

Strategic Environmental Assessment

SCOPING ISSUES PAPER

for the

Ballycullen Oldcourt Local Area Plan 2013-2019



March 2013
Planning Department,
South Dublin County Council

CONTENTS

1.0. Introduction

1.1 Purpose of this Report

2.0 Statutory Context

3.0. Plan / Policy Context

4.0 Existing Environment

4.1 Location of Study Area

5.0 Specific Environmental Consideration

5.1 Population

5.2 Biodiversity (flora, fauna)

5.3 Landscapes/Geology

5.4 Agriculture

5.5 Water

5.6 Air Quality and Noise Pollution

5.7 Waste Management

5.8 Material Assets

5.9 Cultural Assets

5.10 Climate Change and Sustainability

6.0 Conclusion

1.0 Introduction

South Dublin County Council is at present preparing a Local Area Plan for zoned lands in the Ballycullen Oldcourt area in accordance with Section 18 of the Planning and Development Act 2000 (as amended). The land comprises in excess of 100 hectares of land zoned 'To provide for new Residential Communities in accordance with approved Area Plans'.

1.1 Purpose of this Report

This is the Environmental Scoping Issues Paper in respect of the preparation of the proposed Ballycullen Oldcourt Local Area Plan (LAP). The purpose of the paper is

- to identify the significant environmental issues to be taken into consideration in the making of the new Plan
- to form a basis for consultation with the statutory bodies
 - Environmental Protection Agency (EPA);
 - Department of Environment, Community and Local Government
 - Department of Communications, Energy and Natural Resources
 - Department of Agriculture, Food and the Marine
 - Department of Arts, Heritage and the Gaeltacht
 - Adjoining Planning Authorities
- and to identify the baseline information and data gaps.

The findings and comments received as part of the scoping exercise will inform the preparation of the Environmental Report. The Environmental Report will be made available for comment from the public and interested parties at the same time as the draft LAP.

2.0 Statutory Context

The Planning and Development (Strategic Environmental Assessment) Regulations 2004 - 2011 translate the Strategic Environmental Assessment (SEA) Directive 2001/42/EC into Irish Law. A SEA is a formal, systematic evaluation of the likely significant environmental impacts of a proposed plan or programme. The SEA is carried out prior to the adoption of the plan or programme.

The Department of the Environment, Community and Local Government has issued guidelines to Planning Authorities on the implementation of SEA Directive (2001/42/EC). In summary, these guidelines divide the SEA process into a number of steps:

- Screening to determine whether an SEA is required
- Scoping to determine environmental issues
- Preparation of an Environmental Report
- SEA Statement
- Consultation process throughout the procedure

While the requirement for a mandatory Strategic Environmental Assessment for Local Area Plans applies only to areas in which the population is over 5000 persons, South Dublin County Council is of the opinion that development in the Ballycullen Oldcourt LAP area is likely to potentially have significant effects on the environment and consequently is preparing an Environmental Report as part of the production of the LAP.

3.0 Plan/Policy Context

The SEA Directive requires an analysis of the LAPs "relationship with other relevant plans and programmes". The Ballycullen Oldcourt LAP will be considered in the context of the following National, Regional and Local Plans;

Sustainable Development – A Strategy for Ireland (1997)

National Spatial Strategy 2002-2020

National Climate Change Strategy, 2000

National Heritage Plan (2002)

The Planning System and Flood Risk Management Guidelines 2009

Regional Planning Guidelines 2010 - 2020

A Platform For Change And Transport 21

Sustainable Residential Development In Urban Areas 2009

The Retail Planning Strategy for The Greater Dublin Area (2008-2016)

South Dublin County Council Development Plan 2010 – 2016

South Dublin County Heritage Plan, 2010-2015

Green City Guidelines' (UCD Urban Institute Ireland 2008)

4.0 Existing Environment

4.1 Location of Study Area

The LAP lands are located on the Ballycullen and Oldcourt urban fringe where it adjoins the foothills of the Dublin Mountains, the principal natural amenity of South Dublin. The southern limit of the zoned lands closely follows the 120m. contour which generally reflects the height limit of suburban development. The area is bounded on the east by the M50 Motorway and on the west by the Bohernabreena Road. Dublin City Centre is located approximately 12 kilometres to the northeast of the LAP lands, with Tallaght Town Centre located approximately 2/3 kilometres to the north west of the LAP lands (Figure 1 below.)

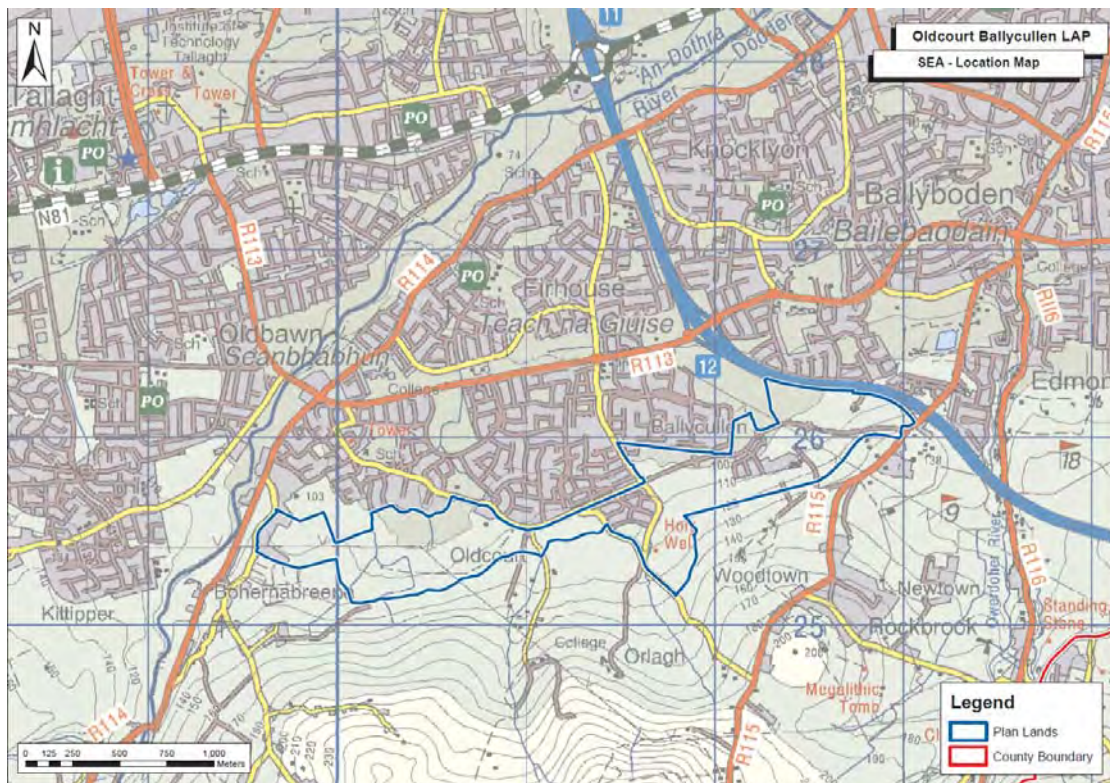


Figure 1: Location Map - Extract from Ordnance Survey

Within the Ballycullen area, there are existing permissions for 1466 units of which 1029 remain to be constructed. Permissions are valid until between 2013 and 2019. Permissions with a higher intensity of development than the market currently favours are unlikely to be built and it is likely that densities in the proposed Local Area Plan will be reduced. There are no live permissions in the Oldcourt area.

improvement schemes. Figure 2 below indicates the sensitivity of the LAP lands in terms of mapped baseline information (from Environmental Report of the South Dublin County Council Development Plan 2010 – 2016).

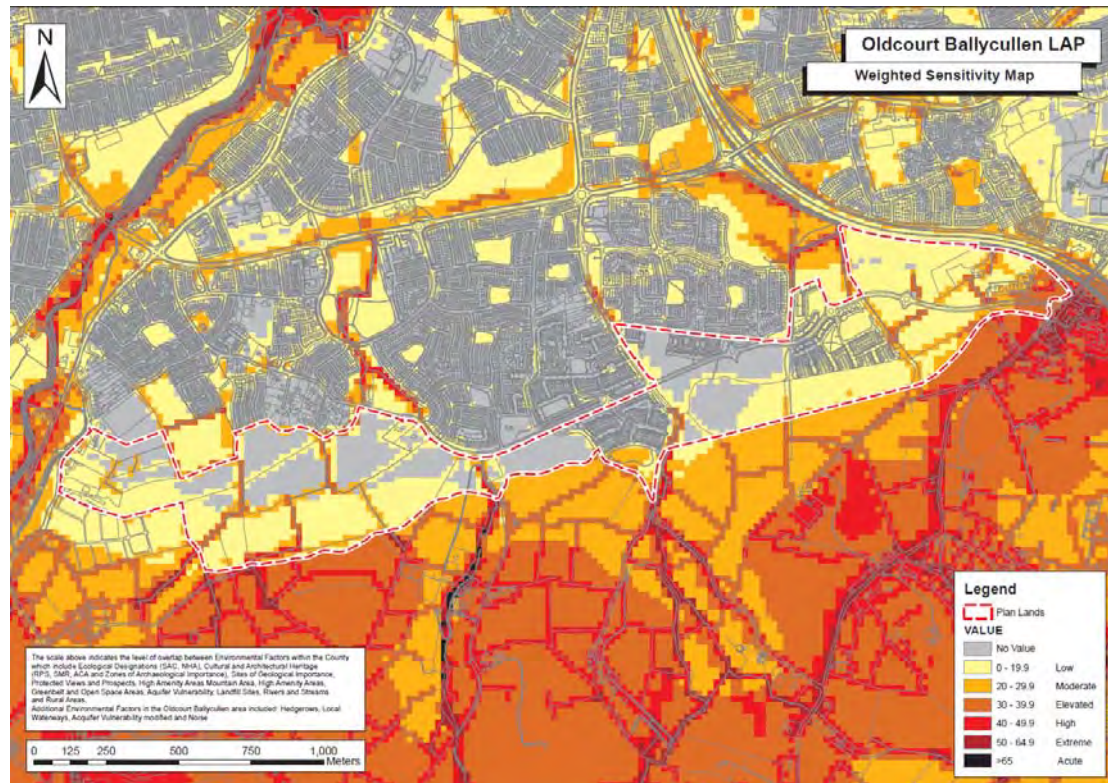


Figure 3: Environmental Sensitivity Map

5.1 Population

Current Population Profile¹

While the LAP lands are spread across three electoral divisions, Bohernabreena, Firhouse Village and Firhouse/Ballycullen, the Census 2011 Small Areas recording system allows an accurate estimate of the population in the LAP area of 1324 persons. Twenty five percent (25%) of the population are aged twelve or under with sixty eight percent (68%) are in the band between twenty and fifty five years of age. Of the 386 families in the proposed LAP area, 34% are Pre-Family and 54% are in the Pre-School, Early School and Pre Adolescent family cycle.

In the category "Private households by type of accommodation", 55% are described as being Houses/Bungalows and 45% as being Flats/Apartments. The "Permanent private households by type of occupancy" indicates that 74% are owner occupier with the balance (26%) being rented (split roughly

¹ This profile has been derived principally from the CSO's [SAPMAP 2011](#) application and combining the six small area divisions that make up the proposed LAP area.

50:50 between private and public). The occupancy per housing unit is 2.5 persons per dwelling in the proposed LAP area compared to 2.9 persons per dwelling in South Dublin overall. One hundred and three (16%) of the six hundred and thirty four permanent dwellings in the proposed LAP area were unoccupied on the night of the Census (April 2011).

The economic status of the 979 persons aged 15 years and over in the Town Centre shows an "at work" and "unemployed" rate of 76% and 9% respectively. This compares with a South Dublin County rate of 52% employed and 12% unemployed.

The proposed LAP area population of 968, aged five years and over, categorised by means of travel to work, school or college indicates that 17% of this population use public transport or non-vehicular means compared to a County figure of 35%.

Population: Existing Problems/Environmental Considerations

- Substantial population using non public transport or motorized vehicular means of travelling to work, school or college

5.2 Biodiversity (flora, fauna)

The enhancement of biodiversity, preservation of natural amenities, integrity of wildlife corridors and protection of the natural environment are all important issues to be addressed in the preparation of the Ballycullen Oldcourt Local Area Plan and in the accompanying Environmental Report.

There are no designated biodiversity areas affected by the proposed Local Area Plan which have a recognised National, European Union or International protection status. The nearest Natural Heritage Area (pNHA) in the vicinity of the LAP lands is the Dodder Valley pNHA.

The Local Area Plan lands are comprised of predominantly agricultural grassland, with field boundaries incorporating trees, shrubs, hedgerows and ditches (Hedgerows WD1 and a linear WD/1 using the Fossit, 2000 classification). Other uses include residential, finished and unfinished estates. The habitats of the grasslands and field boundaries sustain local populations of birds and small mammals.

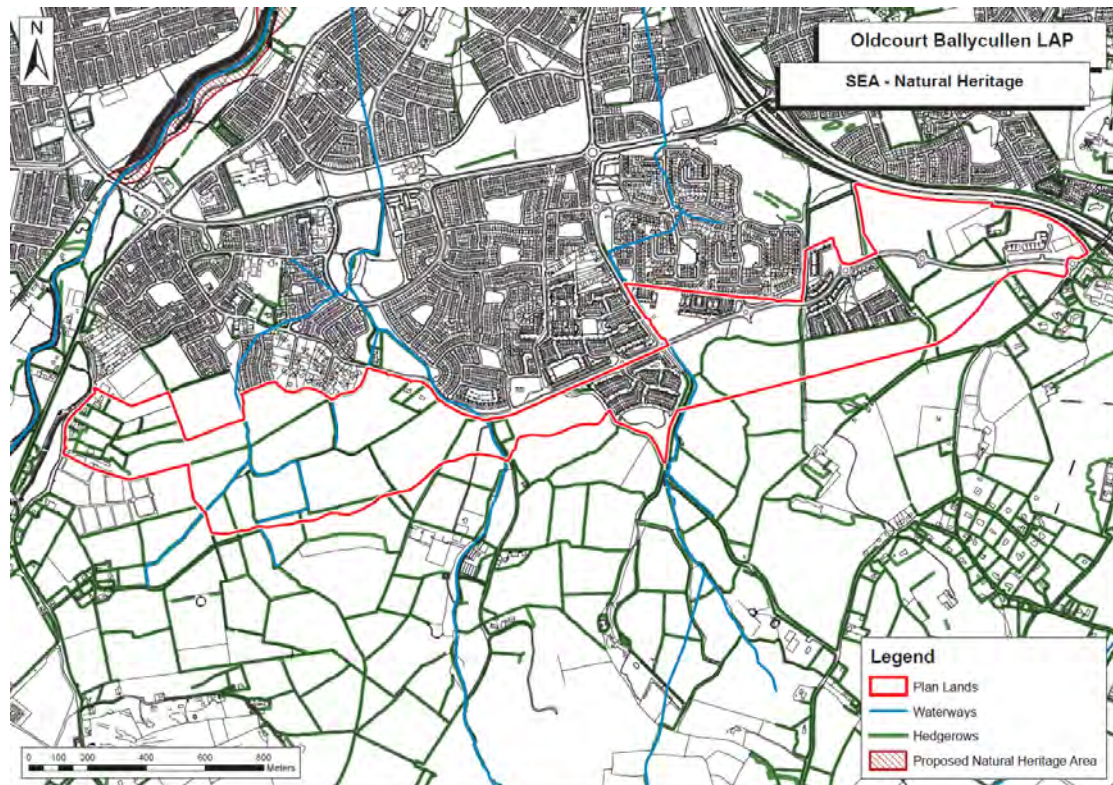


Figure 4: Hedgerow Survey 2012

Biodiversity: Existing Problems/ Environmental Considerations

- Significant habitat fragmentation has already occurred due to hedgerow removal in the eastern LAP land area
- Potential for further extensive habitat loss and loss to the Biodiversity Network
- E.I.S's of development proposals within LAP land contains flora and fauna survey information

5.3 Landscape

Landscape Character

The plan lands are located within the Firhouse and Bohernabreena Character Areas as identified in the Landscape Character Area Assessment in the County Development Plan 2010-2016 (Figure 5). The Local Area Plan lands slope from south to north and the southern boundary of the LAP lands is generally defined by the 120 metre contour line.

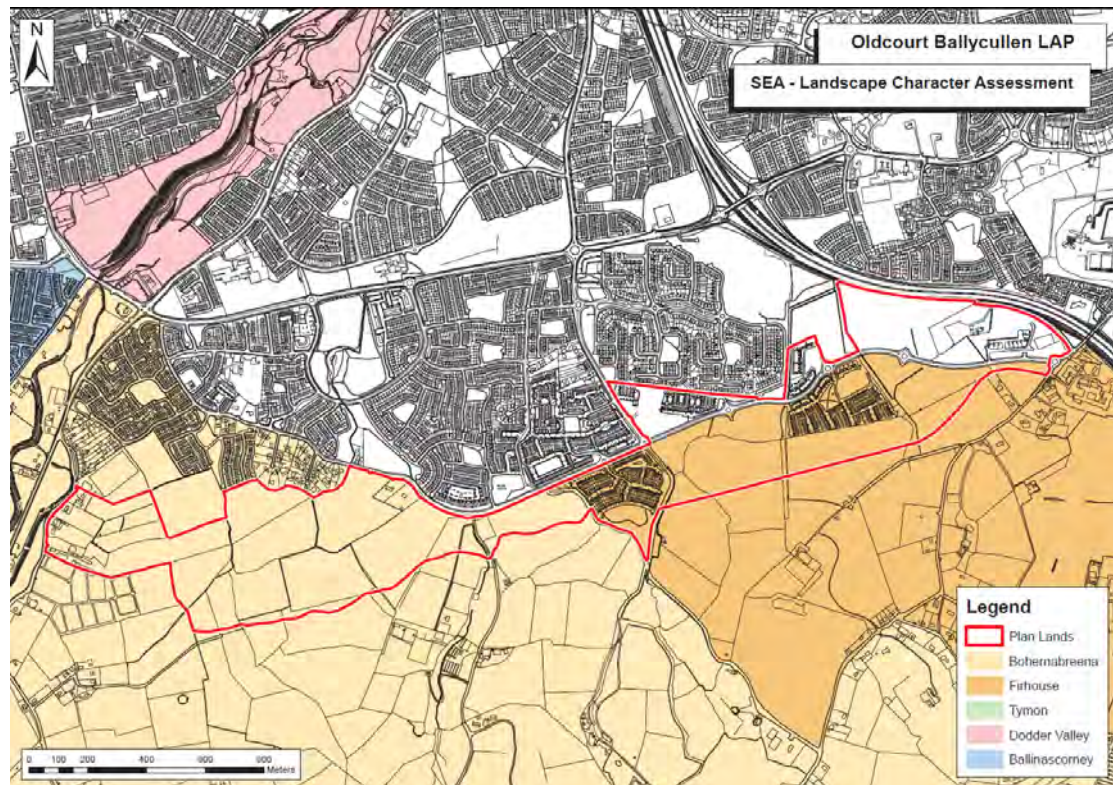


Figure 5: Landscape Character Area Assessment 2010-2016 Source: SDCC

The Firhouse Character Area is defined by its close proximity to the suburban housing estates of Firhouse, Ballyboden and Edmondstown, and the M50. A significant amount of development is taking place in Ballycullen and Woodtown area where a large proportion of lands are zoned for residential development and amenity. The landscape still retains a highly rural quality due to the large amount of urban parkland and the close proximity of the Dublin Mountains. The land rises steeply from 100 to 200m from Ballycullen to Woodtown, which is essentially at the foothills of the Dublin Mountains.

The Bohernabreena Character Area has its northern boundary at the urban fringe at Oldcourt, Woodtown and Newtown and extends southwards into the Dublin mountains, culminating at the peak at Kippure, in the southern tip, which is surrounded by the Wicklow Mountains. The landscape type around Oldcourt is predominantly farmland with some of the lands utilised for active recreation. Much of the original field pattern and hedgerows are intact.

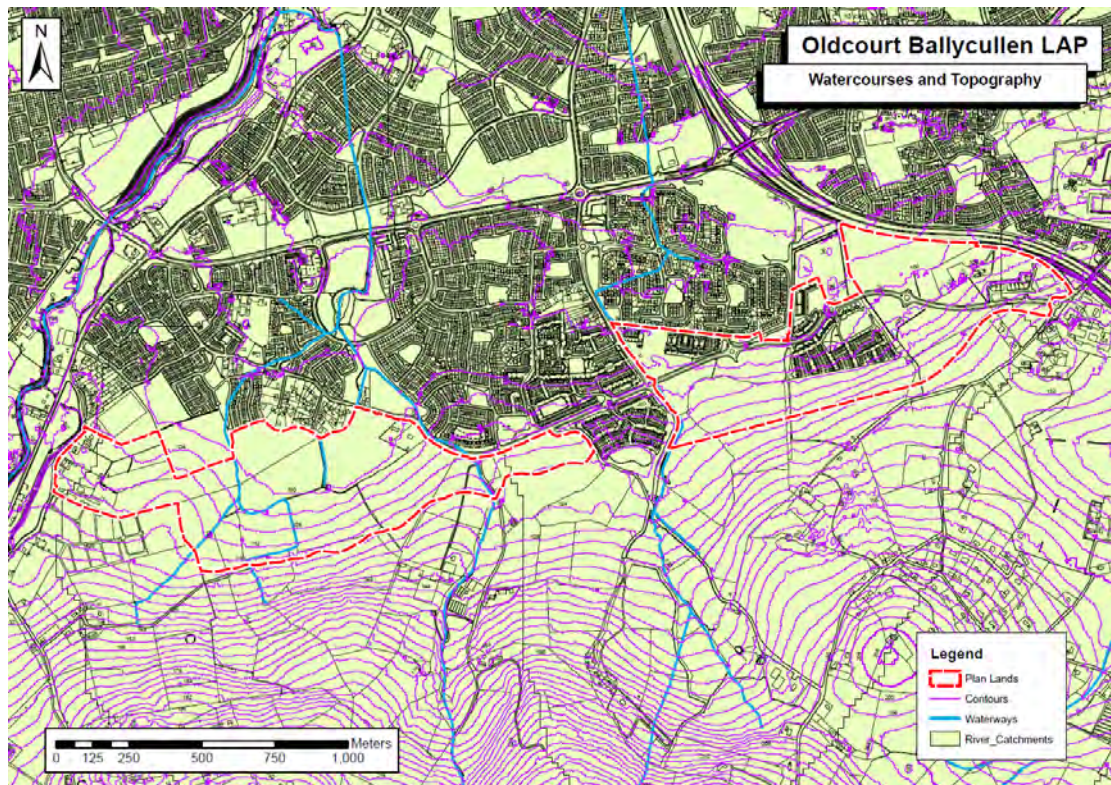


Figure 6: Contour Map - Extract from Ordnance Survey

Due to the location of Ballycullen Oldcourt at the foothills of the Dublin Mountains, extensive views are available. However, none of these views are identified for protection in the South Dublin County Development Plan 2004-2010.

Landscape Issues: Existing Problems / Environmental Considerations

- Lands are at the foothills of the Dublin Mountains
- Removal of hedgerows and field boundaries in Ballycullen Area
- Landscape under considerable development pressure
- Need to sensitively handle the transition from rural/upland character area to urban character i.e. the city edge

Geology/Soils

The Geological Survey of Ireland GSI has provided information on Bedrock, Soils, Groundwater Classification and Aquifer Vulnerability.

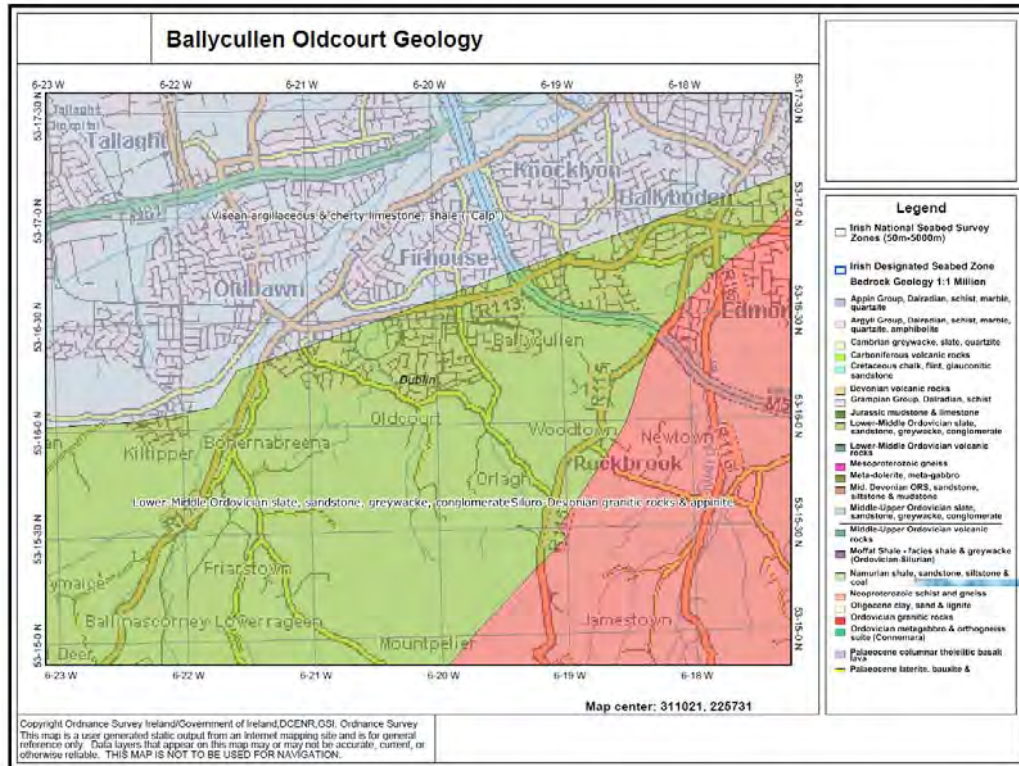


Figure 7: Ballycullen Oldcourt Bedrock

Source: www.gsi.ie

The bedrock of the LAO lands is predominantly Lower to Middle Ordovician slates, greywacke and conglomerates.

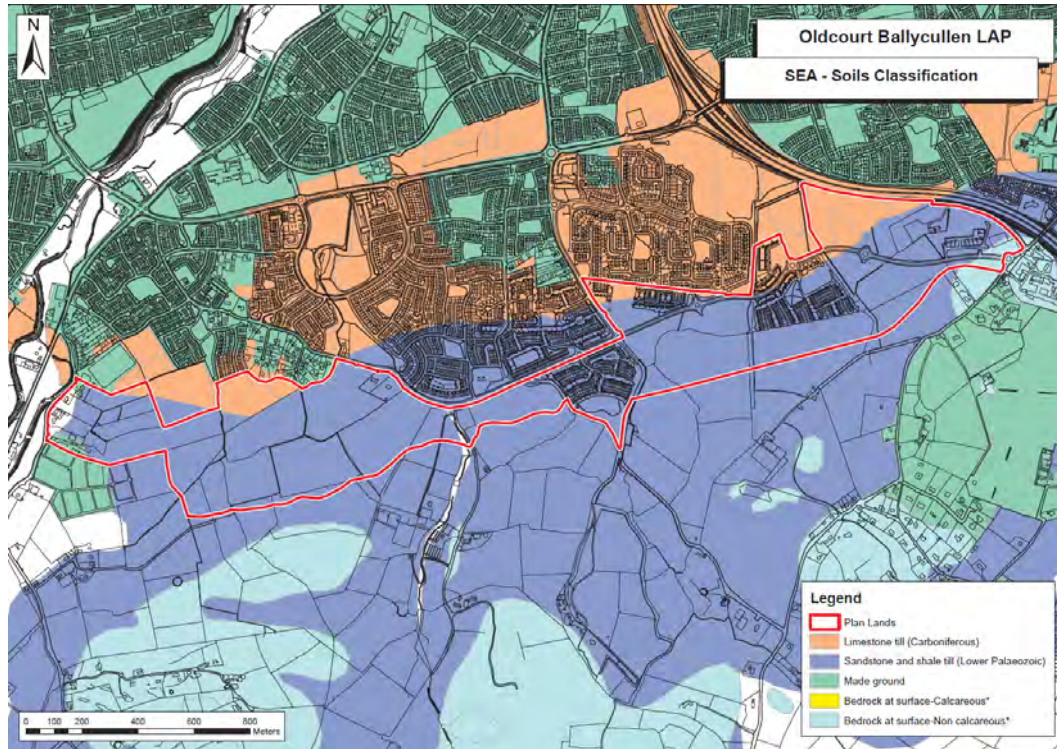


Figure 8 - Ballycullen Oldcourt Soils.

Source: www.gsi.ie

The LAP lands comprise of two soil types – Sandstone and Shale Till is the predominant soil type apart from two small sections of Limestone Till.

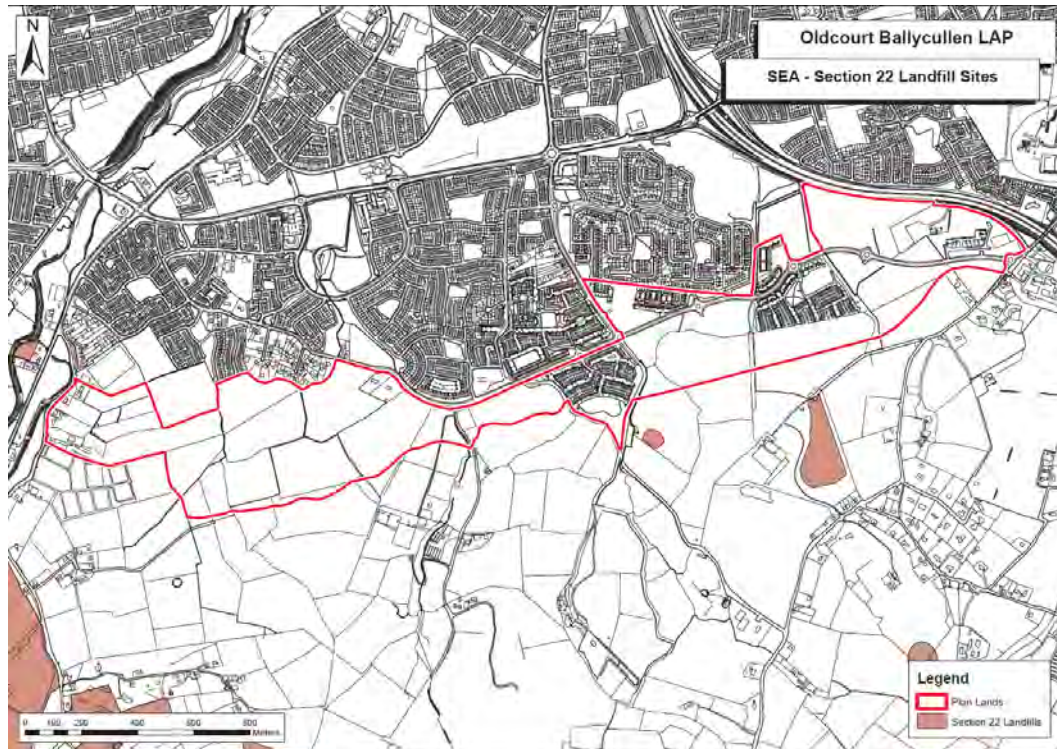


Figure 9: Section 22 contaminated soil sites

There are no Section 22 contaminated soil sites located within the plan lands. There are no sites of Geological Interest within the plan lands which are listed in the County Development Plan 2010-2016.

5.4 Agriculture

The LAP lands in the Ballycullen portion consist of partially developed residential lands, some unmanaged or abandoned agricultural (recolonised bare ground) land and a small amount of grassland. The western portion of the lands at Oldcourt is in active agricultural used as stocked grassland.

5.5 Water

Groundwater and Aquifer Vulnerability

The GSI has carried out a Groundwater Protection Scheme for South Dublin County. The aquifer on the main portion of the plan lands are located is rated as “Locally Important Aquifer – Bedrock which is Moderately Productive only in Local Zones”. On the western portion of the plan lands, the aquifer is described as “Poor Aquifer – Bedrock which is Generally Unproductive”.

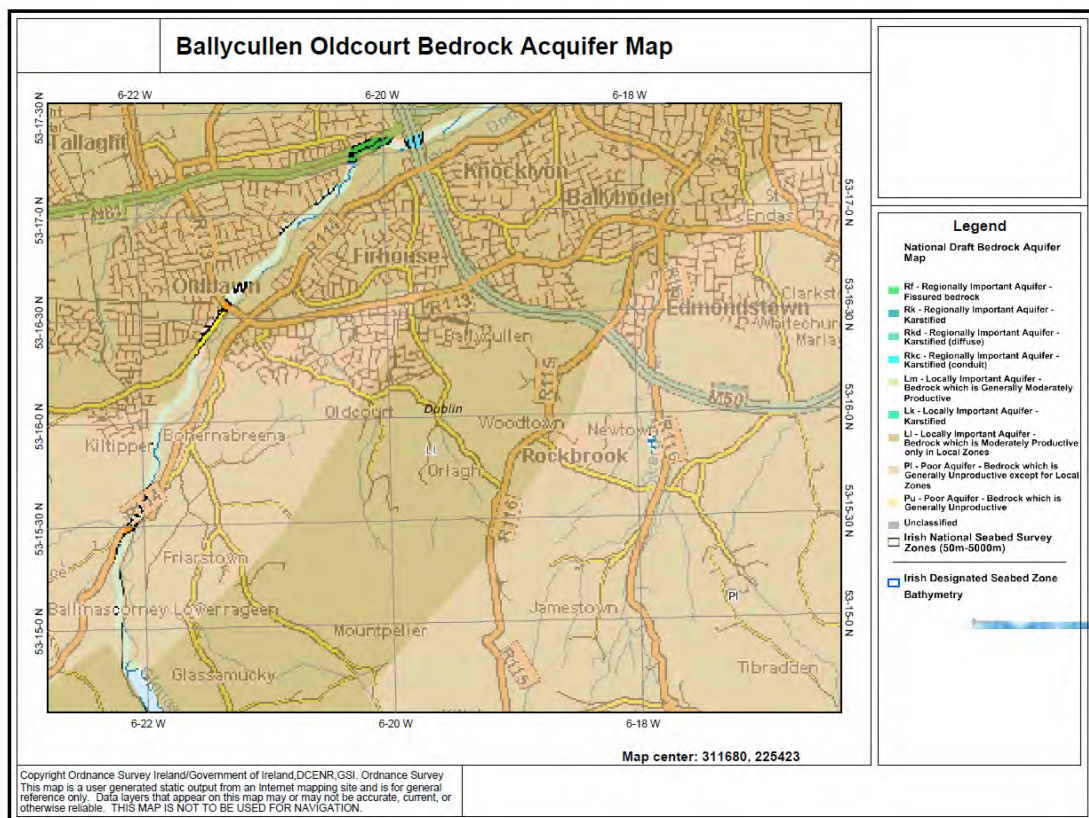


Figure 10: Bedrock Aquifer in Ballycullen Oldcourt

Source: www.gsi.ie

The groundwater vulnerability within the LAP lands varies from low to high to extreme vulnerability with a small portion of the plan lands have been identified as extreme vulnerability where the bedrock is close to the surface (Figure 9).

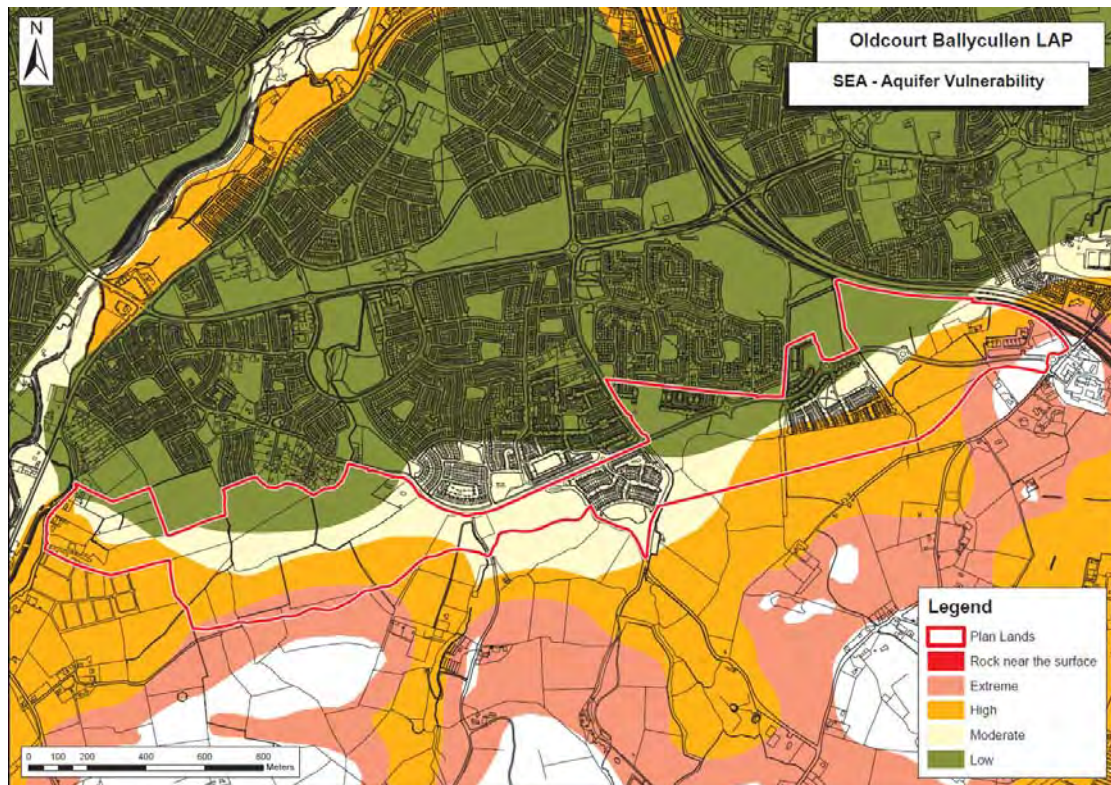


Figure 11: Aquifer Vulnerability

Source: www.gsi.ie

Water: Existing Problems/Environmental Considerations

- Low/Extreme Groundwater Vulnerability on a Locally Important Aquifer
- Both short term and long term implications for the water table

Flooding/Surface Water Policy

The LAP lands are crossed by two streams which are tributaries of the River Dodder, the Ballycullen Stream and the Oldcourt Stream and tributary. There has been partial culverting of the Ballycullen Stream as part of the Dalriada residential development and partial culverting of the Oldstream following the upgrading of the Oldcourt Road (an additional stream, the Whitestown Stream, has already been culverted as part of residential development).

The Office of Public Works (OPW) Draft Preliminary Flood Risk Assessment (PFRA)², using fluvial and pluvial data records, has identified a number of areas in and around the plan lands which would be areas of potential flood risk (Figure 10 below).

² The OPW Draft Preliminary Flood Risk Assessment is part of the Catchment Flood Risk Management Programmes (CFRAMPs) which is a long-term strategy for the reduction and management of flood risk in Ireland.

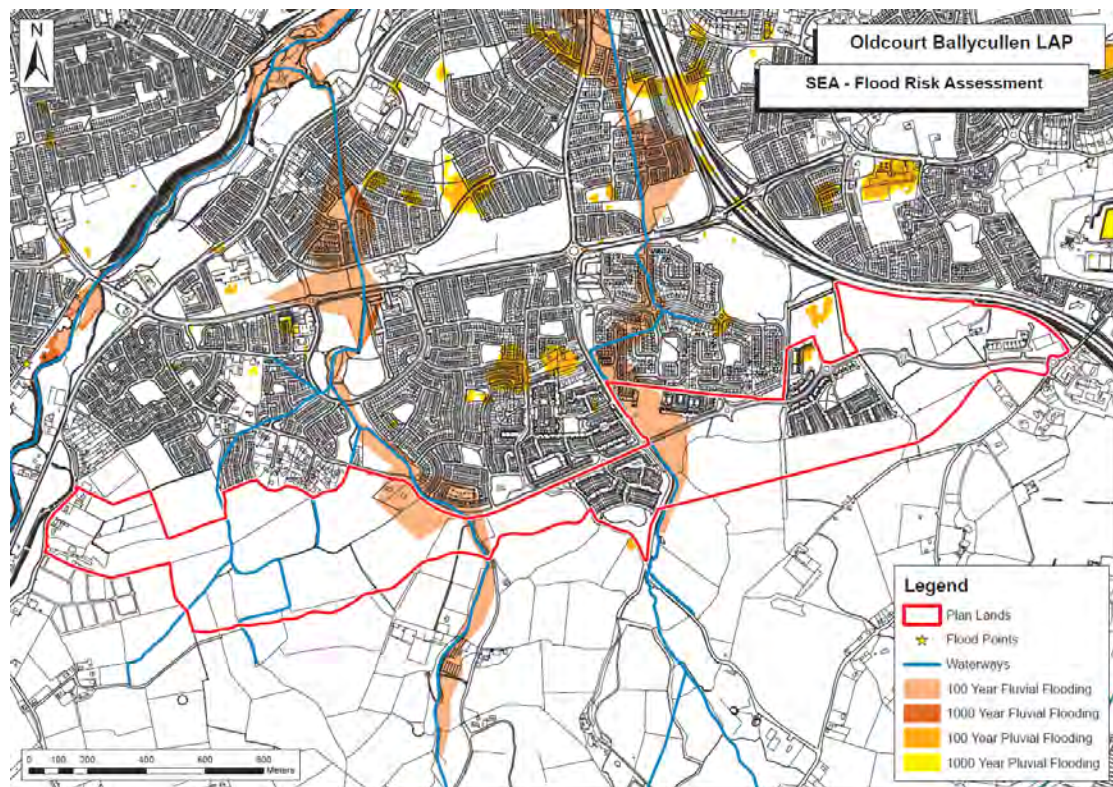


Figure 12: Draft Preliminary Flood Risk Assessment (OPW)

Source: www.cframes.ie

Houses and open spaces downstream of the culverting experienced flooding in November 2011 (Glenlyon, Castlefield & Glenvara). South Dublin is currently seeking significant funding to address this issue.

While the residential development which has occurred within the plan lands made provision for the dealing with surface water runoff by means of retention tanks, it is the intention that a Sustainable Urban Drainage System approach will be required in the new LAP in accordance with the policy as set out in the South Dublin County Development Plan 2010 – 2016.

Flooding / Surface Water: Existing Problems/Environmental Considerations

- Need to resolve existing surface water drainage issues before additional development commences
- A Sustainable Urban Drainage System approach will be required

5.6 Air Quality and Noise Pollution

Air quality impacts are likely to be short-term in relation to construction activity and potentially long term in relation to traffic/transport issues.

The Environmental Protection Agency (EPA) maintains a number of air monitoring stations within South Dublin County. The permanent location of the monitoring station is on the Old Bawn Road in Tallaght, approximately 3 kilometres from the plan lands. Monitoring is done using a continuous monitor for Sulphur Dioxide and Particulate Matter (PM₁₀) at this station.

The latest available document '*Air Quality in Ireland Report (2011)*' by the EPA indicated that none of the monitoring stations in South Dublin exceeded allowable limits during that year.³ The PM₁₀ limit, however, was breached four times in 2011. The daily limit for PM₁₀ is 50 ug/m³. The limit is deemed breached if more than 35 exceedances occur during the year. The table below shows the number of exceedances at the station in South Dublin based on available data to 31st December 2011.

Station Name	Number of values greater than 50 ug/m ³ (year to date)	Station Location	Station Type	Data available to	Station Operator
Tallaght	4	Dublin 24	Suburban Background	31 st December 2011	Fingal County Council

An air quality assessment was carried out in 2004 as part of an Environmental Impact Statement (EIS) for a proposed mixed use residential and commercial development in the south-east portion of the plan lands at Ballycullen (SD04A/0393). The analysis concluded that all air quality monitored did not exceed allowable limits and any increases in emissions during the short term construction period of the subject development would be mitigated against.

Noise Pollution and Noise Mapping

On foot of the Directive 2002/49/EC (transposed into the Environmental Noise Regulations), the four local authorities within the agglomeration of Dublin (Dublin City Council, Fingal, Dún Laoghaire-Rathdown and South Dublin County Councils) have prepared a Noise Action Plan, including noise maps for the Dublin Agglomeration 2008-2013.

³ Source: EPA Website. www.epa.ie/whatwedo/monitoring/air/data

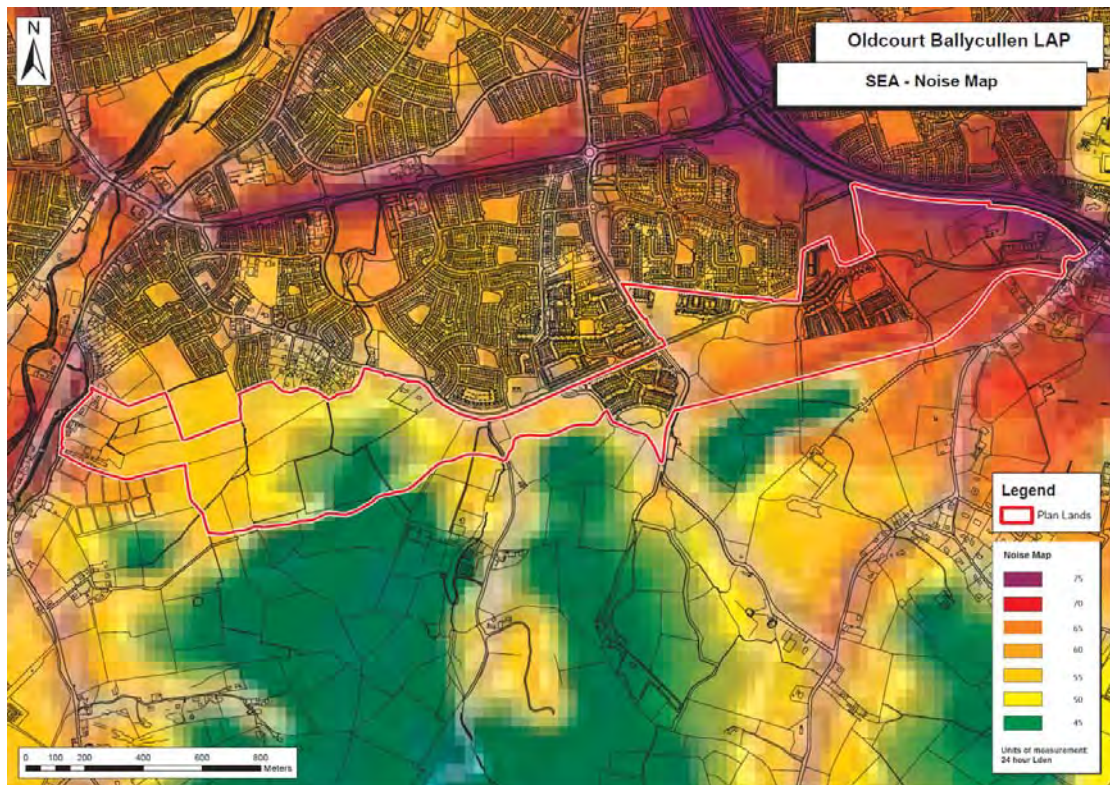


Figure 13: Noise Map

The Ballycullen area has some high levels of environmental noise, originating from the M50 motorway. Under Directive 2002/49/EC relating to the assessment and management of environmental noise, the EU has introduced the indicator LDEN, standing for the long term average sound level over the day, evening and night periods. The equal to or greater than 75 Lden (Db) represents the highest band of roadside noise as measured by the National Roads Authority on National Primary Routes.

The Noise levels in the LAP area is likely to increase short-term during the construction periods of any development but also in the longer term due to increased vehicular movement.

Air Quality and Noise Pollution: Existing Problems/Environmental Considerations

- Lack of existing information in relation to air quality data
- Noise mitigation policies and mitigation measures required in the LAP areas adjoining the heavily trafficked M50

5.7 Waste Management

South Dublin County Council operates within the strategy and policies of the "*Dublin Regional Waste Management Plan*". Waste is baled at the Council's Baling Station at Ballymount and is disposed of in the Council's engineered landfill at Arhurstown, Co. Kildare. The various private Household Waste Collection Service Providers in South Dublin include a recycling and residual waste collection service. Facilities are available at Ballymount Civic Amenity and Recycling Centre for householders to dispose of household waste, household green waste, and recyclable waste.

5.8 Material assets

- Waste Water;
- Drinking Water;
- Transport Infrastructure;

Waste Water

The Dodder Valley Sewer System services the plan lands; it follows the Dodder Valley from Templeogue to Clonskea and eventually the sewer flows into the wastewater treatment works in Ringsend. The Council is cognisant of the need to ensure the requisite wastewater treatment provision to allow for development growth without which the development would conflict with the requirements of the Urban Wastewater Treatment Directive which requires the collection and high level treatment of wastewater, specifically those to be discharged to sensitive waters such as Dublin Bay (the terms of the recent EPA operating license reinforce this aspect).

Waste Water: Existing Problems / Environmental Considerations

- Ensure the requisite wastewater treatment provision to allow for development growth

Drinking Water

The LAP area in the past suffered from inadequate water pressure; the deliverance of the Boherboy Water Supply Scheme, however, has improved this situation in recent years. The Boherboy Water Supply Scheme (due for handover in the first quarter of 2013) involved a major upgrading and expansion of the water supply network and storage infrastructure in the areas of Saggart, Rathcoole, Brownsbarn, Citywest, the Southern parts of Tallaght and Ballycullen Oldcourt. This scheme provides for the construction of 41km of watermain, new reservoirs at Saggart and Kiltalown and a pumping station in Saggart.

Transport Infrastructure

Road Network

The plan lands are situated to the south-west of the M50 motorway on what is currently the edge of the urban area, some 9km southwest of Dublin city centre and just 1/2km from junction 12 of the M50. The lands are serviced by the new distributor road (Stocking Avenue) which links Stocking Lane with the Ballycullen Road and Hunter's Road which continues westwards to link up with the Oldcourt Road. While the lands at the Ballycullen end of the proposed LAP are more than adequately serviced by the new distributor road, those at the western Outdoor end are landlocked. The South Dublin County Development Plan, see extract below, includes a long term proposal to connect the new distributor with the Bohernabreena Road.



Fig 14: Development Plan 2010 – 2016 - Extract

Public Transport

The plan lands are served by bus route operated by Dublin Bus running from Ballycullen Road/Knocklyon/Templogue to Dublin city centre (no. 15) and from Stocking Ave/Ballyboden to Dublin city centre (no. 15b). The nearest Luas stop to Ballycullen Oldcourt is located at Saggart, c. 4/kilometres to the north-west of the plan lands.

A draft public transport accessibility study was carried out for the South Dublin County area in late 2010. The study examined the frequency of Main-line Rail, the Luas and bus services, dividing them into the categories high, medium and low accessibility levels as detailed below.

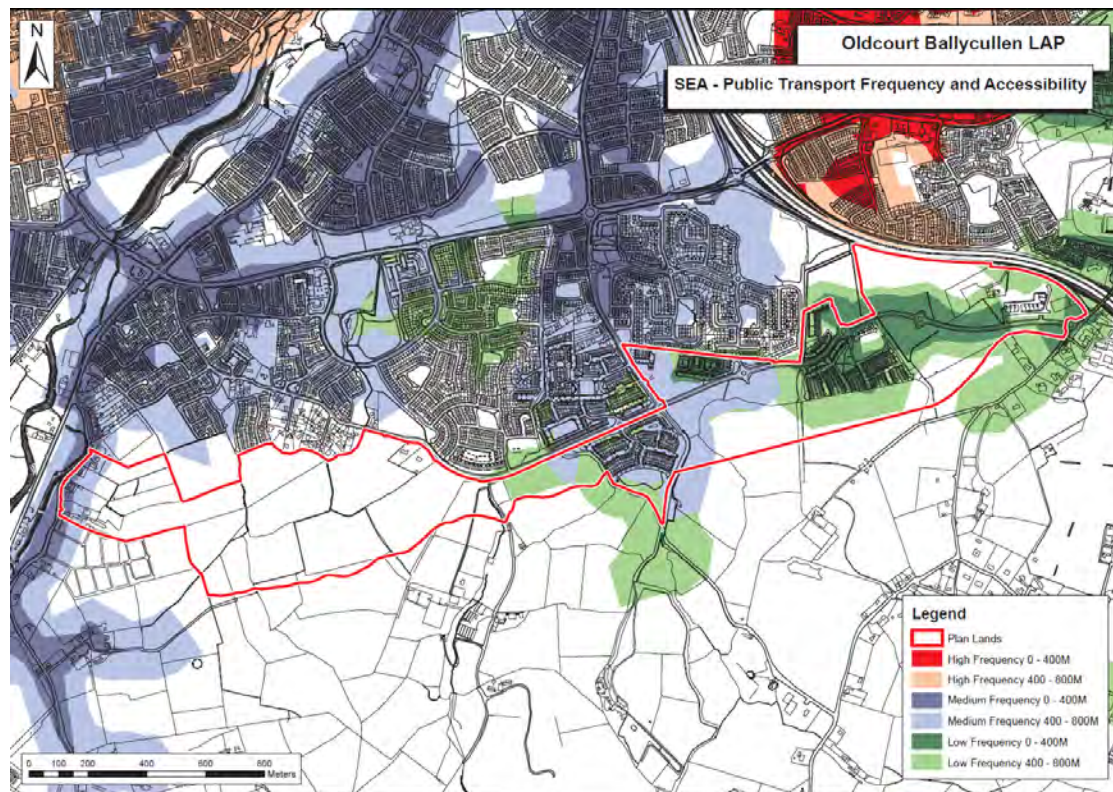


Fig 15: Public Transport Accessibility 2010

The Census 2011 information records that of the proposed LAP area population of 968, aged five years and over, categorised by means of travel to work, school or college indicates that 17% of this population use public transport or non-vehicular means compared to a County figure of 35%.

Transport Infrastructure: Existing Problems / Environmental Considerations

- Make provision for improved cycle and walking routes within the LAP land
- The use by the existing population of public transport or non-vehicular means is less than half that of the County figure

5.9 Cultural Assets

Archaeological and Architectural Heritage

There are no structures from the Record of Monument and Places list or the Record of Protected Structures within the proposed LAP land.

A Report by Archaeological Technology Ltd., assessing the Oldcourt area, identifies thirteen features of archaeological potential which were recorded during aerial photographic analysis of the proposed development area in January 2007 – the majority being visible as circular dark areas or vegetation growth. These features may mark the location of enclosed circular sites such as early medieval

ringforts, prehistoric fulacht fiadhs, burials or settlement centres. The report stated that while no recorded prehistoric sites or material have been recovered from the immediate development area, this is probably due to the absence of significant ground disturbance (other than tillage) which might bring such features to light.

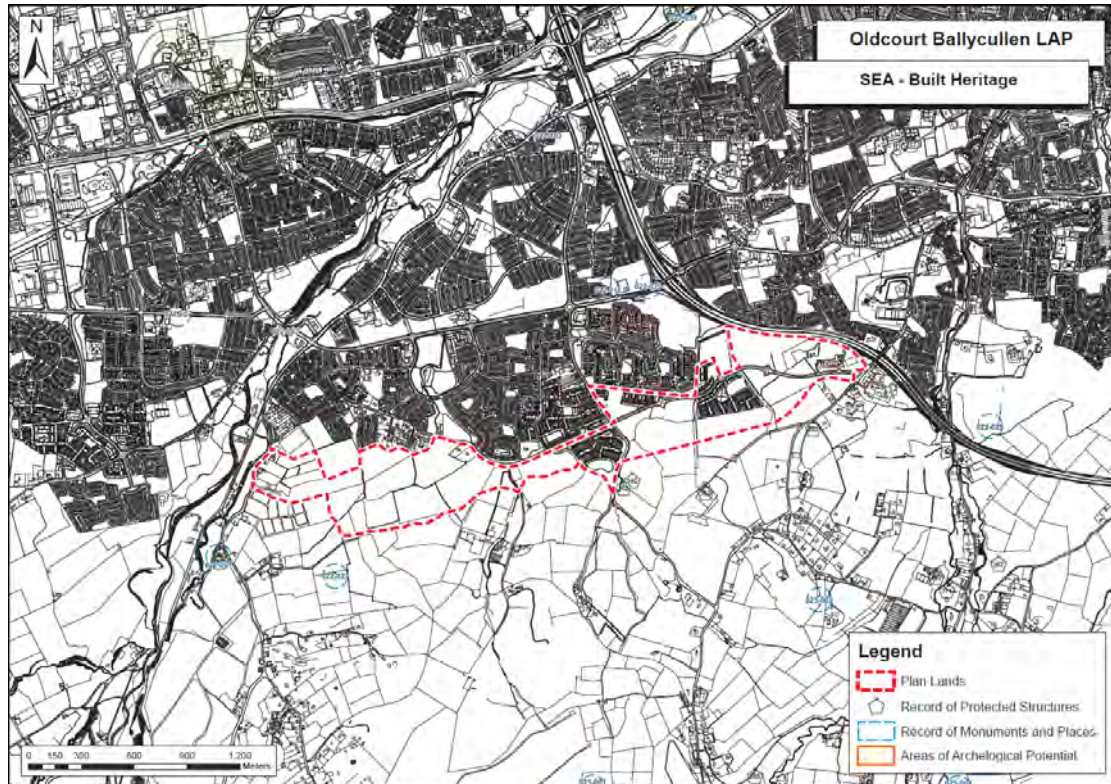


Figure 16: Record of Protected Structures and Recorded Monuments and Areas of Archaeological Potential:
Source: SDCC

In addition, a notable curvature in the northwestern townland boundary of Ballycullen shows a possible indication of a degraded enclosure site or as an area of archaeological potential. St. Columcilles Well, just outside the LAP boundary, is situated at the top of the Ballycullen road, close to the entrance gates of Orlagh College; it lies in the townland of Oldcourt. In the field beside the well, there is a large plain cross made of granite, matching a cross near to the Firhouse road, these crosses were erected in the 1850s when a disease of pleuropneumonia afflicted the dairy herds country wide.

Cultural : Existing Problems/Environmental Considerations

- Potential for significant archaeological structures is high

5.10 Climate Change and Sustainability

There are a number of issues facing South Dublin in relation to the development of the plan lands and its impact on climate change. At present there are a number of undeveloped sites within the plan lands. An increase in population within the plan lands, in conjunction with the lack of public transport serving the area, will result in increased amounts of greenhouse gas emissions from transport movements.

6.0 Conclusion

The purpose of the Issues Paper has been to identify the significant environmental issues to be taken into consideration in the making of the new Plan. The proposed LAP area while sharing a number of environmental characteristics also has two distinct characters. The overall area is at the edge of the urban expansion at the foothills of the Dublin Mountains. The Ballycullen area has already seen considerable development (634 permanent dwellings and a population of 1324) and a degree of environmental degradation (hedgerow loss) and the construction of surface water systems that are not to present day requirements. The Oldcourt area is as yet undeveloped and retains its agricultural grassland, with intact field boundaries. The following are the Existing Problems / Environmental Considerations of note;

- While there are no environmentally designated sites, there is potential for significant loss to the Biodiversity Network
- There is an existing problem of flooding just outside the area due to inadequate surface water infrastructure There is a noise issue along the heavily trafficked M50
- There is a low usage of public transport and non-vehicular means of travel by the existing population
- There is the potential for archaeological impact on sites which are not entered into the Record of Sites and Monuments

Information Gaps:

- No County Biodiversity Plan
- Limited information on Air Quality

This Issues paper will form a basis for consultation with the statutory bodies. Comments from the Environmental Authorities on this Scoping Issues Paper will be addressed and incorporated into the Environmental Report.