

Cork County Council

Amendment No2 to Midleton Electoral Area Local Area Plan 2011 (Carrigtwohill North Framework Masterplan and Water-Rock Framework Masterplan)

**Prepared by Cork County Council Planning Policy Unit
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1 Carrigtwohill

1.1 VISION AND CONTEXT

The overall aims for Carrigtwohill are to realise the significant population growth proposed, to maximise the value of the suburban rail project, grow the employment base of the town as a key location for the delivery of the economic targets for the whole of Metropolitan Cork, and build a vibrant and accessible town centre that provides for the needs of the expanding community, while retaining the unique character and community spirit of the town.

Strategic Context

1.1.1. Carrigtwohill is located along the Waterford-Cork section of the Atlantic Corridor road linking these Gateway cities and which is subject to major on-line improvement proposals. It is an objective of the CDP 2009 to support the Atlantic Corridor in order to address the economic imbalance that exists between Greater Dublin and the Regions, focusing investment on the main towns along the corridor as the principle centres for employment and economic development and in line with the aspirations of the National Spatial Strategy.

1.1.2. Carrigtwohill is a Metropolitan Town within the County Metropolitan Strategic Planning Area and while it is the smallest of the four main towns in the electoral area, it has experienced the most growth in percentage terms of any of the towns in the county in recent years. The objective for Carrigtwohill is set out in SET2-8 of the County Development Plan 2009 where the stated aim is to secure the completion of the major mixed use development proposals set out in the Special Local Area Plan.

1.1.3. Carrigtwohill was the subject of a Special Local Area Plan in 2005, which allocated significant growth to the town on the basis of the re-opening of the rail-line and a new commuter rail service to Cork City as part of the Cork Suburban Rail Network Project. Since the 2005 Special Local Area Plan was adopted there has been significant progress in achieving the strategic planning proposals outlined in that plan, the most notable of which is the recent re-opening of the commuter rail service to Carrigtwohill and Midleton. The intention is to continue with the implementation of the SLAP proposals as a priority but to achieve this from within the Local Area Plan structure.

1.1.4. CASP Update and the CDP 2009 envisages further population growth in the town arising from an overall increase in the expectations for the County Metropolitan Strategic Planning Area and an intensification of employment provision, following the delivery of

the commuter rail link, with the additional growth occurring mainly after 2014. The population growth targets are predicated on the delivery of the masterplan for the lands north of the rail line as originally identified in the 2005 SLAP. CASP Update also highlights the need for additional focus on the provision of hard and soft infrastructure, including self-sustaining retail and service functions.

1.1.5. As well as functioning as a main town, Carrigtwohill is designated as a Strategic Employment Centre in the 2009 County Development Plan, as one of the primary locations for large scale industrial development and being an important location for high technology manufacturing.

1.1.6. The ability of the town to provide a strong supply of housing and business land and the availability of a commuter rail service will make this a particularly sustainable settlement. The Department of the Environment, Heritage and Local Government have designated the town as a 'Developing Area'. There are no water supply constraints and deficits in waste water infrastructure are expected to be addressed by the early delivery of this plan. Providing the timetable for the delivery of that infrastructure is maintained, Carrigtwohill is well placed to facilitate rapid yet sustainable growth and development when wider economic conditions allow.

1.1.7. The ability of the town to provide a strong supply of housing and business land and the availability of a commuter rail service will make this a particularly sustainable settlement. The Department of the Environment, Heritage and Local Government have designated the town as a 'Developing Area'. There are no water supply constraints and deficits in waste water infrastructure are expected to be addressed by the early delivery of this plan. Providing the timetable for the delivery of that infrastructure is maintained, Carrigtwohill is well placed to facilitate rapid yet sustainable growth and development when wider economic conditions allow.

1.1.8. The Cork County Development Board have recently published an Integrated Development Strategy for the Developing Areas in Co. Cork (August 2010) which focuses on the integration of agency actions with the overall strategic objectives of;

- Developing an agreed template for successful developing areas,
- Development of active social networks to underpin community identity and community facilities in the Developing Areas, and
- Integration of forward planning functions within each agency with the Council's forward planning function.

Local Context

1.1.9. Carrigtwohill is located on the N25 Cork - Midleton road and originally developed as a small village serving a larger rural hinterland. In more recent times Carrigtwohill has grown into a small town, developing as an attractive location for industrial development. The N25 runs to the south of the town and the recently re-opened rail

line runs to the north. The town lies on an undulating plain with the hills rising steeply to the north of the rail line providing a backdrop to the town. The town has developed in a linear fashion with the N25 taking an alignment to the south and largely providing the town's southern boundary. Encouraged by the Cork Land Use & Transportation Studies of 1978 and 1992, the IDA Business park has been developed as a large area of modern, technology based, industrial development at the western end of the town and a significant landbank of industrial land also demarcates the eastern extent of the town.

1.1.10. The location of the settlement in the heart of the Metropolitan Green Belt and adjacent to the upper reaches of Cork Harbour and a designated scenic landscape provide excellent opportunities to create a high quality living environment.

1.1.11. Housing in recent years has been provided in the form of large housing estate developments which have introduced diversity to the housing mix in the town, catering for all age groups and stages in the lifecycle. This enhanced choice in housing is particularly important for a rapidly expanding settlement like Carrigtwohill, where the need to maintain mixed communities is an essential element in maturing a neighbourhood and creating a sense of integration between the established and new communities.

1.1.12. A substantial amount of the residential landbank between the main street and the rail line is now developed or committed for development, although some key sites remain available close to the new rail station and along Station Road. There has been limited expansion in retail and services in the town centre, and while the main street remains vibrant, congestion is limiting its potential.

1.1.13. Although significant industrial landbanks were identified in the previous plan at either end of the town, only those sites on the western end of the town have seen some development, and even this is marred by high levels of vacancy in the units most recently constructed.

1.1.14. *The Carrigtwohill North Framework Master Plan study was completed in 2015 and comprises a set of land use proposals for the development of the site currently known as X-01 in Carrigtwohill Chapter of the Midleton Local Area Plan. The findings and recommendations from this report have been included in this amendment.*

1.2 PLANNING CONSIDERATIONS

Population and Housing

1.2.1. Carrigtwohill expanded rapidly through the last decade with the Census recording an almost doubling of its population in the period between 2002 and 2006 from 1,411 to 2,782. See Table 1 below.

	2002 Census	2006 Census	2020 Target	Growth 2006-2020
Population	1,411	2,782	12,012	9,230
Households*	442	924	5,012	4,088

* Estimate

1.2.2. This growth in population was mirrored in the expansion of the town's housing stock. The town underwent a very significant level of housing growth with unit numbers increasing from 559 in 2000 to 1756 in 2010, a manifestation of the success of the growth strategies laid down in CASP and the County Development Plan and provided for in the planning proposals outlined in the 2005 SLAP.

1.2.3. Despite the pace of change in the peripheries of the town, the Main Street has maintained a distinct village character, with limited re-development. New housing has a very distinctive urban estate style, the scale of which can jar with the village scale of the town centre. This is not helped by the limited palette of finishes used and the lack of distinctive character areas within these large developments. A number of developments are awaiting completion and this detracts from the visual amenities of the settlement. The completion of these developments will improve the legibility of the town although it is important that new development be designed in such a fashion as to encourage permeability, avoiding excessive cul-de-sacs and thereby allowing convenient pedestrian and cyclist movements and encouraging frontage development on link roads.

1.2.4. The rate of vacancy (the number of units completed but never occupied) at just under 3% is a small proportion of the total housing stock. Conversely, there is a substantial bank of planning permissions not yet implemented equivalent to the same level of development as occurred during the ten year period up to 2010.

1.2.5. The table below highlights the growth in housing stock in Carrigwohill over the last decade. Between 2001 and 2010 the housing stock more than tripled from 559 dwellings to 1,756 dwellings. See Table 2 below

Dwellings 2001	Dwellings 2005	Dwellings 2010	Growth 2001-2010
559	730	1,756	1,197

Source: Geo-directory

an increase of 9,230 people over the 2006 population and which gives rise to the requirement for an additional 5,314 dwelling units to be

accommodated in the town. CASP Update anticipates that the additional growth earmarked for the town will occur mainly after 2014.

1.2.7. While the 2005 SLAP operated to a 2020 horizon year, the population targets and housing units requirements have since changed due to the revised population targets set out in the CDP 2009, but also due to a changing perspective on vacancy and revised assumptions on future average household size. This gives rise to a requirement to accommodate an additional 818 dwelling units more than was planned for in the 2005 SLAP.

1.2.8. The following table sets out the growth targets for Carrigwohill. There is a requirement for an increase in population of 9,230, in 4,088 households, equivalent to a requirement for a total of 5,314 new dwellings between 2006 and 2020. See Table 3 below.

Population	Households	Dwelling Units
9,230	4,088	5,314

units and outstanding planning permissions, the planning proposals of this plan must therefore make provision for a further 4,312 dwellings to meet the population target for the town for the period 2010-2020. See Table 4 below.

New House Construction Target 2006 to 2020	Already Built 2006-2010 plus units which are vacant & under construction	Outstanding planning permissions	Additional New Development Required to 2020
5314	1002	1133	4,312

Development Plan do not envisage this growth occurring on green field sites but rather by making better use of lands already zoned for development

1.2.11. The 2005 SLAP gave an indication of the likely yield from each of the sites zoned for residential or a mix of residential and other uses. The majority of these sites have been developed and to date the sites have exceeded the densities expected in the assumptions, some by as much as 100%. This is an encouraging development, particularly as the majority of these sites were completed before the rail service was operational, and now that the service is in place, it would be important to see this trend replicated on remaining available lands whilst, at the same time, maintaining high standards of design and amenity.

Employment and Economic Activity

1.2.12. The critical importance of the IDA Business Park and the 'Amgen' site plus the general availability of business land, a ready supply of housing and a high level of public transport accessibility resulted in Carrigwohill being designated as a Strategic Employment Centre in the 2009 CDP.

1.2.13. The combined 2020 jobs target for Carrigwohill and Little Island set out in the CDP 2009 is 14,934, giving a growth in jobs of 2,174 between 2006 and 2020. According to CASP Update, the indicative employment types best suited to Carrigwohill are Business & Technology, Industry, Distribution, Offices, Retail and Commercial.

2020 Jobs	Growth in jobs needed by 2020	Land Supply 2003 (ha)	Land Supply 2008 (ha)
14,934*	2,174*	155^	107^

* Figure includes Little Island Strategic Employment Centre

^ Figure excludes stand - alone site of 56ha

two larger industrial sites on the eastern side of the town remain available, including the Amgen site, and there are also large areas of industrial land in the IDA Business Park and some smaller enterprise sites on the western end of town that remain undeveloped. Carrigwohill continues to have a healthy supply of business land at a variety of locations and including the option of a large stand-alone site. With the recent initiation of a commuter rail service, Carrigwohill has enhanced its attraction as a sustainable and accessible location for business.

1.2.15. The average rate of development between 2003 and 2008 was 9.6 ha per annum, and if this rate were to continue, then the town has approximately a 10 year supply of business land, which given the importance of this location to the overall economy of Metropolitan Cork and the time horizon of the plan represents a small undersupply.

1.2.16. The large stand-alone site on the eastern side of the town is a key asset, with prime road and rail accessibility and presents an opportunity to offer a premium opportunity site on the international market. While demand for larger scale sites is addressed, the town has a requirement for small scale industrial sites.

1.2.17. One of the key development priorities for the Cork Gateway identified in the National Development Plan 2007-2013 is the development of lands in Carrigwohill by IDA Ireland as part of its Strategic Sites Initiative. The existing IDA Business Park has a number of high profile tenants including GE Healthcare, Gilead, Stryker Ireland Ltd and Fournier Laboratories Ireland Ltd.

1.2.18. Millipore Ireland Ltd., which opened in Cork in 1988, employs approximately 400 staff on a site of 38 acres at Tullagreen, south of the N25, accessed from the Cobh road. The main activity on the site is the manufacturing of filtration devices and diagnostic membranes for analytical laboratories and the biopharmaceutical and

the microelectronics industries. Millipore also operate a direct sales and technical support office from the Carrigtwohill plant.

Retailing

1.2.19. The existing town centre comprises the main street running through the town, which offers limited comparison shopping of just 730sqm. The town has become a focus for retail warehousing, with the development of over 8,000sqm of retail warehousing at Fota Retail Park. Convenience shopping is provided in the form of a discount foodstore to the west of the town (Aldi), a Centra in the centre of the town and a Costcutter supermarket at the eastern end. The 2005 SLAP zoned three sites for town centre use, two on the southern side of Main Street and one on the northern side further west, all of which remain undeveloped. They were identified for mixed use development, including retail, offices, residential and in the case of the most westerly site, a hotel and restaurants.

Community Facilities

1.2.20. Carrigtwohill has a range of public services and community facilities including two primary schools, a girl's only secondary school, a garda station and a church. The community centre, located in the heart of the settlement on the main street is a substantial building available for a wide variety of activities including sports, drama and meetings. Immediately south of the community centre is a relatively new community playground and further south trees have been planted in parts, however there is no public lighting and the grasslands have been poorly maintained. This site has the potential to be a key asset to the town and its completion to an appropriate standard is desirable.

1.2.21. A survey of the town has identified a deficit in sports facilities for a town of this size. Notwithstanding this, there are a wide variety of sports clubs operating in the town including badminton, basketball, athletics, children's tennis in the summer and an extensive programme of activities offered by the Community Games programme for young people. Carrigtwohill GAA is located south of the town's main street and the complex contains 3 pitches, a gymnasium and a handball alley. Carrigtwohill United football club recently re-located to new facilities at Ballyadam to the east of the town where they have 2 playing pitches, 2 training pitches and a clubhouse with dressing rooms. At the beginning of 2010 the Community Council opened a new state of the art All-Weather facility on lands to the south west of the community centre capable of accommodating four 5-a-side pitches or one full size pitch. The facility utilises the latest synthetic grass technology and operates a 'green' flood lighting system making the facility extremely environmentally and carbon friendly.

1.2.22. With the exception of the walkway provided west from Castle Lake (under 2005 SLAP objective O-01), all other sites that were zoned for open space remain undeveloped and unusable and this is contributing to the deficit of sports facilities in the town.

1.2.23. The existing primary and post-primary schools in the town are clustered in the area of the Main Street and east of Station Road, and while centrally located, they cause serious problems with traffic

congestion in the town centre at peak drop-off and collection times. More importantly, the lack of a boy's secondary school in the town is a serious deficiency.

1.2.24. New school facilities to serve the Carrigtwohill North Masterplan will be provided within the Masterplan site in tandem with development in that area.

Infrastructure

Roads

1.2.25. Carrigtwohill is well served by national road infrastructure being located on the N25 Cork –Waterford road. There is a problem with traffic congestion and on street parking in the town centre which detracts from the public realm. The Midleton and Carrigtwohill Transportation Study, published in August 2010 makes recommendations to address these issues and, where appropriate, these recommendations have been reflected in the planning proposals of this plan. The distributor road through the masterplan site north of the rail line is also likely to resolve some of the traffic issues in the town. It was hoped that proposals for an eastern grade separated junction on the N25 would go to CPO in 2009, however, current financial considerations have put this on hold. As part of the restoration of the rail line to Midleton an ~~overbridge over~~ underpass under, a pedestrian underpass has also been installed the railway linking lands south of the rail line and the masterplan site has been installed.

Walking/ Cycling

1.2.26. There are limited segregated cycle routes in the town, generally limited to those newer residential developments, although there is potential for increased levels of cycling due to the largely flat terrain.

1.2.27. Footpath provision along Main Street is of varying widths, though generally of a reasonable quality. There are good footpath linkages between the IDA Business Park and the town centre but beyond this the public lighting and footpath provision and quality varies from substandard to no provision. As with cycle routes, footpath provision in new residential estates is good however, there is an issue with poor pedestrian connectivity between these developments and the town centre.

1.2.28. The Midleton and Carrigtwohill Transportation Study 2010 outlines proposals in detail to improve walking and cycling routes throughout the town as well as parking and public transport measures which will significantly enhance the attractiveness of the town as a place to live and to visit.

1.2.29. In 2013 Cork County Council commissioned a cycle strategy study to be prepared for the Cork Metropolitan Area, the objective of this strategy was to provide a clear plan for the

future development of cycling networks throughout Metropolitan Cork including Carrigtwohil The plan when completed will identify routes, infrastructure and policies to encourage greater use of cycling as a key sustainable travel mode for trips to work, education, shopping and recreation. It is the Councils objective to develop these routes on a phased basis once funding is made available.

1.2.30. Cork County Council will commission a Pedestrian/Cycle Bridge Feasibility Study to assess how connectivity to the Masterplan site can be improved from Carrigtwohill South Centre and lands south of the Railway Line.

Public Transport

1.2.31. The town is served by a number of bus routes as part of the bus services operating between Cork City and a range of settlements in East Cork including Midleton, Cloyne, Whitegate and Youghal. In addition to the scheduled services, other bus operations that take place include school services, particularly to the girl's secondary school. The opening of the rail service is likely to result in a reduction in the frequency and demand for bus services in the longer term.

1.2.32. The rail line to Carrigtwohill re-opened on 30th July 2009 and now offers a half hourly service to Cork City in the peak, with a journey time of just 16 minutes. The provision of a commuter rail service may resolve some of the traffic issues experienced on the N25, but it also offers a cost effective, sustainable alternative to a car based commute. CASP Update recommended the development of an additional station at Carrigtwohill West and in November 2009 permission was granted for a new station at Fota Retail and Business Park, including the provision of a park and ride facility accommodating 94 no. car parking spaces.

1.2.33. ~~Cork County Council is preparing a Cork Suburban Rail Network Study in consultation with Irish Rail, the NTA and Cork City Council.~~ The results/findings of the study will determine t train service frequency and capacity to serve Csrrigtwohill and the Masterplan Development. The Rail Network study is unlikely to commence until after the Regional Multi-Modal Transport Model has been completed in 2015. On completion of a new rail policy to address the future role of rail transport in Ireland, as required under DTTaS' Strategic Investment Framework for Land Transport (SIFLT) Action 6, a study of the Cork Metropolitan Areas future suburban rail network requirements should be considered. This could include consideration of additional stations, rail service patterns and interchange with other modes".

Water Supply & Wastewater

1.2.34. The water supply to the town was upgraded in 2007 by the extension of the Cork Harbour and City Water Supply Scheme so there are no water supply constraints in the town. Provision has been

made for 5 watermain connections under the completed railway line to facilitate development of the lands to the north.

1.2.35. The Carrigtwohill Waste Water Treatment Plant is located on the Old Cobh Road south of the N25. The plant discharges to the tidal area of the upper harbour known as Slatty Waters, west of Slatty Bridge. This area contains a number of nature conservation designations, namely Great Island Channel cSAC-1058, Cork Harbour SPA-4030 and Great Island Channel pNHA-1058 and the water quality of this part of the harbour is considered to be of moderate ecological status. Upgrading of the foul sewer network has been completed recently. **The upgrade of the wastewater treatment plant as part of the Carrigtwohill Sewerage Scheme (SLI) has commenced and an extension to the plant is currently under construction.** is listed in the Water Services Investment Programme as a contract to start 2010-2012 at an estimated cost of €14 million. Provision of schemes is dependent on the availability of finance. Approval is also awaited for a foreshore licence.

Surface Water

1.2.36. Surface water from the town discharges to Slatty Pond, a proposed Natural Heritage Area. This freshwater pond was once part of the tidal area of Cork Harbour but, since the construction of the causeway to Fota Island carrying the R624 Tullagreen – Cobh Road, it has been separated from this by a system of privately owned sluice gates. These sluice gates, dating back to the 1930's and constructed from teak and cast iron, are now redundant due to the installation in recent years of a pumping station at Slatty Bridge due to concerns that the failure of the sluice gates could result in localised tidal flooding. Slatty Pond is therefore protected from inundation by tidal waters and surface water can now be discharged to the tidal zone at any state of the tide. Recent development proposals have included provision for the on-site attenuation of surface water-flows to reduce flood risks.

Flooding

1.2.37. The position in relation to flooding in Carrigtwohill is uncertain. Data on flood risk has been collated from a number of sources and are shown on the zoning map accompanying this settlement. Carrigtwohill lies within the study area of the Lee Catchment Flood Risk Assessment and Management Study (CFRAMS) and the draft flood maps produced by that study have identified a number of locations in the town at risk from flood events. However, that study also identifies a requirement for a more detailed assessment in Carrigtwohill because of the nature of the watercourses, ongoing development and work recently undertaken by Cork County Council at the Slatty Bridge pumping station. It is the Council's intention to commission a detailed flood risk assessment for Carrigtwohill imminently, but until such time as this study is completed the existing flood risk data for the settlement is questionable. Dependant on the outcome of this detailed assessment, the planning proposals of this plan may need to be amended through a formal amendment of the final plan. In the interim, any proposals for

development on lands in the town shown to have a flood risk will be required to carry out a detailed flood risk assessment.

The Lee CFRAMS report identified areas at risk of flooding in the south of the town and has recommended that there is a need for a more detailed flood risk assessment study for the whole town, including the master plan site.

As a result of this a more detailed flood risk assessment (Stage 3) has been carried out by Cork County Council which identified a number of areas within the Carrigtwohill area which are considered at risk of flooding

Some of these areas are different from the preliminary CFRAMS map.

Waste

1.2.38. The bring site in Carrigtwohill is located in the Council car park where there are facilities for the recycling of glass, textiles, beverage cans and food tins. A civic amenity site that accepts an extensive range of materials for recycling and disposal is also located in nearby Rossmore, although this is only accessible by car.

Utilities

1.2.39. Fixed line broadband is available in Carrigtwohill however, broadband provision under the MANS II Project has not been provided in the town.

Environment and Heritage

1.2.40. The following table provides a summary of water quality information for the Barryscourt River.

Barryscourt River	
Water Management Unit	Owenacurra
Waterbody Code	IE_SW_19_1693
Protected Area	Yes
River Status (Dec 2008)	Poor
Risk Assessment (River body)	At Risk
Objective	Restore to good status by 2021
Q value	n/a

1.2.41. There are no significant rivers or large watercourses that drain surface water from the Carrigtwohill area, only a number of smaller streams, which in turn drain to the Barryscourt River and Slatty Pond. Barryscourt River is designated as poor ecological status and as a Protected Area. The Carrigtwohill WWTP discharges

to the tidal area of the upper harbour known as Slatty Waters, which are identified as potentially eutrophic. Water quality in this part of the Upper Harbour is identified as of moderate ecological status and there is a risk that it will not achieve good status by 2015. The Carrigtwohill WWTP is currently overloaded and if the population target for the town is to be met, then the upgrading of this key piece of facilitating infrastructure is essential.

1.2.42. The County Development Plan 2009 designates the area from Killacloyne along the inner harbour area including Tullagreen and Barryscourt as far as Midleton as Scenic Landscape, where it is an objective of the County Development Plan 2009 to "preserve the visual and scenic amenities of those areas of natural beauty identified as 'scenic landscape'."

1.2.43. The road at Cashnagarraffe, north west of Carrigtwohill is designated (S42) in the County Development Plan 2009 as a Scenic Route. It is an objective of the County Development Plan 2009 (ENV 2-11) "to preserve the character of those views and prospects obtainable from scenic routes identified in this plan". There are unspoilt and attractive views heading east along the N25 Carrigtwohill by-pass towards the restored Barryscourt Castle.

1.2.44. There is one proposed Natural Heritage Area within the Carrigtwohill area, the Great Island Channel including the area around Harpers Island, Foaty Island and also the channel south of Carrigtwohill and North of Cobh (Great Island) as far as the Ballinacurra River Estuary (pNHA-1058) and it is an objective of the CDP 2009 to maintain the conservation value of all Natural Heritage Areas proposed for designation. There is one candidate special area of conservation (cSAC-1058) in the Carrigtwohill area. This cSAC is also called 'Great Island Channel' and covers the same area as the proposed natural heritage area outlined above. The main habitats of conservation interest are the sheltered tidal sand and mudflats and Atlantic salt meadows, both habitats are listed on Annex I of the EU Habitats Directive. The site is extremely important for its important numbers of wintering waders and wildfowl. It also supports a good invertebrate fauna. The site is an integral part of Cork Harbour which is a wetland of international importance for the birds it supports. A Special Protection Area, Cork Harbour SPA-4030, also extends over this area adjacent to Carrigtwohill where it is an objective of the CDP 2009 to protect the conservation value of this site.

1.2.45. There are a number of cave systems in Carrigtwohill. The most notable of these is the limestone cave system at Terry's Land. Other small caves are found near the graveyard and in the bed of a stream near the quarry.

1.2.46. There are no records of any recorded archaeological monuments or finds within the area. Early human activity in the area dates from the Neolithic Period and careful consideration needs to be given to potentially unrecorded remains, which could exist below ground level.

1.2.47. The National Inventory of Architectural Heritage contains a number of entries for Carrigwohill including two bridges along the rail line, the former presbytery and the RC Church.

1.2.48. There are a number of structures in the Carrigwohill area listed in the Record of Protected Structures contained in the CDP 2009 including the Parochial House (RPS No. 1315), the former Dispensary on Station Road (RPS No. 1316), Rockville also on Station Road (RPS No. 1317), St. Mary's Catholic Church (RPS No. 496), the Medieval Church of Ireland Tower which is in ruins (RPS No. 854), and Barryscourt Castle (RPS No. 497). It is an objective of the County Development Plan 2009 (ENV 4-2) "to ensure the protection of all structures (or parts of structures) contained in the Record of Protected Structures."

1.2.49. The Draft Landscape Strategy identifies Carrigwohill as being located within the City Harbour and Estuary landscape character type which is deemed to be of very high value (scenic landscapes with highest natural and cultural quality, areas with conservation interest and of natural importance). This landscape is rated to be of National Importance. Landscape sensitivity is classified as Very High, as these are landscapes which are considered extra vulnerable and likely to be fragile and susceptible to change.

1.3 PROBLEMS AND OPPORTUNITIES

Population, Housing and Density

1.3.1. Since the adoption of the SLAP in 2005, there has been only modest progress made on the development of the site that was zoned X-01 in that plan, north of the rail line. There are numerous reasons for the lack of progress, not least of which is the complexity of landownership of the site, involving as it does in excess of 30 landowners. While landowners were unable to take advantage of the opportunity afforded them to prepare a masterplan, given the importance of the site to the success of the Cork Suburban Rail Network Project in terms of delivering the population necessary to sustain a commuter service, Cork County Council have prepared a masterplan for the site in consultation with the largest landowner within the site, and having consulted with those other landowners who elected to become involved in the process.

1.3.2. While the bulk of new development will be provided on the masterplan site, significant development opportunities remain on the undeveloped lands south of, and in close proximity to the rail line. Some of these lands have the benefit of planning permission. New roads to be provided crossing these lands will improve permeability in the town and help relieve traffic congestion in the town centre.

1.3.3. *The development of the site will be guided by the densities set out in the County Development Plan and will include a mix of High, Medium A and Medium B densities as set out in Table HOU 4-1 of the Cork County Development Plan 2014.*

Employment and Economic Activity

1.3.4. CASP Update identifies Carrigwohill as a primary location for office development as well as a location for business and technology floorspace, including office based industry, business to business services and R&D activities. Industry, distribution, warehousing and storage uses are also cited as appropriate uses for this strategic employment location.

1.3.5. While it may be unlikely in the current economic climate that existing take-up rates of employment lands will continue, given the scale of population growth targeted for Carrigwohill and its designation as a Strategic Employment Centre, it is considered appropriate to provide for a modest strengthening of the business land supply to ensure there is no shortfall in the life of the plan.

1.3.6. The provision of a second rail passenger station at Carrigwohill West will enhance employment opportunities in the station catchment. This includes the site of Fota Business and Retail Park. There are a large number of planning permissions granted on this site of which some elements have been constructed, including retail warehousing, offices and recently opened drive in cinema. In that context, it is considered appropriate that these lands remain part of the existing built-up area. Should all or part of these lands become available for development in the future, they should be utilized for uses consistent with existing planning permissions such as office space, business uses, including retail warehousing, convenience retailing as part of the new station quarter, leisure uses, specialized tourism/ craft retailing not exceeding 1,000 square metres and other employment activities. Pedestrian and cyclist connectivity with any rail passenger station shall also be maximized.

1.3.7. There is also a need to strengthen the town centre so that the town becomes more self-sustaining in terms of retail and service functions. In the 2005 SLAP, three sites were identified for town centre development, two south of the main street adjoining the existing town centre and another site further west on the north side of the main street, and all three sites remain available.

1.3.8. The level of growth proposed for Carrigwohill will generate a demand for town centre uses that will not be met by the existing zoning provisions. The Midleton and Carrigwohill Transportation Study proposes a new road to the south of main street to improve circulation in the town, which will open up access to these backlands. In order to reinforce the primacy of the main street as the retail core of the town, large scale retail provision outside of the town centre is undesirable. The Draft Masterplan for the lands north of the rail line has respected this principle providing only for a local neighbourhood centre and a mixed use core around the railway station, thereby avoiding competition with the established town centre along Main Street.

1.3.9. It will be important to ensure connectivity and cohesion between the existing town centre, all new town centre development and residential areas. An option for town centre expansion is the identification of town centre lands on Station Road, which while of a small scale, will augment the larger scale proposals south of Main

Street retained in this plan and which will also provide continuity and connectivity with the mixed use core to be provided around the railway station as proposed in the Draft Masterplan.

1.3.10. In the longer term, demand for town centre uses in line with the growing population is likely to exert pressure on those available lands in closest proximity to the established town centre, such as those of the GAA Club, though this is most likely to occur beyond the life time of this plan.

1.3.11. Expansion of the town centre, in conjunction with measures suggested in the published Midleton and Carrigwohill Transportation Study such as junction improvements and provision of off street parking, have the potential to create an attractive and vital centre to the town. In particular, the provision of a public car park on land to the south of the existing town centre is considered a critical element in the resolution of the congestion and parking difficulties in the town. There will be an opportunity for public realm improvements when these traffic issues are resolved.

Community Facilities

1.3.12. The revised population target for Carrigwohill will give rise to an additional requirement for educational facilities. All of the existing schools are on curtailed sites with limited potential for expansion and therefore the deficit in places is likely to be catered for in the new schools planned on the masterplan site. The Draft Masterplan has identified sites for two new primary schools and a post primary school.

~~**1.3.13.** These new education facilities are part of a larger sports and education campus proposed on the masterplan lands and including provision for 2 new pitches, 1 astro-turf facility and a clubhouse, as well as areas for passive recreation. This will help address some of the deficit in sporting facilities identified in survey work on the town as the facilities are intended for the use of the wider Carrigwohill community.~~

Infrastructure

1.3.14. The development proposals of this plan are dependant on the completion of three important infrastructural projects namely, the provision of a grade separated junction to the east of the town on the N25, the upgrading of the town's wastewater treatment plant as part of the Carrigwohill Sewerage Scheme and the implementation of the Midleton and Carrigwohill Transportation Study proposals. If necessary, Cork County Council will need to use its powers of compulsory purchase to acquire the properties necessary to allow the implementation of the proposals.

1.3.15. The proposals for the upgrade of the N25 will re-define access to the town. Proposals involve providing more direct access to employment lands from the N25 thereby eliminating significant volumes of traffic, in particular HGV traffic, from the town centre.

1.3.16. The upgrade of the wastewater treatment plant for the town is listed on the 2010-2012 Water Services Investment Programme.

The completion of this project underpins the delivery of the population targets for the town.

1.3.17. The implementation of the Midleton and Carrigtwohill Transportation Study proposals and the completion of the road through the Castlflake development will relieve the existing congestion and parking deficiencies and will facilitate the commencement of the expansion of the town. The completion of the Castlflake road is required as a priority.

1.4 PLANNING PROPOSALS

1.4.1. Outside the development boundary, the land forms part of the Metropolitan Green Belt. Here, the objectives of the CDP 2009 seek to retain the open and rural character of lands between and adjacent to urban areas, maintaining the clear distinction between urban areas and the countryside, to prevent urban sprawl and the coalescence of built up areas, to focus attention on lands within settlements which are zoned for development and provide for appropriate land uses that protect the physical and visual amenity of the area.

1.4.2. Over the lifetime of this plan, it is envisaged that there will be significant housing and employment growth in Carrigtwohill consistent with the objectives for the settlement set out in the County Development Plan, CASP and CASP Update. The town's 2020 target population is 12,012, requiring the provision of an additional 3,179 dwellings, taking account of both the units built since the 2005 SLAP and those for which permission has been granted (4,312 units required, inclusive of those already permitted).

1.4.3. Having examined the likely yield from lands already zoned, it is considered that there is no requirement for the zoning of new lands outside the established development boundary for residential use. The main alterations to the development boundary comprise of the addition of new lands for employment development in order to address a modest shortfall that may arise in the plan period. Other minor modifications to the boundary have been made to correspond with established field or property boundaries or to reflect a grant of planning permission.

1.4.4. The publication of the Midleton and Carrigtwohill Transportation Study has significant implications, direct and indirect on all lands contained within the development boundary of the town. Implementation of a number of the recommendations of that study will be key to unlocking the rejuvenation and expansion of the town centre as well as facilitating the establishment of a pedestrian and cycle network amongst other things. Some of the key recommendations of the Study are:

- the establishment of a road and street hierarchy in the town, including the identification of new distributor roads;
- closure of the eastbound slip on road to the N25 from Main Street;
- closure of the eastbound slip off road at the Barryscourt interchange;

- a new distributor road connecting Castlflake to Station Road and Station road to Carrigane Road;
- junction improvements, significantly on Main Street;
- the identification of key pedestrian and cyclist routes;
- a parking strategy, including the provision of a 200/300 space public car park;
- improved access to schools, involving the provision of a dedicated pedestrian crossing and a set down/pick up area; and
- HGV Management.

1.4.5. The Council's Housing Strategy states that on zoned lands, it will be a requirement that 20% of all land zoned for residential uses (or for a mix of residential and other uses) be reserved for the purpose of social and affordable housing. In Carrigtwohill, the strategy requires that half of that reserved land will be used for the provision of social housing.

1.4.6. In the longer term, it may be appropriate to give consideration to increasing the capacity of this railway route by adding a second running line either on the busiest parts of the route or throughout. An objective has been included in the plan to protect the land that may be required for this form of development.

1.4.7. Much of the existing built up area of Carrigtwohill is within a convenient walking or cycling distance from the town's new station and the town centre itself. In order to make the most advantageous use of the new railway service it is important to encourage the provision of safe, convenient and pleasant access to the station area for walkers and cyclists. The development of this network will also facilitate better access to the town centre and, ultimately, between the main residential areas.

1.4.8. This can be achieved through the establishment of a network of designated routes linking the main residential areas with the railway station and other important destinations within the town.

1.4.9. The N25 Cork-Rosslare national primary route serves the town of Carrigtwohill, by passing to the south and is the subject of major on line improvement proposals. The western section of this route, to Cork, is the most important of the town's road links and is constructed to a fully grade separated standard. While it may be necessary to undertake some capacity improvements to the existing intersection at Tullagreen this interchange will remain unchanged under the current N25 proposals.

1.4.10. To the east of Carrigtwohill, although this route is constructed to two-lane dual carriageway standard it is not fully grade separated. The preferred option identified for the N25 involves the construction of a new dumbbell interchange to the east of Carrigtwohill with associated parallel access roads to the north and south of the N25 leading to and from the Barryscourt Interchange. The scheme involves the closure of the eastbound slip on road from Main Street, replaced by the northern parallel road and the closure of the east bound slip off road into Carrigtwohill at the Barryscourt

Interchange. This will have the benefit of removing traffic volumes from Main Street, limiting through traffic in the town and returning a significant land bank back to the town centre. An objective supporting the implementation of this scheme has been included.

~~**1.4.11.** Significant local improvements and traffic management measures will also be required for Station Road and Bog Road.~~

~~**1.4.12.** Pending the completion of a detailed flood risk assessment by the Council for the town, it will be a requirement that any development proposals on lands shown as having a flood risk will be required to carry out a detailed flood risk assessment in line with the requirements of The Planning System and Flood Risk Management Guidelines for Planning Authorities, November 2009.~~

A detailed flood risk assessment (Stage 3) has been carried out on behalf of Cork County Council and has identified significant changes to the flood risk previously identified .The revised assessment has identified new areas at risk of flooding as well revising the level of risk to some areas previously identified.

Objective No.	<u>Development Boundary Objectives</u>
DB-01	Taking account of development already completed or under construction, it is an objective of this plan to secure the development of 4,312 new dwellings in Carrigtwohill over the lifetime of the plan in order to facilitate the sustainable growth of the town's population to 12,012 people over the same period. These will be provided through the development of land for which planning permission has already been granted and by the development of land designated for development in this plan.
DB-02	(a) In order to secure the population growth and supporting development proposed in DB -01, appropriate and sustainable water and waste water infrastructure, that will secure the objectives of the relevant River Basin Management Plan and the protection of the Great Island Channel Special Area of Conservation and Cork Harbour Special Protection Area, must be provided and be operational in advance of the commencement of any discharges from the development. Waste water infrastructure must be capable of treating discharges to ensure that water quality in the receiving river does not fall below legally required levels. Sustainable Urban Drainage Systems (SUDS) and sufficient storm water attenuation will be required for developments within this area. (b) All new development shall be connected to the public water supply, the public waste water treatment system and shall make adequate provision for storm water disposal.
DB-03	It is an objective to broadly support the principles of

Objective No.	Development Boundary Objectives
	the Midleton and Carrigtwohill Transportation Study published in August 2010 as they apply to Carrigtwohill, in a sustainable manner. It is an objective to implement the findings of the Midleton and Carrigtwohill Transportation Study published in August 2010 as they apply to Carrigtwohill at an early stage and in tandem with development. This should be done in a sustainable manner.
DB-04	It is an objective of this plan, where necessary, to reserve land on either side of the railway route to facilitate the possible future upgrading of the route to double track standard. This objective applies to all land within 5m of the perimeter fence on either side of the railway. Within this area the following categories of development will be resisted: <ul style="list-style-type: none"> New buildings not required for the operation of the railway; and New vehicular and pedestrian accesses where these accesses are the sole or primary access to development. New bridge crossings constructed will be required to provide sufficient clearance to permit double track operation. Open land uses, such as open space, surface car parking and agriculture will normally be permitted subject to the proper planning and sustainable development of the area.
DB-05	It is an objective of this plan that a network of designated walking and cycling routes shall be established to provide safe, convenient and pleasant routes between the town's main residential areas, schools, the town centre and the railway station complex.
DB-06	The network of designated walking and cycling routes proposed will include the following residential areas within the town: <ul style="list-style-type: none"> Bog Road; Fota Rock; Gortnamucky; Rocklands; Terry's Land (North & South); and Tullagreen.
DB-07	It is an objective to ensure that provision is made in proposals for new development, particularly for housing, office, retail, industrial and educational uses to provide safe, convenient and pleasant routes linking the development to the railway station and the other principal areas of the town for walkers and cyclists. Any such provision must have regard to the existing deficiencies in infrastructure and the requirement to ensure the delivery of adequate

Objective No.	Development Boundary Objectives
	infrastructure ahead of or in tandem with the new development. In achieving this objective, special attention will be paid to the layout of the development to ensure that appropriate measures are taken to establish a walking and cycling friendly environment.
DB-08	It is an objection of this plan to support the implementation of important safety improvements to the national road network, including the provision of a grade separated interchange to the east of the town, generally in accordance with the N25 improvement proposals developed by the National Roads Authority and outlined in the Midleton and Carrigtwohill Transportation Study August 2010.
DB-09	It is an objective of this plan to secure significant road safety and traffic management improvements to Station Road so that it can provide a safe, pleasant and effective route between the station and the town centre.
DB-10	It is an objective that all proposals for employment related development shall be required to prepare and submit a mobility management plan that maximises the use of public transport options/ passenger rail services.
DB-11	All proposals for development within the areas identified as being at risk of flooding will need to comply with Objectives FD 1-1 to FD 1-6 detailed in Section 1 of this Plan, as appropriate, and with the provisions of the Ministerial Guidelines – 'The Planning System and Flood Risk Management'. In particular, a site-specific flood risk assessment will be required as described in objectives FD 1-4, 1-5 and 1-6.
DB-12	Carrigtwohill is situated adjacent to Cork Harbour Special Protection Area and the Great Island Channel Special Area of Conservation. This plan will protect the favourable conservation statuses of these sites, and all new development shall be designed to ensure the protection and enhancement of biodiversity generally. Development proposals in unzoned parts of the settlement adjacent to the SAC and SPA will be likely to require the provision of an ecological impact assessment report (Natura Impact Statement) in accordance with the requirements of the Habitats Directive and may only proceed where it can be shown that they will not have significant negative impact on these.
DB-12	It is an objective to provide adequate buffer zones along watercourses to ensure riparian zones are not degraded and there is no bankside erosion. Developers shall therefore take account of relevant guidance documents relating to watercourse buffer

Objective No.	Development Boundary Objectives
	zones.
DB-13	Support the implementation of the Carrigtwohill North Framework Masterplan Study.

Residential

1.4.13. A significant amount of residential development has taken place in the town in the last five years. However, some of the areas that were designated for housing in the 2005 SLAP, have not yet come forward for development. Although there were a number of zoning requests on Greenfield lands, on the basis of the headroom available within the masterplan site, additional lands will not be required to meet the need for housing numbers over the lifetime of the plan.

1.4.14. The following specific residential zoning objectives for Carrigtwohill address the requirement for the provision of new housing in the town up to 2022, in addition to the units to be provided on the masterplan site. Development on town centre lands and the special policy area zoning south of the station will also include a residential component.

~~**1.4.15.** The existing wastewater treatment plant is proposed to be upgraded as part of the Carrigtwohill Sewerage Scheme listed in the Water Services Investment Programme as a contract to start 2010-2012, and therefore while this will not constrain development in the longer term, in the shorter term, development will have to be cognisant of the existing infrastructural deficiencies.~~

The existing wastewater treatment plant is currently being upgraded and will have sufficient capacity to accommodate the existing and future development proposed for Carrigtwohill

Carrigtwohill North Framework Masterplan

Policy Background

1.4.16. *The Carrigtwohill North site was first identified in the 2005 Special Local Area Plan for Carrigtwohill and was later identified in the 2011 Midleton Electoral Area Local Area Plan where the objective for the site was to prepare a masterplan to secure the development of the site through a phased programme of implementation.*

1.4.17. *Since 2010, a number of studies/surveys of the town have been undertaken:-*

- A detailed Flood Risk Assessment of Carrigtwohill was has which resulted in changes to the flood map for the town. The new map showing areas of flood risk is shown on Map1.*
- The Cork Metropolitan Cycle Strategy Study was prepared for the Cork County Council and it has made*

- *recommendations for the improvement of accessibility to cycle users and pedestrians.*
- *A Transport Assessment of the master plan site in its context of the town as a whole. The assessment, utilising up-to-date traffic counts and modelling techniques, examined a number of alternative approaches to the phasing of development and the delivery of road infrastructure and transportation improvements with the aim of identifying a strategy for the development that would make a significant contribution to achieving the Governments targets for modal shift and, at the same time, provide the greatest protection to the carrying capacity of existing and planned road infrastructure.*
- *Consultation was undertaken with all key infrastructure service providers (Irish Rail, Irish Water, Bus Eireann, Department of Education and Skills, NRA, TII, NTA) in November 0214.*
- *The preparation of Preliminary Ecological Appraisal of the site in 2015 in order to assess the baseline ecological conditions on site, to identify key ecological resources to be retained and where necessary identify scope for further ecological surveys.*

1.4.18. *A framework masterplan study has been prepared for the development of the lands at Carrigwohill North. This study is a non statutory document which has informed this amendment to the 2011 Midleton Electoral Area Local Area Plan.*

Framework Masterplan Proposals

1.4.19. *It is the aim of Cork County Council to provide for a new residential neighbourhood located on the lands identified as X-01 in this plan, that will enable the town to expand to meet the growth targets of the Cork County Development Plan 2014.*

1.4.20. *The plan aims to achieve modal shift to support the use of the suburban rail line from Midleton to Cork City. In order to achieve a properly co-ordinated development, it will be developed in accordance with a framework masterplan for the area that has been approved by the County Council through consultation with the relevant landowners and key stakeholders.*

1.4.21. *The framework master plan identifies the need for a hierarchy of roads and open/space recreation areas that in accordance with the relevant guidance documents. Additional studies will need to be done by the local authority in collaboration with other agencies:*

- *A Stormwater Drainage Attenuation Study that will facilitate design and management of the storm water in the development.*
- *A bridge study for cyclist and pedestrians over ht existing bridges to enable safe access from north to south of the town.*
- *A Cork Metropolitan Suburban Rail study that will investigate progress made on the previous study of 2001 and prepare recommendations for additional stations in master plan sites, methods to achieve modal shift to support rail use and an affordable and frequent service.*
- *Additional site specific ecological surveys for mammals, bats and aquatic life where relevant.*

1.4.22. *The masterplan specifies, for each phase, the number of residential units, commercial uses, educational facilities, social facilities, amenities, physical infrastructure and access strategy required, thereby setting out the enabling works that are required to allow development to commence. This provides a framework within which proposals for the development of individual sections can be co-ordinated and each development phase has been subdivided into individual pockets of land uses with a development objective. These objectives are set out in this amendment and include residential, neighbourhood centre, open space, educational and commercial uses.*

1.4.23. *The plan outlines a vision for the development of Carrigwohill North and its guiding principles in the areas of Housing, Urban Design, Transport and Mobility, Green Infrastructure, Open Space and Recreation; Community Uses, Water Services and Flood Risk. These principles should be used to guide the future development of the site and its detailed proposals in the planning policy process and in future detailed design plans. In preparing applications for planning permission, intending developers must demonstrate that their proposals have addressed the principles set out in this document.*

Residential Density

1.4.18. *The development of the site will be guided by the densities set out in the County Development Plan and will include a mix of High, Medium A and Medium B densities. The overall density of the site will be approximately 28 units per ha. The Framework Masterplan also sets out a logical and sequential phasing programme that allows for an orderly development pattern and maximises the development quantum related to investment in infrastructure.*

Public Realm and Community Uses

1.4.19. *The provision of public realm in a town or suburb on publically owned streets, pavements, parks and other publically accessible open spaces and civic areas enables the promotion of good health and well being through a sense of civic pride and place. It involves the use of distinctive features and materials to create streetscapes and spaces that facilitates the re-positioning or re-imaging an area's marketability. Typical examples of public realm in a town are high quality footpaths and cycle ways, street furniture, utilities and services, lighting, signage and public art.*

1.4.20. *In Carrigwohill North the opportunity exists for the use of existing hedgerows and local topography to create a unique concept in housing and community living through innovative public realm.*

Station Quarter

1.4.21. *The creation of a Station Quarter in the centre of the site which will be a vibrant, high density residential and mixed use local centre will provide a focal point for the community within the Masterplan site.*

1.4.22. *A vertical mix of compatible uses should be focused around a new square with a mix of commercial of appropriate scale, residential uses can be accommodated at ground floor level as well as overhead commercial space.*

1.4.23. *The square shall be at the heart of this area and should be designed to accommodate a wide variety of events such as a regular local market and should include cycle parking provision, public seating and public art Access to this square should be via a variety of pedestrian priority streets/lanes/arcades which should converge on this space to reinforce its centrality within the plan area.*

Transport Assessment

1.4.24. *As part of the preparation of the Carrigwohill North Framework Masterplan Study, a Transport Assessment was commissioned by Cork County Council.*

1.4.25. *The Assessment was based the following assumptions ,that all extant permissions in the wider town for both residential and commercial be utilised in full,,a new secondary and a new primary school would be constructed within the existing town and that the projected population targets be achieved in Carrigwohill and the wider Cork Metropolitan Area.*

1.4.26. *As a result of the assumptions in place a number of transport models were tested based on a moderate and accelerated modal shift.. The achievement of a modal shift to*

support the continued viability of the Cork-Midleton Suburban Railway is also contained within the Vision and Guiding Principles of this Framework Master Plan Study.

The assessment identified a number of minor road works and improvements to accommodate the first phase of the development (1,000 houses approximate)

1.4.27. With an additional 500 units constructed and an increase of 5% in modal shift is anticipated additional works will be required and these include

- Signalisation Main Street/Carrigane Road Junction
- Signalisation Main Street/Wyses Road
- Junction Upgrade of cross roads junction Maple Lane/Oakbrook to a roundabout.

1.4.28. The Transport Assessment also acknowledges, based on an assumption of high rates of modal shift that the full upgrade of the N25 Interchange between Midleton to Carrigtwohill N25 route or additional road improvements may not be required to achieve the target number of dwellings (approx 2,750) if a range of transport measures are delivered to help secure higher levels of modal shift including;

1.4.29. The development of such a large site in close proximity to the suburban rail network offers a major opportunity to achieve high modal shift therefore providing new homes at this location, where residents can gain easy access to high quality rail from the outset, is a priority for Cork County Council.

1.4.30. It is proposed that Cork County Council and other agencies, including Transport Infrastructure Ireland (TII), the NTA and Irish Rail, will subject to agreement with the relevant agencies and programming, be responsible for the funding and/or implementation of the measures.

Green Infrastructure

1.4.31. A primary green corridor is proposed across the masterplan site forming a key link between existing and future development to the south, developments in Phase 1 and a Linear park to the east of the masterplan area – the station quarter and the proposed schools. This green corridor will provide a well maintained and secure natural corridor within the site. In addition, a number of secondary green corridors are envisaged that link the site in a north to south and east to west direction. This network of corridors will form a local community hub enabling pedestrian / cycle cross movements towards the linear park at all times of the day. Provision shall be also made for landscaping along the green corridors to ensure an attractive pedestrian and cycling link through the site..

1.4.32. In accordance with the objective contained in the Carrigtwohill Section of the Midleton Local Area Plan for this site, useable open space shall be in the order of 20% of the

total site area and shall be designed and located in accordance with best practice guidance.

Appropriate Assessment and Strategic Environmental Assessment

1.4.33. SEA: A Strategic Environmental Assessment of Carrigtwohill North was undertaken and the results from the SEA process were fully considered and integrated into the preparation of the Masterplan.

HDA: A Habitats Directive Assessment Screening was undertaken in accordance with the requirements under the EU Habitats Directive and EU Birds Directive and section 177 of the Planning and Development (Amendment) Act 2010.

Nature Conservation Areas

1.4.34. Cork County Council engaged consultants to prepare a Preliminary Ecological Appraisal of the masterplan site. The purpose of the appraisal is to gather baseline data for a site through desk-top studies and walkover surveys in order to identify notable species and habitats and evaluate the ecological features on the site to identify potential impacts of proposed development and provide necessary mitigation.

1.4.35. The results of the Ecological Appraisal for the Carrigtwohill North site concluded that the site is suitable for development because it has largely agricultural habitats and improved grasslands that are widespread. The report has identified some area of greater sensitivity, it has recommended a number of additional surveys to be undertaken before development can take place:-

- A mammal survey to assess potential for a badger sett, presence of otter holts
- A bat survey in the tree line along the Glounatouig stream
- A freshwater aquatic survey to assess the quality of water for vegetation, fisheries and other fauna
- Retain existing tree lines and hedgerows where possible (specify types of trees)
- Provide green spaces and/or corridors within the site to maintain habitat connectivity
- Provide adequate bufferzones and setbacks between Walkways and the banks of watercourses.
- Recognising the importance of scrub to provide dense and safe cover for faunal species and breeding habitat for several bird species.

Phasing and Implementation

1.4.36. A total of two development phases (1 and 2) are identified within the development site. This masterplan specifies, for each phase, the number of residential units,

commercial uses, educational facilities, social facilities, amenities, physical infrastructure and access strategy required, thereby setting out the enabling works that are required to allow development to commence.

1.4.37. The development of this site should proceed in accordance with the phasing as identified in the Framework Masterplan. An implementation programme will be applied to each phase of the development which will ensure that the development of the site will proceed in an orderly and timely manner with the appropriate infrastructure in place to serve the site.

1.4.38. Significant infrastructural works will need to be provided to facilitate the development of the Framework Masterplan Site.

1.4.39. Cork County Council and other agencies including the Transport Infrastructure Ireland (TII), National Transport Authority and Irish Rail will be responsible for the funding and/or implementation of the measures recommended in the Transport Assessment (see Sections 1.2.25-1.2.38), Pedestrian/Cycle Bridge Study and Cork Metropolitan Suburban Rail Study (see Sections 1.2.25-1.2.38), which were commissioned during or as a result of the preparation of the Masterplan

1.4.40. Future bus service provision and the potential for bus to meet the future public transport requirements of Carrigtwohill and the masterplan lands will be considered as part of a package of transport interventions. This will include the provision of high levels of permeability within and between new and existing development areas, which facilitates the operation of bus services through these areas at an early stage in their development.

1.4.41. Cork County Council will also be responsible for commissioning of a Sustainable Urban Drainage Scheme (SuDs) study for the site to address stormwater disposal and attenuation. Implementation of the Scheme will be the responsibility of individual developers.

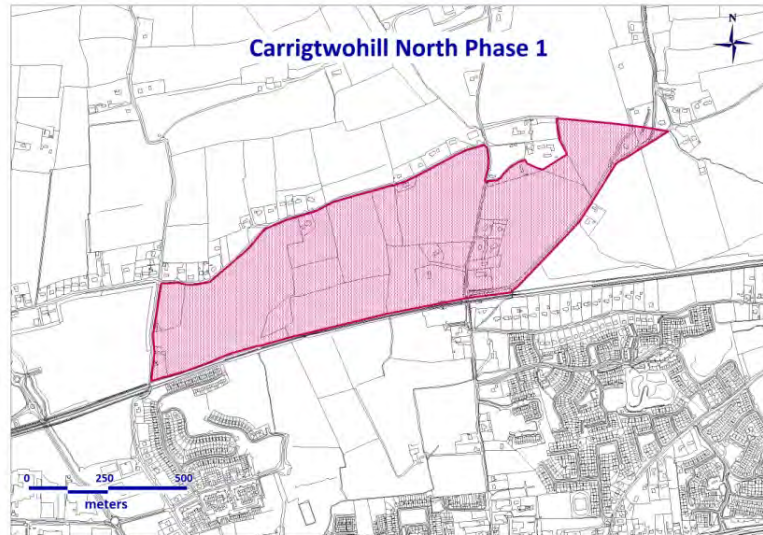
1.4.42. The Provision of Schools with the Masterplan Site (C03 & C-04) will be the responsibility of the Department of Education Science and Skills.

1.4.43. Provision of water and waste water infrastructure is the responsibility of Irish Water and it is the responsibility of individual developers to consult with Irish Water on a detailed design prior to obtaining connection agreements to the Irish Water networks

1.4.44. The provision of onsite roads infrastructure including link Streets (U-02) will be the responsibility of individual developers.

1.4.45. The provision of Open Space/Green Infrastructure including the development of small parks (O-05 & O-06), the Linear Park (O-07) and Greenway/GreenCorridor (U-03) will be the responsibility of the developer.

Phase 1



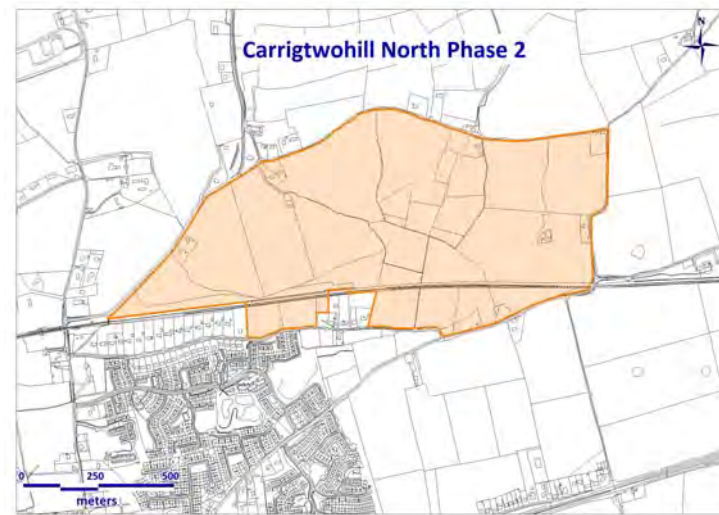
1.4.46. This phase of the development covers a developable area of approximately 39 ha and will provide up to 1,060 residential units.

1.4.47. Phase 1 represents the lands closest to the railway station and also the lands which can currently be accessed more readily by motor vehicles. This phase is also closest to existing and proposed residential areas of the town.

Within this phase the Station Quarter is envisaged to be a vibrant, high density, mixed use local centre given its strategic position within the Framework Masterplan site adjoining the railway station.

Phase 1 will also require the reservation of land for a 16 classroom primary school and the completion of a neighbourhood park and commencement of a greenway at the western end of the site.

Phase 2



1.4.48. This phase of the development covers an area of approximately 83 ha and will provide up to 1,474 residential units. Phase 2 lands are located in the east of the masterplan site. The lands cover a significant portion of the entire masterplan site and prior to the development of Phase 2 there will be a requirement for a transport assessment to identify road and transport infrastructure and required timing for delivery. Phase 2 will also require the provision of 2 parks, Local Park and a Linear Park, the completion of the Greenway commenced in Phase 1 and the reservation of land for a 16 classroom primary school and a secondary school.

Masterplan Infrastructure Requirements	
Phase 1 : Prior to commencement of development	Cycle and pedestrian bridge study.
	Sustainable Urban Drainage Scheme (SUDS) Study
	Junction and traffic management measures from Traffic Assessment
Phase 1	Carrigwohill Cycling and Walking Network
	Construction of SuDS measures
	Construction of pedestrian cycle bridges (Wyse's and Station)
	Construction of local park
Phase 2	Transport Assessment for N25

Masterplan Infrastructure Requirements	
Prior to commencement of development	Upgrade
Phase 2	Junction and traffic management measures from TA
	Construction of pedestrian and cycle bridge
	Construction of SuDS measures
	Construction of Linear Park and local park
	Carrigwohill Cycling and Walking Network

Objective No.	Specific Objective	Approx Area (Ha)
R-01	Medium density residential development to include a mix of house types and a graduation in the density commensurate with the distance from the railway station. The layout shall allow for permeability between housing areas and in particular, direct, safe and convenient access to the rail station by pedestrians and cyclists. Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.	18.4
R-02	Medium density residential development. Proposals should include a 20 metre tree planted buffer to the eastern and southern boundary of the site and screening to protect views from the N25.	9.6
R-03	Medium density residential development of high architectural standard on this gateway site at the	2.8

Objective No.	Specific Objective	Approx Area (Ha)
	entrance to the town centre. Structural landscaping shall be an integral part of any layout.	

Carrigtwohill North Framework Masterplan Residential Zonings

Objective No.	Specific Objective	Approx Area (Ha)
Phase 1		
R-04	<p>Medium density residential development to include a mix of house types and a graduation in the density commensurate with the railway station. The Layout shall allow for permeability between housing areas and in particular, direct, safe and convenient access to the rail station by pedestrians and cyclists.</p> <p>Part of the landholding shall include the provision of a Local Park (O-05) which will need to be constructed by the developer in accordance with the specifications set out in the Recreation and Amenity Policy of Cork County Council.</p> <p>Part of the landholding shall include the provision of a primary school (C-03), which will need to be purchased and developed by the Department of Education, Science and Skills.</p> <p>Part of the site is adjacent to the linkroad (U-02) which will need to be constructed in accordance with the specifications and approval of the Roads Section of Cork County Council.</p> <p>The road will need to be built up to the boundaries of the site so that it can link to adjacent landowners and developments.</p> <p>Part of the site is adjacent to the new greenway (U-03) to comprise a cycleway and pedestrian pathway designed in accordance with the DMURS Guidance document to the</p>	2.0

	<p>approval of the Cork County Council and constructed as part of the development and linked to other parts of the greenway on adjacent properties.</p> <p>Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.</p>	
R-05	<p>Medium density residential development to include a mix of house types and a graduation in the density commensurate with the railway station. The Layout shall allow for permeability between housing areas and in particular, direct, safe and convenient access to the rail station by pedestrians and cyclists.</p> <p>Part of the site is adjacent to the linkroad (U-02) which will need to be constructed in accordance with the specifications and approval of the Roads Section of Cork County Council.</p> <p>The road will need to be built up to the boundaries of the site so that it can link to adjacent landowners and developments.</p> <p>Part of the landholding shall include the provision of a primary school (C-03), which will need to be purchased and developed by the Department of Education, Science and Skills.</p>	4.8
R-06	<p>Medium density residential development to include a mix of house types and a graduation in the density commensurate with the railway station. The Layout shall allow for permeability between housing areas and in particular direct, safe and convenient access to the rail station by pedestrians</p>	6.5

	<p>and cyclists.</p> <p>Part of the landholding shall include the provision of a Local Park (O-05) which will need to be constructed by the developer in accordance with the specifications set out in the Recreation and Amenity Policy of Cork County Council.</p> <p>Part of the site is adjacent to the link road (U-02) which will need to be constructed in accordance with the specifications and approval of the Roads Section of Cork County Council.</p> <p>The road will need to be built up to the boundaries of the site so that it can link to adjacent landowners and developments.</p>	
R-07	<p>Medium density residential development to include a mix of house types and a graduation in the density commensurate with the railway station. The Layout shall allow for permeability between housing areas and in particular, direct, safe and convenient access to the rail station by pedestrians and cyclists.</p> <p>Part of the site is adjacent to the linkroad (U-02) which will need to be constructed in accordance with the specifications and approval of the Roads Section of Cork County Council. The road will need to be built up to the boundaries of the site so that it can link to adjacent landowners and developments.</p> <p>Part of the site is adjacent to the local road L (U-03) which will need to be upgraded to accommodate Pedestrians and Cyclists in accordance with the specifications and approval of the Roads Section of Cork County Council.</p> <p>Part of the landholding shall include the provision of a primary school (C-03), which will need to be purchased and developed by the Department of Education, Science and Skills.</p>	4.0
R-08	<p>Medium density residential development to include a mix of house types and a graduation in the</p>	2.6

	<p>density commensurate with the railway station. The Layout shall allow for permeability between housing areas and in particular, direct, safe and convenient access to the rail station by pedestrians and cyclists.</p> <p>Part of the site is adjacent to the link road (U-02) which will need to be constructed in accordance with the specifications and approval of the Roads Section of Cork County Council.</p> <p>The road will need to be built up to the boundaries of the site so that it can link to adjacent landowners and developments.</p>	
R-09	<p>High density residential development to include a mix of house types and a graduation in the density commensurate with the railway station. The Layout shall allow for permeability between housing areas and in particular, direct, safe and convenient access to the rail station by pedestrians and cyclists.</p> <p>Part of the site is adjacent to the link road (U-02) which will need to be constructed in accordance with the specifications and approval of the Roads Section of Cork County Council.</p> <p>The road will need to be built up to the boundaries of the site so that it can link to adjacent landowners and developments.</p> <p>Part of the landholding shall include the provision of a primary school (C-03), which will need to be purchased and developed by the Department of Education, Science and Skills.</p> <p>Part of the landholding shall include the provision of a Local Park (O-05) which will need to be constructed by the developer in accordance with the specifications set out in the Recreation and Amenity Policy of Cork County Council.</p> <p>Part of the site is adjacent to the new greenway (U-03) to comprise a cycleway and pedestrian pathway designed in accordance with the</p>	3.7

	<p>DMURS Guidance document to the approval of the Cork County Council</p>	
R-10	<p>High density residential development to include a mix of house types and a graduation in the density commensurate with the railway station. The Layout shall allow for permeability between housing areas and in particular, direct, safe and convenient access to the rail station by pedestrians and cyclists.</p> <p>Part of the site is adjacent to the link road (U-02) which will need to be constructed in accordance with the specifications and approval of the Roads Section of Cork County Council.</p> <p>The road will need to be built up to the boundaries of the site so that it can link to adjacent landowners and developments.</p> <p>Part of the site is adjacent to the local road L6306 (U-04) which will need to be upgraded to accommodate Pedestrians and Cyclists in accordance with the specifications and approval of the Roads Section of Cork County Council.</p>	4.7
R-11	<p>High density residential development to include a mix of house types and a graduation in the density commensurate with the railway station. The Layout shall allow for permeability between housing areas and in particular, direct, safe and convenient access to the rail station by pedestrians and cyclists.</p> <p>Part of the site is adjacent to the link road (U-02) which will need to be constructed in accordance with the specifications and approval of the Roads Section of Cork County Council.</p> <p>The road will need to be built up to the boundaries of the site so that it can link to adjacent landowners and developments.</p> <p>Part of the site is adjacent to the new greenway (U-03) to comprise a cycleway and pedestrian pathway</p>	9.3

	<p>designed in accordance with the DMURS Guidance document to the approval of the Cork County Council and constructed as part of the development and linked to other parts of the greenway on adjacent properties.</p> <p>Part of the landholding shall include the provision of a Local Park (O-06) which will need to be constructed by the developer in accordance with the specifications set out in the Recreation and Amenity Policy of Cork County</p> <p>Part of the site is adjacent to the local roads L 6306 (U-04) and L6303 (U-05) which will need to be upgraded to accommodate Pedestrians and Cyclists in accordance with the specifications and approval of the Roads Section of Cork County Council.</p>	
Phase 2		
R-12	<p>Medium density residential development to include a mix of house types and a graduation in the density commensurate with the railway station. The Layout shall allow for permeability between housing areas and in particular, direct, safe and convenient access to the rail station by pedestrians and cyclists.</p> <p>Part of the site is adjacent to the linkroad (U-02) which will need to be constructed in accordance with the specifications and approval of the Roads Section of Cork County Council.</p> <p>The road will need to be built up to the boundaries of the site so that it can link to adjacent landowners and developments.</p> <p>Part of the landholding shall include the provision of a primary school and a secondary school (C-04), which will need to be purchased and developed by the Department of Education, Science and Skills.</p> <p>Part of the site is adjacent to the new greenway (U-03) to comprise a</p>	13.5

	<p><i>cycleway and pedestrian pathway designed in accordance with the DMURS Guidance document to the approval of the Cork County Council and constructed as part of the development and linked to other parts of the greenway on adjacent properties.</i></p> <p><i>Part of this site is adjacent to the new Pedestrian/Cycle Bridge (u-09) linking these lands with R-18, in accordance with the specifications and approval of Cork County Council and Irish Rail.</i></p> <p><i>A way leave for an existing high voltage powerline is in place on this site and prospective developers will need agreements with ESB networks regarding required separation distances for developments in proximity to the powerlines.</i></p> <p><i>Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.</i></p>	
R-13	<p><i>Medium density residential development to include a mix of house types and a graduation in the density commensurate with the railway station. The Layout shall allow for permeability between housing areas and in particular, direct ,safe and convenient access to the rail station by pedestrians and cyclists.</i></p> <p><i>Part of the landholding shall include the provision of a primary school and a secondary school (C-04), which will need to be purchased and developed by the Department of Education, Science and Skills</i></p> <p><i>Part of the site is adjacent to the linkroad (U-02) which will need to be constructed in accordance with the</i></p>	7.7

	<p><i>specifications and approval of the Roads Section of Cork County Council.</i></p> <p><i>The road will need to built up to the boundaries of the site so that it can link to adjacent landowners and developments.</i></p> <p><i>Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.</i></p>	
R-14	<p><i>Medium density residential development to include a mix of house types and a graduation in the density commensurate with the railway station. The Layout shall allow for permeability between housing areas and in particular, direct ,safe and convenient access to the rail station by pedestrians and cyclists.</i></p> <p><i>Part of the landholding shall include the provision of a primary school and a secondary school (C-04), which will need to be purchased and developed by the Department of Education, Science and Skills</i></p> <p><i>Part of the site is adjacent to the link road (U-02) which will need to be constructed in accordance with the specifications and approval of the Roads Section of Cork County Council.</i></p> <p><i>The road will need to built up to the boundaries of the site so that it can link to adjacent landowners and developments.</i></p> <p><i>Part of the landholding shall include the provision of a Linear Park (0-07) which will be constructed by the Cork County Council using General Development Contributions in accordance with the specifications set out in the Recreation and Amenity Policy of Cork County</i></p> <p><i>Parts of this site are at risk of flooding. Any development</i></p>	4.7

	<p><i>proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.</i></p>	
R-15	<p><i>Medium density residential development to include a mix of house types and a graduation in the density commensurate with the railway station. The Layout shall allow for permeability between housing areas and in particular, direct ,safe and convenient access to the rail station by pedestrians and cyclists.</i></p> <p><i>Part of the site is adjacent to the linkroad (U-02) which will need to be constructed in accordance with the specifications and approval of the Roads Section of Cork County Council.</i></p> <p><i>The road will need to built up to the boundaries of the site so that it can link to adjacent landowners and developments.</i></p> <p><i>Part of the landholding shall include the provision of a Linear Park (0-07) which will be constructed by Cork County Council using General Development Contributions in accordance with the specifications set out in the Recreation and Amenity Policy of Cork County</i></p> <p><i>Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.</i></p>	12.9
R-16	<p><i>Medium density residential development to include a mix of house types and a graduation in the density commensurate with the railway station. The Layout shall allow for permeability between housing areas and in particular,</i></p>	8.4

	<p><i>direct ,safe and convenient access to the rail station by pedestrians and cyclists.</i></p> <p><i>Part of the site is adjacent to the linkroad (U-02) which will need to be constructed in accordance with the specifications and approval of the Roads Section of Cork County Council.</i></p> <p><i>The road will need to be built up to the boundaries of the site so that it can link to adjacent landowners and developments.</i></p> <p><i>Part of the landholding shall include the provision of a Linear Park (0-07) which will be constructed by Cork County Council using General Development Contributions in accordance with the specifications set out in the Recreation and Amenity Policy of Cork County</i></p> <p><i>Part of the site is adjacent to the new greenway (U-03) to comprise a cycleway and pedestrian pathway designed in accordance with the DMURS Guidance document to the approval of the Cork County Council</i></p> <p><i>Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines ‘The Planning System and Flood Risk Management’ as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.</i></p>	
R-17	<p><i>Medium density residential development to include a mix of house types and a graduation in the density commensurate with the railway station. The Layout shall allow for permeability between housing areas and in particular, direct, safe and convenient access to the rail station by pedestrians and cyclists.</i></p> <p><i>Part of the site is adjacent to the link road (U-02) which will need to be constructed in accordance with the specifications and approval of the Roads Section of Cork County Council.</i></p>	2.3

	<p><i>The road will need to built up to the boundaries of the site so that it can link to adjacent landowners and developments.</i></p> <p><i>Part of the site is adjacent to the new greenway (U-03) to comprise a cycleway and pedestrian pathway designed in accordance with the DMURS Guidance document to the approval of the Cork County Council</i></p> <p><i>Part of the landholding shall include the provision of a Linear Park (0-07) which will be constructed by th Cork County Council using General Development Contributions in accordance with the specifications set out in the Recreation and Amenity Policy of Cork County</i></p> <p><i>Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines ‘The Planning System and Flood Risk Management’ as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.</i></p>	
R-18	<p><i>Medium density residential development to include a mix of house types and a graduation in the density commensurate with the railway station. The Layout shall allow for permeability between housing areas and in particular, direct ,safe and convenient access to the rail station by pedestrians and cyclists.</i></p> <p><i>Part of the site is adjacent to the linkroad (U-02) which will need to be constructed in accordance with the specifications and approval of the Roads Section of Cork County Council.</i></p> <p><i>The road will need to built up to the boundaries of the site so that it can link to adjacent landowners and developments.</i></p> <p><i>Part of the site is adjacent to the new greenway (U-03) to comprise a cycleway and pedestrian pathway designed in accordance with the</i></p>	2.3

	<p><i>DMURS Guidance document to the approval of the Cork County Council</i></p> <p><i>Part of this site is adjacent to the new Pedestrian/Cycle Bridge (u-09) linking these lands with R-12 and C-05, in accordance with the specifications and approval of Cork County Council and Irish Rail.</i></p> <p><i>Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines ‘The Planning System and Flood Risk Management’ as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.</i></p>	
R-19	<p><i>Medium density residential development to include a mix of house types and a graduation in the density commensurate with the railway station. The Layout shall allow for permeability between housing areas and in particular, direct ,safe and convenient access to the rail station by pedestrians and cyclists.</i></p> <p><i>Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines ‘The Planning System and Flood Risk Management’ as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.</i></p> <p><i>Part of the site is adjacent to the new greenway (U-03) to comprise a cycleway and pedestrian pathway designed in accordance with the DMURS Guidance document to the approval of the Cork County Council</i></p> <p><i>Part of the site is adjacent to the local roadL6303 (U-05) which will need to be upgraded to accommodate Pedestrians and Cyclists in accordance with the</i></p>	1.3

specifications and approval of the Roads Section of Cork County Council.

Employment & Economic Activity

1.4.1. In order to ensure the continued growth of the employment sector in the town, it is imperative that a shortfall in suitably zoned lands does not arise. The augmentation of the business offering could take the form of more job intensive uses on existing zoned lands or the modest addition of new greenfield sites, and the strategy being pursued in this plan involves both options.

1.4.2. Carrigwohill sits in the heart of the Metropolitan Green Belt and there is a need to maintain the separation between the town and the adjacent settlements of Glounthaune and Midleton. Therefore the planning proposals of this plan seek to maximise the benefits of the existing passenger rail station and the recently permitted station at Fota Business Park, while minimising the impact on the green belt.

1.4.3. In line with the revised zoning categories of the County Development Plan, employment lands are zoned for Industry, Enterprise and Business uses.

Industry

1.4.4. One of the key development priorities for the Cork Gateway identified in the National Development Plan 2007-2013 is the development of lands in Carrigwohill by IDA Ireland as part of its Strategic Sites Initiative and the IDA landbank has been protected in this plan.

1.4.5. The site proposed for standalone industry at Ballyadam, has been identified for this use as far back as the 1996 County Development Plan and remains an important asset to the town. It is one of a very few sites in Metropolitan Cork where a large area suitable for stand alone, larger scale industry exists close to a supply of good quality housing, and where major roads and railway infrastructure are present or in the process of being developed. The mix of these elements creates the opportunity for employment in a highly sustainable location. It is considered to be a strategic industrial site, reserved for large scale stand alone industry of regional or national importance and it is the Council's intention to reserve it in the longer term until such an opportunity arises.

1.4.6. Provision has also been made for sites suitable to accommodate large scale industrial development below the threshold for standalone industry, ensuring Carrigwohill has the optimum mix of sites to meet the industrial sector requirements. Additional lands to the west of Carrigwohill have been included for this purpose.

1.4.7. The specific industrial zoning objectives for Carrigwohill are set out in the following table.

Objective No.	Specific Objective	Approx Area (Ha)
I-01	Industrial type activities including warehousing and distribution. High quality structural landscaping shall be provided along the western site boundary as part of a comprehensive landscaping scheme for the site and shall also include proposals to minimise the impact on existing residential properties on the eastern site boundary.	24.5
I-02	It is an objective to develop this site for industrial type activities giving priority to high quality manufacturing. Consideration should be given to providing connectivity between the south-western part of this site and the proposed passenger rail station at Fota Business and Retail Park. Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.	35.6
I-03	Industrial development including the provision of high quality strategic landscaping around the boundary of the site, with particular attention paid to proposed and established residential development to the west and south. Proposals for development shall be accompanied by a mobility management plan and parking strategy that optimizes modal shift to rail, cycling and walking.	32.2
I-04	It is an objective of this plan to reserve this strategic site for large stand-alone high quality industrial development. This site will be reserved and protected in the longer term for industrial development of regional or national economic importance. The following criteria will need to be addressed in the development of the site: • Road improvements required to	56.0

Objective No.	Specific Objective	Approx Area (Ha)
	the National Primary network including a new grade separated interchange with the N25, • Road improvements to the local road network. These routes should be capable of providing public transport to connect the site with the town centre and railway station and adequate land should be reserved to facilitate likely future traffic growth; • The need to set aside land for a passenger station to serve the proposed development in the medium or longer term, subject to the selection of an agreed location in consultation with Iarnród Éireann; and • A landscaping and tree planting scheme will be implemented to enhance the setting of the development; and • A detailed Traffic Impact Assessment (TIA), Mobility Management plan and parking strategy that optimizes modal shift to rail, cycling and walking will also be required.	
I-05	Maintain existing industrial uses. This zone is close to the Great Island Channel Special Area of Conservation and the Cork Harbour Special Protection Area and parts of the zone are susceptible to flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan. Development proposals must provide for sufficient stormwater and surface water attenuation and are likely to require the provision of ecological assessments which comply with Article 6 of the Habitats Directive. New developments which involve industrial discharges will require the provision of an ecological impact assessment report (Natura Impact Statement) in accordance with	39.7

Objective No.	Specific Objective	Approx Area (Ha)
	the requirements of the Habitats Directive and may only proceed where it can be shown that they will not have significant negative impact on the SAC or on the SPA.	
I-06	<p>Maintain existing industrial uses. This zone is immediately adjacent to the Great Island Channel Special Area of Conservation and the Cork Harbour Special Protection Area. Development proposals must provide for sufficient stormwater and surface water attenuation and are likely to require the provision of ecological assessments which comply with Article 6 of the Habitats Directive. New developments which involve industrial discharges will require the provision of an ecological impact assessment report (Natura Impact Statement) in accordance with the requirements of the Habitats Directive and may only proceed where it can be shown that they will not have significant negative impact on the SAC and on the SPA.</p> <p>Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.</p>	13

Enterprise

1.4.8. Since the 2005 Plan, planning permission has been granted for the provision of a second passenger station in Carrigtwohill West at Fota Business and Retail Park. Permission has been granted in the past on the neighbouring site for a mixed use development including retail warehousing, office, commercial and leisure development, however, when the new station at Carrigtwohill West is constructed, this site would be better utilised for higher order office based uses. This would present the opportunity to provide for more job intensive uses than previously envisaged, maximising the benefits of this second station.

1.4.9. Four sites have been identified for enterprise use and the specific enterprise zoning objectives for Carrigtwohill are set out in the following table.

Objective No.	Specific Objective	Approx Area (Ha)
E-01	<p>Office based industry, Research and Development and technology uses. Proposals shall optimise connectivity with the proposed rail passenger station at Fota Business and Retail Park, particularly for pedestrians and cyclists.</p> <p>Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.</p>	2.7
E-02	<p>Office based industry, Research and Development and technology uses. Proposals shall optimise connectivity with the proposed rail passenger station at Fota Business and Retail Park, particularly for pedestrians and cyclists. A significant landscaped buffer shall be provided along the western site boundary. Proposals for development shall be accompanied by a mobility management plan and parking strategy that optimizes modal shift to rail, cycling and walking.</p> <p>This zone is immediately adjacent to the Great Island Channel Special Area of Conservation and the Cork Harbour Special Protection Area. Development proposals must provide for sufficient stormwater attenuation and may require the provision of ecological assessments. New developments which involve industrial discharges will require the provision of an ecological impact assessment report (Natura Impact Statement) in accordance with the requirements of the Habitats Directive and may only proceed where it can be shown that they will not have significant negative impact on the SAC and SPA.</p> <p>Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described</p>	7.9

Objective No.	Specific Objective	Approx Area (Ha)
	in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.	
E-03	<p>Office based industry to include the provision of landmark buildings at this strategic location for the town. Proposals for development shall be accompanied by a mobility management plan and parking strategy that optimizes modal shift to rail, cycling and walking.</p> <p>This zone is adjacent to the Great Island Channel Special Area of Conservation and the Cork Harbour Special Protection Area. Development proposals must provide for sufficient stormwater attenuation and may require the provision of ecological assessments. New developments which involve industrial discharges will require the provision of an ecological impact assessment report (Natura Impact Statement) in accordance with the requirements of the Habitats Directive and may only proceed where it can be shown that they will not have significant negative impact on the SAC and SPA.</p> <p>Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.</p>	2.7
E-04	<p>Office based industry to include the provision of landmark buildings at this strategic location for the town. Proposals for development shall be accompanied by a mobility management plan and parking strategy that optimizes modal shift to rail, cycling and walking.</p> <p>Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in</p>	6.6

Objective No.	Specific Objective	Approx Area (Ha)
	Section 1 of this plan.	

Business

1.4.10. Survey work on the town has noted the lack of opportunities for small scale industrial units. In order to address this, three sites are identified for business uses. In addition, character area 9 in the masterplan site will provide for small scale business uses.

1.4.11. The specific business zoning objectives for Carrigtwohill are set out in the following table.

1.4.12. An additional area to accommodating small scale businesses, retail, professional and leisure services and activities is proposed in the Masterplan site area adjacent to the existing railway station.

Objective No.	Specific Objective	Approx Area (Ha)
B-01	Business development, excluding retail warehousing, non-retail general offices and car showrooms. Proposals for this site will include a comprehensive layout and structural landscaping scheme that will ensure that any buildings or other structures erected have minimal visual impact in longer distance views. Vehicular access to the site will be from the adjoining industrial area to the south only.	19.8
B-02	Business development. Proposals should include a 20 metre tree planted buffer and screening to protect views from the N25. Proposals for development shall be accompanied by a mobility management plan and parking strategy that optimizes modal shift to rail, cycling and walking. This zone is adjacent to the Great Island Channel Special Area of Conservation and the Cork Harbour Special Protection Area. Development proposals must provide for sufficient stormwater attenuation and will require the provision of an ecological impact assessment report (Natura Impact Statement) in accordance with the requirements of the Habitats Directive and may only proceed where it can be shown that they will not have significant	4.0

Objective No.	Specific Objective	Approx Area (Ha)
	negative impact on the SAC and SPA. Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.	
B-03	Business development. Proposals for development shall be accompanied by a mobility management plan and parking strategy that optimizes modal shift to rail, cycling and walking. This zone is adjacent to the Great Island Channel Special Area of Conservation and the Cork Harbour Special Protection Area. Development proposals must provide for sufficient stormwater attenuation and will require the provision of an ecological impact assessment report (Natura Impact Statement) in accordance with the requirements of the Habitats Directive and may only proceed where it can be shown that they will not have significant negative impact on the SAC and SPA. Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.	2.2
B-04	Business development excluding non-retail general offices and car showrooms. Proposals for the site shall be accompanied by a traffic and transport assessment, mobility management plan and parking strategy that optimizes modal shift to rail, cycling and walking. This zone is immediately adjacent to the Great Island Channel Special Area of Conservation and the Cork Harbour Special Protection Area. Development proposals must provide for sufficient stormwater and surface water attenuation and may require the	3.8

Objective No.	Specific Objective	Approx Area (Ha)
	provision of ecological assessments. New developments which involve industrial discharges will require the provision of an ecological impact assessment report (Natura Impact Statement) in accordance with the requirements of the Habitats Directive and may only proceed where it can be shown that they will not have significant negative impact on the SAC and SPA. Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.	
B-05	Station Quarter including convenience retailing, professional services and Leisure Facilities. Residential development can be accommodated at first floor level and above. A public square shall be at the heart of this area and should be designed to accommodate a wide variety of events such as a regular local market and should include cycle parking provision, public seating and public art Access to this square should be via a variety of pedestrian priority streets/lanes/arcades which should converge on this space to reinforce its centrality within the plan area. Part of the site is adjacent to the new greenway (U-03) to comprise a cycleway and pedestrian pathway designed in accordance with the DMURS Guidance document to the approval of the Cork County Council Part of the site is adjacent to the local roads L 6306 (U-04) and L6303 (U-05) which will need to be upgraded to accommodate Pedestrians and Cyclists in accordance with the specifications and approval of the Roads Section of Cork County Council.	1.5

Objective No.	Specific Objective	Approx Area (Ha)

Community Facilities and Utilities

Community Facilities

1.4.13. Two new primary schools and one new post-primary school have been included in proposals set out in the Draft Masterplan for the lands north of the rail line. This will be sufficient to cater for the demand for new school places arising from the population targets for the town. **Proposed school sites in the Masterplan shall be subject to a review if the requirement for schools in Carrigtwohill changes during the lifetime of the plan.**

However, given the long term nature of the masterplan project and the need to address the lack of a post primary boy's school in the town in the shorter term, consideration will be given to the development of a post-primary school on other suitable lands, including zoned lands, in the town, subject to proper planning and sustainable development considerations. The two existing national schools in the town are located on the Main Street on restricted sites and in late 2009 planning permission was granted to the Boards of Management of both schools for a new two-storey 24 classroom school on a site adjoining the Castlelake development. As pressure is likely to increase on the existing schools in the short term in line with population growth, the need for a new school site will become increasingly important and so this plan provides for its protection.

1.4.14. The Community Council have invested significantly in the provision of facilities on their site, south of Main Street, including a children's playground and a new all-weather pitch. It is important that these facilities be protected for use by the wider community and an objective has been included in this regard.

1.4.15. The specific community zoning objectives for Carrigtwohill are set out in the following table.

Objective No.	Specific Objective	Approx Area (Ha)

Objective No.	Specific Objective	Approx Area (Ha)
C-01	Provision of a primary school and associated sports facilities. Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.	2.4
C-02	Retain existing community centre, playground and sports facilities.	3.4
C-03	Provision of a primary school. Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan	2.4
C-04	Provision of a primary and secondary school multi campus. Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan	5.7

Utilities

1.4.16. The distributor road to be provided as part of the development of the masterplan site north of the rail line will alleviate traffic congestion in the town, acting as an outer relief road. The completion of the undeveloped housing lands south of the rail line provide a further opportunity to enhance connectivity in the town through the provision of a link road through Castlelake to Station Road that would ultimately connect up with the existing link road from Station Road to the Carrigane Road.

1.4.17. Provision is also made in the proposals of this plan for a number of new town centre streets, to the south of Main Street which are key to unlocking access to these backlands and are identified in the recommendations of the Midleton and Carrigtwohill Transportation Study August 2010.

Objective No.	Specific Objective	Approx Area (Ha)
U-01	Provision of a new link road connecting with underpass and U-02. Road line on map is indicative only.	-
U-02	Provision of new link roads to access development lands. Road lines on map are indicative only.	-
U-03	Provision of a Greenway to comprise a cycleway and pedestrian pathway designed in accordance with the DMURS Guidance document to the approval of Cork County Council and constructed as part of the development and linked to other parts of the greenway on adjacent properties.	2.8
U-04	Upgrading of Feeder Road (U-04) to accommodate Pedestrian and Cycling facilities.	-
U-05	Upgrading of Feeder Road (U-05) to accommodate Pedestrian and Cycling facilities	
U-06	Upgrading of Station Bridge to accommodate Pedestrian and Cycling facilities	
U-07	Upgrading of Wyse's Bridge to accommodate Pedestrian and Cycling facilities	
U-08	Upgrading of Ballyadam Bridge to accommodate Pedestrian and Cycling facilities	

Objective No.	Specific Objective	Approx Area (Ha)
U-09	Construction of Pedestrian/Cycling Bridge linking R-12, R18 and Educational Campus C-05.	

Town Centre/ Neighbourhood Centre

1.4.18. The current town centre area comprises a small stretch of Main Street and a cluster of mixed use development at the eastern end of Main Street. In 2005 three additional areas were zoned as new town centre areas, however, these remain largely undeveloped. The area of established development is separated from the area of proposed development by further areas designated as established residential and other uses. Underpinning the town centre proposals in the 2005 SLAP was the principle that the existing town centre would continue to be the primary retail centre in the town and that retail and other town centre uses would not be permitted to migrate to the outer edges of the town or to the new masterplan site.

1.4.19. This plan envisages that the town centre of Carrigwohill will grow in line with the planned increases in population and develop into an attractive area of mixed use development where the aim is to ensure that as many as possible of the goods and services required by the town's population can be provided without the need to travel to other locations. It is particularly important, if unnecessary car journeys are to be avoided, that the range and scale of convenience goods shopping should be sufficient to provide for the weekly shopping needs of the resident population. The parallel development of a good range of comparison goods shopping will add significantly to the overall attractiveness of Carrigwohill as a place to live and work.

1.4.20. To achieve this growth, mixed-use town centre development is encouraged with the emphasis on retailing as the preferred ground floor use but additionally providing for housing and office uses particularly above ground floor level.

1.4.21. This approach to land use planning in the town centre inherently offers a flexibility that will serve the area well in the coming years because not only will it encourage significant new retail and office development but also there will be capacity for a substantial number of new dwellings and new community facilities. It is important that this trend towards new residential development in the town centre should establish itself in the future because of the contribution that new population will make to the vitality of the town centre and because much of the town centre is relatively close to either the new railway station or the town's existing community facilities.

1.4.22. In this plan the area for town centre development has been expanded to provide opportunities for mixed-use developments of this type and also taking account of the road and parking proposals identified in the Midleton and Carrigwohill Transportation Study, the conclusions of which are supported in this plan. The area now included for town centre development includes land currently in use or zoned for active open space, industrial and commercial purposes and it is envisaged that some of these uses may relocate from within the town to more suitable locations in the years to come, and in considering the zoning proposals for the town, provision has been made for these uses on alternative sites. Town centre uses fronting onto Station Road will provide continuity and connectivity with the mixed use core to be provided around the railway station as proposed in the Draft Masterplan and will encourage pedestrian and cyclists movements contributing to the vibrancy of the area.

1.4.23. Traffic congestion and lack of parking have long detracted from the town centre and a number of measures have been set out in the Transportation Study to deal with these issues. The study identifies a location for a new public car park and indicates a possible road network providing access to the lands to the rear of Main Street and re-development proposals for the town centre will need to make provision for these requirements. Concurrent with the resolution of parking and congestion issues will be the opportunity to instigate public realm improvements, particularly with the rationalisation of parking and junction improvements on Main Street.

1.4.24. The specific town / neighbourhood centre zoning objectives for Carrigwohill are set out in the following table.

Objective No.	Specific Objective	Approx Area (Ha)
T-01	This area denotes the established footprint of the town centre and includes a significant area to allow for the expansion of town centre uses. This is the primary location for new retail and office development where services are provided to visiting members of the public. New residential development that will enhance the vitality, attractiveness and safety of the town centre will be an important component of any development proposal. Any proposals for development within this core area should: <ul style="list-style-type: none"> comply with the overall uses acceptable in town centre areas, make provision for a new public car park at a 	10.7

Objective No.	Specific Objective	Approx Area (Ha)
	location west of the all-weather pitch, the exact location and size of which to be agreed with the Council, <ul style="list-style-type: none"> provide for the closure of the eastbound slip off road from the N25, provide for new town centre streets and improved junctions with Main Street so as to provide access to backlands, include proposals for public realm improvements with particular focus on Main Street, and include proposals for the completion of the upgrade of the junction of Main Street and Church Road. 	
T-02	Town / neighbourhood centre in line with the overall uses acceptable in town centre areas. Careful consideration shall be given to the overall design approach given the prominence of the site to both the entrance to Castlelake and the start of the Main Street. Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.	3.0
T-03	Frontage development to Station Road in line with the overall uses acceptable in town centre areas, so as to provide continuity and connectivity between the Station Quarter to the north and the primary town centre area on Main Street. Parts of this site are at risk of flooding. Any development	6.9

Objective No.	Specific Objective	Approx Area (Ha)
	proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.	

Open Space/ Sports/ Recreation & Amenity

1.4.25. The sports and education campus which is integral to the draft masterplan proposals will address a part of the deficit in sporting facilities in the town in the longer term. However, it is important that proposals be advanced in the established areas of the town to provide a balance in the location of facilities.

1.4.26. Proposals to expand the town centre and provide for a public car park are critical to the self-sufficiency and accessibility of the town in the future and in this context part of the lands zoned for the expansion of the GAA Club in 2005 have now been included for town centre use. In order to maintain opportunities for sports/ recreation in this more established part of town a replacement site has been zoned active open space use further west though still reasonably close to the town centre.

1.4.27. Lands identified in the 2005 SLAP for active open space have been carried forward in this plan and may have a role to play as additional facilities for the GAA in the long term or alternatively as a home for Carrigtwohill United AFC or some other sporting body all of which will require substantial additional facilities to serve the anticipated population numbers.

1.4.28. In order to ensure the delivery of the open space proposals contained in this plan, consideration will be given to the development of an implementation plan/ study specific to the town that will outline the mechanisms and timeframes for the delivery of this recreational infrastructure. This study will be completed in the lifetime of this local area plan.

1.4.29. The specific open space and agriculture zoning objectives for Carrigtwohill are set out in the following table.

Objective No.	Specific Objective	Approx Area (Ha)
O-01	Maintain active open space. Parts of this site are at risk of	7.0

Objective No.	Specific Objective	Approx Area (Ha)
	flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.	
O-02	Active open space to include the provision of playing pitches, ancillary facilities and parking. Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.	4.9
O-03	Maintain active open space.	1.8
O-04	Active open space to include the provision of a playing pitch, ancillary facilities and parking.	3.0

Objective No.	Specific Objective	Approx Area (Ha)
O-05	Provision of a Small Park- Accommodate playground facilities, bio-diversity areas, possible storm water attenuation swales and a number of playing facilities in accordance with the Recreation and Amenity Policy of Cork County Council. Sports facilities will be shared with the neighbouring school,. Passive recreational and Bio-diversity Areas will also be provided. Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan	4.8
O-06	Provision of a Small Park- Accommodate playground facilities, bio-diversity areas, possible storm water attenuation swales and a number of playing facilities in accordance with the Recreation and Amenity Policy of Cork County Council. Sports facilities will be shared with the neighbouring school,. Passive recreational and Bio-diversity Areas will also be provided. Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan	1.6

Objective No.	Specific Objective	Approx Area (Ha)
O-07	<p>Provision of a Linear Park to Accommodate playground facilities and a number of playing facilities. Passive recreational and Bio-diversity Areas will also be provided. Along with possible storm water attenuation swales in accordance with the Recreation and Amenity Policy of Cork County Council.</p> <p>Sports facilities will be shared with the local schools,</p> <p>Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan</p>	12.3

Special Policy Area Objectives

Carrigtwohill

1.4.30. The Carrigtwohill Special Local Area Plan, adopted in September 2005, set out a development framework for Carrigtwohill to guide new development to take advantage of proposals to establish a suburban rail network for Cork, including the re-opening of the rail line to the town. The SLAP identified a 128ha site north of the rail line, with the special zoning objective X-01, for a new residential neighbourhood. The plan recognised that this area could offer significant potential for the expansion of Carrigtwohill to meet the new housing targets as set out in the Cork Area Strategic Plan. The site is split between 37 landowners/developers.

1.4.31. Following on the principles set out in the SLAP, this LAP puts in place the framework for the delivery of a residential neighbourhood incorporating a mixed use station quarter and an employment area to create a sustainable living community. The creation of this sustainable living community will involve the interaction of social, economic and environmental factors.

1.4.32. Because of the size and complexity of the proposals for this site, a non-statutory Framework Masterplan Study draft masterplan has been prepared to set out greater detail on the implementation of the principles of this plan

1.4.33. In the latter stages of the preparation of this plan issues have arisen that are likely to have an impact on the design and layout of the masterplan; the outcome of the detailed flood study, the need for the more urgent delivery of a post primary school than the masterplan may facilitate, delivery of a greater quantum of open space/ recreation facilities for the wider community and concerns in relation to the achievement of a satisfactory living environment and sustainable communities at higher density levels, particularly in the early stages of a recovering housing market. The local community are particularly concerned about ensuring proper integration by creating places where people want to live and building a sustainable community. It is considered that the appropriate resolution of these issues lies in the detailed design and layout work to be completed as part of the masterplan process. This may ultimately involve the extension of the boundary of the masterplan site and a subsequent amendment or variation to the statutory plans for the area.

Site Location and Size

1.4.34. The site is located mainly to the north, with a small portion to the south, of the re-opened railway line. The site is split between 37 landowners/developers. The masterplan area, which comprises 128 ha/133ha, is gently sloping upwards from south to north but is a little steeper towards the road to the north of the site. The height differential across the site is in the range of 0-40 metres. The lands are only a little below the railway line to the south while approaching the northern boundary of the site the land rises more steeply which may present some more challenges for development. The more steeply rising land beyond and to the north of the site is an attractive and prominent landscape feature which will provide a backdrop to, and better assimilation of, the development within the wider landscape area.

1.4.35. Primarily the lands are composed of hedgerow enclosed farmland being interspersed with a number of single site houses along roads within the area. Generally the existing roads which bound the site are lightly trafficked, hedgerow enclosed boreens which have a predominantly rural character. There are a number of areas of scrubland which may be of limited ecological value.

Development Principles

1.4.36. The vision for delivering this ambitious urban expansion will be based on a set of accepted urban design principles outlined in the current Department of the Environment, Heritage and Local Government's "Urban Design Manual: A best practice guide" and this will help shape the urban structure.

1.4.37. The development of the site will be informed by the following principles:

General Principles

- To provide a coherent strategic spatial framework for the lands to the north of the rail line in Carrigtwohill.
- Optimise the accessibility opportunities at Carrigtwohill to create a mixed use residential neighbourhood of between 2,600—3,300 houses that connects with neighbouring communities, and sets in place the necessary conditions to enable a sustainable community to develop and use site resources in an efficient manner.
- To benefit from and support the reopening of the Cork to Midleton railway line by ensuring convenient and direct access to the Midleton to Cork commuter rail services.
- To strengthen the role of the public realm, the network of streets and open spaces that enable a successful and vibrant public life.
- Guide the performance of development to achieve environmental excellence, efficient use of resources and minimise waste through the provision of design guidance.
- To respect the quality of life of the existing community and to provide for the development of the masterplan area in a manner which does not jeopardise that quality of life.
- To develop the Masterplan area in a manner and at a pace which allows for the proper social and economic development of the town as a whole, and which allows an opportunity for the integration and assimilation of the new residents and which requires the delivery of adequate social, amenity and recreational facilities for the new residents in tandem with the development.
- To develop a detailed phasing programme that establishes appropriate trigger points for the delivery and completion of social, amenity, recreational and physical infrastructure in line with the key phases of residential development.

Landuse Principles

- To deliver a new residential neighbourhood comprising of a mix-use core at the railway station, new educational, sports and community facilities and a minimum of 2,600 residential units within a patchwork of character areas.
- A mix of tenures and building types will be incorporated throughout the site to cater for a diversity of needs.
- Local services and community uses should largely be focused within the mixed-use core to maximise accessibility and encourage a strong sense of community and identity.
- The education campus (including a primary and secondary school) should be located at a central position within the site to maximise accessibility to the wider community and optimise links with the railway station. The dual use of the site for primary and post-primary facilities should allow for shared facilities and minimise trips at peak times. The education campus should be delivered at a very early stage in the masterplan.
- A hierarchy of public open space will be provided within the site to provide diverse areas of formal and informal recreation which contributes to the legibility of the urban structure and distinction between the character areas.

- A hierarchy of streets of varying capacity and function will be designed to create a permeable environment linked to the existing network. Routes will be designed to encourage walking and cycling as the most direct transport mode with a particular focus on access to the railway station and education campus.

Community Principles

- To provide for recreational and community facilities including primary and secondary schools which will serve the Masterplan population and the population of the surrounding hinterland.
- To provide a mixed use station quarter neighbourhood centre to encourage the local population to shop in the area thereby creating a vibrant urban core.
- To provide for health facilities including a day care clinic.

Movement Principles

- The layout will clearly link to existing routes and create a permeable network of routes within the site.
- The layout will be designed to create movement choices for the public, with a presumption in favour of walking, cycling and public transport (especially rail).
- The layout and design of the movement network will respond to the local context and should contribute to the “sense of place” within the urban structure. A hierarchy of streets and spaces will be an integral part of the urban structure.
- Safety will be a key consideration in the location and design of the movement network. Where possible, routes should be overlooked, sociable, of a comfortable width and conspicuous.
- Parking will be required to meet the Council's standards. The arrangement of spaces within the scheme should ensure it does not dominate the space or inconvenience pedestrians and cyclists.
- A phased traffic management plan will be implemented in association with the delivery of key phases of development. This will ultimately lead to the closure of Barry's Bridge to vehicular use and it will function as a pedestrian and cyclist route only on delivery of Station Quarter; the provision of a one-way system at the school, the upgrading of Wisen and Ballyadam Bridge to facilitate the higher traffic levels, and the provision of a new pedestrian bridge crossing linking the public park to lands south of the railway line.

Urban Design Principles

- To develop a number of character areas throughout the Masterplan area to accommodate a minimum of 2,600 new dwelling units. These character areas will vary in terms of type and density of development to give each area a different identity.
- Innovative design will be encouraged throughout the development.
- Regard will be had to the best practice guidance offered in the Council's publication, ‘Making Places: a design guide for residential estate development’ May 2011, the Department's

Urban Design Manual and any other best practice guidelines in relation to density or urban design issued by the Government. Regard will also be had to the need to integrate with the existing character of the town.

Landscape Principles

- To retain existing significant mature trees and hedgerows within the site and utilise them to delineate pedestrian/cycle routes within the scheme.
 - To create a hierarchy of linked, diverse public open space types to meet the wide ranging needs of the community and reinforce the urban structure of the site. These will be located within 250-400m of the majority of homes.
 - To create a linear park which will span east-west along the northern boundary of the railway line. Its function will be to:
 - a) Provide a green spine within the site to accommodate a variety of functions including sports facilities, allotments and walking/cycle routes
 - b) To serve as an amenity resource for the overall population of Carrigtwohill
 - c) To act as a buffer between the railway and adjoining residential uses.
 - d) To act as an ecological corridor
 - e) To accommodate SUDS
 - To incorporate a variety of pocket parks within the residential areas which will contribute to the diverse character and sense of place of the urban environment.
 - To ensure new landscaping proposals are of the highest standard meeting the Council's adopted Recreation and Amenity policy
 - To ensure the use of a consistent set of street furniture, lighting stands and signage design and colour across the site. Its role should add to the visual logic of the neighbourhood.
 - To promote the use of art to add to the character and identity of the neighbourhood.
- The specific special policy area zoning objective for a major new residential neighbourhood for Carrigtwohill is set out in the following table.

1.4.38. In addition to the Masterplan site, another key site within the town is the undeveloped land south of the rail line adjacent to the station car park. The proximity of these lands to the station mean they are suited to a similar approach as taken to lands on the opposite side of the rail line in the masterplan area i.e. a high density mixed use core. This is a site where the highest densities in the town, 50+ units per hectare, are most appropriate.

1.4.39. The special policy area zoning objective for Carrigtwohill is set out as follows:

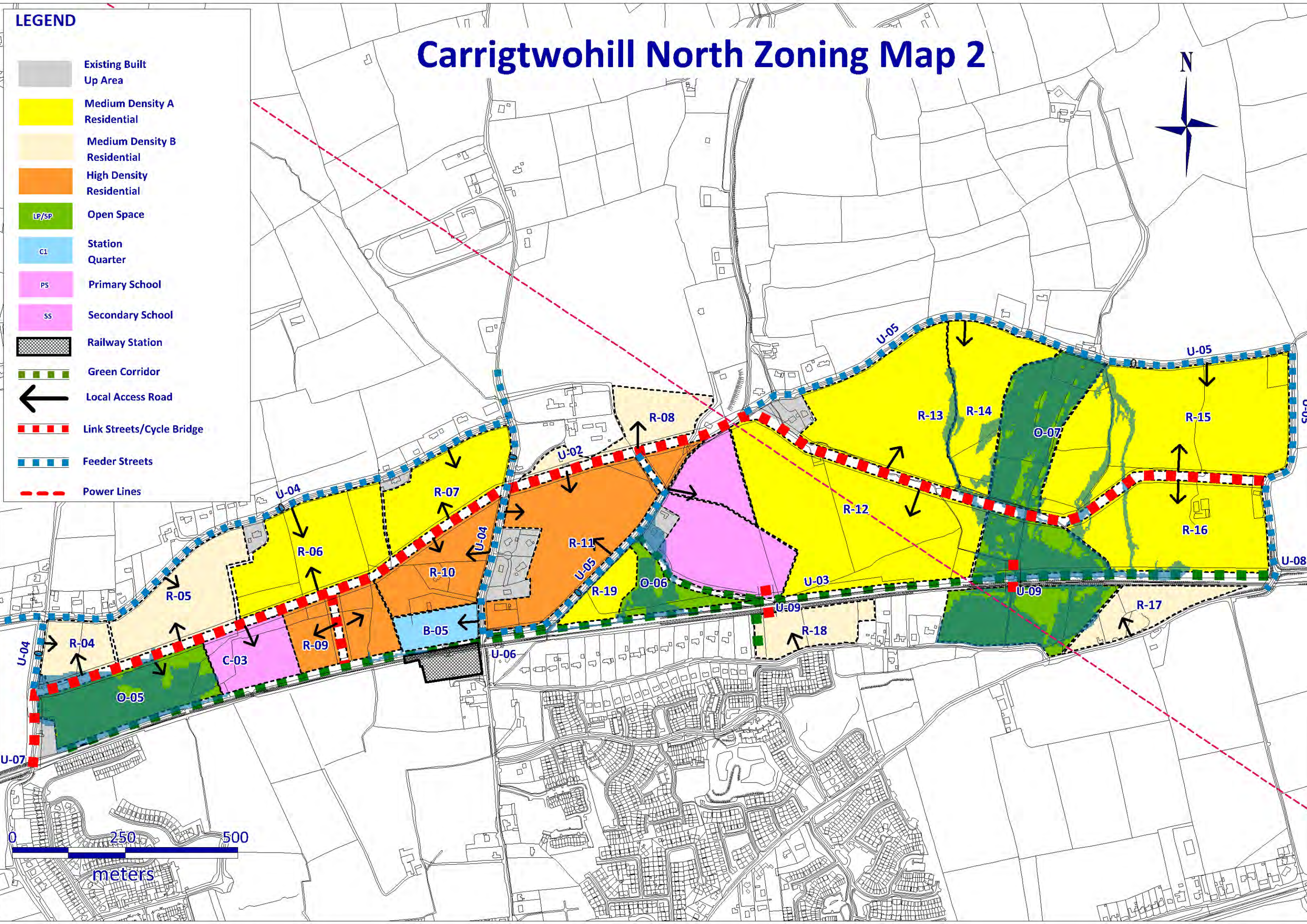
Objective No.	Specific Objective	Approx Area (Ha)
X-02	Station Quarter South – Appropriate uses include high density residential, small scale retail, commercial and community uses.	5.5

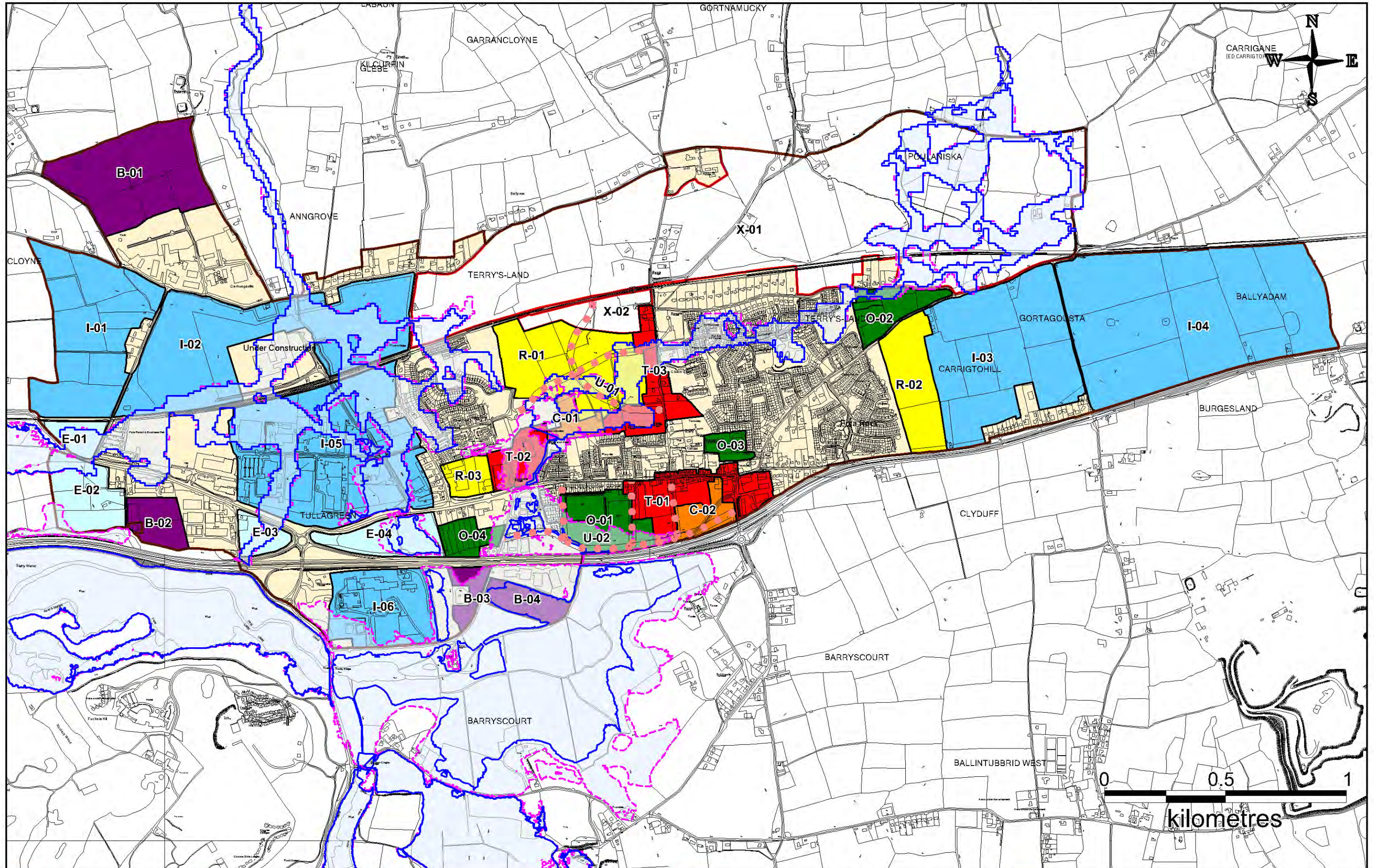
Objective No.	Specific Objective	Approx Area (Ha)
X-01	X-01 Carrigtwohill- amended- see Carrigtwohill Framework Masterplan Study and Local Area Plan Zoning Map 2 for details.	128.0

Carrigtwohill North Zoning Map 2

LEGEND

- Existing Built Up Area
- Medium Density A Residential
- Medium Density B Residential
- High Density Residential
- Open Space (LP/SP)
- Station Quarter (C1)
- Primary School (PS)
- Secondary School (SS)
- Railway Station
- Green Corridor
- Local Access Road
- Link Streets/Cycle Bridge
- Feeder Streets
- Power Lines





Settlement Boundary	Open Space / Sports Recreation / Amenity	Town Centre / Neighbourhood Centre	Industry	Special Policy Area	Utilities	Area Susceptible to Flooding: Zone A
Existing Built-up Area	Residential	Community / Utility	Business	Enterprise	Roads	Area Susceptible to Flooding: Zone B
					Walkways	

3 Midleton Environs

3.1 VISION AND CONTEXT

Mainistir Na Corann - Monastery at the Weir

The vision for Midleton is to attain the target population for the town by 2020 in a sustainable manner, broadening and strengthening its employment base, and building on the success of its rail connections, as well as providing an excellent environment for its residents and visitors, thereby realising its potential as a significant metropolitan town within the CASP Metropolitan area.

3.1.1. Strategic Context

3.1.2. Midleton is designated as a Metropolitan Town within the County Metropolitan Strategic Planning Area and has experienced significant growth and development in the last decade. The aims for Midleton as set out in the County Development Plan 2009 are to secure the completion of the major mixed use development proposed for the Water-Rock Area and the GAA lands in the Midleton Special Local Area Plan, building on the success of the re-opening of the railway line, and to facilitate its growth as an integrated employment centre while maintaining its attractive setting within the Metropolitan Cork Green Belt.

3.1.3. Like Carrigtwohill, Midleton was the subject of a Special Local Area Plan in 2005, which allocated significant growth to the town on the basis of the re-opening of the rail-line and a new commuter rail service to Cork City as part of the Cork Suburban Rail Network Project. Since the 2005 Special Local Area Plan was adopted there has been significant progress in achieving the strategic planning proposals outlined in that plan, the most notable of which is the recent re-opening of the commuter rail service to Carrigtwohill and Midleton. The intention is to continue with the implementation of the SLAP proposals as a priority but to achieve this from within the Local Area Plan structure.

3.1.4. Midleton is situated on the N25 National Primary Route which forms part of the Atlantic Corridor linking the gateway cities of Cork and Waterford. Significant improvement of this corridor is envisaged over the next plan period. The County Development Plan 2009 gives considerable support to the Atlantic Corridor as does the South Western Regional Authority's Regional Planning Guidelines 2010.

The principle aim of the Atlantic Corridor concept is the development of an economic counter balance in the southern and western regions to the Dublin region, focusing investment on the main towns along the corridor as the principal centres for employment and economic development.

3.1.5. The Department of Environment, Heritage and Local Government has designated Midleton as a Developing Area and as a result it is anticipated that the Town would receive a degree of priority in funding allocations for future infrastructure investment. Developing Areas are locations where strategically important and rapid development is expected to occur over the next five to ten years.

3.1.6. Cork County Council have established a Developing Areas Interagency Committee with the aim of overseeing the preparation of an Integrated Development Strategy for the Developing Areas in Cork County. This will focus on the integration of agency actions with the overall strategic objectives of developing an agreed template for successful development areas, development of active social networks to underpin community identity and facilities and the integration of the forward planning function of each agency with the forward planning function of the Council.

3.1.7. CASP Update envisages a focus on further population growth along the rail line to the north and east of the city, including Midleton. The updated strategy proposes that development be located along the suburban railway corridor which would support the investment that is being made in the rail network. The Update does not envisage that additional lands would need to be zoned to accommodate the increased population targets, rather that a change in densities be achieved on existing zoning lands.

3.1.8. CASP Update notes that the identification and implementation of infrastructure programmes and the execution of Masterplans will be critical to the achievement of growth and development in Metropolitan towns like Midleton. A key issue will be the continued growth and development of compact and sustainable urban centres. In this regard the implementation of the Masterplan which has been prepared for the Water-Rock area of Midleton will be key to the success of the town in the future.

Local Context

3.1.9. In the past, Midleton has developed around the nucleus of its main street where a strong retail core has led to the development of a thriving market town. The agricultural market in the town was once one of the most important in East Cork. The port at Ballinacurra enabled the export of grain, whiskey and other produce. The arrival of the railway in the town in 1859 further strengthened the agricultural sector by opening up access to new markets.

3.1.10. In recent years, whilst retaining its self-sufficient market town character, Midleton has become a popular residential location

for commuters working in or near Cork City. The town expanded to the west, along the Cork Road, to the north, along Mill Road and to the south towards and including Ballinacurra.

3.1.11. The town has a north-south orientation, with key transport infrastructure at each end; the rail line to the north and the N25 dual carriageway to the south. The lands to the north of the rail line rise steeply in two hills at Water-Rock and Broomfield, with the Owenacurra river valley in between. The lands to the south of the town are low lying leading to the river estuary.

3.1.12. Ballinacurra which lies to the south of the N25, experienced significant residential growth in the last decade and has become a major suburb of the town. Despite this it retains quite a strong village character. The growth in housing has not been matched by a provision of community facilities and the area lacks a primary school, community hall and place of worship in particular. Very little development took place in the centre of the village. The R630 regional road to Whitegate divides the village from the traditional quays areas. The heavy volumes of industrial traffic on the R630 considerably detract from the village environment.

3.1.13. Midleton is recognised as an Integrated Employment Centre in the 2009 CDP and has a very strong supply of business land to support this. In the retail hierarchy, Midleton is a Metropolitan town, with an overall strategy for expansion in line with the planned population increase.

3.1.14. Like Carrigtwohill, Midleton town was the subject of a Special Local Area Plan in 2005 which envisaged large scale growth by 2020 to take advantage of the proposed commuter rail service. This commuter rail service is now operational, offering a 30 minute peak hour service to Cork City with a journey time of just 23 minutes.

3.1.15. The ability of the town to provide a strong supply of housing and business land in a location accessible by a sustainable transport option means the settlement has the potential to play a key role in the delivery of the objectives of CASP and the settlement strategy of the County Development Plan.

3.1.16. The central area of Midleton is located within the jurisdiction of the Town Council which is a separate planning authority. Midleton Town Council area has seen large scale redevelopment in recent years with major development taking place on the old Mart site comprising a large Tesco shopping centre and cinema as well as smaller infill residential and retail schemes, opening up older backland areas and lands along the river. Generally there is further potential for new development on lands within the Town Council area and a new draft development plan for Midleton Town Council area was produced in 2009.

3.1.17. There are a number of other relevant plans and reports which have been prepared since 2010, these include; ~~Cork County Council produced~~ ***the Midleton and Carrigtwohill Transportation Study***

(2010), the Water-Rock Transport Assessment (2014), a Preliminary Ecological Appraisal for Water-Rock (2015), a Framework Masterplan Study for Water-Rock (2015). The findings and recommendations outlined in these reports have been included in this amendment. and a draft Masterplan for the Water-Rock area of the town has also been recently produced and was available for public consultation in tandem with the draft local area plan in October 2010.

3.2 PLANNING CONSIDERATIONS

Population and Housing

3.2.1. The table below outlines the principal demographic figures for Midleton town for the last two census years 2002 and 2006. The population of Midleton rose by almost 26% in the period 2002-2006 while households grew by 33%. Numerically, this was the largest growth in population of any settlement in the electoral area and also in all of the Metropolitan towns. The target growth for population identified by County Development Plan 2009 for Midleton in 2020 is 23,735 which is an increase of 136% while the household target for 2020 is 6,484 which is an increase of 194 %. See Table 1 below.

	2002 Census	2006 Census	2020 Target	Growth 2006 - 2020
Population	7,957	10,048	23,735	13,687
Households*	2,494	3,338	9,822	6,484

3.2.2. This increase in households gives rise to the requirement for an additional 8429 housing units to be accommodated in the town as set out in Table 2 below.

3.2.3. The 2008 Housing Land Availability Study (HLAS) indicates that the existing residential land supply in the town can adequately accommodate 5,522 dwellings which include the development of the Water-Rock Masterplan site in Midleton.

Population	Households	Dwelling Units
13,687	6,484	8,429

3.2.4. The table below outlines the current housing stock figures for Midleton town. Almost 2000 new dwellings were completed in Midleton between 2001 -2010. There is currently an estimated 4,392 units occupied within the town with a further 112 units under construction. Currently it is estimated that newly built vacancies stand at 206 units (when considering Midleton metropolitan location this vacancy level of 4% could be considered moderate). There are 1271 units which have an outstanding planning permission (including the Town Council area).

Dwellings 2001	Dwellings 2005	Dwellings 2010	Growth 2001-2010
2,400	3,260	4,392	1,992

Source: Geodirectory

3.2.5. The table below outlines that when houses constructed between 2006 - 2010, excluding the number of existing planning permissions, are taken into account; the net requirement of new housing in Midleton is 7,205 units. Previous studies (Housing Land Availability Studies) have indicated that the capacity of the current zoned lands is 5,522 units. The 2005 Special Local Area Plan in 2005 estimated that there was a capacity of 1000 houses to be constructed within the Town Council area and this then leaves a current shortfall of about 683 units. See Table 4 below.

New House Construction Target 2006 to 2020	Already built, 2006-10 plus units which are vacant and under construction.	Outstanding planning permissions	Additional New development Required to 2020
8429	1,224	1271	7,205

3.2.6. CASP Update points to an increase in densities on existing available lands as the means of accommodating this additional dwelling units requirement. This is not an unreasonable position as, similar to Carrigtwohill, sites that have been developed to date have tended to achieve densities in excess of the yield anticipated in the 2005 SLAP.

3.2.7. A number of key sites, in close proximity to the rail passenger station, including the Masterplan site at Water-Rock remain available and offer the opportunity to re-examine the densities that could be

achieved thus negating any requirement to zone additional land on the outskirts of the town. Much of this new development took place in the form of modern housing estates on zoned lands in the environs, as well as some infill development on sites within the Town Council boundary. Ballinacurra which lies on the southern side of the N25 also experienced considerable growth over the same period with large housing estates growing up around the traditional village centre.

3.2.8. Most of the lands at Broomfield East have been developed or are currently being developed resulting in a significantly large new area of residential development in the town which is beginning to mature. Similarly Ballinacurra has seen significant levels of development, both along the river frontage in the form of apartments as well as more traditional suburban style housing estates.

3.2.9. The residential lands at Baneshane have been subject of a number of permissions and there is an outstanding permission on one of the sites for just over 400 housing units, a small number of which have been commenced. The site immediately west of these lands has been fully developed for housing.

Employment and Economic Activity

3.2.10. Midleton is designated in the 2009 County Development Plan as an Integrated Employment Centre with a stated aim of achieving balanced housing and employment provision and as a suitable location for large scale industry, office based industry and enterprise. Good road access, a commuter rail service and a healthy supply of business land in addition to a ready supply of housing should position Midleton as an attractive location for business.

3.2.11. Data from the 2006 Census notes the excess of employees over jobs in the town, resulting in outward commuting and emphasises the importance of measures to increase modal shift. Little Island and Cork City are the most popular destinations for commuters from the town. Up until now, this commuting has been entirely car-based, but the recent re-establishment of a commuter rail service to the town should see this pattern change. The way forward is to establish Midleton as a self sustaining town with a mix of employment and business opportunities, reducing commuting numbers and encouraging further retail and tourism development in the town.

3.2.12. The Business Land Availability Study identified the actual number of jobs in Midleton in 2006 as 3,725 and CASP Update has identified a 2020 jobs target of 6,202 for the town. This gives a requirement for almost an additional 2,500 jobs. Between 2003 and 2008 a total of 33ha of business land were taken up, but the supply of business land remains reasonably strong with 101ha remaining, (which is equivalent to a 15 years supply based on the current rate of take-up prevailing).

3.2.13. Significant employers in Midleton include Midleton Distillery, Tesco, Super Valu, Lidl, Aldi as well as other retailers and service

providers in the town. Food production is an important component of the local economy and Midleton Farmers Market is well known across the country.

Retailing

3.2.14. Midleton is designated as a Metropolitan Town in the retail hierarchy and the town has been very successful in attracting retail development, continuing its success as a long established market town. Midleton has seen a reasonable growth in retail activity in recent years, including the opening of the Market Green shopping complex. Midleton has a specific role in serving a wider rural catchment area and, despite its proximity to Cork City and a number of suburban district centres, its strong retail and service base has ensured it has remained self-sufficient.

Community Facilities

3.2.15. The largely self sufficient nature of the town makes it a very attractive place to live. Existing sports facilities are well dispersed throughout the town and while the town is reasonably well served, there will be a need to add to these in line with planned population growth. Existing facilities include two golf clubs, GAA, soccer, rugby, pitch and putt, hockey and squash.

3.2.16. Indoor facilities include a leisure centre at the Midleton Park Hotel Complex, gyms, indoor courts for volleyball and badminton, community centre and a snooker hall. A new five screen multiplex cinema has opened at Market Green. There is also a playground for younger children near the town centre.

3.2.17. A very attractive and well maintained town park has been provided at the Council offices in the centre of the town and a newer park has also been developed at Bailick.

3.2.18. A new pedestrian walk was recently completed at Ballinacurra linking it to Ballyannan Wood, providing an attractive off-road amenity walk. The potential to provide additional amenity walks, linking existing and future facilities is outlined in the Transportation Study including the Owenacurra River Route and Dungourney River Route linking with Ballyannan Wood.

3.2.19. Midleton is well served in terms of educational facilities with five primary schools and four secondary schools in the town. The primary schools are the Gaelscoil, St Bridget's, St John the Baptist, Christian Brothers and the Educate Together. Both the Gaelscoil and the Educate Together schools are seeking new premises. The secondary schools comprise Christian Brothers, Midleton College, St Mary's High School and St Colman's Community College.

3.2.20. The revised population target set by CASP Update of 23,735 (as a result of the population targets issued by the Department of the Environment, Heritage and Local Government in February 2007) and contained in the 2009 CDP, will give rise to an additional requirement for educational facilities above that already identified of approximately 24 additional classrooms for primary school age and 346 post-primary school places.

3.2.21. Options to accommodate this additional demand for primary school places include increasing the size of those schools already planned or consideration of a further new primary school. Post-primary demand can most likely be accommodated in the planned new post-primary school.

3.2.22. *New school facilities to serve the Water-Rock Masterplan will be provided within the Masterplan site in tandem with development in that area.*

3.2.23. Our Lady of Lourdes Hospital (Midleton Community Hospital) and Home is located within the Town Council area and has a total of 100 beds. The Southern Health Board also have a health centre in the town centre area and the Welfare Home is situated at the Fair Green. A Rehabilitation Centre is run by COPE at Avoncore. There are no primary health care teams in Midleton at present.

Infrastructure

Roads

3.2.24. The N25 runs through the south of Midleton and while a portion of the town lies to the south of the road, it functions as a bypass. Phase 1 of the Northern Relief road has been completed, however Phases 2 and 3 are dependent on the availability of finance and the anticipated timescale for this is a number of years from now. Traffic congestion and parking is a major issue in the town, particularly on the main street and around the numerous schools in the town.

3.2.25. The Midleton and Carrigtwohill Transportation Study which was published in August 2010 sets out a variety of measures to alleviate this situation. The distributor road for the Water-Rock development and a grade separated junction on the N25 are also crucial elements of roads infrastructure that need to be provided in order to advance the development proposals for the town. There are also proposals to close the Lakeview Roundabout and provide a distributor road from the Whitegate Road south of Ballinacurra eastwards to join the N25. This would free up congestion at the roundabout and ensure easier access to the N25 from the Whitegate/Aghada area as well as resulting in significant improvements to the environment of Ballinacurra Village.

3.2.26. The N25 Atlantic Corridor is the subject of major on line improvement works and the preliminary design of the Midleton to

Youghal section is underway. It is anticipated that CPO documents will be published by the end of the year. Improvement works to the N25 Progress on this is again subject to finance being made available. The possible timescale for the commencement of these works is 2012/ 2013.

3.2.27. *Improvements and upgrades to both the N25 Carrigtwohill – Midleton and N25 Midleton – Youghal sections of the corridor are currently suspended pending the availability of funding. Emphasis therefore needs to be on accelerating modal shift in Midleton through the promotion of sustainable transport in Midleton Town and not just in the Water-Rock masterplan area.*

Walking/Cycling

3.2.28. New cycle routes have been provided in the newer estates at Broomfield and around the Northern Relief Road. There is significant potential for cycle routes in the town given the relatively level terrain and proximity of most residential areas to the centre. In terms of achieving modal shift in the next plan period, significant weight must be given to encouraging increased levels of walking and cycling in the town, mainly through design in new development areas. The **Midleton and Carrigtwohill Transportation Study 2010** outlines proposals in detail to improve walking and cycling routes throughout the town as well as parking and public transport measures which will significantly enhance the attractiveness of the town as a place to live and to visit.

3.2.29. *In 2014 Cork County Council commissioned a cycle network study to be prepared for the Cork Metropolitan Area, the objective of this study was to provide a clear plan for the future development of cycling networks throughout Metropolitan Cork including Midleton. The study, when completed, will identify routes, infrastructure and policies to encourage greater use of cycling as a key sustainable travel mode for trips to work, education, shopping and recreation. It is the Councils objective to develop these routes on a phased basis once funding is made available.*

Public Transport

3.2.30. The recent re-establishment of a commuter rail service to the town is likely to be the catalyst for further strong housing and economic growth in the town. The 2005 SLAP indicated the potential for a second passenger station within the Water-Rock opportunity site and this is being considered in the **Water-Rock Framework** Masterplan currently being prepared by the Council.

~~**3.2.31. *Cork County Council is preparing a Cork Suburban Rail Network Study in consultation with Irish Rail, the NTA and Cork City Council. The results/findings of the study will determine the timing and delivery of the 2nd railway station at Midleton and the required train service frequency and capacity to serve Midleton and the Water-Rock Development. The Rail Network study is unlikely to commence until after the Regional Multi-Modal Transport Model has been completed in 2015.***~~

3.2.32. On completion of a new rail policy to address the future role of rail transport in Ireland, as required under DTTaS' Strategic Investment Framework for Land Transport (SIFLT) Action 6, a study of the Cork Metropolitan Area's future suburban rail network requirements should be considered. This could include consideration of additional stations (including the 2nd station at Midleton) rail service patterns and interchange with other modes.

3.2.33. Midleton is also served by frequent bus services between Cork and Waterford linking the town with a number of smaller settlements in the area, including Cloyne, Castlemartyr and Youghal.

Water & Wastewater

3.2.34. In Midleton the existing water supply is inadequate, in terms of both the capacity of the water treatment plant and storage. Existing abstractions from the Owenacurra River are shared with Cobh Rural Water Supply Scheme; however, increased abstractions to serve Midleton may impact on the available supply for Cobh.

3.2.35. There are some local options to upgrade the supply but given the scale of growth proposed and the strategic location of the town on the Cork Suburban Rail Network, the most effective option would be to extend the trunk main from Carrigtwohill to Midleton. ~~Construction on this main could commence in two years.~~ Given the importance of Midleton to the delivery of growth targets in Metropolitan Cork, it is critical that this constraint on future development is overcome. **Investment is therefore needed by Irish Water to upgrade the Water Supply for the town.** A total of four watermain connections have been installed under the re-instated railway line to facilitate future development. **As Irish Water is now the relevant body dealing with water services issues it will be necessary for a developer to obtain a connection agreement from Irish Water for waste water disposal and treatment.**

3.2.36. The Wastewater treatment plant will require modular expansion from 10,000 PE to 15,000 PE and beyond in line with planned housing and employment development. There have been a significant number of storm overflows on the existing collection system however, an infiltration project to repair defective sewers is now substantially complete. Subject to the availability of finance the upgrade of Midleton WWTP to 15,000 pe is targeted to commence in the short term (late 2010/ early 2011) and is expected to be completed at the end of 2011. Again, the delivery of this strategic infrastructure must be a key priority for the County. Provision has been made for two foul sewer connections under the railway line.

3.2.37. The Midleton Wastewater Treatment Plant which is located at Garryduff townland has a current capacity of 15,000p.e. The current usage is approximately 12,600p.e. Access to the spare treatment capacity will be granted to those undertaking new development on a "first come – first served"

basis. Upgrading of the capacity of the Midleton WWTP is required to accommodate development proposed at Water-Rock and also the proposed target population for Midleton contained in the County Development Plan. This upgrade needs to be provided by Irish Water.

Surface Water

3.2.38. New proposals for development in Midleton should include the provision of sustainable urban drainage systems, silt traps, and grease hydrocarbon interceptors where appropriate so as to ensure that water quality is improved and maintained. Provision has been made for two storm sewers under the rail line.

Flooding

3.2.39. Draft flood maps prepared for the town and incorporating the conclusions of the Lee CFRAMS Project have identified a potential risk of flooding in a number of places within and on the outskirts of the town, from both fluvial and tidal flooding. The areas at risk largely follow the paths of the Owenacurra and Dungourney Rivers and the areas adjoining the estuary at Ballinacurra and are illustrated on the settlement map. Government Guidelines require, and it is an objective of this plan, that future development is avoided in areas indicated at being at risk of flooding. A number of the locations affected are either existing or potential open space but the planning proposals of this plan make provision for dealing with this flood risk. More detailed information on the approach to flooding and how development proposals in areas at risk of flooding will be assessed is given in Section 1 of this Plan and within the Guidelines for Planning Authorities 'The Planning System and Flood Risk Management,' issued by the Minister of the Environment, Heritage and Local Government in 2009.

Waste

3.2.40. There is a major civic amenity site at Rossmore near Carrigtwohill which is only accessible by car. There are also two bring sites in Midleton at Distillery Walk and Tesco car parks where there are facilities for the recycling of glass, textiles, beverage cans and food tins.

Utilities

3.2.41. Fixed line broadband is available in Midleton.

Environment and Heritage

3.2.42. The draft Landscape Strategy places Midleton within the city harbour and estuary landscape type. The landscape value and sensitivity is stated as very high and of national importance. The Great Island channel south west of Midleton is classified as designated scenic landscape in the CDP 2009. The characteristics

identified in the draft Landscape Strategy will assist in the visual impact assessment of large scale proposals for development.

3.2.43. Cork Harbour/Great Island Channel which extends to Ballinacurra are also identified as designated SPA, pNHA and cSAC areas in the County Development Plan 2009. It is an objective of the CDP 2009 to maintain the conservation value of all Natural Heritage Areas proposed for designation and this Local Area Plan will attempt to avoid any adverse impacts on these sites. This area hosts a good diversity and numbers of wintering birds. Most of the species that are found in the harbour are represented here, including teal, lapwing, black-tailed godwit, redshank, dunlin and golden plover.

3.2.44. With regard to water quality, the Owenacurra and Dungourney waterbodies are the relevant waterbodies for the town and are identified as being at risk. The overall objective for 2015 is to restore these waterbodies. Although other issues such as agricultural practices and septic tanks are significant factors, an upgraded waste water treatment plant for the town would aid the achievement of this objective. The following tables summarise information in relation to water quality in the area.

3.2.45. Given the scale of growth envisaged in Midleton it is important that environmental issues are given sufficient consideration. Water quality in the Dungourney River has been identified as poor status and the Owenacurra River is only moderate and these rivers are therefore at risk of not achieving good quality status by 2015.

3.2.46. The estuarine and coastal waters are designated as a 'Protected Area' which is a water body requiring special protection under EU legislation because they are bathing waters, nutrient sensitive and designated as an SPA and cSAC. The upgrading of the WWTP for the town is clearly a priority if the targeted levels of growth in population and employment are to be achieved.

Owenacurra River	
Water Management Unit	Owenacurra
Waterbody Code	IE SW 19 1955
Protected Area	Yes
River Status (July 09)	Moderate
Risk Assessment (River body)	1a at risk
Objective	Restore
Q value	Moderate

Dungourney River

Water Management Unit	Dungourney
Waterbody Code	IE SW 19 1957
Protected Area	Yes
River Status (July 09)	Poor
Risk Assessment (River body)	1a at risk
Objective	Restore
Q value	Poor

3.2.47. There are a total of 51 buildings or sites in Midleton that are included within the Record of Protected Structures made under section 51 of the Planning and Development Act 2000. Midleton Town boasts some fine Georgian public buildings, terraces and houses, at Broderick Street, St John Baptist, Midleton College the Distillery buildings, Market House and Tracton Lodge. There are also examples of one-off Victorian buildings and detached Edwardian houses. Also notable is the railway station, which includes the signal box, station building, platform facings and the remains of the canopy.

3.2.48. Also, a number of areas and street frontages within the Town Council's area are designated as Architectural Conservation Areas. In the vicinity of the railway station, the houses fronting the south side of Railway Street and the eastern side of Mill Road are included within the designation.

3.2.49. There are a number of areas of known archaeological interest or potential within the Town Council's area. Some examples of these include sites on the Midleton College Complex, the hall and graveyard site to the north and south of Church Lane and also at the Industrial Estate on Dwyer's Road. Outside of the Town Council boundary, there are a number of archaeological sites to the south of the town, at Castleredmond, Bailick and Ballinacurra, in particular around the old Malt Houses and at Rose Hill.

3.3 PROBLEMS & OPPORTUNITIES

Population, Housing and Density

3.3.1.—The success of the commuter rail project is contingent on delivering a high level of growth at suitable locations, particularly the station hinterlands. The 2005 SLAP zoned a number of opportunity sites in close proximity to the proposed station. Progress on the delivery of actual units on these sites has been limited. The objective for the largest site north of the station at Water Rock required for the preparation of a masterplan for the site. ~~The intention is that the masterplan, which will be a non-statutory plan, will support the implementation of the key objectives for the site set out in this plan.~~ Cork County Council has recently **completed a Framework Masterplan for Water-Rock, the recommendations of which have**

~~**informed the amendment to this Local Area Plan.** taken the lead in the preparation of this masterplan in consultation with the landowners in the masterplan area and produced a draft masterplan which was available for public consultation along with the draft Local Area Plan in October 2010.~~

3.3.2. The timing of the delivery of the Masterplan has afforded an opportunity to re-examine density provision on these key sites which are essential to delivering the additional growth earmarked for Midleton under the revised CASP update targets, requiring a total of 6081 new housing units to be provided in the town.

3.3.3. This LAP outlines a number of strategic principles which will guide development within its area and are reflected in the ~~draft~~ **Framework Masterplan**. The LAP supported by the masterplan, provides a coherent planning framework for the Water-Rock lands and makes provision for the creation of a mixed use neighbourhood with a minimum of 2,500 new housing units.

3.3.4. The Masterplan will ensure convenient and direct access to the Midleton railway line, strengthen the role of the public realm and realises the potential of the flood plain of the Owenacurra River as an important amenity and environmental asset for the town. The plan intends to “guide the performance of development to achieve environmental excellence, efficient use of resources and minimise waste through design guidance”.

3.3.5. *The development of the site will be guided by the densities set out in the County Development Plan and will include a mix of High, Medium A and Medium B densities as set out in Table HOU 4-1 of the Cork County Development Plan 2014.* ~~The overall density of the site will be approximately 28 units per ha.~~ **The Framework Masterplan also sets out a logical and sequential phasing programme that allows for an orderly development pattern and maximises the development quantum related to investment in infrastructure.**

3.3.6. The Masterplan outlines the intention for individual character areas within the site which are clearly identified and set out appropriate density ranges for each area which are in line with the principles set out in the DOEHLG publication ‘Sustainable Residential Development in Urban Areas’ and the associated Urban Design Manual. The strategy recommends higher density provision in the **vicinity of rail corridors and this approach has been adopted for Water-Rock with the provision of high density residential development in close proximity to the railway line and proposed railway station which fans out to Medium A and Medium B density residential development with some low density provision for serviced sites at points furthest from the railway line. Medium density is set at 20-50 units per hectare** in order to give sufficient flexibility to help development get underway in a returning market. A phasing schedule for Water-Rock is also included in the Framework Masterplan ~~which is organised in three phases whereby~~

the delivery of infrastructure, services and facilities are produced in tandem with the delivery of residential units.

3.3.7. It is expected that up to 1,000 units can be accommodated within the Town Council area of Midleton and further housing lands are available in other areas of Midleton, including lands at Broomfield West, Baneshane and Ballinacurra.

3.3.8. There is a large site at Broomfield West to the north of the railway station and east of the Masterplan area fronting the Mill Road which is suitable for additional residential development. This site is in Council ownership and remained undeveloped through the last plan period when it was zoned for potential relocation of the GAA complex, residential, business and a cemetery.

3.3.9. This site is bounded by East Cork Oil to the north, and residential estates to the south. It is currently in agricultural use. The site is extremely well located in terms of road and rail access. The site comprises a steeply sloping western facing hillside with a wide flat base at its western edge. The upper slopes are quite visually sensitive. Most of the level portion of the site lies within a 1000m radius of the railway station, and the SE corner of the site is just 500m north of the northern relief road and 1200m from the town centre. Access is available onto the Mill Road while limited access may be possible from the Avoncore Road.

Employment and Economic Development

3.3.10. The Airport Business Park has been a key location in terms of the supply of premium office floorspace in Metropolitan Cork, however, given the strong growth in office based jobs that underpins the CASP update economic strategy it is important to identify strategic alternative locations for high quality office based developments to meet an expanding demand in the future. As a place earmarked for significant population growth and with enhanced public transport facilities, Midleton offers a prime location for a high quality business park. A site, suitable for such a use was identified at Knockgriffin in the 2005 SLAP. The completion of Phase 1 of the Northern Relief road has enhanced the potential of these lands.

3.3.11. Midleton Distillery, on the east side of the town centre, is designated under the Major Accidents (Seveso) Directive and may constrict development on this side of the town. The Distillery is a major local employer and has significantly expanded its operations in Midleton over the previous plan period. Further potential to expand may be limited at its current site and the Council may have to give consideration to further off-site development of the Distillery's operations.

3.3.12. In order to meet growing demand for Irish Whiskey (in particular Jameson) Irish Distillers Limited have plans to double the capacity of the Distillery in the next 5 years. In principle, the Council will support these expansion plans.

3.3.13. The potential for Irish Distillers Limited to expand on the current site is limited but the required increase in the distillation capacity can be accommodated. In addition to the Distillery's distillation capacity its maturation capacity will also have to increase significantly and this requires specifically designed maturation warehouses on a large site area. The current Distillery site does not have the capacity to accommodate the scale of associated maturation warehousing required to facilitate the doubling of the distillation capacity and this will have to be accommodated off site.

3.3.14. The warehousing use will require limited services and having regard to the large site size required, its limited direct employment and Seveso designation, is considered to be an unsustainable use of zoned and serviced land in Midleton and Metropolitan Cork.

3.3.15. The 2009 County Development Plan recognises that certain industries cannot be accommodated within towns and alternative locations outside of towns are required. Having regard to the unique nature of maturation warehousing, its potential impacts and low servicing and employment demands, a rural location within the Midleton Electoral Area is considered to be the most appropriate location to facilitate the required maturation warehousing facilities.

3.3.16. IDL have identified commercial forestry lands to the north of Dungourney at Ballynona North with the potential to cater for all future maturation needs, which will enable the expansion of distilling operations in Midleton and will secure the long term future and expansion of one of the County's important industries.

3.3.17. The main business land banks are located on the eastern and western outskirts of the town. There are good road links to those sites on the western side of the town and when the remaining phases of the northern relief road are completed, the sites to the east will be equally well served.

3.3.18. A stand alone site at Baneshane to the south of the N25 remains undeveloped but enhances the opportunities available for varying scales of industrial development. At present the site has direct access to the N25 but this will change under the Midleton Carrigtwohill Transportation Plan whereby access will be via the local distributor road with a link the national road at Carrigtwohill. Given the distance from the railway station and the Water Rock area and other main centres of population, it is considered that the site is not suitable for high intensity employee uses such as offices. Uses which would be suited to this site include stand alone industry, warehousing and distribution.

Community Facilities

3.3.19. A new primary school is required to serve the population south of the N25 at Ballinacurra and both the Gaelscoil and Educate Together primary schools require new premises. If the lands at

Baneshane are developed within the plan period, provision for a primary school is also necessary in that location. It is envisaged that significant provision for new education, community and sporting facilities will be provided within the **Water-Rock** Masterplan lands north of the railway line. Large areas of lands have been specifically zoned for open space and specific provision for **two new primary school sites and a secondary school site** ~~new schools~~ and other community facilities are outlined.

Infrastructure

3.3.20. The location of the town on the railway line and on the N25 Atlantic Corridor offers significant opportunities in terms of access to markets and attractiveness for tourism etc. The potential offered by the town's location on the main road and rail network should be expanded by building on the existing population and employment base of the town. The re-opening of the railway line from Midleton to Cork and beyond also offers a significant opportunity to significantly increase its public transport modal share.

3.3.21. The Masterplan lands offer the opportunity for a second rail station at Water-Rock. Much of the Water-Rock site is outside the 1000m recommended walking distance from the existing station and in light of this and the need to work towards achieving more sustainable transport modes, it is clear that a second railway station is required for the intended population of 23,735 people.

3.3.22. Significant development in the town without further upgrading of key infrastructure is unsustainable. This issue needs to be resolved as quickly as possible if the town is to achieve its strategic role in Metropolitan Cork.

3.4 PLANNING PROPOSALS

General Objectives

3.4.1. Outside the development boundary, the land forms part of the Metropolitan Green Belt. Here, the objectives of the Cork County Development Plan 2009 seek to preserve the character of the area and (subject to certain exceptions) reserve the land generally for agriculture, open-space or recreation uses.

3.4.2. The population target of 23,735 set out in CASP Update and the County Development Plan 2009 requires the provision of additional 6081 new housing units in the town (exclusive of outstanding permissions and units constructed in the period since 2005). The combined land supply for Midleton town and environs, based on the town council meeting its 2005 commitment to achieving 1,000 units in the town council area, is sufficient to accommodate 5,522 units.

3.4.3. There is a shortfall of zoned land to cater for around 683 units but it is considered that this can be met within the existing boundaries. There is scope within the Masterplan area to achieve higher densities resulting in the possibility of achieving in excess of 2,500 new units within the site. This would account for a significant proportion of the shortfall identified above. Other undeveloped sites and redevelopment options of brownfield lands are likely to cater for the balance. The lands at Broomfield West have been identified for mixed use development and therefore have the potential to yield some additional housing units.

3.4.4. In line with the objectives of the CDP, Ballinacurra will continue to consolidate, focussing on the provision of social and community facilities with improvements to the village core.

3.4.5. The Council's Housing Strategy states that on zoned lands, it will be a requirement that 20% of all land zoned for residential uses (or for a mix of residential and other uses) be reserved for the purpose of social and affordable housing.

3.4.6. The publication of the Midleton and Carrigtwohill Transportation Study has significant implications, direct and indirect on all lands contained within the development boundary of the town. Implementation of a number of the recommendations of this study will be key to facilitating the development of the town as a sustainable location for business and living, linking the outer areas with the town centre as well as facilitating the establishment of a pedestrian and cycle network. Some of the key recommendations for Midleton in the Study are:

The establishment of a road and street hierarchy;

- a new interchange to the east of the town;
- Main Street Urban Improvement Scheme;
- gyratory improvements;
- provision of an Eastern Relief Road to Ballinacurra;
- Identification of pedestrian and cyclists routes;
- HGV Management proposals; and
- street and junction improvements.

Objective No.	<u>Development Boundary Objectives</u>
DB-01	Taking account of development already completed or under construction, it is an objective of this plan to secure the development of 7,205 new dwellings in

Objective No.	Development Boundary Objectives
	<p>Midleton over the lifetime of the plan, in order to facilitate the sustainable growth of the town's population to 23,735 people over the same period, and of which 1,000 dwellings will be accommodated in the Town Council Area.</p> <p>These will be provided through the development of land for which planning permission has already been granted and by the development of land designated for development in this plan.</p>
DB-02	<p>(a) In order to secure the population growth and supporting development proposed in DB -01, appropriate and sustainable water and waste water infrastructure, that will secure the objectives of the relevant River Basin Management Plan and the protection of the Great Island Channel Special Area of Conservation and Cork Harbour Special Protection Area, must be provided and be operational in advance of the commencement of any discharges from the development. Waste water infrastructure must be capable of treating discharges to ensure that water quality in the receiving river does not fall below legally required levels. Sustainable Urban Drainage Systems (SUDS) and sufficient storm water attenuation will be required for developments within this area.</p> <p>(b) All new development shall be connected to the public water supply, the public waste water treatment system and shall make adequate provision for storm water disposal.</p>
DB-03	<p>It is an objective to broadly support the principles of the Midleton and Carrigtwohill Transportation Study published in August 2010 as they apply to Midleton Environs, in a sustainable manner.</p>
DB-04	<p>It is an objective of this plan, where necessary, to reserve land on either side of the railway route to facilitate the possible future upgrading of the route to double track standard. This objective applies to all land within 5m of the perimeter fence on either side of the railway. Within this area the following categories of development will be resisted:</p> <ul style="list-style-type: none"> • New buildings not required for the operation of the railway; and • New vehicular and pedestrian accesses where these accesses are the sole or primary access to development. <p>New bridge crossings constructed will be required to provide sufficient clearance to permit double track operation.</p> <p>Open land uses, such as open space, surface car parking and agriculture will normally be permitted</p>

Objective No.	Development Boundary Objectives
	<p>subject to the proper planning and sustainable development of the area.</p>
DB-05	<p>It is an objective of this plan that a network of designated walking and cycling routes shall be established to provide safe, convenient and pleasant routes between the town's main residential areas, schools, the town centre and the railway station complex.</p>
DB-06	<p>It is an objective to ensure that provision is made in proposals for new development, particularly for housing, office, retail, industrial and educational uses to provide safe, convenient and pleasant routes linking the development to the railway station and the other principal areas of the town for walkers and cyclists, based on the priority measures identified in the Midleton and Carrigtwohill Transportation Study, August 2010.</p> <p>In achieving this objective, special attention will be paid to the layout of the development to ensure that appropriate measures are taken to establish a walking and cycling friendly environment.</p>
DB-07	<p>All proposals for development within the areas identified as being at risk of flooding will need to comply with Objectives FD 1-1 to FD 1-6 detailed in Section 1 of this Plan, as appropriate, and with the provisions of the Ministerial Guidelines – 'The Planning System and Flood Risk Management'. In particular, a site-specific flood risk assessment will be required as described in objectives FD 1-4, 1-5 and 1-6.</p>
DB-08	<p>Midleton is situated adjacent to Cork Harbour Special Protection Area and the Great Island Channel Special Area of Conservation. This plan will protect the favourable conservation status of these sites, and all new development shall be designed to ensure the protection and enhancement of biodiversity generally. Development proposals in unzoned parts of the settlement adjacent to the SAC and SPA will be likely to require the provision of an ecological impact assessment report (Natura Impact Statement) in accordance with the requirements of the Habitats Directive and may only proceed where it can be shown that they will not have significant negative impact on these.</p>
DB-09	<p>It is an objective to provide adequate buffer zones along watercourses to ensure riparian zones are not degraded and there is no bankside erosion. Developers shall therefore take account of relevant guidance documents relating to watercourse buffer zones.</p>

Objective No.	Development Boundary Objectives
DB-10	<p>It is an objective to support the implementation of the Water-Rock Framework Masterplan Study which was published in 2015.</p>

Water-Rock Masterplan

Policy Background

3.4.7. The Water-Rock site was first identified in the 2005 Special Local Area Plan for Midleton and was later identified in the 2011 Midleton Electoral Area Local Area Plan where the objective for the site was to prepare a masterplan to secure the development of the site through a phased programme of implementation.

3.4.8. The development of such a large site in close proximity to the suburban rail network also offers a major opportunity to achieve high modal shift therefore providing new homes at this location, where residents can gain easy access to high quality rail from the outset, is a priority for Cork County Council.

3.4.9. A framework masterplan study has been prepared for the development of the lands at Water-Rock. This study is a non statutory document which has informed this amendment to the 2011 Midleton Electoral Area Local Area Plan.

Framework Masterplan Proposals

3.4.10. The site is approximately 160 ha in size with a multiplicity of landownership. The site will be a mixed use development to include approximately 2,500 residential units, school sites, a neighbourhood centre, parks, greenway, a railway station and business uses over three separate phases. Development within each phase should vary in terms of type and density in order to avoid uniformity in design.

3.4.11. The masterplan specifies, for each phase, the number of residential units, commercial uses, educational facilities, social facilities, amenities, physical infrastructure and access strategy required, thereby setting out the enabling works that are required to allow development to commence. This provides a framework within which proposals for the development of individual sections can be co-ordinated and each development phase has been subdivided into individual pockets of land uses with a development objective. These objectives are set out in this amendment and include residential, neighbourhood centre, open space, educational and commercial uses.

Residential Density

3.4.12. It is a target of this plan to achieve an average density of 28 units per hectare on 90 ha of residential land. This will allow a range of house types and densities to be provided which supports rail public transport while also providing a choice of units for family needs. While restrictive policies are in place to protect rural landscapes from urban generated housing, support is required in the provision of attractive alternatives for family housing in developments like Water-Rock. Hence this project will aim to provide a mix of dwelling types from smaller 2 bedroom units to 4/5 bedroom units at an overall density level that supports public transport by allowing higher density development to be located in close proximity to the existing and proposed railway stations which fans out to Medium A and Medium B density residential development with some low density provision for serviced sites at points furthest from the railway line. The approach to housing density in County Cork is set out in Table HOU 4-1 of the County Development Plan 2014.

Environment

3.4.13. SEA: A Strategic Environmental Assessment of Water-Rock was undertaken and the results from the SEA process were fully considered and integrated into the preparation of the Masterplan.

3.4.14. HDA: A Habitats Directive Assessment Screening was undertaken in accordance with the requirements under the EU Habitats Directive and EU Birds Directive and section 177 of the Planning and Development (Amendment) Act 2010.

3.4.15. Ecology: A Preliminary Ecological Appraisal of the Water-Rock site was carried out in January 2015. The purpose of the appraisal was to assess the baseline ecological conditions for each site, to identify the key ecological resources to be retained, and where necessary identify the scope of further ecological surveys. The appraisal states that while the site is connected ecologically to Cork Harbour (via the Owenacurra River), it is suitable for development because it has largely agricultural habitats that are widespread. The report has identified some areas of greater sensitivity and it recommends a number of measures and additional surveys to be undertaken before development can take place. These include;

- A mammal survey to assess the potential for a badger sett and the presence of otter holts
- A bat survey to determine the use of treelines by bats for commuting and foraging corridors, this should also be extended to survey mature trees proposed for removal to ascertain their use/potential use by roosting bats

- A freshwater aquatic survey of rivers and streams to assess the quality of water, aquatic vegetation, fisheries and to assess the Owenacurra River for presence of Otter holts/feeding territories and potential for Kingfisher.

- Retain existing tree lines and hedgerows where possible
- Provide green spaces and/or corridors within the site to maintain habitat connectivity
- Provide adequate buffer zones along watercourses to ensure riparian zones are not degraded and there is no bank side erosion.

3.4.16. The report concludes that the undertaking of further surveys and impact assessment resulting in targeted mitigation should enable the proposed development to proceed without any large adverse effects on the ecology of the site or adjacent environment.

Transportation and Road Network

3.4.17. A Traffic and Transport Assessment has been carried out for Water-Rock in order to inform the development of the site. The assessment was carried out by Transport Consultants in 2014 on behalf of Cork County Council. The aim of the report was to examine the transport impact of the proposed development at Water-Rock on the local road network. The assessment concluded that there is limited capacity on both the local road network and the N25 and its interchange serving Midleton to accommodate future planned population growth.

3.4.18. The assessment identified a number of minor road network improvements which will be necessary to create the network capacity to accommodate up to 350 new dwellings. The road network may be unable to accommodate any further development unless a significant programme of road infrastructure improvements are implemented including a full upgrade of the N25 Interchange between Midleton and Carrigtwohill and an upgrade to the 'Midleton Gyratory'.

3.4.19. The Transport Assessment also acknowledges, based on an assumption of high rates of modal shift that the full upgrade of the N25 Interchange between Midleton and Carrigtwohill may not be required until later in the Water-Rock development programme (approx. 1,250 units) if a range of transport measures are delivered to help secure higher levels of modal shift including;

- Increased train frequency on the Midleton-Cork railway line,
- Commissioning of a new railway station at Water-Rock,

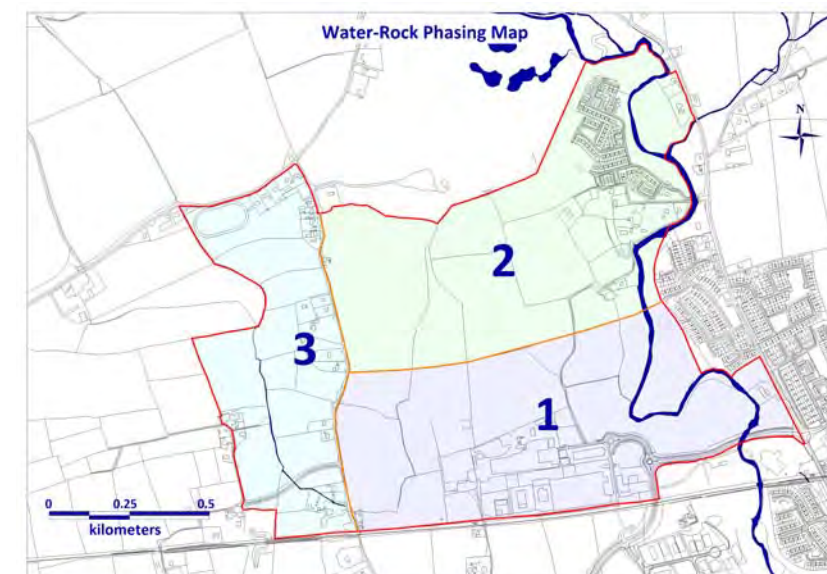
- Construction of a second road access (U-04/Link Street C) to Water-Rock, *
- Upgrade to the Midleton Gyratory.

* Following on from the conclusions of the Transport Assessment, Cork County Council are examining the possibility of constructing a 3 lane access road up to the boundary of Council owned lands at the south eastern corner of the Masterplan site and the remainder of Link Street U-02 to Water-Rock Road (approximately 1.01km). This access road (U-02/Link Street A1) would also allow for emergency access and would therefore negate the need to construct the second road access (U-04/Link Street C) until later in the development (circa 1,000 residential units). The construction of the remainder of U-02 beyond the boundary of Cork County Council lands, will be the responsibility of the developers of those adjoining lands.

Phasing

3.4.20. It is the objective of the Framework Masterplan to set out logical and sequential phasing that allows for an orderly development pattern and maximises the development quantum related to investment in infrastructure. The timing of each phase of development is directly linked to infrastructure availability. It is envisaged that development phases may commence in a sequential order once appropriate and necessary infrastructure is available to serve the proposed development.

3.4.21. A total of three development phases (1, 2 and 3) are identified within the development site. This framework masterplan specifies, for each phase, the number of residential units, commercial uses, educational facilities, social facilities, amenities, physical infrastructure and access strategy required, thereby setting out the enabling works that are required to allow development to commence.



Phase 1 (see Section 4 Framework Masterplan for Strategic Infrastructure and Service Requirements for each phase)

3.4.22. This phase of the development covers a developable area of approximately 56 ha and will provide up to 1,000 residential units which will consist of a mix of medium A and high density development. The lands are located to the north of the railway line and the Northern Relief Road.

3.4.23. Phase 1 has direct access onto the Midleton Northern Relief Road via the roundabout at the former Dawn Meats premises. This existing employment area contains the former Dawn Meats Factory and a number of small industrial and commercial premises which are still operating. A mix of high quality office based business developments that provide for high intensity employment uses will be encouraged at this location due to its close proximity to the proposed second railway station. Phase 1 will also require the provision of a neighbourhood centre, the reservation of land for a 16 classroom primary school and the completion of a linear park and greenway.

3.4.24. The R-08 lands adjoining the Mill Road have the potential to be developed independently of the infrastructure requirements for Phase 1 subject to the availability of adequate capacity of water, waste water and roads infrastructure.

Phase 2 (see Section 4 Framework Masterplan for Strategic Infrastructure and Service Requirements for each phase)

3.4.25. This phase of the development covers an area of approximately 57 ha of which approximately 30 ha is considered to be suitable for residential development. This and will provide up to 800 residential units which will consist of a mix of Medium A and Medium B density residential development. Phase 2 lands are located to the north of Phase 1 adjoining Water-Rock Golf Course. The lands cover a significant portion of the entire masterplan site and prior to the development of Phase 2 there will be a requirement for a transport assessment to identify road and transport infrastructure and required timing for delivery. Phase 2 will also require the provision of a small park and the reservation of land for a 16 classroom primary school and a secondary school.

3.4.26. Phase 2 of the development consists of 13.5ha of existing built up areas consisting mainly of residential development including the Tir Cluain Housing Estate which is located in the north eastern corner of the site. There may be potential for some infill development on existing plots of one off residential development which are scattered throughout Phase 2. Any infill development would be subject to the same

requirements as the rest of the masterplan site in terms of appropriate infrastructure provision.

Phase 3 (see Section 4 Framework Masterplan for Strategic Infrastructure and Service Requirements for each phase)

3.4.27. This phase of the development which lies to the west of the Water-Rock Road covers an area of approximately 35 ha and will provide up to 660 residential units. Prior to the development of Phase 3 there will be a requirement for a transport assessment to identify road and transport infrastructure and required timing for delivery. The development of Phase 3 will require the delivery of the overall transport infrastructure and prior to its development there will be a requirement for a transport assessment to identify road and transport infrastructure and required timing for delivery.

3.4.28. As the development progresses it may be considered appropriate to proceed with development on lands to the west of the Water-Rock Road (R23 and R-24) at an earlier stage. This is provided all required road works are complete and the railway crossing is closed so there is no possibility of access from the Water-Rock Road onto the N-25. In addition all other necessary infrastructure including required water services and rail infrastructure i.e. the 2nd railway station must be in place.

3.4.29. Phase 3 of the development consists of 6.6 ha of existing built up areas consisting mainly of residential development. There may be potential for some infill development on existing plots of one off residential development which are scattered throughout Phase 3. Any infill development would be subject to the same requirements as the rest of the masterplan site in terms of appropriate infrastructure provision.

Implementation and Infrastructure Provision

3.4.30. An implementation programme will be applied to each phase of the development which will ensure that the development of the site will proceed in an orderly and timely manner with the appropriate infrastructure in place at the right time to allow each phase to be developed. The Framework Masterplan sets out the construction responsibility and funding source for the required infrastructure. The principle infrastructure requirements of the masterplan are; Water, Waste Water and Roads.

Water - Irish Water will be responsible for the funding and provision of water supply and waste water treatment capacity and it is the intention of Irish Water to include funding of these projects as part of their next investment cycle. The design and layout of water services will require consultation with Irish Water. Cork County Council will also be responsible for the preparation

of a Sustainable Urban Drainage Scheme Study which will be implemented by the developers.

Roads - Cork County Council will be responsible for the funding and construction of Link Street A1 (section of U-02 of approximately 1.01km to Water-Rock Road. If this road is not built by the County Council, the responsibility of its construction will revert to the landowners/developers. ~~and Link Road C (U-04).~~ All other required road infrastructure improvements will be the responsibility of the NRA, NTA and the developers. As part of the Sustainable Urban Drainage programme, a storm water pipe will need to be installed from the Water-Rock site to the Owenacurra Estuary as development takes place.

Rail - ~~Cork County Council, the NTA and Irish Rail will be responsible for the preparation of a Metropolitan Cork Suburban Rail Network Study. The results/findings of the study will determine the timing and delivery of the 2nd railway station at Midleton and the required train service frequency and capacity to serve Midleton and the Water-Rock Development.~~ On completion of a new rail policy to address the future role of rail transport in Ireland, as required under DTTaS' Strategic Investment Framework for Land Transport (SIFLT) Action 6, a study of the Cork Metropolitan Area's future suburban rail network requirements should be considered. This could include consideration of additional stations (including the 2nd station at Midleton) rail service patterns and interchange with other modes. Discussions will be held with Irish Rail about the delivery of the Link Road and railway bridge (U-04).

Bus - Future bus service provision and the potential for bus to meet the future public transport requirements for Midleton and the masterplan lands will be considered as part of a package of transport interventions. This will include the provision of high levels of permeability within and between new and existing development areas which facilitates the operation of bus services through these areas, at an early stage in their development.

3.4.31. The Council will give separate consideration to the issues of funding of required infrastructure through development contributions. The Council are having discussions with the Department relating to Development Contributions. These discussions have not been concluded however the Council will agree on a suitable development contribution scheme for the provision of infrastructure for Water-Rock in due course.

3.4.32. The infrastructure trigger points for each phase of the development are summarised in the following table*;

Table 5 Water-Rock Principal Infrastructure Requirements for each Phase	
Prior to Commencement of Development	Type of Infrastructure
	Provision of Water Supply
	Provision of Capacity of Waste Water Treatment and Collection
	SUDS Study
Phase 1	Suburban Rail Network Study
	Improvements to Northern Relief Road/Cork Road/N25 junction at Knockgriffin
	Construction of U-02*
	Construction of U-03 as required
	Upgrade Water-Rock Road to Feeder Street Standard (as required)
	Midleton Gyrotory Upgrade
	Second Railway Station
	Provision of capacity for Waste Water Treatment
	Linear Park
	Greenway (U-06)
Installation of storm water pipe from site to estuary	
Phase 2	Road Infrastructure Improvements (may require N25 upgrade)
	U-03 Completion as required.
	Construction of U-04 and road bridge over railway as required
	Upgrade of Water-Rock Road to Feeder Street Standard as required.
	Provision of capacity for waste water treatment and collection.

	Linear Park to be completed.
Phase 3	Road Infrastructure Improvements (may require upgrade to N25)
	Provision of Capacity for Waste Water Treatment and Collection

* see Table 4.1 Water-Rock Masterplan for additional information

The Midleton Special Local Area Plan, adopted in September 2005, set out a development framework for Midleton to guide new development to take advantage of proposals to establish a suburban rail network for Cork, including the re-opening of the rail line to the town. The SLAP identified a 133.8 HA site at Water Rock, with the special zoning objective X-01, for a new residential neighbourhood. The plan recognised that the Water Rock area could offer significant potential for the expansion of Midleton to meet the new housing targets as set out in the Cork Area Strategic Plan. The site is split between 18-20 landowners/developers.

Following on the principles set out in the SLAP, this LAP puts in place the framework for the delivery of a residential neighbourhood incorporating mixed use business areas and employment areas to create a sustainable living community. The creation of this sustainable living community will involve the interaction of social, economic and environmental factors.

Because of the size and complexity of the proposals for this site, a non-statutory masterplan has been prepared to set out greater detail on the implementation of the principles of this plan and is published concurrent with this Plan for public comment. This master plan, when adopted, will require a review within a 2 year period.

Site Location and Size

The Water Rock site is located to the south west of Midleton town centre. The site is within the Water Rock, Knockgriffin (Imokilly), Carrigogna and Broomfield West Townlands. It is bounded on the east by the R626 (Mill Road), to the south by the newly opened Cork to Midleton Railway Line and the Northern Relief Road, to the west by the L3618 (Water Rock Road) and open countryside and to the north by the Water Rock Golf Course. The Water Rock site is partially developed at the north eastern end of the site (Tir Cluain housing estate).

The former Dawn Meats processing plant, cold stores and a number of smaller units with a mix of business uses are located on a site zoned in the Midleton Special Local Area Plan 2005 for established Industry/Enterprise located along the southern boundary of the site. This 11.5 hectare site and some additional land to the west has now been included within the masterplan boundary.

The site slopes upwards from south to north with the slopes becoming more pronounced towards the northern end of the site. The site has a predominantly southerly and south easterly aspect and there is a 33m change in levels from the southern to the northern site boundary. The site generally consists of farmland under a mixture of grass and tillage. There are substantial groups of trees along the banks of the Owenacurra River and in the north eastern part of the site. There are a number of existing industrial sites and former industrial brownfield sites located along the railway line and in the south east corner of the site

Development Principles

The vision for delivering this ambitious urban expansion will be based on a set of accepted urban design principles outlined in the current Department of the Environment, Heritage and Local Government's "Urban Design Manual: A best practice guide" and this will help shape the urban structure.

The development of the Water Rock site will be informed by the following principles:

General Principles

- To provide a coherent strategic spatial framework for the Water Rock lands.
- Optimise the accessibility opportunities at Water Rock to create a mixed use residential neighbourhood of between 2,500 – 3,500 houses that connects with neighbouring communities, and sets in place the necessary conditions to enable a sustainable community to develop and use site resources in an efficient manner.
- To benefit from and support the reopening of the Cork to Midleton railway line by ensuring convenient and direct access to the Midleton to Cork commuter rail services.
- To strengthen the role of the public realm – the network of streets and open spaces that enable a successful and vibrant public life – and realise the potential of the flood plain of the Owenacurra River as an important amenity and environmental asset for Water Rock and Midleton Town.
- Guide the performance of development to achieve environmental excellence, efficient use of resources and minimise waste through the provision of design guidance.

Landuse Principles

- To provide a mix of uses on the site to include residential, retail, offices, community uses and business uses. The site will also include provision of a community hall, sports, leisure and recreation facilities and a linear park along the Owenacurra River floodplain.

Community Principles

- To establish a new sustainable residential settlement with a mix of house types and sizes.
- To provide for recreational and community facilities including primary and secondary schools which will serve the Water Rock population and the population of the surrounding hinterland.
- To provide a mixed use neighbourhood centre to encourage the local population to shop in the area thereby creating a vibrant urban core.

Movement Principles

- ~~To provide high density mixed use residential development in close proximity to the new railway station to encourage residents to commute by train to Cork City.~~
- ~~Provision of a second railway station at the south west corner of the masterplan site to ensure that all residents are within a 10 minute walk of a railway station.~~
- ~~To provide easy access and good connectivity for pedestrians and cyclists throughout the site with links to Midleton to encourage alternative modes of transport. The green corridors running through the site in an east to west and north to south direction will provide a safe and attractive environment for pedestrians and cyclists.~~
- ~~Provide road based public transport links from the site to the railway stations and Midleton Town Centre.~~

Residential Areas

3.4.33. The **residential** zonings for Midleton environs are set out below and for the most part are located south of the N25 at Baneshane and Ballinacurra.

Objective No.	Specific Objective	Approx Area (Ha)
R-01	Medium Density Residential Development. In submitting proposals for the development of this land, the developer will be required to: Demonstrate, to the satisfaction of the planning authority, that the proposals for this land can, in future, be satisfactorily integrated with other land in the Baneshane area and linked to the town centre, it's railway station and the site identified in this plan as a possible second station to serve the town at Water Rock; No new houses shall be commenced until the new primary school and community recreational facilities are commenced by the developer and the development of new houses shall be limited to 400 in number until such time as the New Grade Separated Junction with the N25 is completed by either Cork County Council or by way of Public Private Partnership with the developer. The special contribution of €100,000 per acre updated in accordance with the Consumer Price Index shall be paid to Cork County Council on the commencement of the work on the New Grade Separated Junction or in the event of a Public Private Partnership, the developers shall immediately make available the	32.3

Objective No.	Specific Objective	Approx Area (Ha)
	<p>aforementioned funds i.e. € 8,000,000 (updated in accordance with the Consumer Price Index) to facilitate the project.</p> <p>Any proposals for development shall be accompanied by a Flood Risk Assessment in line with The Planning System and Flood Risk Management Guidelines, November 2009.</p> <p>Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan. As this zone is within the floodplain of the Owenacurra River and upstream from the Great Island Channel Special Area of Conservation, any development proposals are likely to require the provision of a Natura Impact Statement and can only proceed where it can be shown that it will not have significant impacts on the Great Island Channel SAC. Sustainable Urban Drainage Systems (SUDS) and sufficient storm water attenuation will be required for any development which may be permitted in this area.</p>	
R-02	High density residential development – new development on this site should include detailed landscaping proposals.	0.9
R-03	Medium density residential development to include a mix of house types. Consideration may also be given to the provision of a nursing home. Proposals should take cognisance of the period property in the near vicinity and should include detailed landscaping proposals for the site.	7.5
R-04	Medium density residential development to include a mix of house types. Detailed access and	7.2

Objective No.	Specific Objective	Approx Area (Ha)
	landscaping proposals to be included.	
R-05	<p>High Density residential development. Proposals should take cognisance of the period property in the near vicinity and should include detailed landscaping proposals for the site.</p> <p>Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.</p>	1.7
R-06	High density residential development.	0.9
R-07	<p>Medium density residential development and provision of individual serviced sites, subject to ground conditions.</p> <p>This zone is immediately adjacent to the Great Island Channel Special Area of Conservation and the Cork Harbour Special Protection Area. Development proposals must provide for sufficient stormwater attenuation and may require the provision of an ecological impact assessment report (Natura Impact Statement) in accordance with the requirements of the Habitats Directive and may only proceed where it can be shown that they will not have significant negative impact on the SAC and SPA.</p> <p>Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.</p>	14.7

Objective No.	Specific Objective Water-Rock Phase 1	Approx Area (Ha)
R-08	<p>High Density residential development to include a mix of house types. The layout shall allow for permeability between adjoining housing areas for pedestrians and cyclists.</p> <p><i>This site is located adjacent to lands which are at risk of flooding. Therefore any development proposals on this site will be dependent on compliance with the requirements of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.</i></p>	1.9
R-09	<p>High Density residential development to include a mix of house types. The layout shall allow for permeability between adjoining housing areas for pedestrians and cyclists.</p> <p><i>Part of the site is adjacent to link street (U-02). The road shall be constructed up to the boundaries of the site so that it can provide access to adjacent land parcels and developments.</i></p> <p><i>This site is located adjacent to lands which are at risk of flooding. Therefore any development proposals on this site will be dependent on compliance with the requirements of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.</i></p>	5.5
R-10	<p>High Density residential development to include a mix of house types. The layout shall allow for permeability between adjoining housing areas and in particular, direct, safe and convenient access to the proposed railway station at Water-Rock by pedestrians and cyclists.</p> <p><i>Part of the site is adjacent to link streets U-02 and feeder street U-07. The roads shall be constructed up to the boundaries of the site so that they can provide access to adjacent</i></p>	4.7

	<i>land parcels and developments.</i>	
R-11	<p>Medium Density A residential development to include a mix of house types and the provision of a greenway (U-06) to comprise a cycleway and pedestrian pathway.</p> <p><i>Part of the site is also adjacent to Feeder Street U-07 Link Streets U-02 and Link Street U-03. The roads shall be constructed up to the boundaries of the site so that they can provide access to adjacent land parcels and developments.</i></p> <p><i>This site is divided between 3 separate landholdings which can be developed independently if necessary however there will be a requirement to provide connectivity and permeability through the sites for both cyclists and pedestrians.</i></p>	4.6
R-12	<p>Medium Density A residential development to include a mix of house types and the provision of a greenway (U-06) to comprise a cycleway and pedestrian pathway. Provision shall also be made for a local neighbourhood centre to provide shopping for residents.</p> <p><i>Part of the site is adjacent to link street U-02 and U-03. The road shall be constructed up to the boundaries of the site so that they can provide access to adjacent land parcels and developments.</i></p>	8.4
R-13	<p>Medium Density A residential development to include a mix of house types and the provision of a greenway (U-06) to comprise a cycleway and pedestrian pathway.</p> <p><i>Part of the site is adjacent to link street U-03. The road shall be constructed up to the boundaries of the site so that it can provide access to adjacent land parcels and developments.</i></p> <p><i>This site is located adjacent to lands which are at risk of flooding. Therefore any development proposals on this site will be dependent on compliance with the requirements of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5</i></p>	2

	and 1-6 in Section 1 of this plan.	
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Objective No.	Specific Objective Water-Rock Phase 2	Approx Area (Ha)
R-14	<p>Medium Density A residential development to include a mix of house types. The layout shall allow for permeability between adjoining housing areas for pedestrians and cyclists.</p> <p><i>Part of the site is adjacent to Link Street (U-03). The road shall be constructed up to the boundaries of the site so that it can provide access to adjacent land parcels and developments.</i></p> <p><i>This site is located adjacent to lands which are at risk of flooding. Therefore any development proposals on this site will be dependent on compliance with the requirements of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.</i></p>	9
R-15	<p>Medium Density A residential development to include a mix of house types. The layout shall allow for permeability between existing and proposed residential areas for pedestrians and cyclists and access roads shall be constructed to allow through access for vehicles from U-03 to Tir Cluain.</p>	6.2
R-16	<p>Medium Density A residential development to include a mix of house types. The layout shall allow for permeability between housing areas for pedestrians and cyclists.</p> <p><i>Part of the site is adjacent to proposed Feeder Streets (U-07 and U-08). The roads shall be constructed up to the boundaries of the site so that it can provide access to adjacent land parcels and developments.</i></p>	2
R-17	<p>Medium Density A residential development to include a mix of house types. The layout shall allow</p>	6.1

	for permeability between housing areas for pedestrians and cyclists. Part of the site is adjacent to Link Street U-03 and proposed Feeder Streets (U-07 and U-08). The roads shall be constructed up to the boundaries of the site so that it can provide access to adjacent land parcels and developments.	
R-18	Medium B density residential development to include a mix of house types. The layout shall allow for permeability between housing areas for pedestrians and cyclists. Part of the site is adjacent to Link Street U-03. The road shall be constructed up to the boundaries of the site so that it can provide access to adjacent land parcels and developments.	4.8
R-19	Medium B density residential development to include a mix of house types. The layout shall allow for permeability between housing areas for pedestrians and cyclists. Part of the site is adjacent to proposed Feeder Street (U-07). The road shall be constructed up to the boundaries of the site so that it can provide access to adjacent land parcels and developments.	2.7

Objective No.	Specific Objective Water-Rock Phase 3	Approx Area (Ha)
R-20	Medium B density residential development to include a mix of house types and serviced sites. The layout shall allow for permeability between housing areas for pedestrians and cyclists. Part of the site is adjacent to proposed Feeder Street (U-07). The road shall be constructed up to the boundaries of the site so that it can provide access to adjacent land parcels and developments.	4.4
R-21	Medium B density residential development to include a mix of house types and serviced sites. The layout shall allow for permeability between housing areas for pedestrians and cyclists.	7.4

R-22	Medium Density A residential development to include a mix of house types. The layout shall allow for permeability between housing areas for pedestrians and cyclists. Part of the site is adjacent to proposed Feeder Street (U-07). The road shall be constructed up to the boundaries of the site so that it can provide access to adjacent land parcels and developments.	8.7
R-23	Medium Density A residential development to include a mix of house types. The layout shall allow for permeability between housing areas for pedestrians and cyclists. Part of the site is adjacent to proposed Feeder Street (U-07). The road shall be constructed up to the boundaries of the site so that it can provide access to adjacent land parcels and developments.	3.6
R-24	Medium B density residential development to include a mix of house types. The layout shall allow for permeability between housing areas and in particular, direct, safe and convenient access to the proposed railway station at Water-Rock by pedestrians and cyclists. Part of the site is adjacent to proposed Feeder Street (U-07). The road shall be constructed up to the boundaries of the site so that it can provide access to adjacent land parcels and developments.	2.6
R-25	High density residential development to include a suitable landscaped buffer zone between the site and E-02 to the south.	5.7

Open Space/ Sports/ Recreation & Amenity

3.4.35. The development boundary for Midleton includes substantial areas of predominantly open land uses that are not, generally, intended for development but nevertheless form part of the structure of the town. The protection of these valuable open space areas have been made the subject of specific objectives. New active and passive open space facilities which will be required will be provided in the Masterplan area in conjunction with new development in that area.

Part of the O-05 now includes the lands previously zoned for a cemetery.

Objective No.	Specific Objective	Approx Area (Ha)
O-01	Passive open space for informal recreation. This area forms an important visual buffer to the railway line.	10.1
O-02	Active open space for Midleton Rugby Club and Midleton College. Proposals for new or improved sports related facilities may be considered.	7.9
O-03	Active open space for informal public recreation including the provision of an amenity walk connecting with similar proposals in the Town Councils area. Any development proposals on this site will be dependent on compliance with the requirements of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.	3.9
O-04	Active open space for Midleton FC. Proposals for new or improved sports related facilities may be permitted.	3.45
O-05	Active open space, this facility could include new and improved facilities for the GAA, Tennis Court, Gym and Swimming Pool facilities or other sports complex uses. A direct pedestrian access to the town centre shall also be provided. Any development proposals on this site will be dependent on compliance with the requirements of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.	23.5

Objective No.	Specific Objective	Approx Area (Ha)
O-06	Protect the special character and amenity value of Ballyannan Wood.	23.3
O-07	Passive open space. This prominent slope makes a significant contribution to the rural character of Ballinacurra.	5.5
O-08	<p>Provision of Phase 1 section of the Water-Rock Linear Park to include a mix of active and passive open space. This park will span both sides of the River Owenacurra and will include a cycle/pedestrian link with ancillary foot bridges. Provision must be made for appropriate lighting and adequate buffer zones to minimise disturbance to biodiversity such as protected species which may be present within/adjacent to the plan area.</p> <p>Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.</p>	9.4

Objective No.	Specific Objective	Approx Area (Ha)
O-09	<p>Provision of Phase 2 section of the Water-Rock Linear Park to include a mix of active and passive open space. This park will span both sides of the River Owenacurra and will include a cycle/pedestrian link with ancillary foot bridges. Provision must be made for appropriate lighting and adequate buffer zones to minimise disturbance to biodiversity such as protected species which may be present within/adjacent to the plan area.</p> <p>Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.</p>	5.3
O-10	Provision of a small park for passive recreation as part of Phase 2 of the Water-Rock Development.	2
O-11	Provision of a small park for passive recreation as part of Phase 3 of the Water-Rock Development.	1.2

Community Facilities

3.4.36. New school facilities to serve the Water-Rock Masterplan will be provided within the Masterplan site in tandem with development in that area. The Masterplan proposals include two new primary school sites (C-02 and C-03) and a secondary school site (C-04). Proposed school sites in the Water-Rock Masterplan shall be subject to a review if the requirement for schools in Midleton changes during the lifetime of the plan. Provision has also been made at R-01 (Baneshane), C-01 (Ballinacurra) and T-01 for new primary school facilities to serve development in those areas.

3.4.37. There is a requirement for a site for a new cemetery in Midleton and provision has been made for a site in the X-02 zoning to

the north of the town, however, this does not preclude consideration being given to alternative sites in the town, subject to proper planning and sustainable development considerations.

Objective No.	Specific Objective	Approx Area (Ha)
C-01	Primary junior school provision.	2.6
C-02	Provision of a site for a primary school as part of Phase 1 of the Water-Rock Masterplan Development.	2.5
C-03	Provision of a site for a primary school as part of Phase 2 of the Water-Rock Masterplan Development.	2.5
C-04	Provision of a site for a secondary school as part of Phase 1 of the Water-Rock Masterplan Development.	5

Utilities

3.4.38. Provision has been made in an objective for the protection of the line of the Northern Relief Road in the town. Phase 1 of the scheme has been completed and proposals for phase 2 of the scheme, which runs between the Dungourney road and the Old Youghal road east of Midleton Distillery, are advancing.

3.4.39. The Framework Masterplan makes provision for the following new transport infrastructure;

- A network of link roads to provide circulation (U-02, U-03 and U-04).
- A new feeder road (U-08) to link Phase 2 of the development with the Water-Rock Road.
- Upgrading of the Water-Rock Road to Feeder Road standard (U-07)
- A new greenway (U-06) linking the Water-Rock Road with the proposed linear park.
- A new railway station and ancillary services (U-05). All road alignments and proposed locations are indicative and subject to detailed design.

Objective No.	Specific Objective	Approx Area (Ha)
U-01	Northern Relief Road	-
U-02	Provision of a 3 lane Link Street, from the Northern Relief Road roundabout to the Water-Rock Road, designed and constructed in accordance with the DMURS guidance document to a standard with meets the approval of the Roads Section of Cork County Council.	-
U-03	Provision of a 3 lane Link Street designed and constructed in accordance with the DMURS guidance document to a standard which meets the approval of the Roads Section of Cork County Council.	-
U-04	Provision of a Link Street and road bridge over the railway line, designed and constructed in accordance with the DMURS guidance document to a standard with meets the approval of the Roads Section of Cork County Council.	-
U-05	Railway Station and ancillary services	-

U-06	Provision of a new Greenway as part of the Water-Rock development to comprise a cycleway and pedestrian pathway designed in accordance with the DMURS Guidance document to a standard with meets the approval of Cork County Council. The Greenway shall be constructed as part of the residential developments to the south. Each segment of the greenway must be linked up to provide east/west permeability through the site.	-
U-07	Upgrading of the Water-Rock Road to Feeder Street Standard, designed and constructed in accordance with the DMURS guidance document to a standard with meets the approval of the Roads Section of Cork County Council.	-
U-08	Provision of a new Feeder Street designed in accordance with the DMURS Guidance document to a standard with meets the approval of Cork County Council.	-

Employment and Economic Activity

3.4.40. In this plan substantial provision has been made for industry, business and enterprise development on greenfield lands in the town. Substantial provision for new high intensity employment uses is being made within the Masterplan area north of the railway line.

Industry

3.4.41. Much of the lands zoned I-03 have been developed over the lifetime of the previous plan but some lands remain (which may be required for the relief road). Provision for the line of the Northern Relief Road has been made within the I-03 and I-04 zonings.

3.4.42. The specific industrial zoning objectives for Midleton Environs are set out in the following table;

Objective No.	Specific Objective	Approx Area (Ha)
I-01	It is an objective to develop this site for industry and non retail commercial development.	0.8
I-02	It is an objective to develop this site for industry and non retail commercial development.	2.4
I-03	It is an objective to develop this site for industry and to provide for the future extension of the adjoining distillery to the south. Provision should be made to facilitate the construction of the northern relief road and to provide access from this road directly to the distillery complex for commercial vehicles. Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.	7.5
I-04	It is an objective to develop this site for industry and non retail commercial development taking into account the line of the proposed Northern Relief Road, the proximity of the Seveso site (Irish Distillers) to the north, the flood risk guidelines and adjacent residential, archaeological and sports uses. Proposals shall include: <ul style="list-style-type: none"> • a traffic and transport assessment and mobility management plan, and; • detailed landscaping plans for the site having regard to its proximity to the N25. Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial	19.9

Objective No.	Specific Objective	Approx Area (Ha)
	Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.	

Business

3.4.43. While there are a number of industrial sites identified, it is also important that Midleton has a suitable supply of business land to cater for development at the smaller scale end of industry and of a format that has become more typical in the modern economy. A site has been identified at Baneshane, south of the N25 and formally an industrial zoned site, which is considered suitable for this type of development.

3.4.44. The specific business zoning objective for Midleton Environs is set out in the following table.

Objective No.	Specific Objective	Approx Area (Ha)
B-01	Business development including mixed use employment uses not suited to town centre or edge of centre locations. A 20m tree planted buffer shall be provided along the northern site boundary with the N25. Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan. As this zone has been identified as being susceptible to flooding and is upstream from the Great Island Channel Special Area of Conservation, any development proposals are likely to require the provision of a Natura Impact Statement and can only proceed where it can be shown that it will not have significant impacts on the Great Island Channel SAC. Sustainable Urban Drainage Systems (SUDS) and sufficient storm	26.8

Objective No.	Specific Objective	Approx Area (Ha)
	water attenuation will be required for any development which may be permitted in this area.	

Enterprise

3.4.45. The specific enterprise zoning objective for Midleton Environs is set out in the following table.

Objective No.	Specific Objective	Approx Area (Ha)
E-01	It is an objective to develop this site as a business park for enterprise/industry and non retail commercial development. Broad proposals for the development of the site in line with the zoning and including a detailed traffic management plan showing phasing of development in tandem with the delivery of the railway station at Water Rock and safe convenient and pleasant pedestrian and cyclist linkages with the railway station/s, town centre and residential areas shall be submitted prior to any detailed applications being made on the site.	37.2
E-02	It is an objective to develop this site as a Business Park for enterprise/industry and non retail commercial development as part of the Water-Rock Masterplan Development.	9.2

Town Centre

3.4.46. The specific town centre zoning objective for Midleton Environs is set out in the following table.

Objective No.	Specific Objective	Approx Area (Ha)
T-01	Town centre development. Consideration will be given to the siting of a primary school on part of this site subject to proper planning and sustainable development considerations. Development proposals must provide for sufficient stormwater and surface water attenuation in this zone.	8.9

~~**3.4.47.** The specific special policy area zoning objective for a major new residential neighbourhood for Water Rock is set out in the following table.~~

Objective No.	Special Policy Area Objective X-01	Approx Area (Ha)
X-01	The County Council consider that the area to which this objective relates is an appropriate location for a major expansion of the town that is required in order to achieve the scale of growth suggested in the Cork Area Strategic Plan. It is the Councils' objective to secure the development of between 2,500-3,500 new dwellings on this site through a phased programme of development that will secure the timely provision of the necessary physical, social and economic infrastructure. The site shall be developed in accordance with the development principles set out in this Plan for the area to which this objective relates. The master plan will make provision for: Clear and unambiguous proposals for the timing and construction of all the elements of the development in a number of sequential phases; Provision of new housing within a clearly defined network of Character Areas so that each area can develop its own	164.5

Objective No.	Special Policy Area Objective X-01	Approx Area (Ha)
	<p>identity and sense of community;</p> <p>In order to secure the population growth and supporting development proposed in X-01, appropriate and sustainable water and waste water infrastructure, must be provided and be operational in advance of the commencement of any discharges from the development;</p> <p>Proposals for the construction of a distributor and residential road network capable of accommodating public transport and a segregated footway and cycle way system linking the proposed northern relief route with the Mill Road near Broomfield, and the new railway bridge proposed as a replacement for the Water Rock level crossing in the south western part of the site;</p> <p>Proposals for the provision and construction of 2 primary schools to meet the educational requirements of those likely to live in the development including the timing of their construction (minimum 2 ha);</p> <p>The setting aside of land for the construction of a new secondary school (minimum 5 ha);</p> <p>The construction of a neighbourhood centre consisting mainly of small scale convenience and comparison shops, community services, a community hall and sports, leisure and recreation facilities;</p> <p>The provision of a 14ha linear park along the floodplain of the Owenacurra River to include provision of recreation, sports and leisure facilities. It will be a minimum requirement of the proposals for this area that they should maintain its' flood storage capacity at current levels. Wherever possible, the proposals for the area should include measures that will serve to increase the flood storage capacity of the area as a whole;</p> <p>Structural landscaping along the site boundaries to protect it's setting and to provide a long-term edge to the built up area of the town;</p> <p>Large scale development in this zone has the potential to impact on the nearby Great Island Channel Special</p>	

Objective No.	Special Policy Area Objective X-01	Approx Area (Ha)
	<p>Area of Conservation and the Cork Harbour Special Protection Area. Development proposals must provide for sufficient stormwater attenuation and may require the provision of an ecological impact assessment report (Natura Impact Statement) in accordance with the requirements of the Habitats Directive.</p> <p>The implementation of the phasing proposals embodied in the master plan to secure the overall co-ordination of the development. In principle, the commencement of development in a number of locations is acceptable provided adequate water services and road infrastructure is in place to serve the proposed development. However, care needs to be taken to ensure that this approach would not have an adverse effect on those living or working close to the approach routes to the site. In this respect, Water Rock Road is considered unsuitable as an access road to the development. Development in this part of the site should not commence until such time as appropriate alternative road access is in place or a timescale for its delivery has been agreed.</p> <p>Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan.</p>	

Special Policy Areas

3.4.48. In addition to Water-Rock there are a number of other important special policy area sites in Midleton. The first (X-02), north of Broomfield, is located to the east of Mill Road close to the northern edge of the built up area of the town. The eastern side of the site is generally flat but rises towards more steeply sloping and prominent land to the west. The site has a 350m frontage to Mill Road itself. Most of the site is in agricultural use excepting a small part to the

north that is used as an oil products distribution depot. There are existing houses adjoining the site to both the north and south.

3.4.49. The overall site has been designated in this plan for a mix of uses including sports, recreation, cemetery, residential uses and provision has also been made for business development.

3.4.50. Permission for 44 no dwellings plus a large GAA complex was granted on the X-03 site but these have not been developed. The site remains suitable for recreational and sports use combined with a limited amount of residential development and this zoning has been retained.

3.4.51. In the 2005 SLAP two sites were zoned for mixed use development along the quayside at Ballinacurra, however, these sites have been omitted from the proposals of this plan as they have been identified as having a significant flood risk.

3.4.52. The X-04 site in Ballinacurra is an important heritage site in a central area of Ballinacurra and its redevelopment would contribute greatly to the village environment. New buildings should respect the character and grain of the existing village and existing heritage buildings on the site.

3.4.53. Some of the land in the Water-Rock Master Plan area has been cut off by the newly constructed northern relief road and requires its own land use objective (X-05). This land is adjacent to the Town Council boundary and opposite the Midleton railway station and is suitable for mixed use development of residential and offices

3.4.54. The additional special policy area zoning objectives for Midleton are set out as follows:

Objective No.	Specific Objective	Approx Area (Ha)
X-01	Water-Rock – amended – see Water-Rock Framework Masterplan Study and Midleton Local Area Plan Zoning Map No. 2 for details.	160ha
X-02	It is an objective to allow for a mix of uses on this site including the potential for the relocation of Midleton GAA, provision of a cemetery, residential and business uses.	25.4
X-03	It is an objective of this plan to allow for a mixed use development comprising sporting	14.3

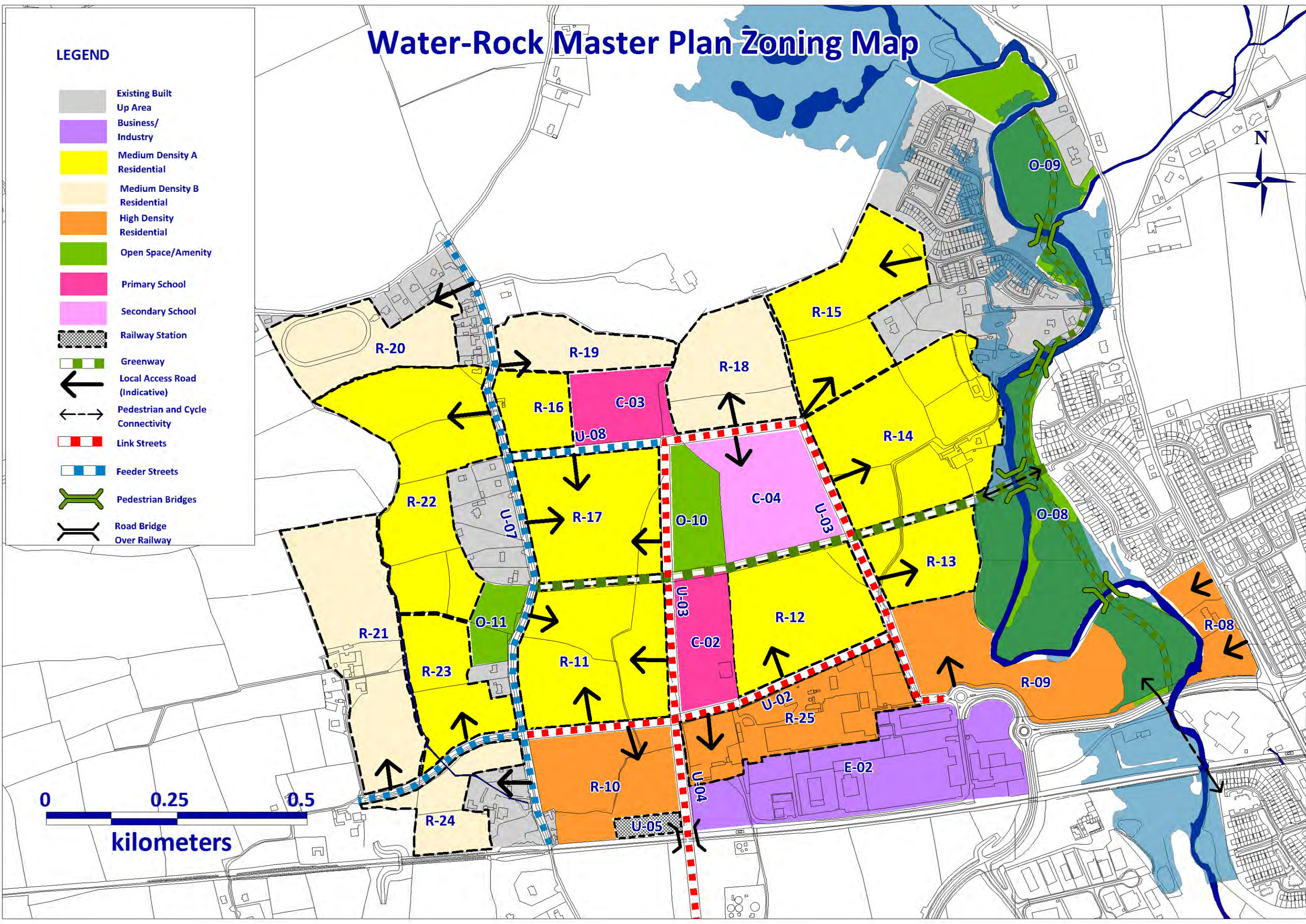
Objective No.	Specific Objective	Approx Area (Ha)
	facilities, up to 44 dwelling houses, and a nursing home. Detailed proposals shall include traffic and pedestrian impact management assessment and no dwellings or nursing home will commence prior to the commencement of construction of the sporting facilities.	
X-04	These grain stores comprise a mix of traditional and relatively modern buildings on a restrictive site adjoining a recently developed residential area. Should an opportunity to redevelop the site arise during the lifetime of the plan, consideration should be given to the conversion of the principal traditional building on the site to other uses more compatible with the sites present surroundings. A limited amount of new development may be possible in a form that respects the traditional buildings remaining on the site.	2.0
X-05	<p>It is an objective to develop this area for a mixed use residential and office development. Provision may also be made for;</p> <ul style="list-style-type: none"> • small scale retail units at ground floor level, • commercial and residential uses at upper floor levels appropriate to a mixed use urban neighbourhood. <p>Pedestrian and cyclist linkages shall be provided along the Owenacurra River.</p> <p>Parts of this site are at risk of flooding. Any development proposals on this site will normally be accompanied by a flood risk assessment that complies with Chapter 5 of the Ministerial</p>	5

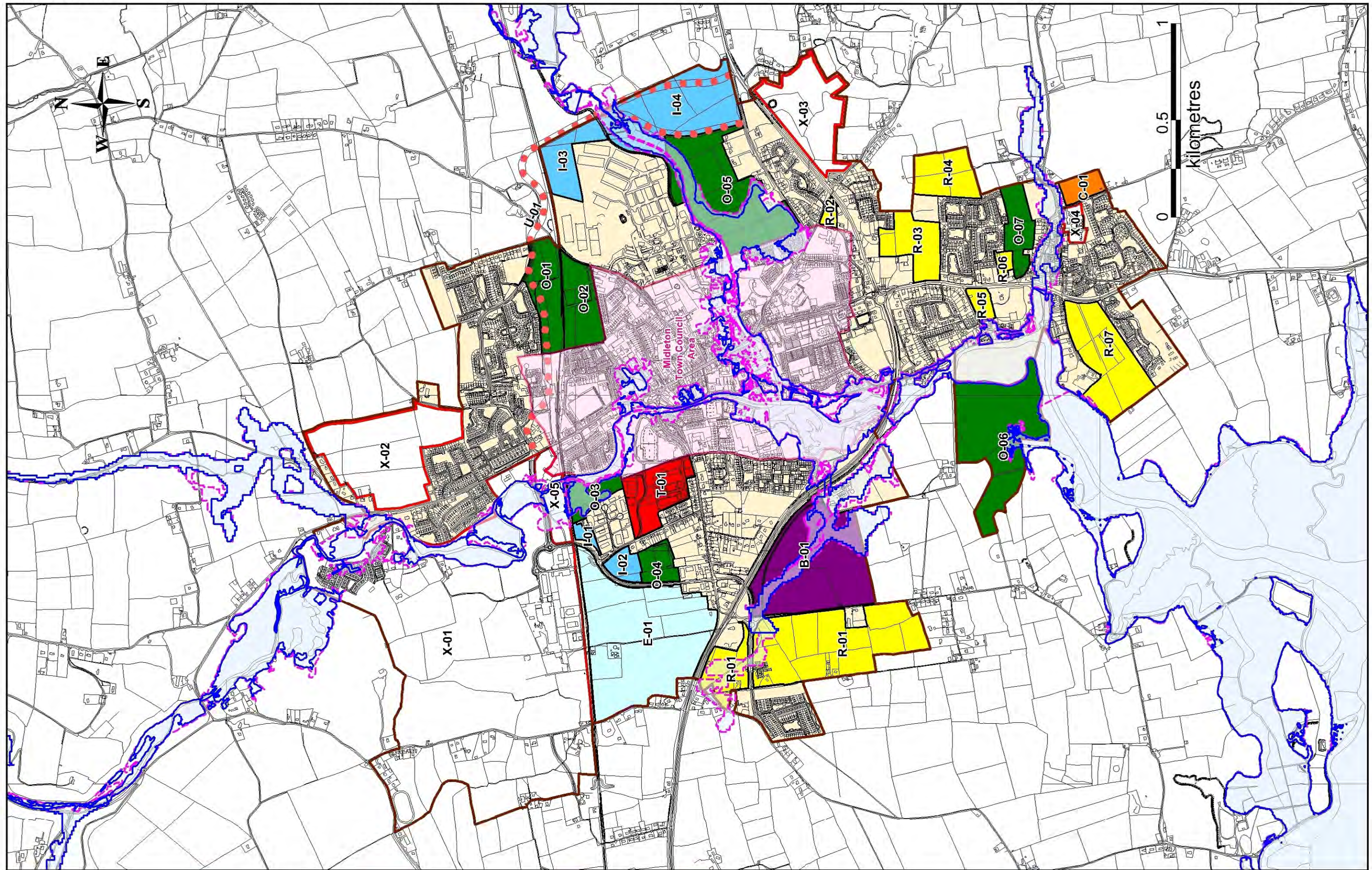
Objective No.	Specific Objective	Approx Area (Ha)
	Guidelines 'The Planning System and Flood Risk Management' as described in objectives FD 1-4, 1-5 and 1-6 in Section 1 of this plan. As this zone is within the floodplain of the Owenacurra River and is upstream from the Great Island Channel Special Area of Conservation, any development proposals are likely to require the provision of a Natura Impact Statement and can only proceed where it can be shown that it will not have significant impacts on the Great Island Channel SAC. Sustainable Urban Drainage Systems (SUDS) and sufficient storm water attenuation will be required for any development which may be permitted in this area.	

Water-Rock Master Plan Zoning Map

LEGEND

-  Existing Built Up Area
-  Business/ Industry
-  Medium Density A Residential
-  Medium Density B Residential
-  High Density Residential
-  Open Space/Amenity
-  Primary School
-  Secondary School
-  Railway Station
-  Greenway
-  Local Access Road (Indicative)
-  Pedestrian and Cycle Connectivity
-  Link Streets
-  Feeder Streets
-  Pedestrian Bridges
-  Road Bridge Over Railway





- | | | | | | | |
|------------------------|--|------------------------------------|----------|---------------------|-----------|--------------------------------------|
| Settlement Boundary | Open Space / Sports Recreation / Amenity | Town Centre / Neighbourhood Centre | Industry | Special Policy Area | Utilities | Area Susceptible to Flooding: Zone A |
| Existing Built-up Area | Residential | Community / Utility | Business | Enterprise | Roads | Area Susceptible to Flooding: Zone B |
| | | | | | Walkways | |