

SECTION SEVEN: New Village Centre

7.0 Introduction

Apart from the small shop operating in one of the houses and a pre-school childcare facility provided in the school there appears to be no businesses operating in Rivermeade.

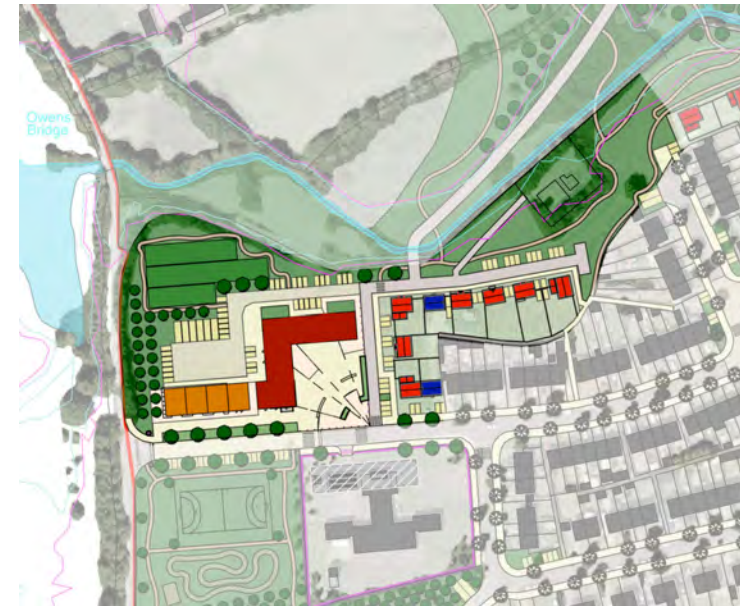
Keelings, a large agri-business is situated in close proximity to the LAP lands on the south side of Killeek Lane. There is an opportunity as part of this LAP to maximize the potential to integrate Rivermeade with this key expanding employment area for the mutual benefit of both those living in Rivermeade and Keelings

7.1 Proposed Village Centre

The proposed Village Centre is located at the entrance to Rivermeade in Development area 1 opposite the National School. It is an objective of Fingal County Council to promote and encourage the provision of retail, service, community and light industrial, incubator, and /or business units for appropriate small to medium sized businesses at this location in order to create a sustainable balance between residential, service and employment uses in Rivermeade.

Fingal County Council will encourage the development of retail and commercial services and facilities at a level appropriate to the village to meet the needs of the existing and future residents within Rivermeade and its rural hinterland. It is an objective to ensure that the proposed village centre is designed to the highest standards so that it can become the focal point of this expanding area.

Development area 1 shall be the subject of one single planning application / application for planning consent within which the phasing of development within this area shall be clearly indicated.



7.2 Employment

Fingal County Council will encourage and facilitate the establishment of businesses at this location.

To facilitate economic development and the promotion of sustainable employment in this area, the LAP provides for the development of employment, retail and other appropriate commercial uses within Development area 1.

Keelings, a large agri-business is situated in close proximity to the LAP lands on south side of Killeek Lane. The LAP provides for a proposed new link road between Rivermeade and an improved Killeek Lane with shared path and cycle way which will connect those living in Rivermeade with this key expanding employment area for the mutual benefit of both those living in Rivermeade and Keelings.

Fingal County Council will co-operate with state and semi-state employment agencies and local entrepreneurs in encouraging and supporting appropriate small and medium enterprise, and promoting the establishment of new employment opportunities in Rivermeade.

7.3 Commercial Recreation

The LAP provides for the retention and refurbishment of the existing cottage and farm buildings to provide for appropriate new uses in association with the adjoining lands along the River Ward including the reservoir which could be restored to provide for recreational use [Development area 8- *Sustainable Living Centre*]. In addition to the benefits arising from the development of the riparian corridor, the farm complex and reservoir for the existing and expanding community in Rivermeade they will serve as important 'attractors' in their own right in bringing people to Rivermeade.

7.4 Broadband

Broadband connectivity is considered a necessity for any village if it is to attract new businesses and new residents. The Council will support the expansion and rollout of broadband services in the village.



Village Development Framework Plan, showing ideas for a Village Square

SECTION EIGHT: COMMUNITY and EDUCATIONAL PROVISION

8.0 Existing facilities

Built community facilities in the village comprise a community centre; Mary Queen of Ireland National School and a childcare facility in the school. Public open space is located along the Ward River and along the boundary with the Toberburr Road and adjoining the school. Existing recreational facilities include an informal football pitch, a playground, mini all weather pitch and a passive recreational area.

There is a church; national school and post box in St. Margaret's village, to the south. Other community facilities located in close proximity include St. Margaret's GAA Club and St. Margaret's golf club which are located on the R122 to the west of Rivermeade and a nursing home on the Toberburr Road to the south.

The nearest garda station is in Swords. Rivermeade is serviced by Clonmethan Health Centre in Oldtown.

8.1 Community Facilities

As part of the development of the LAP lands, a Village centre will be developed to serve the day to day needs of the expanding residential community. A community building and community garden shall be provided as part of the Village centre as required. A Civic space shall be incorporated as a key element in the design of the Village centre. In addition community facilities in the form of additional recreational facilities and extended public open space areas shall be provided as part of the development of the LAP lands. It is an objective to provide for a number of off street car parking spaces within the small area of public open space adjoining the existing community centre.

8.2 Educational Provision

The primary School in Rivermeade *Mary Queen of Ireland National School* adjoins the main area of public open space and existing recreational facilities including the playground and multi functional mini pitch. The school is located opposite the proposed village centre. There are 62 no. pupils and 3 teachers in the school. The pupils primarily come from Rivermeade. School needs will increase with the development of



the LAP lands. As part of this LAP process consultation took place between Fingal County Council and the Department of Education and Science. The existing school site is of sufficient size to accommodate additional classrooms as required and the LAP shows an indicative extension to the school on its northern side, enabling the school to provide a strong presence onto the Main Street opposite the new village centre.

Fingal County Council will facilitate and co-operate with community and educational organizations in the provision of services for the community including, in particular, schools and crèches to meet the required needs of both the current and expanding population.

8.3 Childcare facilities

It is an objective of this LAP that childcare facilities shall be provided in accordance with the DoEHLGs' Childcare Facilities Guidelines for Planning Authorities. It is an objective of this LAP to promote the development of a purpose built child care facility if required in the village centre.

8.4 Home-Based Economic Activity

Small-scale and appropriate home-based economic activity will be promoted and encouraged where the proposal does not adversely affect existing residential amenity and does not alter the primary use of the dwelling as a residence.

SECTION NINE: GREEN INFRASTRUCTURE

9.0 Green Infrastructure

The term Green infrastructure is increasingly being used to describe the interconnected networks of land and water all around us that sustain environmental quality and enrich our quality of life. This includes the nature conservation areas, parks, open space, rivers, floodplains, wetlands, woodlands, farmland and coastal areas found throughout Fingal and which surround and are threaded through our villages, towns and urban areas.

The key themes which encompass green infrastructure are:

- Landscape Character
- Biodiversity
- Open Space and Recreation
- Archaeological and Built Heritage
- Sustainable Water Management

This LAP proposes objectives for the protection and enhancement of green infrastructure in Rivermeade.

9.1 Landscape Character



The LAP lands are located within the designated Rolling Hills Character Type

The undulating nature of countryside together with trees and the Ward river valley help create a rich landscape both visually and ecologically. The LAP includes objectives to protect existing trees/ hedgerows and to provide for appropriate strategic planting, ensuring that new development will be 'absorbed' within this landscape and the impact of development in the landscape will be reduced.

9.2 Landscape Character Objectives

- To minimise the visual impact of future development on the setting and visual quality of this Rolling Hills Character Type
- Prohibit proposals necessitating the removal of extensive amounts of trees and hedgerows
- To provide for appropriate strategic planting

9.3 Biodiversity

Biodiversity refers to the diversity of ecosystems and individual species of flora and fauna. It is an important part of the landscape in which we live and which gives each local area its sense of place. There are many elements of flora and fauna in the village and the surrounding area which are all part of the interrelated natural fabric of the landscape, particularly the many trees and hedgerows. They function as ecological 'corridors' or 'stepping stones' which enable species to move from place to place.

The Fingal County Development Plan through its policies and objectives is committed to the protection and enhancement of the county's biodiversity. The Fingal Heritage Plan 2005-2010 provides for practical actions to enhance our understanding and enjoyment of heritage including our natural heritage and to better protect and manage it. The Fingal Biodiversity Plan sets out the Council's objectives for biodiversity conservation for the next 20 years with a particular emphasis on the first five years (2010-2015). A major element of the Fingal Biodiversity Plan is the development of the Fingal Ecological Network.

The River Ward Crosses through the LAP lands and flows eastwards to the Broadmeadow Estuary. This river shall be protected and maintained for its biodiversity and amenity value including surface water management. In order to protect, improve and enhance

the natural character of this watercourse, the culverting of the Ward River shall not be permitted and the river shall be retained within a riparian corridor which shall widen out into proposed public open space areas.

9.4 Biodiversity Objectives

- Promote the conservation and enhancement of biodiversity having regard to the policies/objectives of the Fingal County Development Plan, the Fingal Heritage Plan 2005-2010 and the Fingal Biodiversity Plan, while allowing for appropriate development, access and recreational activity.
- Conserve, protect and enhance existing trees and hedgerows, within the LAP lands which form wildlife corridors and link habitats, providing the 'stepping stones' necessary for wildlife to flourish, while also protecting and enhancing surface water and groundwater resources in the area.
- Developers shall submit proposals for the protection and management of local biodiversity features in any future development proposals.
- Developer's shall identify, protect and conserve, in co-operation with the relevant statutory authorities and other groups, vulnerable, rare and threatened species or wild flora and fauna and their habitats. These include plant and animal species afforded protection under the Wildlife Acts and the EU Habitats & Birds Directives.
- In all future planning applications, developers shall submit a full ecological assessment by a suitably qualified professional including measures to avoid or minimise the loss to local biodiversity which would potentially have a negative impact on the local biodiversity of the area.
- To protect the integrity of the Ward River for its biodiversity and amenity value including surface water management, a riparian corridor shall be established along the river free from new development.
- To promote and facilitate public access along the Ward River.
- Integrate provision for biodiversity with public open space provision and sustainable water management measures (including SuDs) where possible and appropriate.

9.5 Trees and Hedgerows.

Existing trees and hedgerows contribute strongly to the character of this area and act as a transition into the adjoining agricultural landscape. Field and road boundaries are

defined by trees and hedgerows. They provide important wildlife habitats as well as contributing significantly to the character, setting and amenity of Rivermeade.

9.6 Trees and Hedgerows Objectives

- To protect existing trees and hedgerows within the LAP lands which are of amenity or biodiversity value and contribute to the landscape character in so far as is practicable. This relates in particular to those identified on the LAP map. Future development proposals shall provide for their protection and management into the future.



SECTION TEN: OPEN SPACE AND RECREATION

10.1 Existing Open Space:

Existing public open space comprises the public open space lands adjoining the River Ward and the public open space lands adjoining the school.

Public open space lands adjoining the River Ward: This area is of limited amenity value presently and poorly supervised by housing backing onto this space. There is the opportunity and scope to improve its future use, function and appearance in conjunction with new development in Rivermeade. The only recreational facility here is a small informal football pitch beside the entrance to Rivermeade.



The LAP provides for the public open space lands adjoining the River Ward to be extended to provide the main recreational /amenity spine in this expanding village and to include new public open space and recreational facilities to the east. It is an objective to restore the reservoir for recreational use.



Public open space lands adjoining the school: The existing public open space located at the entrance to Rivermeade and adjoining the national school is well used. Existing recreational facilities include a playground, a mini all weather pitch, and pathways.

10.2 Providing for an Active Recreational hub in Rivermeade

It is an objective of Fingal County Council to develop an active recreational hub in Rivermeade to serve the expanding village and its rural hinterland. This will provide for improved recreational facilities including a new floodlit soccer pit and possibly a skate board park, tennis and basketball courts and exercise stations. These will be located within the existing and new public open space areas.

10.3 Future required public open space to support new residential development

High quality public and private open space areas shall be provided in accordance with the provisions of the CDP. Developers within the LAP lands shall provide a minimum public open space of 6.2 acres [2.5 hectares] per 1000 populations.

Based on the proposed number of houses 139, the LAP would have a population of circa 486 for public open space purposes [139 no. 3 bed houses @ 3.5 persons units = 486]. Applying the above standards, this population will generate a demand for circa 1.21 hectares [3 acres] of public open space .

10.4 Relocation of the pitch



The LAP provides for the relocation of the pitch at the entrance to Rivermeade within the eastern part of the subject lands. The proposed pitch shall be an all weather floodlit pitch to maximise it's future use.

No development shall take place within Development area 1 until the existing football pitch has been replaced within the LAP lands, or at another suitable location within the Rivermeade area.

Note: This will be a replacement pitch and shall not be considered as fulfilling part of Public Open Space requirements supporting the new development.

10.5 Green Corridor

Green corridors are required along all watercourses in the interests of bio-diversity protection, amenity value, flood control and surface water management. The LAP provides for a Green corridor along the Ward River. This riparian corridor shall be kept free of development and retained as strategic open space as it forms part of the Fingal Ecological Network. This riparian corridor shall widen out into new public open spaces along the river. It should be noted that Development Plan OS 23 provides that the area of land provided for the Green corridor within the LAP lands shall not be included for the purposes of the calculation of the required public open space to support additional development and it is additional to the Development Plan public open space requirements.



10.6 Existing Reservoir

It is an objective of this LAP to provide for the restoration of the existing disused reservoir for recreational use. It shall form part of the extended linear park along the Ward providing for water based recreational facilities [for example fishing; water sports etc]

10.7 New designated Public Open Space - Development area 4.

A new area of designated Public Open Space circa 4 hectares in area is provided for within the eastern part of the LAP lands, adjoining the River Ward and reservoir to the south [Development area 4]. Future residential development shall overlook this area and provide for the informal supervision of this public area.

Provision shall be made for the development of the active recreational facilities within this area including a new floodlit football pitch to replace the existing pitch at the entrance to Rivermeade. Off street car parking facilities and changing facilities shall also be provided to support the recreational facilities. Other facilities to be provided may include tennis and basketball courts and multi-sport pitches. Ancillary supporting

facilities for example a small pavilion incorporating changing facilities and a café and / or meeting area will be permitted. A playground shall be provided in this area.



10.8 New 'Civic Space'

A new 'Civic Space' suitable for outdoor events shall be provided as part of the Village centre in Development area 1. This area has the potential to become an important civic space for the expanding community located in the new 'heart' of Rivermeade beside a new community building and opposite the school and existing recreational facilities. A 'Civic Space' suitable for outdoor events [e.g. farmer's market and various community gatherings] shall be provided as an integral part of the design of the village centre. This area will form a focal point in the village and as such shall be suitably landscaped to provide for the different functions it may serve. The Village Development Framework Plan details a possible design and layout of this space.

10.9 Existing Public Open Space [development Area 6] beside school

Existing recreational facilities include a playground, a mini all weather pitch and a passive recreational area. There is an opportunity as part of the development of the LAP lands to enhance this area by providing strategic landscaping and additional recreational facilities [including a skate board park and exercise stations] to improve it's amenity value for the benefit of the expanding community in Rivermeade.



10.10 Existing small areas of public open space

It is an objective to provide for improvements to some of the small existing public open space areas, by providing for tree planting and pathways.

10.11 Extending the Ward Regional Park from Knocksedan Bridge to Rivermeade

It is an objective of Fingal County Council to extend the Ward Regional Park from Knocksedan Bridge westwards to Rivermeade: LO 300 - *'Prepare and implement a plan to develop the linear open space along the ward river Valley, improve its accessibility and permeability and extend the park from Knocksedan Bridge westwards to Rivermeade.'*

The proposed extension and development of public open space and recreational facilities in Rivermeade as proposed in this LAP will in time form an important part of the extended Ward river valley park.

10.12 Pedestrian and cycling routes

The road upgrade proposals including the shared footpath and cycle facility along both the Rivermeade Link Road and along the upgraded Killeek Lane will be a key element in connecting Rivermeade to the very attractive Ward River Valley Park 'green route' between Swords and Rivermeade which will in time greatly improve pedestrian and cycling connections between Rivermeade and Swords. The new cycle/pedestrian link from Rivermeade to Swords via Killeek Lane and the Ward River Valley Park could eventually link into the GDA Cycle Network currently being finalised by the NTA.

SECTION ELEVEN : ARCHITECTURAL AND ARCHAEOLOGICAL HERITAGE

11.1 Archeology and Architecture

The National Monuments Act 1930-2004 sets out the legislative procedure for protection of all known archaeological monuments. Section 12 of the National Monuments (Amendment) Act, 1994 relates specifically to the establishment and maintenance of a statutory inventory of sites called the Record of Monument and Places (RMP). Monuments of National significance are identified and listed for protection by the National Monuments Section of the DoEHLG. The Record of Monuments and Places (RMP) is the principal mechanism for protecting sites of archaeological importance.

While there are no Protected Structures or Recorded monuments located within the LAP lands, there are a number of structures and monuments in the vicinity of the lands as follows:

- To the west of the lands along the adjoining Toberburr road, Owens Bridge 639 is listed on the record of protected structures and is described as a 'Bridge and Ford'.
- A fullacht fiadh site (638 and RMP DU011:024) is located to the south west on the St. Margaret's golf club lands;
- A ring fort (635 and RMP DU011:025) is located to the immediate south;
- Ecclesiastical remains (RMP DU011:031) and an enclosure site (RMP DU011:026) are located in close proximity to the east of the LAP lands.
- A potential earthwork site [646] is located to the north east ;
- A thatched dwelling on the Toberburr Road to the south [636]
- Killeek bridge [634]
- Killeek church in ruins and graveyard [633].

Given the presence of archaeological sites in vicinity of LAP lands an archaeological assessment was carried out. In 2007, a geophysical survey of the LAP lands was conducted by J. M. Leigh Surveys in order to locate and identify any responses of potential archaeological interest and to investigate the nature and extent of any archaeological responses identified. The area under investigation comprised of 18 fields. Survey work consisted of gradiometer scanning (32Hectares) and a targeted detailed gradiometer survey totaling 4 Hectares was conducted under licence 06-

R-202 from the Department of the Environment, Heritage & Local Government. Areas of potential archaeological interest were identified within the LAP lands and test trenching is recommended for these areas. Prior to the commencement of any development within the LAP lands test trenching shall be carried out as recommended in the geophysical assessment report dated February 2007 in Development areas 2, 3, 9, and 10. Should future archaeological findings preclude development in parts of the LAP lands the VDFP shall be revised to reflect this.

11.2 Archaeological and Architectural Heritage Objectives

- To protect as yet undiscovered archaeological sites or features that survive subsurface in accordance with the National Monuments Legislation, developer's shall make provision to allow for and fund, whatever archaeological work may be needed on site if any remains are noted following topsoil removal. Any and all required additional archaeological investigations including monitoring during removal of topsoil and during construction phase, shall be carried out under licence and in consultation with the DoEHLG, by a suitably qualified archaeologist under licence from the DoEHLG and the National Museum of Ireland, at the developer's expense.
- Prior to the commencement of any development within the LAP lands, test trenching shall be carried out as recommended in the geophysical assessment report dated February 2007 in Development areas 2, 3, 9, and 10. Should future archaeological findings preclude development in parts of the LAP lands the VDFP shall be revised to reflect this.
- To protect Protected Structures and their settings in the vicinity of the LAP lands.

SECTION TWELVE : WATER SERVICES

12.1 Foul Drainage

The Council aims to protect the environment including local water bodies by ensuring adequate collection, treatment and discharge of domestic, industrial and other wastewater in Rivermeade , in accordance with the Urban Waste Water Treatment Directive. In addition, it aims to anticipate and provide drainage capacity to meet the future demands in the area whilst continuing to protect the environment.

Existing Waste Water Treatment Plant (WWTP): The existing WWTP serving Rivermeade is operating at its design capacity and has no spare capacity .The treatment plant caters for preliminary treatment, secondary treatment; surface aeration and sludge draw off. The treated effluent from the WWTP discharges into the Ward River.

Future Plans: Fingal County Council propose to decommission the existing WWTP, construct a pumping Station on the site of the WWTP and pipe all effluent from Rivermeade to Swords Waste Water Treatment Plant. The pump station has been through preliminary design and the planning consent process. It will cater for current flows from existing development in Rivermeade and up to 200 new residential units. Construction time is due to tie in with Swords WWTP upgrade works. A proposed rising main from the proposed pump station traverses part of the LAP lands and the required temporary and permanent way leaves in respect of this rising main are 5 metres and 10 metres respectively.

Future expansion of capacity of SWWTP: Swords Waste Water Treatment Plant is operating at its design capacity of 60,000 PE (population equivalent) and does not have the capacity to accommodate development within the LAP lands.Fingal County Council intends to upgrade the plant to 90,000 p.e. in the medium term and are investigating the possibility of expanding to 140,000 in the long term. The expanded Swords WWTP [from 60,000 p.e. to 90.000 p.e] is expected to be operational in mid 2015.

All future development within the LAP lands including the housing on the proposed individual serviced sites shall connect to the mains public foul drainage network. No on - site proprietary waste water treatment systems shall be permitted to serve individual houses.

New housing and other major forms of development shall proceed within the LAP lands following the expansion of the capacity of the Swords Wastewater Treatment Plant, the completion of the Toberburr pumping station and pipe connection to Swords WWTP.

All foul infrastructure shall be designed and constructed in accordance with the Greater Dublin Regional Code of Practice for Drainage works and shall comply with the Greater Dublin Strategic Drainage Study (GDSDS)

12.2 Water Supply

The water supply for the majority of the Fingal area including Swords is supplied from the Leixlip water treatment plant. The proposed upgrade of the Leixlip Water Treatment Plant has a planned completion date in 2014, at the earliest.

A trunk water main traverses the LAP lands and the permanent way leave in respect of this water main is 10 metres each side of the watermain.

There are no particular constraints in terms of supplying water to future development within the LAP lands.

In order to limit unnecessary water usage, leaks and excessive consumption it will be necessary to submit and adhere to a water management and conservation plan detailing how best practice in water conservation shall be applied in respect of future development within this LAP area.

The watermain layout for the proposed development must be in accordance with Fingal County Councils 'Guidelines for the Laying of distribution watermain's' amended version 2007, the "Guidelines for Drinking Water Supply". FCC February 2009 Revision 1 and be fully agreed with the Water Operations department of Fingal County Council.

12.3 Surface Water

Surface water disposal from the existing housing comprises a separate public sewer system and water is discharged to the Ward River.

The Ward River traverses the centre of the LAP lands and the Draft flood catchment

areas as identified in the FemFrams study are shown on the LAP map. In order to protect, improve and enhance the natural character of this watercourse, the culverting of the Ward River shall not be permitted and the river shall be retained within a riparian corridor. This riparian corridor shall widen out into proposed public open space areas. This corridor should generally be a minimum of 10-15m wide.

In order to reduce surface water run-off and to minimise the risk of flooding, the LAP lands shall be required to be developed in accordance with SUDS principles in compliance with the 'Greater Dublin Strategic Drainage Study'. This approach using Sustainable Drainage Systems (SuDS) can best be summarised as offering a "total" solution to rainwater management. Water is either infiltrated or conveyed more slowly to the drainage system and ultimately to water courses using for example permeable paving, swales, infiltration trench/blanket, soakways, green roofs, rain water harvesting, detention basins, ponds and wetlands. These facilities are designed to prevent pollution of streams and rivers and to slow down runoff from sites, thereby helping to prevent downstream flooding and improve water quality. A "treatment train" approach is required to mimic natural catchment processes as closely as possible.

A SUDS strategy for the LAP lands has been prepared for Fingal County Council by *Oliver Russell and Associates Limited*. This strategy comprises of a series of features which incrementally reduce pollution, flow rates and volumes of runoff. (See Appendix 2)

Further information on SuDS is available at www.suds.com.

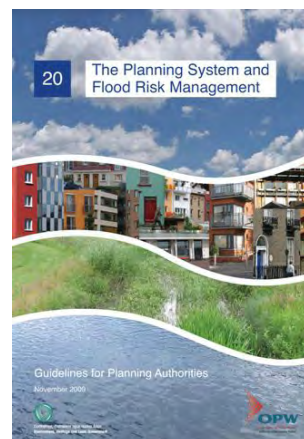
No construction will be permitted within the plan lands without a comprehensive surface water drainage plan.

The surface water system for the proposed site shall be designed and constructed in accordance with the Greater Dublin Regional Code of Practice for Drainage works and should comply with the Greater Dublin Strategic Drainage Study (GSDSDS).

It is important to note that drainage ditches (whether dry or not) are considered watercourses under the 1977&1990 Water Pollution Acts and should not be culverted except where the need arises.

The exact details of this system will be decided at planning application stage and will be in accordance with best practice and the requirements of Fingal County Council.

12.4 Flood Risk Management



Fingal County Council, along with Meath County Council and the Office of Public Works (OPW) are currently carrying out the Fingal East Meath Flood Risk Assessment and Management Study (FEM FRAMS). This is a catchment-based flood risk assessment and management study of 19 rivers and streams and their catchments within the Fingal East Meath area. The core objectives of the Fingal East Meath Flood Risk Assessment and Management Study (FEM-FRAMS) include:

- the development of maps for the existing and potential flood hazard and risk areas within the study area,
- the development of an economically, socially and environmentally appropriate long- term strategy (a Flood Risk Management Plan) for the Fingal and East Meath study area and associated SEA,
- setting out the measures and policies based on the core objectives including guidance on appropriate development that should be pursued by the Local Authorities.

The River Ward crosses through the LAP lands and divides the subject lands into two parts. The Ward River has been surveyed as part of the FEM-FRAMS study and draft flood risk maps for this river have been prepared for the 1% (1 in 100yr) and 0.1%(1 in 1000yr) probability of flooding. These draft flood catchment areas are shown on the LAP map and it should be noted that these have yet to be finalised.

The Department of Environment, Heritage and Local Government and the OPW have jointly published a comprehensive guidance document for the management of flood risk entitled "The Planning System and Flood Risk Management Guidelines (November 2009)" are aimed at ensuring a consistent, rigorous and systematic approach to fully incorporate flood risk assessment and management into the planning system. The Guidelines require the incorporation of flood risk management in the plan-making and development management processes. Fingal County Council must

have regard to the planning and development principles outlined in the national flood risk management guidelines when considering development proposals.

Fingal County Council will complete a formal stage 2 Flood Risk Assessment prior to any future planning applications / applications for planning consents.

'Flood risk assessment will be required in respect of any proposed development on sites which include areas within the 100 and 1000 year flood risk areas and this shall form part of any planning applications/ applications for planning consents.

12.5 Water Quality

The Council is responsible for maintaining, improving and enhancing the environmental and ecological quality of our waters by implementation of pollution control measures, licensing of effluent discharges, implementing and monitoring compliance with environmental legislation and drawing up pollution contingency measures on a local and regional level.

The Water Framework Directive (WFD), 'establishing a framework for community action in the field of water policy', became effective in 2000. The overall objective of the Directive is to prevent deterioration in the status of any waters and achieve at least 'good status', by 2015. Further information is available at www.wfdireland.ie.

The WFD requires that all member states adopt a comprehensive integrated river-basin based approach to water management. Its aims include expanding the scope of protection to include surface waters, ground waters, transitional and coastal waters, achieving 'good status', for all waters by 2015, basing water management on river-basin districts and getting the public involved in water management. All of Fingal is within the Eastern River Basin District (ERBD).. The background to the processes and the reports of the ERBD are available at www.erbd.ie

The Ward River flows through the LAP lands. This river flows eastwards into the Broadmeadow Estuary east of Swords. The proposed development lands at Rivermeade are located within the Broadmeadow Water Management Unit [WMU]. The River Ward has been assigned 'poor' status by the EPA at Rivermeade under the Water Framework Directive. The Broadmeadow WMU has also been designated 'poor status'.

In 2009, a Programme of Measures was established for each Water Management Unit (WMU) within the river basin district as part of the ERBD River Basin Management Plan 2009-2015. This is aimed at addressing those pressures which threaten the water environment and put water bodies at risk of not achieving 'good status' by 2015.

The onus is on Fingal County Council to 'restore' any water bodies in this WMU to 'good status' by 2015. Further information is available in the ERBD River Basin Management Plan 2009-2015 and the programme of measures at www.erbd.ie.

In relation to waterbodies within or adjacent to LAP lands, it is imperative that any works during construction/development phases do not impact negatively on the Rivers or any tributaries.

The proposed replacement of the existing wastewater treatment plant with a pump house which will pump sewage to the Swords wastewater treatment plant will result in a major improvement to the water quality in the Ward River downstream of the present discharge point. The LAP lands shall be required to be developed in accordance with SUDS principles.

12.6 Groundwater Vulnerability and Protection

The Geological Survey of Ireland (GSI) has recently completed Ground Water Mapping for Fingal. This Mapping indicates that a significant portion of the site is impacted by a Source Protection Zoning. Appropriate measures will need to be adopted to protect the groundwater source.

Groundwater and water catchment areas have an inherent ecological and economic value and are a major resource that needs to be protected. Groundwater contributes to rivers, lakes and therefore influences its amenity and recreational value. The Council is responsible for the protection of all waters including rivers, lakes, and groundwater sources. The responsibilities include; implementation of pollution control measures, licensing of effluent discharges, implementing and monitoring compliance with environmental regulations, the drawing up of pollution contingency measures.

It is an objective to protect existing ground water sources from pollution during construction/development works

SECTION THIRTEEN: TRANSPORTATION

13.0 Existing Road network

Rivermeade estate was constructed in the middle of the 1970's without any significant supporting road improvements. Road connections between Rivermeade and Swords and Finglas are poor. Rivermeade is accessed from the Toberburr Road which passes north-south along the western boundary of the subject lands. Killeek Lane runs in a west-east direction along part of the southern boundary of the subject lands. Both roads are narrow winding third class rural roads with poor vertical and horizontal alignments and no footpaths. The LAP provides for the necessary road improvements and the phasing of development in association with road improvements which will improve the accessibility of Rivermeade to adjoining areas and to Swords in particular.



Killeek Lane



Toberburr Road

13.1 Future improved road network serving the LAP lands

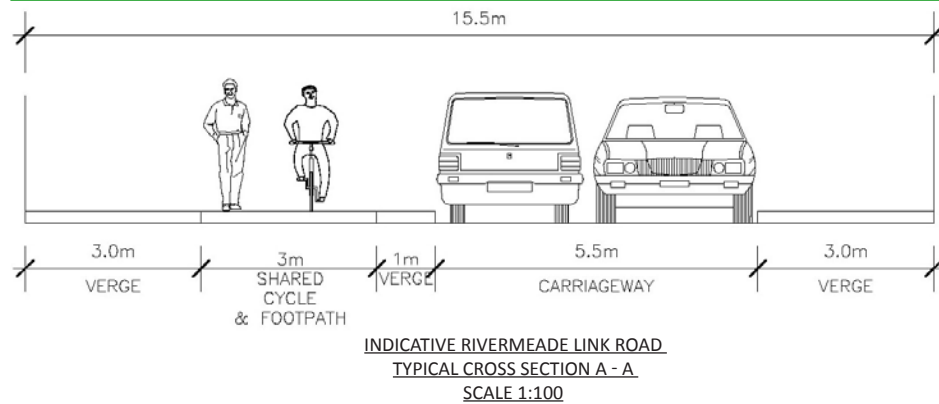
A number of external road improvements and new connections will need to be developed to improve accessibility between Rivermeade and Swords and Finglas and to facilitate future development at Rivermeade. The LAP provides for road improvements in tandem with future development.

Rivermeade Link Road and the upgrading of Killeek Lane

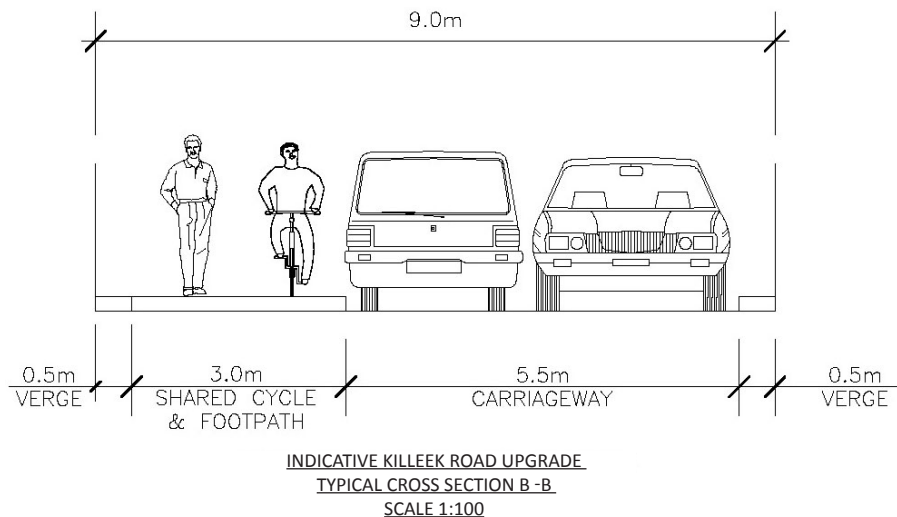
The LAP seeks to provide for [1] the construction of a new link road between the LAP lands and Killeek lane and [2] the upgrading of the eastern part of Killeek Lane to provide an improved alignment and a shared pedestrian / cycle way .

The length of the new link road would be approximately 300m and the upgrade of Killeek Lane extends for approximately 1.4km as far as the Naul Road.

The proposed cross section for the link road includes a carriageway width of 5.5m, a 3m wide shared footpath and cycleway with a 1m grassed separator strip and 3m grassed verges on both sides. The diagram below shows the typical cross-section of the Proposed new link road.



The upgrade of Killeek Lane is required to provide suitable facilities for pedestrian and cyclists. The indicative cross section includes maintaining a carriageway width of 5.5m (existing varies from 4 – 6m), the provision of a 3m wide shared footpath and cycle way on one side and 0.5m wide grass verges on both sides. Appropriate



road widening could be undertaken on one side so as to minimise the impacts on boundaries / trees. The diagram above shows a typical cross section for the Killeek Lane Upgrade Section. This layout is similar to the R335 in Mayo for the provision of a shared pedestrian and cycle facility on a rural road (see Photo right).

The Rivermeade Link Road and the improved Killeek Lane will in time tie in with the proposed Swords Western Distributor Road at Naul Road, which will see footpath and cycle facilities provided south along Naul Road and east towards Swords Town Centre along Brackenstown Road. The proposed link road will also provide a more direct route for a bus connection to the public transport facilities in Swords including the proposed Metro North.



The indicative road upgrade proposals including shared footpath and cycle facility along the Rivermeade Link Road and the upgrading of Killeek Lane will be a key element in connecting to the very attractive Ward River Valley Park 'green route' between Swords and Rivermeade.

The Rivermeade Link Road and the upgrade of Killeek Lane shall be facilitated by Fingal County Council in the context of development proceeding within the Plan lands in conjunction with the main landowners within the Plan lands. In this regard no more than 35 of the 74 [$< 50\%$] indicative housing units in areas 2,3 and 5 shall be sold pending the construction of the Rivermeade Link Road and the upgrade of Killeek lane .

The proposed Rivermeade Link Road and the proposed upgrading of Killeek Lane will both be subject to separate statutory consent processes. They will either be the subject of future planning applications or applications for planning consents.

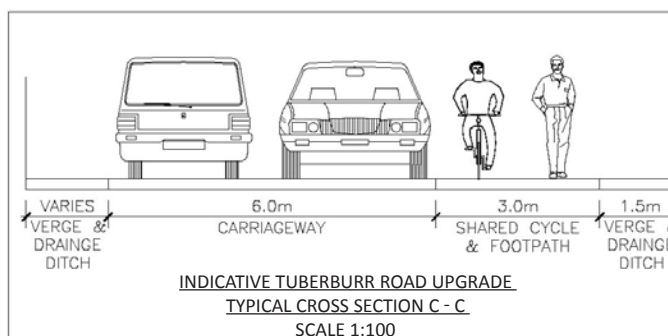
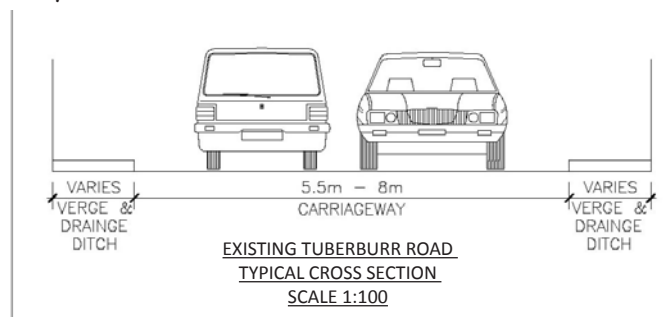
The proposed upgrading of Killeek Lane will be subject to a detailed design in the future. The detailed design will be prepared having regard to protecting the existing rural character and visual amenities of this area and will have particular regard to minimising impacts on existing properties; trees and hedgerows and Protected Structures [Killeek Bridge and Killeek Church and Graveyard]. Any trees/ hedgerows that have to be removed will be replaced along realigned boundaries. Consideration will be given to including a weight restriction on the upgraded Killeek Lane.

Toberburr Road Improvements.

Fingal County Council will also facilitate the upgrade of the Toberburr Road to include improved forward visibility at a number of sharp bends, through verge widening, and a shared footpath and cycle way along one side. These upgrades would be necessary to improve the safety of pedestrians and cyclists and ensure that the current network would be able to deal with the additional traffic arising from the development of the LAP lands. Improvements to Toberburr Road can extend from the entrance to Rivermeade to St. Margaret's [circa 2.5 kms] providing for shared facilities for pedestrian and cyclists.



The diagrams below show the existing and indicative typical cross sections. This indicative layout is similar to the N59 Derrylea Scheme which is an NRA pilot project for the provision of a shared pedestrian and cycle facility on a rural road, see photo above.



The upgrade of the Toberburr Road shall be facilitated by Fingal County Council during the construction of housing in the plan lands. No more than 35 of the 74 [< 50%] indicative housing units in areas 2,3 and 5 and no more than 28 of the indicative 56 [50%] housing units in areas 9,10 and 11 shall be sold pending the undertaking of adequate improvements along Toberburr Road by Fingal County Council in conjunction with the main landowners in the Plan lands.

The proposed upgrading of the Toberburr Road will be subject to detailed design and any proposals will be subject to a separate statutory consent process. As part of this process consideration will be given to reducing traffic speeds.

The Swords Western Ring Road [SWRR]

The SWRR is an objective of the Fingal development Plan 2011- 2017 and is a long term objective of the 'Your Swords, An Emerging City, and Strategic Vision 2035'. The SWRR connects the M1 north of Lissenhall to the N2 north of the M50 (via the Airport Box roads system). The original outline design incorporated seven interchanges along its length connecting to the R132, M1, Newtown, Rathbeale, Naul Road, the R122 and the N2. The scheme has been developed to address deficiencies in north-south movement through the study area to the west of Swords, whilst providing a strategic bypass of the town to provide a high quality, fast route to the N2, M50 and other

national primary roads.

The proposed SWRR traverses the south east edge of the RV lands. The SWRR will likely be in cut as it passes by Rivermeade and the Rivermeade Link road will likely be constructed at existing ground level in order to minimise any adverse impacts on residents in Rivermeade.

13.2 Public Transport

The bus service to Rivermeade is very limited and residents are therefore very dependent on cars. Dublin Bus Route No. 40 A operates between Toberburr and Parnell Street with 5 services each way per day during the week and a total journey time of approximately 50 minutes.

There is a need to improve access to public transport. Fingal County Council will support and encourage public transport providers to enhance the provision of public transportation services between Rivermeade and [1] Swords and [2] Finglas and to support and facilitate rural community transport initiatives where possible, aimed at providing new services through the village and enhancing and expanding existing services.

13.3 Access to the LAP lands to north of River Ward

All of the LAP lands located north of the River ward shall be accessed by the new internal road and bridge crossing. Existing trees and hedgerows shall be retained where possible and this road shall be aligned so as to ensure the protection and maintenance of existing trees and hedgerows into the future. Housing completions shall not take place within the LAP lands on the north side of the Ward River until such time as the new road and bridge crossing is constructed.

13.4 Access to the LAP lands to the east

The LAP provides for the Rivermeade link road from an improved Killeek Lane which will serve future development within the eastern part of the LAP lands and greatly improve the accessibility of existing housing in Rivermeade to Swords. Rivermeade Avenue will be extended to ensure proper integration of existing and future residential development.

There will be no discernable increase in traffic on Rivermeade Drive associated with the new development given that traffic from the proposed new housing going to and from



Swords will likely use the proposed new Link Road to Killeek Lane rather than travelling westwards through existing development onto the Toberburr Road. It will also provide a more convenient route for existing residents in Rivermeade accessing Swords as an alternative to travelling via Toberburr Road and Airport Road to Swords.

13.5 Pedestrian and cycle links

It is an objective of this plan that provision shall be made for direct and attractive pedestrian and cycle linkages along the river ward and throughout the village.

Combined pedestrian/ cyclist facilities shall be provided on the new Rivermeade Link road and on both Killeek Lane and Toberburr road which shall be improved.

The road upgrade proposals including the shared footpath and cycle facility along both the Rivermeade Link Road and along the upgraded Killeek Lane will be a key element in connecting Rivermeade to the very attractive Ward River Valley Park 'green route' between Swords and Rivermeade which will in time greatly improve pedestrian and cycling connections between Rivermeade and Swords. The new cycle/pedestrian link from Rivermeade to Swords via Killeek Lane and the Ward River Valley Park could eventually link into the GDA Cycle Network currently being finalised by the NTA

13.6 Car-Parking

Car parking shall be provided in accordance with Fingal Development Plan standards.

*Indicative Strategic Pedestrian/Cycle Route Linking
Rivermeade to Swords & onto Malahide Viaduct via
Ward River Valley Park*



SECTION FOURTEEN: SUSTAINABILITY – Promoting a low carbon community

14.0 Introduction

Fingal County Council in association with all stakeholders [community; landowners; SEAI] will promote the development of a Low Carbon Community incorporating environmental sustainability in existing and future development in Rivermeade.

Fingal County Council is committed as a priority to encourage and promote more sustainable development through energy end use efficiency in building design; increasing the use of renewable energy and developing an appropriate urban form.

14.1 Environmental Sustainability and the LAP

The LAP promotes Environmental Sustainability by:

- Promoting the efficiency and energy performance for all buildings both existing and new build.
- Making the best use of land through consolidation and renewal of the village.
- Promoting use of renewable energy including solar and wind power;
- Promoting walking and cycling by providing for safe, attractive pedestrian and cycling routes.
- Promoting biodiversity by conserving existing indigenous hedgerows and trees and by providing for additional strategic planting in the village.
- Providing for the development of a *Sustainable Living Centre* [Development Area 8].
- Providing for opportunities for food production through the development of allotments and a community garden. Allotments are proposed in Development Area 7 and a community garden is proposed in association with the community facility within the new village centre in Development Area 1.
- Promoting waste reduction by providing a convenient, well-maintained recycling area in the village.

14.2 Efficiency and Energy Performance for Buildings

New building design in the LAP lands shall reflect the need to ensure that development

occurs in a sustainable and sensitive manner giving due recognition to the necessity to produce a design which accords with national sustainability and energy conservation policies and contributes to the creation of appropriate urban form.

The energy and environmental performance required for new buildings under the Building Regulations is expected to improve rapidly over the course of the LAP with a Government policy target of carbon neutral by 2013.

Fingal County Council will seek to ensure that all development in the LAP lands will contribute positively towards reduced energy consumption and the associated carbon footprint. It will achieve this by:

- Ensuring that development proposals demonstrate reduced energy consumption in their design and construction.
- Ensuring that development proposals incorporate where possible alternate energy technologies.
- Promoting the retrofitting of existing housing and the school to reduce energy demands.
- All buildings in the plan area should incorporate environmentally sustainable design principles in their design and construction. New buildings shall strive to reduce the energy and water demand through measures which include the following :
 - Careful consideration of building orientation, form, massing and fenestration to make the most of passive solar gain for space heating.
 - Maximization of natural daylight.
 - Maximization of passive solar gain for solar thermal water heating and electricity production. [For example solar panels and ground mounted photovoltaic panels].
 - maximizing the potential for incorporating wind energy [For example wind turbines and wind spires].
 - Use of insulation to reduce heat loss from draughts and uncontrolled ventilation.
 - Reduced water use through rainwater harvesting and recycling of rainwater and in-building grey water treatment systems.
 - Use of building roofs as solar collectors and rainwater harvesters. (Green roofs can be used as amenity spaces that also

support biodiversity and rainwater attenuation.)

- Intelligent and energy efficient heating, cooling and ventilation systems.
- Use of materials with low embodied energy and consider incorporating environmentally 'smart' materials that can minimise energy use by responding to changing external conditions.



14.3 Wind Energy

It is an objective to promote and facilitate the development of wind power within the LAP lands [for example wind turbines and wind spires] where such development does not have a negative impact on the landscape and the amenities of property adjacent. All new wind energy developments in the county shall comply with national guidelines and the Fingal County Development Plan.

Lands adjoining the reservoir

The development of a single wind turbine could be considered on the lands adjoining the reservoir.

Sustainable Living Centre

Ground mounted photovoltaic panels could be considered on the south facing slope of lands to the north of the existing farm buildings.

Houses on serviced sites:

Wind turbines and solar panels could be considered in association with development of houses on the larger serviced sites

Existing houses/ school

The existing houses and school could be retrofitted to make them more energy efficient.

Village Centre

Consideration could be given to the development of wind spires integrated into the design of the new village centre/ free standing wind turbines up to 20 metres in height and solar panels.

14.4 Allotments and community garden

The LAP provides for allotments at two locations as well as the development of a community garden beside a new community facility.



SECTION FIFTEEN: WASTE MANAGEMENT

15.0 The Council actively promotes waste prevention and minimisation through its County Development Plan having regard to 'The Waste Management Plan for the Dublin Region 2005-2010'. In addition, anti-litter awareness and cleaner communities are promoted through its annual Spring Clean-Up Week Campaign and Eco Week. In addition, the Council has appointed a Green Schools Co-Ordinator to promote the Green Schools Programme. The primary school in the village is registered in this programme.

15.1 Waste Management Objectives

- Prevent and minimise the generation of waste in accordance with the Waste Management Plan for the Dublin Region.
- Raise environmental awareness through the continuation of the Council based initiatives. Particular emphasis should be placed on the involvement of local schools, individual households and businesses.
- Upgrade waste management facilities in the village, including bring banks and litter bins.
- Residential developments shall have adequate waste storage space designated for 3 waste streams- residual waste (grey bin), dry recyclables (green bin), and organic waste (brown bin) and shall comply with Fingal County Council's Guidelines on the Provision of Waste and Recycling Bins for Residential Developments.
- The storage of bins and waste receptacles shall be carefully considered at the design stage and to ensure that all future residential schemes include appropriate design measures for refuse bins, within convenient distance of all units, details of which should be clearly shown at planning application stage.
- All non-residential developments must have suitable and adequate internal and external storage space for segregated waste and must also comply with the Draft Waste and Recycling Storage Requirements for Residential and Non-Residential Developments in Fingal.

15.2 Construction Waste Management Objectives

Construction and demolition waste management plans shall be submitted as part of planning applications in accordance with objective WM13 of the County Development Plan.

Developers shall ensure that all waste is removed by approved waste disposal contractors to approved waste disposal facilities.

Developers shall take suitable and adequate measures to minimise adverse impacts including noise, dust and traffic during construction phases.

SECTION SIXTEEN: DEVELOPMENT CONSTRAINTS, PHASING AND CHECK LIST FOR PLANNING APPLICATIONS

16.0 Development constraints

The level of development proposed is unlikely to be developed over the lifetime of this LAP (6 years or any extended period) but it outlines the optimal sustainable development strategy for the village over a longer time period in tandem with the timely delivery of the necessary physical infrastructure, in particular the necessary road improvements and the essential improvements to the Swords WWTP.

16.1 Phasing Requirements

The following requirements shall be complied with:

- New housing and other major forms of development will require the expansion of the capacity of the Swords Wastewater Treatment Plant, the completion of the Toberburr pumping station and pipe connection to Swords WWTP. Funding is now available for these works which are likely to be completed by mid 2015.
- Prior to the commencement of any development within the LAP lands archaeological test trenching shall be carried out as recommended in the geophysical assessment report dated February 2007 in Development areas 2, 3, 9, and 10. In the event that future archaeological findings preclude development in parts of the LAP lands, the VDFP shall be revised to reflect this.
- The Rivermeade Link Road and the upgrade of Killeek Lane shall be facilitated by Fingal County Council in the context of development proceeding within the Plan lands in conjunction with the main landowners within the Plan lands. In this regard no more than 35 of the 74 [$< 50\%$] indicative housing units in areas 2,3 and 5 shall be sold pending the construction of the Rivermeade Link Road and the upgrade of Killeek lane.
- The upgrade of the Toberburr Road shall be facilitated by Fingal County Council during the construction of housing in the plan lands. No more than

35 of the 74 [$< 50\%$] indicative housing units in areas 2,3 and 5 and no more than 28 of the indicative 56 [50%] housing units in areas 9,10 and 11 shall be sold pending the undertaking of adequate improvements along Toberburr Road by Fingal County Council in conjunction with the main landowners in the Plan lands.

- No house completions shall take place within the LAP lands on the north side of the Ward River until such time as the new road and bridge crossing is constructed.
- In the interests of controlling the pace of development and ensuring that the new development is well integrated with existing development and in tandem with the necessary physical and social infrastructure, it is an objective of this LAP that individual planning applications / applications for planning consents shall be submitted for each of the entire 11 proposed development areas, and the phasing of future development within each such area shall be clearly indicated as part of the planning applications/ applications for consents.
- No development shall take place within Development Area 1 until the existing football pitch has been replaced within the LAP lands, or at a suitable alternative location within the Rivermeade area.
- Fingal will encourage and promote the early development of: the new Recreational Hub in Development Area 4; the Sustainable Living Centre in Development Area 8; the allotments in Development Area 7 and the new recreational amenities within Development Area 6.

16.2 Check List for Planning Applications

- All development proposals shall have regard to the guidelines set out in the Village Development Framework Plan and Design Guidance [VDFP].
- All planning applications for development shall be accompanied by a Site Design Statement [see VDFP for requirements]
- Developers shall submit proposals for the protection and management of local biodiversity features in all development proposals.
- In all future planning applications, developers shall submit a full ecological assessment by a suitably qualified professional, including measures to avoid or minimise the loss to local biodiversity which would potentially have a negative impact on the local biodiversity of the area.

- To protect as yet undiscovered archaeological sites or features that survive subsurface in accordance with the National Monuments Legislation, developer's shall make provision to allow for and fund whatever archaeological work may be needed on site if any remains are noted following topsoil removal.
- Construction and demolition waste management plans shall be submitted as part of planning applications in accordance with objective WM13 of the County Development Plan.

APPENDIX 1

SEA Screening Statement

SEA Screening Statement

Introduction

Fingal County Council is preparing a local area plan for lands at Rivermeade. As part of the preparation of the local area plan, the planning authority must consider whether the Rivermeade Local Area Plan requires SEA. The assessment of this issue is based in the criteria set down in the SEA Guidelines and Annex II of the SEA Directive for determining the likely significance of environmental effects. The guidelines require screening for SEA to be carried out for all local area plans where the population of the area of the local area plan is 5,000 persons or less. Where the population of an LAP is 5,000 or more, an SEA Environmental Report must be prepared. The estimated population for the proposed Local Area Plan at Rivermeade is c. 1050 persons; therefore SEA is not mandatory.

Proposed LAP

Rivermeade is located within the rural area of Fingal to the west of Swords and north of Dublin Airport. The village is approx. 7 km to the west of Swords, approx. 3 km north of St. Margaret's and approx. 8 Km north of Finglas.

The village is zoned 'RV' in the 2011-2017 County Development Plan where it is the objective to:

'Protect and promote the character of the Rural Village and promote a vibrant Community in accordance with an approved Local Area Plan, and the availability of physical and community infrastructure'.

The development of this rural village is based on providing for the development of a sustainable rural community by focusing on the inherent development potential of the village and on strengthening the village. The strengthening of the village will also provide a viable housing alternative to the demand for housing in the open countryside for members of the rural community.

The LAP comprises an area of approximately 41 hectares. There are 175 houses in Rivermeade together with a school, small shop and community facility. The current population of Rivermeade is estimated to be circa 600 persons.

Future development will comprise mainly residential development together with small scale local shops, services, employment space, and additional recreational facilities. Development of the LAP lands could potentially yield in the long term approximately 139 additional residential units and a projected additional population of circa 400 persons, increasing the population of Rivermeade in the long term to circa 1000 persons.

The level of development proposed is unlikely to be developed over the lifetime of this LAP (6 years or any extended period) but the LAP outlines the optimal sustainable development strategy for the village over a longer time period in tandem with the timely delivery of the necessary physical infrastructure, in particular improvements to water services and roads.

A Village Development Framework Plan and Design Guidance [VDFP] for Rivermeade has been prepared and will form part of the LAP. All development proposals shall have regard to the guidelines set out in the VDFP. The VDFP forms the blueprint for the future development of the LAP lands. The framework plan represents a long term strategy to achieve the sustainable development of the village, with a diversity of uses whilst ensuring a balance between the protection and development of the natural and built environment.

Schedule 2A Screening Assessment

The LAP has been screened under Schedule 2A of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 as amended in 2011.

The local area plan has been assessed viz. the likely significant effects on the environment having regard to the following:

- (i) The characteristics of the plan and
- (ii) The characteristics of the effects and of the area likely to be affected.

Response from the Environmental Authorities

Department of Communications, Energy and Natural Resources

The DCENR had no comments /observations to make at this time. It is stated that this is without prejudice to the attached comments from the Inland Fisheries Ireland which welcomes the commitment of Fingal County Council not to allow development until such time as the pumping station at Toberburr is constructed and sufficient capacity is available at the Swords WWTP.

EPA

The submission received from the EPA states that it is a matter for Fingal County Council to determine, having regard to relevant criteria set out in Schedule 2A of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI436 of 2004) as to whether or not the implementation of the Plan would be likely to have significant effects on the environment.

The EPA makes a number of comments including the following:

- The EPA welcomes the intention to link development to the ability to provide appropriate wastewater treatment prior to any further development is welcomed.
- It should be ensured that a safe and secure drinking water supply is provided to service the Plan area.
- The intention to incorporate the findings of the FEMFRAMS into the Rivermeade LAP is welcomed.
- It should be ensured that the recommendations of the Eastern River Basin Management Plan are integrated into the Plan to improve water quality
- In relation to infrastructure planning adequate and appropriate infrastructure should be in place, or required to be put in place, to service any development proposed and authorised during the lifetime of the particular Plan.
- Additional comments are made in relation to Appropriate Assessment.

These issues together with others suggested in the EPA's attached guidance document "integration of environmental considerations in the land use plans" have been addressed in the Local Area Plan.

The planning authority is satisfied that the screening assessment, together with policies and objectives indicated in the LAP have demonstrated that the LAP is unlikely to have any significant environmental effect on the environment.

RATIONALE FOR DECISION:

The village is zoned 'RV' in the 2011-2017 County Development Plan where it is the objective to:

'Protect and promote the character of the Rural Village and promote a vibrant Community in accordance with an approved Local Area Plan, and the availability of physical and community infrastructure.'

The planning authority considers that SEA is not required in this case, on the basis of the assessments carried out having regard to the nature and characteristics of the lands and overall quantum of development proposed within the plan lands. The characteristics of the likely effects relate to:

Foul Sewerage and Water Services

Foul Drainage

The existing WWTP serving Rivermeade is operating at its design capacity and has no spare capacity. The treatment plant caters for preliminary treatment, secondary treatment; surface aeration and sludge draw off. The treated effluent from the WWTP discharges into the Ward River.

Fingal County Council plans to [1] decommission the existing WWTP; [2] construct a pumping Station on the site of the WWTP and [3] pipe all effluent to SWWTP.

The pump station has been through preliminary design and the planning consent process. Construction time is due to tie in with Swords WWTP upgrade works.

Swords Waste Water Treatment Plant is operating at its design capacity of 60,000 PE (population equivalent) and does not have the capacity to accommodate development within the LAP lands. Fingal County Council intends to upgrade the plant to 90,000 p.e. in the medium term and are investigating the possibility of expanding to 140,000

in the long term. The expanded Swords WWTP [from 60,000 p.e. to 90,000 p.e.] is expected to be operational by mid 2015.

No development shall proceed within the LAP lands until such time as the capacity of SWWTP is expanded and the Toberburr pumping station is built and connected by pipe to Swords network.

Water Supply

A trunk water main traverses the LAP lands and the required way leave in respect of this water main is 10 metres each side of the watermain. There are no particular constraints in terms of supplying water to future development within the LAP lands.

Flood Risk Management

Fingal County Council, along with Meath County Council and the Office of Public Works (OPW) are currently carrying out the Fingal East Meath Flood Risk Assessment and Management Study (FEM FRAMS). This is a catchment-based flood risk assessment and management study of 19 rivers and streams and their catchments within the Fingal East Meath area.

The Ward River crosses through the LAP lands and divides the subject lands into two parts. The Ward River has been surveyed as part of the FEM-FRAMS study and draft flood risk maps for this river have been prepared for the 1% (1 in 100yr) and 0.1% (1 in 1000yr) probability of flooding.

The findings of this study have informed this Local Area Plan. All new development will have regard to the findings of FEM-FRAMS. Fingal County Council must have regard to the planning and development principles outlined in the national flood risk management guidelines "The Planning System and Flood Risk Management Guidelines (November 2009)" when considering development proposals within the LAP lands.

Surface Water

Surface water disposal from the existing housing comprises a separate public sewer system and water is discharged to the Ward River.

The Ward River traverses the centre of the LAP lands and the Draft flood catchment areas as identified in the FemFrams study are shown on the LAP map. In order to protect, improve and enhance the natural character of this watercourse, the culverting of the Ward River shall not be permitted and the river shall be retained within a riparian corridor. This riparian corridor shall widen out into proposed public open space areas.

In order to reduce surface water run-off and to minimise the risk of flooding, the LAP lands shall be required to be developed in accordance with SUDS principles in compliance with the 'Greater Dublin Strategic Drainage Study'. This approach using Sustainable Drainage Systems (SuDS) can best be summarised as offering a "total" solution to rainwater management. Water is either infiltrated or conveyed more slowly to the drainage system and ultimately to water courses using for example permeable paving, swales, infiltration trench/blanket, soakways, green roofs, rain water harvesting, detention basins, ponds and wetlands. These facilities are designed to prevent pollution of streams and rivers and to slow down runoff from sites, thereby helping to prevent downstream flooding and improve water quality. A "treatment train" approach is required to mimic natural catchment processes as closely as possible. This strategy shall comprise of a series of features which incrementally reduce pollution, flow rates and volumes of runoff.

Water quality

The Council is responsible for maintaining, improving and enhancing the environmental and ecological quality of our waters by implementation of pollution control measures, licensing of effluent discharges, implementing and monitoring compliance with environmental legislation and drawing up pollution contingency measures on a local and regional level.

The Water Framework Directive (WFD), 'establishing a framework for community action in the field of water policy', became effective in 2000. The overall objective of the Directive is to prevent deterioration in the status of any waters and achieve at least 'good status', by 2015. Further information is available at www.wfdireland.ie.

The Ward River flows through the LAP lands. This river flows eastwards into the Broadmeadow Estuary east of Swords. The estuary is a Natura 2000 site [an SAC and an SPA]. The proposed development lands at Rivermeade are located within the Broadmeadow Water Management Unit [WMU]. The River Ward has been assigned

'poor' status by the EPA at Rivermeade under the Water Framework Directive. The Broadmeadow WMU has also been designated 'poor status'.

In 2009, a Programme of Measures was established for each Water Management Unit (WMU) within the river basin district as part of the ERBD River Basin Management Plan 2009-2015. This is aimed at addressing those pressures which threaten the water environment and put water bodies at risk of not achieving 'good status' by 2015.

The onus is on Fingal County Council to 'restore' any water bodies in this WMU to 'good status' by 2015. Further information is available in the ERBD River Basin Management Plan 2009-2015 and the programme of measures at www.erbd.ie.

A key priority for the Planning Authority is the need to ensure that there is no adverse impact on the water quality of the Ward River. The proposed replacement of the existing wastewater treatment plant with a pump house which will pump sewage to the Swords wastewater treatment plant will result in a major improvement to the water quality in the Ward River downstream of the present discharge point.

The LAP includes objectives for the protection and improvement of water quality.

Groundwater Vulnerability and Protection

The Geological Survey of Ireland (GSI) has recently completed Ground Water Mapping for Fingal. This Mapping indicates that a significant portion of the site is impacted by a Source Protection Zoning. Appropriate measures will need to be adopted to protect the groundwater source.

Groundwater and water catchment areas have an inherent ecological and economic value and are a major resource that needs to be protected. Groundwater contributes to rivers, lakes and therefore influences its amenity and recreational value. The Council is responsible for the protection of all waters including rivers, lakes, and groundwater sources. The responsibilities include; implementation of pollution control measures, licensing of effluent discharges, implementing and monitoring compliance with environmental regulations, the drawing up of pollution contingency measures.

The LAP includes an objective to protect existing ground water sources from pollution during construction/development works

Landscape Character Area

The LAP lands are located within the designated 'Rolling hills' Character type in the County Development Plan. The undulating nature of countryside together with trees and the Ward river valley help create a rich landscape both visually and ecologically. The LAP includes objectives to protect existing trees/ hedgerows and to provide for appropriate strategic planting, ensuring that new development will be 'absorbed' within this landscape and the impact of development in the landscape will be reduced.

Heritage and Archaeology

The Ward River traverses the centre of the LAP lands. In order to protect, improve and enhance the natural character of this watercourse the LAP requires that the river be retained within a riparian corridor.

The LAP includes policies and objectives to protect and enhance Rivermeades' natural and built heritage including policies and objectives to protect and preserve archaeological sites and monuments as yet unknown.

Traffic

The road network in the vicinity of LAP lands comprises mainly third class rural roads. Rivermeade is accessed from the Toberburr Road which passes north-south along the western boundary of the subject lands. Killeek Lane runs in a west-east direction along part of the southern boundary of the subject lands. Both roads are narrow winding rural roads with no footpaths. Road connections to Swords and Finglas are poor. The LAP provides for road improvements and the phasing of development in association with these road improvements.

Conclusion

The Planning Authority, having assessed the characteristics and the effects of those characteristics of the LAP in terms of the likely significance of environmental effects, considers that SEA is not required for the implementation of the Rivermeade Local Area Plan.

APPENDIX 2 SUDs Strategy