Prospect Hill, to the east is Byrne Avenue and to the south-east is the Hyde Avenue/Road. While access to Hyde Avenue/ Road from the regeneration area is reasonable, access to the Rosbrien Road/Prospect Hill via Alley Lane is particularly poor, with there being only one road in and out. This road is quite narrow in size and only runs a short distance. It does not offer access to the entire regeneration area, thereby effectively severing connections to the area from the Rosbrien Road. The situation of the ESB site along this road further compounds this severance, with the large landholding acting as a barrier to vehicular and pedestrian permeability in the area. The road which runs between the study area and the Punches Cross site only accommodates one-way traffic.

Within the regeneration area internally, movement is quite restricted. The area features a number of cul-de-sacs and circuitous roadways which impede the easy flow of pedestrians and vehicles. In addition, the steep topography of the site further hampers circulation. This is particularly apparent to the east of the church, where a narrow laneway, approached by a flight of steps, is used as an access route from the Beechgrove housing estate. This design of this laneway, which is surrounded by high walls, is not a people-friendly space, and would appear to only encourage anti-social behaviour in the area rather than facilitate safe access to the church. Closure of the lane is currently being sought by the residents.



Figure 1.25: Existing Movement

4. Physical Overview and Analysis

Public Transport

Section 3.1.7 Transport of Section 3.0 Baseline Conditions and Analysis highlights that in common with other regeneration areas, Ballinacurra Weston exhibits low levels of car usage with a high percentage of private households having no car (58%) and a generally high use of public transport (9%) which is higher than the city average (7%).

Therefore, the provision of a good quality public transport system will be essential for the regeneration of the area given the existing demand levels. The area is well served by bus operators, however no bus routes currently pass through the regeneration area. There are three Bus Eireann routes which provide transport to and from Limerick City Centre – Ballinacurra Weston, including the 312 and the 304 (Punches Cross – O’Connell Avenue area) and the 304A (Hyde Road).

Existing facilities for cyclists are inadequate. In this regard, it is positive to note that the Ballinacurra Road–O’Connell Avenue area has been earmarked for redevelopment under the Limerick City Council Green Route Corridors scheme.

4.3.5 Environmental Considerations

The topographical character of the regeneration area of Ballinacurra Weston is defined by noticeably undulating lands. The most elevated part of the study area occurs to the north-east in proximity to the Adapt House complex, with the highest recorded point being 20 metres above ordnance datum (AOD). The topography rises from 8 metres on Hyde Avenue (in the east) to 22 metres on Prospect Hill, giving an overall level difference of 14 metres. The fact that there was once a quarry sited to the north-east of the study area further exacerbates level differences at this location.

As was indicated on the historic Ordnance Survey maps, there was previously a quarry located to the north-east of the Ballinacurra Weston regeneration area. This quarry is no longer present today.



Figure 1.26: Existing Contours

4.3.6 Soils

The GSI (Geological Survey of Ireland) Teagasc Sub-Soil database demonstrates that soil types found within the study area include a mix of Made Ground and Bedrock. Active bedrock is evident to the north-east of the regeneration area which might result in subsidence or instability of the ground surface. Made ground is present within the study area and is associated with prior road construction and other developments.

4.3.7 Groundwater Vulnerability

Groundwater Vulnerability within the study area was found to be mainly “High to Low.” An “Extreme” pocket where rock is near the surface exists to the north-east of the study area, near the Adapt House complex.

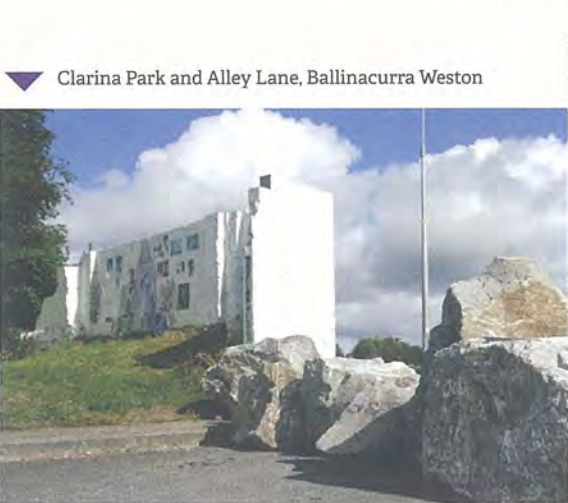
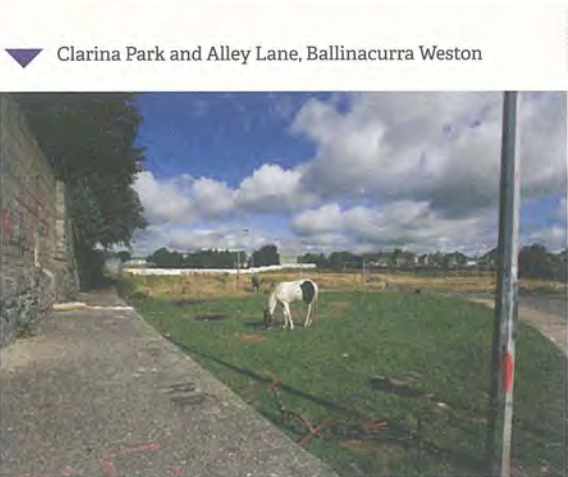
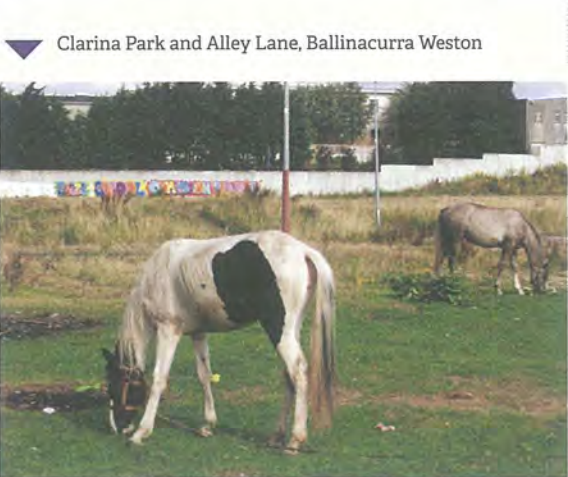
4.3.8 Flooding & Drainage

Information from the Limerick City Council Development Plan 2010-2016 Flood Risk Mapping indicates that there are no Flood Points within, or in very close proximity to the regeneration area at Ballinacurra Weston. The nearest area which has flooded in recent times is located to the south of the study area adjacent to Portland Park. This area is described as having ‘Benefiting Lands’ which typically indicates low-lying land near rivers and streams that might be expected to be prone from flooding. To the north of the study area, the South Circular Road is also indicated as being a Flood Point where more than one flood has occurred.

Areas prone to flooding as indicated in the Limerick City Development Plan suggest that there are no flood zones located immediately adjacent to the study area.

4.3.9 Water, Sewerage and Drainage Infrastructure

All main services such as water, sewage, gas, Eircom and electricity are available in the area. An infrastructural survey was carried out by Tobin Consulting Engineers to ascertain the extent and location of existing services in Ballinacurra Weston and this information is contained within Appendix 7 of this document. All services are available adjacent to the site in the footpaths along the surrounding roadways.



4. Physical Overview and Analysis

4.3.10 Existing Open Space & Amenity

Current amenity and public open space provision within the regeneration boundary of Ballinacurra Weston is poor. In terms of amenity uses, the complex to the west of the church contains the area's only community facilities. This consists of a community centre, crèche and credit union. However, the housing estates in the area appear to be well served in terms of private open space, with the majority containing long back gardens, as well as space to the front (semi-private open space) which generally consists of grass areas, but in some cases has been paved over to accommodate carparking. The largest expanses of open space in the area at present include the piece of land to the rear of the community centre and the area

of ground to the south of the Adapt House complex. With regard to the site to the rear of the community centre, the recent provision of a number of active open space areas, including a seven-a-side pitch, with two areas of passive open space – consisting of a garden for older people and a garden for the crèche – have enhanced significantly the area's amenity provision. The other area of significant open space – at the former site of Clarina Park – located to the northeast of the study area presents problems in terms of anti-social behaviour due to the lack of surveillance and security in the area.

The study area is well served by open spaces located in the wider surrounding area. Portland Park, located to

the south, is a large area of passive open space, which provides ample parkland amenity. To the immediate east of the regeneration area is Caledonian Park, which contains a number of large sports grounds, thus providing important active open space areas. However, internally, the study area is very poorly served by meaningful public open spaces. In terms of environmental features, there are a number of mature trees in the study area. The most significant tree groups occur at different intervals to the north of the area, particularly to the rear of Adapt House and to the rear of the Beechgrove estate. There appears to be large trees in the back gardens of many of the houses, particularly in the estates of Lenihan Avenue, Clarina Avenue and Crecora Avenue.



Figure 1.27: Existing Open Space and Amenity

4.3.11 Planning Context

The City Development Plan stated specific key local objectives that the Ballinacurra Weston Framework Plan should address, these include:

- That a new connection be made between the Childers Road and Hyde Avenue.
- That a neighbourhood centre be developed along the frontage of Childers Road and Ballinacurra road.

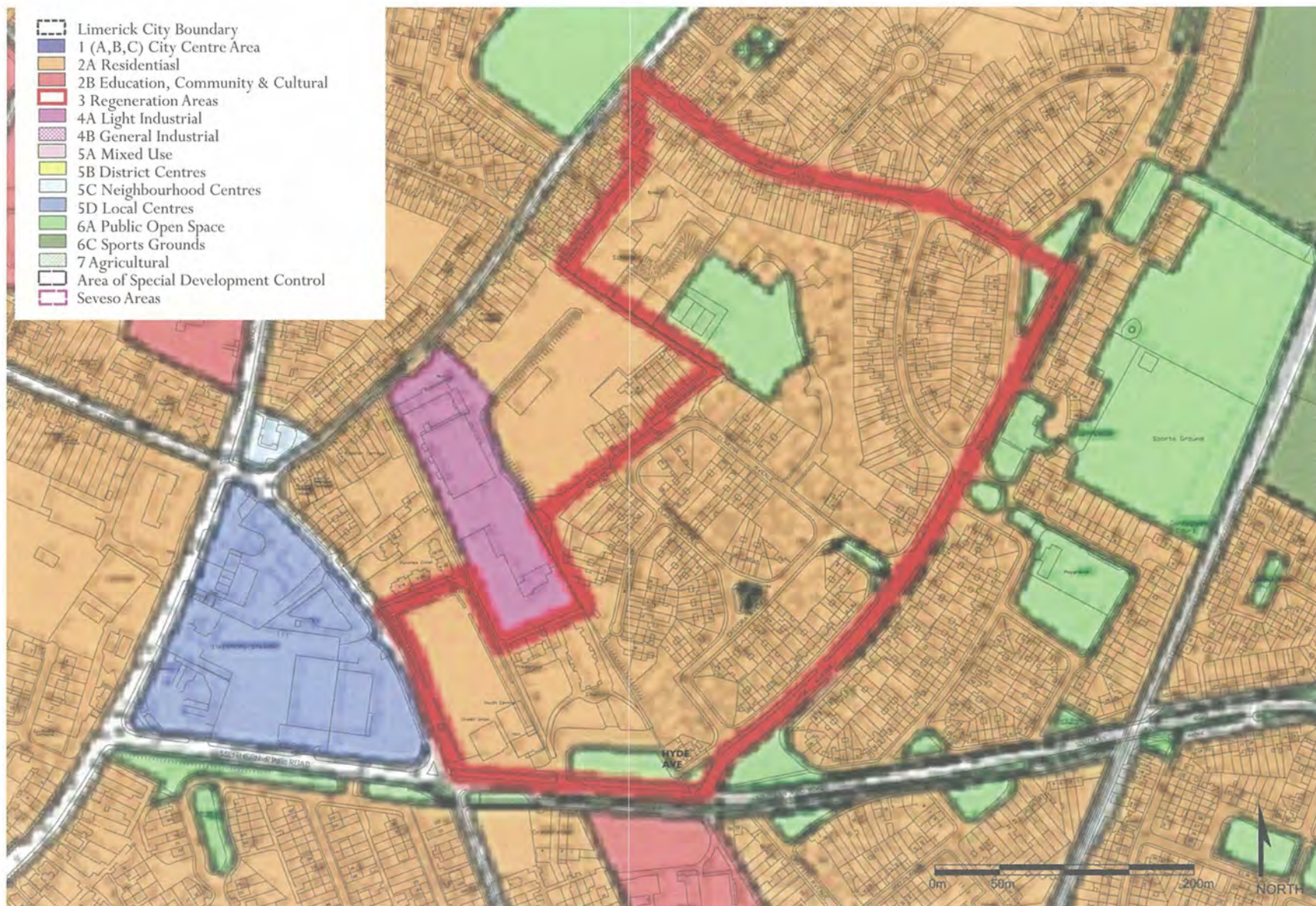


Figure 1.28: Land Use Zoning Map Extracted from the Limerick City Development Plan 2010-2016

4. Physical Overview and Analysis

4.3.12 Key Challenges and Opportunities

Challenges

Land Use

Due to the demolition of Clarina Park, there is a significant amount of vacant land within the regeneration area. A key challenge is to identify interventions for the land in the short to medium term to ensure its protection from anti-social activities.

Movement

The following key challenges exist within Ballinacurra Weston:

- Within the regeneration area internally, movement is quite restricted. The area features a number of cul-de-sacs and circuitous roadways which impede the easy flow of pedestrians and vehicles.
- In addition, the steep topography of the site further hampers circulation.

Open Space

Much of the internal open space within Ballinacurra Weston is poorly overlooked. A key challenge is to provide functional, safe and well overlooked open spaces within the estate.

Topography

The following key topographical challenges exist within Ballinacurra Weston

- East of the church site
- Eastern side of Rosbrien Road leading into the site of the community centre
- To the south of Adapt House
- The rear gardens of Beechgrove Avenue (backing onto the ESB site)
- Clarina Park to the rear gardens of Byrne Avenue.

Physical Character

The following key challenges exist in Ballinacurra Weston in relation to the physical realm:

- Poor accessibility and/or awareness of routes to key locations due to the cul-de-sac layout of the area
- Unattractive public realm with an overdominance of hard surfaces (especially to Byrne Avenue) and rock armoury with limited soft landscaping
- Poorly overlooked pedestrian routes
- A significant amount of vacant land within the regeneration area at the site formerly occupied by

Clarina Park

- Several under-used and vacant housing sites, which currently detract from the overall appearance of the estate.

Opportunities

Land Use

A key opportunity exists to strengthen the existing neighbourhood centre at Punches' Cross to ensure its vibrancy and vitality for the residents of Ballinacurra Weston.

Movement

Efforts to promote greater local connectivity to adjoining residential areas is a key opportunity and will require consultation with stakeholders and residents within the area. The extension of a link north-eastwards through Clarina Park to Byrne Avenue south-eastwards towards Lenihan Avenue will increase connectivity. Strengthening the existing access at Alley Lane is also a key objective.

Open Space

There is an opportunity to protect the existing mature treestands at the following locations:

- to the rear of Adapt House
- to the rear of the Beechgrove estate

There is an opportunity to design new buildings to overlook open spaces and ensure safety and security of the public realm

Topography

The topography of some sites within the estate is difficult and there is an opportunity to sensitively design new development to respect and protect sightlines and views within and from outside the area.

Physical Character

There is an opportunity to:

- Restructure the existing layout to address gap sites
- Develop poor quality frontage sites and vacant land to improve visual quality
- Consider intensive interventions to remove units to improve legibility and permeability
- Address existing poor housing conditions
- Address the lack of integration between areas of new and existing housing
- Remove environmental black spots to the rear of blocks
- Develop streetscape improvements to enhance the

public realm and create pedestrian friendly environments

- Provide additional soft landscaping to soften the existing hardness of the public realm
- Introduce new frontage development to non-overlooked routes



4. Physical Overview and Analysis

4.4 Southill

Southill is located in the southern fringe of Limerick City centre. The Masterplan aims to 'redefine the south city as a distinctive and popular neighbourhood. This new image and identity will transform Limerick's Southside into a place where people will aspire to live and feel that they belong, and help secure long term regeneration in the area'. Despite a distance of less than 1.5 km from the Roxboro roundabout to the city centre, the area is poorly connected to the city with one principal access road (R511) due to the severance effect of the railway line. This key route is in need of improvement and upgrade.

4.4.1 Existing Physical Context

Land Use

The predominant land use in the regeneration area of Southill is residential. As stated in the baseline analysis, the houses in this area generally consist of low density, council developed estates dating from the 1960s.

The estates incorporate four residential areas, namely Carew Park, Kincora Park, Keyes Park and O'Malley Park, with a hotel, commercial and retail outlets, the Limerick Enterprise Development Park (LEDP) complex, Roxboro Shopping Centre, Galvone Industrial Estate, Southill House (Community and Enterprise Campus), schools and community buildings, Rathbane Golf Club, football clubs and areas of open space.

There is significant vacancy within the Galvone Industrial Estate as is detailed from Figure 1.30 Existing Land Uses. As older manufacturing units became obsolete and closed within the Galvone Industrial Estate, new industrial opportunities were provided elsewhere. What remains, in general, are smaller industrial enterprises and storage/distribution facilities. Antisocial behaviour, may be amongst the causes which has prevented any serious re-investment in the estate.

Housing Size and Conditions

Southill was constructed in various phases from 1966 to 1989. Today, the condition of the building stock varies significantly, with a number of areas containing well maintained houses and other areas displaying high levels of dereliction.

A significant amount of demolition work has occurred within O'Malley and Keyes Parks, which contained a significant amount of dereliction and burnt out



houses. The image of this area needs to be radically altered to ensure successful regeneration. In terms of design, the majority of houses are two-storey, two bay structures with small front gardens or paved parking areas entered via individual gates, with linear gardens to the rear.

A typical house layout (approx 78m²) in Southill consists of a ground floor layout of a kitchen/dining area and a living area. The upper floor consists of 3 bedrooms and a bathroom.

These houses are typically red brick cavity wall-terraced or end-terraced houses with replacement double glazed windows, a gas boiler and open fire for heating. Further information on the works required to

achieve an acceptable energy rating are described as part of the refurbishment strategies for each of the regeneration areas in Volume 2.

Public Realm

In terms of public realm, Southill is characterised by the following physical features:

- Poor accessibility with adjacent neighbourhoods which has resulted in Southill becoming physically, economically and socially isolated
- The Radburn² layouts that characterise Southill create a place that is difficult to navigate
- Poorly observed rear courts (as part of the Radburn layouts)
- Poorly observed and confusing pedestrian routes
- Over-provision of underutilised public open space
- Previous demolition activity in O' Malley Park has left significant areas of open space without a clear role or function, which have become hotspots for dumping and grazing of horses
- The quality of the public realm is compromised by the tethering of horses
- Several under-used and vacant infill housing sites, which currently detract from the overall appearance of the estate
- Due to the demolition of some blocks to date, the layout of the houses provide exposed boundaries which provide little in the way of natural surveillance. This undermines the safety and security of the area



Figure 1.31: Existing Land Use

² Radburn layout are layouts designed to separate housing from the roads and footpaths and therefore the housing appears front-to-back with a lack of through-routes and clear movement for both pedestrians and car users. This creates a neighbourhood which can be difficult to police and to manage successfully.

4. Physical Overview and Analysis

4.4.2 Existing Movement

Southill, as identified by the Masterplan, is bounded by the railway line to the west. John Carew Road runs in a north/south direction and forms a T-Junction with Childers Road. There is a single access point from John Carew Road into Carew Park and Kincora Park estates. However this is only accessible to traffic travelling out of the city. A further access point from John Carew Road accesses the hotel and commercial area located at the corner site of the junction with the Childers Road. Childers Road runs in an east/west direction, to the north of it lies the Roxboro Shopping Centre and further residential dwellings of Janesboro, to the south the LEDP offices. Roxboro roundabout forms the four-way intersection between the Roxboro Road and the Childers Road, which continues on in an east/west direction.

The Roxboro Road runs in a north/south direction from the Roxboro Roundabout and gives access to the Galvone Industrial Estate, Keyes Park and O'Malley Park on the east and Kincora Park and Southill House on the west. The Roxboro roundabout, in its current condition, is design predominantly for the movement of the vehicle.

The Rosbrien Interchange (M7) in the southwest corner adjacent to the site, in its current design, only allows for vehicular traffic coming from the west to access the Southill area.

Inbound access from the south (M20) or east (M7) to Southill is a crucial element of the regeneration process. This could severely restrict the viability and vitality of the Southill area. Local movement, as is highlighted on Figure 1.30, is restricted due to the cul-de-sac nature of existing developments. Three existing bus routes currently serve the area. Limerick City Council has also carried out a comprehensive Corridor Selection Study and has identified three Green Route Corridors linking the outskirts of Limerick City with the City Centre. The eastern corridor runs along the M7 connecting to the Childers Road, which runs in a north-south direction connecting to the Kilmallock Road Roundabout and continuing on into town. The Kilmallock Roundabout skirts the north-eastern point of the Southill area therefore connections and pedestrian routes need to be made available from Southill to this junction in order to avail of and utilise the proposed green routes infrastructure. Another future option in promoting a direct strategic transport

connection would be to connect the proposed Eastern and Southern Corridors, continuing along the Childers Road, servicing the entire Southill area and connecting to the Ballinacurra Road at the western end of the Childers Road. This will have a positive effect on the economic potential³ (faster and more reliable work journeys, productivity gains, increased potential for clustering of activities) of strategic sites within Southill at the Galvone Industrial Estate.

The Roxborough Road and the Roxboro roundabout are predominantly designed for the movement of vehicles which isolates Southill from its wider physical context. It is a key objective of the LRFIP to create a traffic-calmed street where the needs of pedestrians, cyclists and public transport users are prioritised. The existing Childers Road contains, to its southern edge, a large isolated industrial area with no direct connections. The future image of the Childers Road needs to be carefully considered through new uses and development typologies with active frontage, increased permeability and landscaping improvements. This will assist in de-isolating Southill from its wider physical context.



Figure 1.32: Existing Movement

Larkin Drive, O'Malley Park, Southill



3 Department for Transport (UK) (2005), Transport, Wider Economic Benefits, and Impacts on GDP, Technical Paper.

Public Transport

Section 3.1.7 Transport of Section 3.0 Baseline Conditions and Analysis highlights that in common with other regeneration areas, Southill exhibits low levels of car usage with a high percentage of private households having no car (43%) and a very high use of public transport (14%) which is higher than the city average (7%). Therefore, the continuing provision of a good quality public transport system will be essential for the regeneration of the area given the high usage.

4.4.3 Topography

The topographical area consists of undulating lands. The most elevated part of the Southill regeneration area is O'Malley Park to the east, including lands in the vicinity of St. Enda's Community College. From Southill House and O'Malley Park the gradients fall towards Rathbane Golf Course, and Barry's Field where low lying lands exist. The gradient within the Galvone Industrial Estate rises to the east.

4.4.4 Geology

Based on the available information from the Geological Survey of Ireland. Southill is shown to be underlain by Dinantian Pure Bedded Limestones which is defined as a dark fine limestone and calcareous shale.

4.4.5 Soils

The GSI (Geological Survey of Ireland) Teagasc Sub- Soil database demonstrates that soil types found within the study area range from Marine/Estuarine Silts and Clays, Till derived from Limestone, Made Ground and Bedrock.

An old limestone quarry is located within Southill, south of Keyes Park and east of Roxboro Road and was previously used as a landfill for domestic waste. It was closed in 1987. A preliminary investigation was carried out for leachate and gas emissions and the landfill has been registered on the Environmental Protection Agency (EPA) database in compliance with legislation. A thorough investigation has never been carried out as funding is not available and the council has no plans to do this. The landfill would need to go through this process in order to be certified by the EPA. The outcome of which would probably require a more substantial cap.

The groundwater map for Southill indicates that vulnerability within the study area to be mainly "High

to Low." "Extreme" small pockets where rock is near the surface exists to the north and northeast of the study area.

4.4.6 Flooding & Drainage

A desktop study was carried out to determine the flooding risks involved within the study area. Information from the Office of Public Works' National Flood Hazard Mapping indicates that a couple of small areas can be prone to some localised flooding as indicated in figure 1.32. The issue of localised flooding will be adequately dealt with during redevelopment through the incorporation of sustainable urban drainage systems (SUDs). The Limerick City Development Plan 2010-2016, does not indicate any areas within Southill that are at risk from flooding. Surface water run-off from any proposed development will be subject to pollution control and attenuation before it is discharged to the receiving water.

4.4.7 Water, Sewerage and Drainage Infrastructure

All main services such as water, sewage, gas, Eircom and electricity are available in the area. An infrastructural survey was carried out by Tobin Consulting Engineers to ascertain the extent and location of existing services in Southill and this information is contained within Appendix 7 of this document. All services are available adjacent to the site in the footpaths along the surrounding roadways. However, some services such as surface water sewers traverse sites scheduled for proposed replacement housing in the short term. The cost of redirecting these services have been accounted for at the planning and cost appraisal stage.

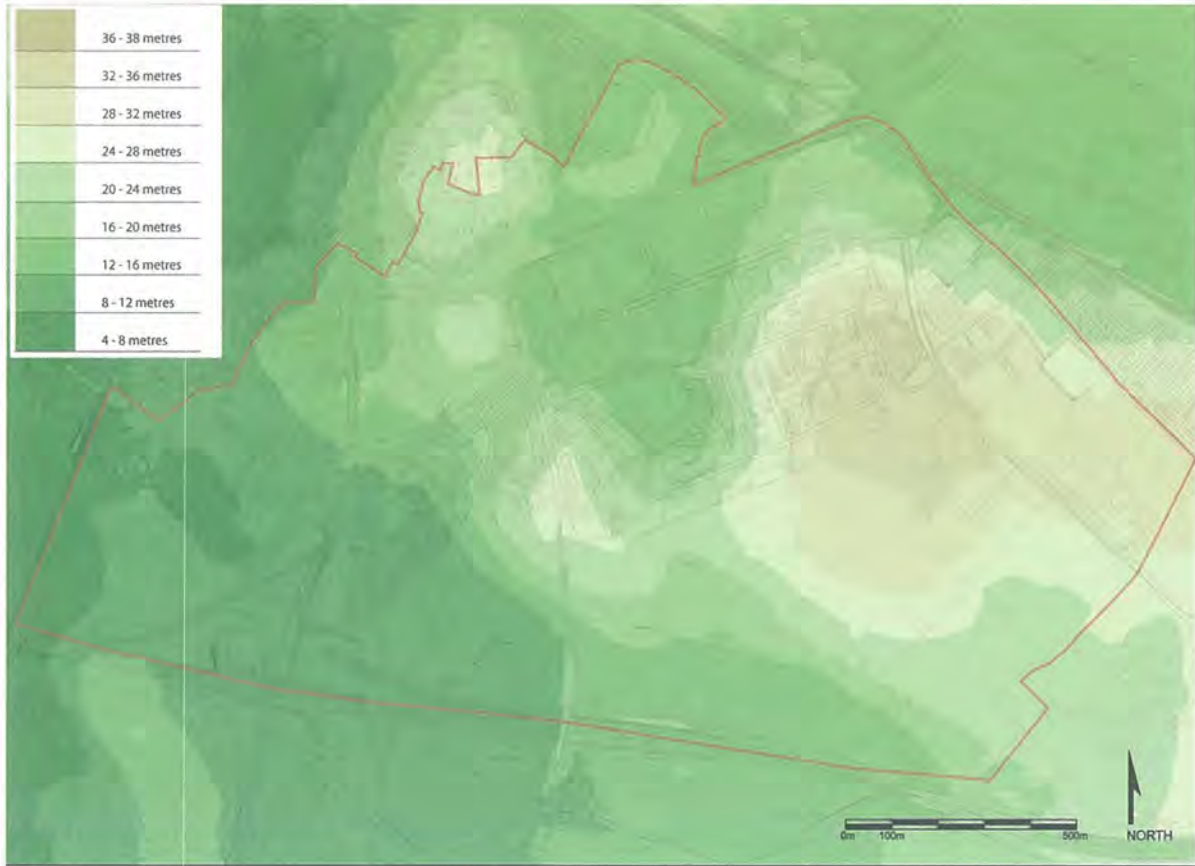


Figure 1.33: Existing Contours

4. Physical Overview and Analysis

4.4.8 Environmental Parameters

Southill is an urban edge location, leading from an area characterised by suburban residential development towards open countryside with the M7 route acting as the boundary to this division. Figure 1.33 sets out the overall environmental parameters in Southill including trees and hedgerows, wetlands, drains and ditches, architectural and archaeological heritage features. There are no identified statutory environmental designations.

Southill House demesne located along the Roxboro Road contains significant mature tree groups consisting of Holm's Oak, elm trees, sycamore, yew and some hawthorn and holly with evidence of a rookery creating a scenic landscape. Smaller clusters or bands of trees are noted at other locations within Southill. They are located at:

- at the primary school by O'Malley Park,
- the boundary of the Golf Course,
- St. Enda's School,
- the eastern end of the Galvone Industrial Estate.

4.4.9 Architectural Heritage

Southill House is listed on the NIAH survey, providing a range of services to the community, small enterprise development including businesses based on cooperative/social economy projects. It would be important to retain the setting and curtilage of the house.

4.4.10 Archaeological Heritage

There are a number of local sites of archaeological heritage within Southill most of which are located along the southern boundary by the M7 route and have been dealt with in the M7 Environmental Impact Statement report. One other site of archaeological heritage is located to the northeast of the existing golf course. It should be noted that all monuments recorded have to some degree been encroached on by existing built interventions.



Figure 1.34: Environmental Parameters

Valley View Green Area not accessible by car, O'Malley Park, Southill

Valley View Green Area, O'Malley Park, Southill



4.4.10 Existing Open Space

Figure 1.34 outlines the passive and active open space within Southill. Current passive/parkland open space quality is poor within Southill. The open spaces have little or no amenity function, being disjointed and suffering from a perceived lack of safety. A number of spaces have been boarded up and closed off for access and in general the area is bereft of facilities such as seating, playgrounds etc. There is a need for a considered inclusive open space strategy for the regeneration areas.

There are a number of sports pitches within Southill that have varying degrees of auxiliary facilities such as changing rooms, gyms, etc. There is a pitch on lands south of the Maldron Hotel with no facilities and Kennedy Park to the north provides pitches and walkways offering good links to the school. St. Enda's School in the east provides sporting facilities by way of playing fields, there is also a gym and swimming pool which closed in 2010. Rathbane Public Golf Club provides a strong, positive amenity for the area.

Carew Football Club have their facilities within Barry's Field and Hogan Park to the west is a currently under utilised stadium, with a local club operating out of the stadium.



Figure 1.35: Existing Open Space

4. Physical Overview and Analysis

4.4.11 Planning Context

The following are the local objectives set out in the Limerick City Development Plan 2010-2016 that the Southill Framework Plan shall address:

- The re-establishment of the N7/N20 Rosbrien interchange into Southill to establish Southill as a gateway to the city centre.
- To develop the Roxboro Shopping Centre and adjacent lands as a mixed use district centre in accordance with the Retail Strategy
- To develop the existing commercial and industrial lands along the south boundary of the Childers Road for mixed use employment related development.
- To develop a mobility strategy for the area connecting the residential zones to the district centre and employment zones and amenity area.
- To develop a new educational campus to serve the needs of the entire area.
- To develop an amenity strategy for the area.
- To establish the need for additional local shopping facilities throughout the area.
- To identify strategic sites for the construction of landmark/gateway buildings.
- The framework plans shall be approved by the City Council and they shall form the basis of a variation to the zoning proposals contained in this plan.

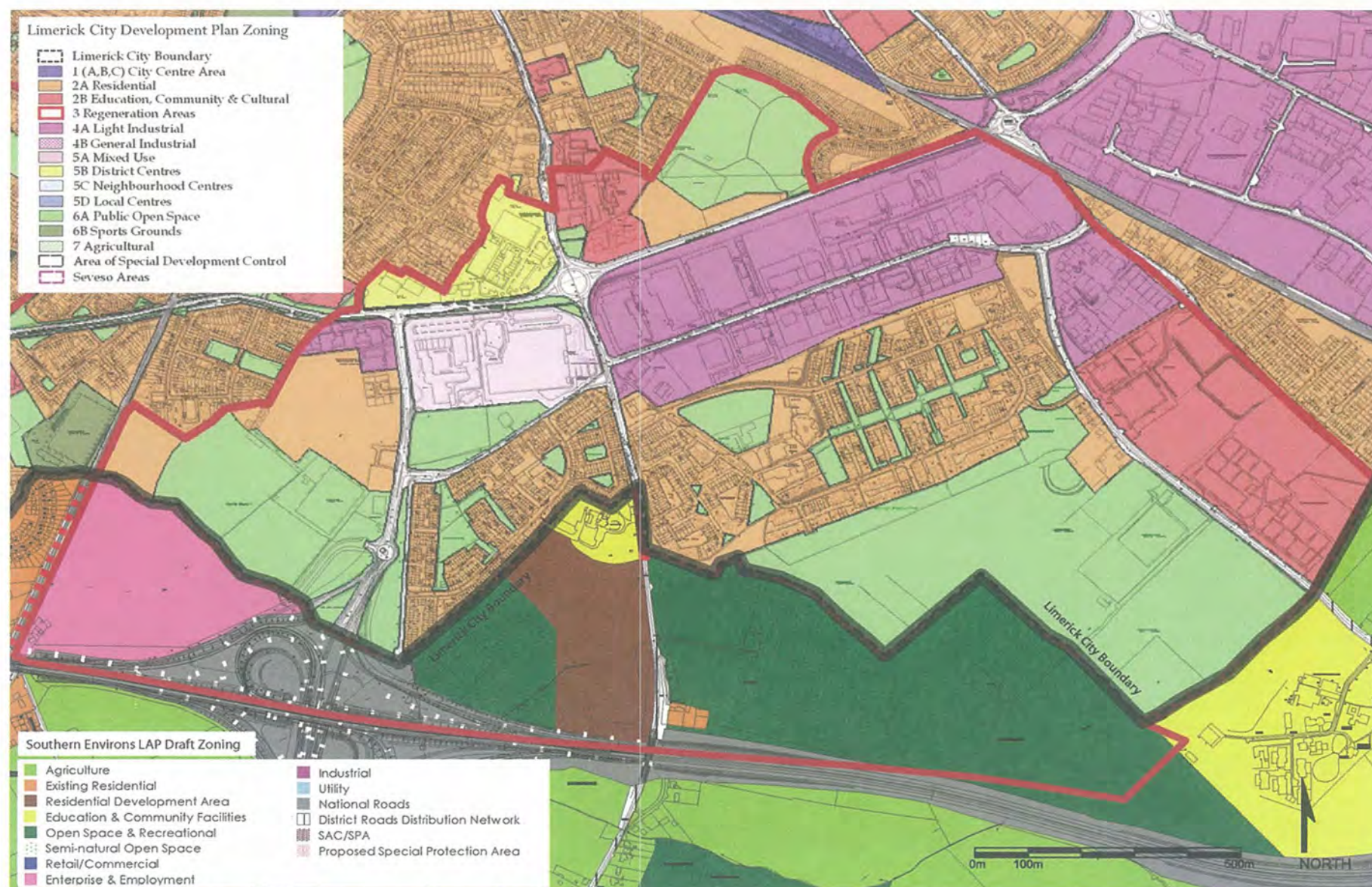


Figure 1.36: Land Use Zoning Map extracted from the Limerick City Development Plan 2010-2016

4.4.12 Key Challenges and Opportunities

Key Challenges

Land Use

The following key challenges in relation to land use exist within Southill:

- How to encourage development of the fallow areas in O'Malley and Keyes Park that once contained housing in the short-medium term.
- How to promote the revitalisation of the Galvone Industrial Estate, especially to the eastern end and which consists of lands outside public ownership.

Movement

The following key challenges in relation to movement and permeability exist within Southill:

- The lack of strategic access into Southill from the M7 motorway. This greatly limits possible opportunities to attract employment into the area and acts as a barrier to permeability.
- Roxboro roundabout represents a key challenge to pedestrian and cycle movement.
- The existing cul-de-sac layout of the estates and limited ingress and egress points presents a key challenge to internal permeability.
- The lack of connectivity to the wider area, including the University of Limerick to the northeast, presents a key challenge

Open Space

The following key challenges in relation to open space exist within Southill:

- Routes and open spaces faced by rear gardens, which provide no 'eyes on the street' thus facilitating anti-social behaviour.
- The perceived lack of safety within existing public open spaces.
- The lack of active play facilities for children under 15 years old within each of the estates.

Soils

The following key challenge in relation to soils exist within Southill:

- The landfill located south of Keyes Park presents a key challenge to future development, even low intervention development. Certification from the EPA is required prior to any development taking place.

Physical Character

The following key challenges exist in Southill in relation to the physical realm:

- Poor accessibility with adjacent neighbourhoods which has resulted in Southill becoming physically, economically and socially isolated
- The Radburn layouts that characterise Southill create a place that is difficult to navigate
- Poorly observed rear courts (as part of the Radburn layouts)
- Poorly observed and confusing pedestrian routes
- Over-provision of underutilised public open space *
- Previous demolition activity in O' Malley Park has left significant areas of open space without a clear role or function, which have become hotspots for dumping and grazing of horses
- The quality of the public realm is compromised by the tethering of horses
- Several under-used and vacant infill housing sites, which currently detract from the overall appearance of the estate
- Due to the demolition of some blocks to date, the layout of the houses provide exposed boundaries which provide little in the way of natural surveillance. This undermines the safety and security of the area

Key Opportunities

Movement

There is an opportunity to increase permeability between Southill and the wider district at the following locations:

- From Keyes/O Malley Park to the Childers Road
- From the existing M7 motorway to Southill (a number of options will need to be tested for viability in consultation with the Roads Office and NRA)
- From Bawnmore Road eastwards to the University of Limerick

There is an opportunity to increase permeability within Southill at the following locations:

- Through Carew Park
- From Collins Avenue to Kincora Park
- South of Southill House connecting Collins Avenue to Maigue Way
- Connecting Collins Avenue to Southill Area Centre south of Keyes Park

Open Space

There is an opportunity to:

- Exploit significant views across the city from Southill House and lands in the vicinity that command an elevated position.
- Retain existing treestands for screening purposes at:
 - Southill House
 - the primary school by O'Malley Park,
 - the boundary of the Golf Course,
 - St. Enda's School,
 - the eastern end of the Galvone Industrial Estate.
- There is also an opportunity to develop a comprehensive assessment of recreational facilities within the district leading to a consolidation of facilities.
- There is an opportunity to develop options to design new buildings to front open space and maximise the potential for overlooking, thus ensuring the area's safety and security.

Topography

There is a key opportunity to exploit existing viewpoints and topography at key locations within Southill.

Historic Character

There is an opportunity to:

- Retain and protect the setting and curtilage of Southill House.

Physical Character

There is an opportunity to:

- Restructure the existing layout to address gap sites
- Develop existing poor quality frontage sites and vacant land to improve visual quality
- Consider intensive interventions to remove units to improve legibility and permeability
- Address existing poor housing conditions
- Address the lack of integration between areas of new and existing housing
- Remove environmental black spots to the rear of blocks
- Develop streetscape improvements to enhance the public realm and create pedestrian friendly environments
- Provide additional soft landscaping to soften the existing hardness of the public realm
- Introduce new frontage development to non-overlooked routes

