



Draft Greystones-Delgany and Kilcoole Local Area Plan 2013-2019

Strategic Flood Risk Assessment (SFRA)

December 2012

1. BACKGROUND INFORMATION AND CONTEXT

1.1 Introduction

In accordance with the 'Planning System and Flood Risk Management: Guidelines for Planning Authorities (DoEHLG/OPW, 2009), a Strategic Flood Risk Assessment (SFRA) of the 'Draft Greystones/Delgany and Kilcoole Local Area Plan (LAP) 2013-2019' has been undertaken.

The objective of the 'Planning System and Flood Risk Management' is to integrate flood risk management into the planning process, thereby assisting in the delivery of sustainable development. For this to be achieved, flood risk must be assessed as early as possible in the planning process. Paragraph 1.6 of the Guidelines states that the core objectives are to:

- *“avoid inappropriate development in areas at risk of flooding;*
- *avoid new developments increasing flood risk elsewhere, including that which may arise from surface run-off;*
- *ensure effective management of residual risks for development permitted in floodplains;*
- *avoid unnecessary restriction of national, regional or local economic and social growth;*
- *improve the understanding of flood risk among relevant stakeholders; and*
- *ensure that the requirements of EU and national law in relation to the natural environment and nature conservation are complied with at all stages of flood risk management.”*

The guidelines aim to facilitate the transparent consideration of flood risk at all levels of the planning process, ensuring a consistency of approach throughout the country. SFRAs therefore become a key evidence base in meeting these objectives.

The Guidelines work on a number of key principles, including:

- adopting a staged and hierarchical approach to the assessment of flood risk; and
- adopting a sequential approach to the management of flood risk, based on the frequency of flooding (identified through Flood Zones) and the vulnerability of the proposed land use.

1.2 Definition of Flood Zones

In the 'Planning System and Flood Risk Management: Guidelines for Planning Authorities', Flood Zones are used to indicate the likelihood of a flood occurring. These Zones indicate a high, moderate and low risk of flooding from fluvial or coastal sources and are defined as follows:

- Flood Zone A – where the probability of flooding from rivers and the sea is highest (greater than 1% or 1 in 100 for river flooding or 0.5% or 1 in 200 for coastal flooding);
- Flood Zone B – where the probability of flooding from rivers and the sea is moderate (between 0.1% or 1 in 1000 and 1% or 1 in 100 for river flooding and between 0.1% or 1 in 1000 year and 0.5% or 1 in 200 for coastal flooding).
- Flood Zone C – where the probability of flooding from rivers and the sea is low (less than 0.1% or 1 in 100 for both river and coastal flooding). Flood Zone C covers all areas of the plan which are not in zones A and B.

The flood zones described above are indicative of river and coastal flooding only. They should not be used to suggest that any areas are free from flood risk, since they do not include the effects of other forms of flooding such as from groundwater or artificial drainage systems.

The Indicative Flood Zone map for the plan area is included in Map1. The information about flood risk that has been used in the preparation of these flood zones has been collated from a number of sources including:

- OPW Preliminary Flood Risk Assessment (PFRA)

- 'Floodmaps.ie' – The national flood hazard mapping website operated by the Office of Public Works, where information about past flood events is recorded and made available to the public. 'Flood point' information is available on this site and has been noted.
- Alluvial deposits maps of the Geological Survey of Ireland – indicating areas that have flooded in the past (the source of alluvium)
- Examination of the old '6 Inch' maps
- Walk over survey to assess potential sources of flooding
- Interviews with local people
- Consultation with the engineering section of Wicklow County Council
- An examination of contours.
- Aerial photographs

No CFRAMS studies are currently available for the plan area.

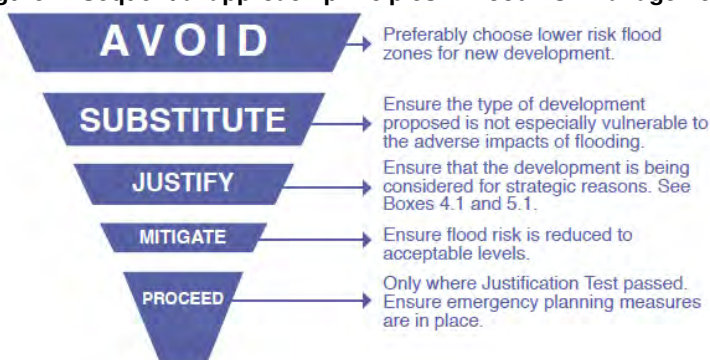
In preparing the Flood Zones, a precautionary approach has been applied, where necessary, to reflect uncertainties in flooding datasets and risk assessment techniques.

1.3 The Sequential Approach and Justification Test

Each stage of the SFRA process aims to adopt a sequential approach to management of flood risk in the planning process. The sequential approach to flood risk management is set out in Figure 1. In summary, the key principles of the sequential approach include:

1. Avoid flood risk, where possible.
2. Substitute less vulnerable uses, where avoidance is not possible, and
3. Mitigate and manage the risk, where avoidance and substitution are not possible.

Figure 1: Sequential approach principles in flood risk management



Source: The Guidelines on Planning System and Flood Risk Management

In other words, where possible, development in areas identified as being at flood risk should be avoided; this may necessitate de-zoning lands within the LAP. If de-zoning, is not possible, then rezoning from a higher vulnerability land use, such as residential, to a less vulnerability use, such as open space may be required. Where rezoning is not possible, exceptions to the development restrictions are provided for through the Justification Test. The plan-making Justification Test is used at the plan preparation and adoption stage where a planning authority needs to consider the future development of areas at a high or moderate risk of flooding, for uses or development vulnerable to flooding, for uses or development vulnerability to flooding that would generally be inappropriate. In such cases, the planning authority must be satisfied that it can clearly demonstrate on a solid evidence base that the zoning or designation for development will satisfy the Justification Test.

Tables 1.1 and 1.2 below illustrates those types of development that would be appropriate to each flood zone and those that would be required to meet the Justification Test. Table x sets out the Justification Test for plan making. Where the planning authority considers that land should be

zoned for Inappropriate development that does not meet the criteria of the Justification Test, the flooding risk should be mitigated, so that the flood risk is reduced to an acceptable level by means of land use strategies or by means of detailed proposals for the management of flood risk, as addressed in a Flood Risk Assessment.

Table 1.1: Matrix of vulnerability versus flood zones to illustrate appropriate development and that required to meet the justification test

	Flood Zone A	Flood Zone B	Flood Zone C
Highly vulnerable development (including essential infrastructure)	Justification Test	Justification Test	Appropriate
Less vulnerable development	Justification Test	Appropriate	Appropriate
Water-compatible development	Appropriate	Appropriate	Appropriate

Source: Table 3.2 of the Guidelines on Planning System and Flood Risk Management

Table 1.2: Classification of vulnerability of different types of development

Vulnerability class	Land uses and types of development which include*:
Highly vulnerable development (including essential infrastructure)	<p>Garda, ambulance and fire stations and command centres required to be operational during flooding;</p> <p>Hospitals;</p> <p>Emergency access and egress points;</p> <p>Schools;</p> <p>Dwelling houses, student halls of residence and hostels;</p> <p>Residential institutions such as residential care homes, children's homes and social services homes;</p> <p>Caravans and mobile home parks;</p> <p>Dwelling houses designed, constructed or adapted for the elderly or, other people with impaired mobility; and</p> <p>Essential infrastructure, such as primary transport and utilities distribution, including electricity generating power stations and sub-stations, water and sewage treatment, and potential significant sources of pollution (SEVESO sites, IPPC sites, etc.) in the event of flooding.</p>
Less vulnerable development	<p>Buildings used for: retail, leisure, warehousing, commercial, industrial and non-residential institutions;</p> <p>Land and buildings used for holiday or short-let caravans and camping, subject to specific warning and evacuation plans;</p> <p>Land and buildings used for agriculture and forestry;</p> <p>Waste treatment (except landfill and hazardous waste);</p> <p>Mineral working and processing; and</p> <p>Local transport infrastructure.</p>
Water-compatible development	<p>Flood control infrastructure;</p> <p>Docks, marinas and wharves;</p> <p>Navigation facilities;</p> <p>Ship building, repairing and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location;</p> <p>Water-based recreation and tourism (excluding sleeping accommodation);</p> <p>Lifeguard and coastguard stations;</p> <p>Amenity open space, outdoor sports and recreation and essential facilities such as changing rooms; and</p> <p>Essential ancillary sleeping or residential accommodation for staff required by uses in this category (subject to a specific warning and evacuation plan).</p>
*Uses not listed here should be considered on their own merits	

Table 3.1 Classification of vulnerability of different types of development

Source: Table 3.1 of the Guidelines on Planning System and Flood Risk Management

2. STRATEGIC FLOOD RISK ASSESSMENT OF THE DRAFT GREYSTONES-DELGANY AND KILCOOLE LAP 2013-2019

2.1 Flood Risk Assessment

Following the Guidelines this flood risk assessment shows the zoning objectives of the plan and their typical permitted uses. In accordance with the Guidelines an assessment was undertaken to determine the appropriateness of land uses (allowed by virtue of land use zoning) to each flood zone. The assessment is undertaken in accordance with tables 3.1 and 3.2 of the guidelines and measures vulnerability to flooding of different types of development, to illustrate appropriate development that is required to meet the justification test. Where the zone is deemed to be appropriate no further action is required here in the FRA. Where the zone requires the justification test to be carried out, it is done so with any necessary mitigation measures recommended.

The Draft Greystones-Delgany and Kilcoole LAP 2013-2019 includes the following land use zonings:

RE: Existing Residential	To protect, provide for and improve residential amenities of adjoining properties and areas while allowing for infill residential development that reflects the established character of the area in which it is located.
R22: Residential	To provide for the development of sustainable residential communities up to a maximum density of 22 units per hectare and to preserve and protect residential amenity.
R17: Residential	To provide for the development of sustainable residential communities up to a maximum density of 17 units per hectare and to preserve and protect residential amenity.
R15: Residential	To provide for the development of sustainable residential communities up to a maximum density of 15 units per hectare and to preserve and protect residential amenity.
R10: Residential	To provide for the development of sustainable residential communities up to a maximum density of 10 units per hectare and to preserve and protect residential amenity.
R5: Residential	To provide for the development of sustainable residential communities up to a maximum density of 5 units per hectare and to preserve and protect residential amenity.
R2.5: Residential	To provide for the development of sustainable residential communities up to a maximum density of 2.5 units per hectare and to preserve and protect residential amenity.
Special R: Special Residential (A,B and C)	To provide for the development of a limited amount of residential development on lands where there are exceptions to the standard residential objectives of the plan. The amount of units permitted on Special Residential Zones shall be in accordance with the objectives set out in 'Section 3: Population and Housing' of this plan.
TC: Town Centre	To provide, provide for, and improve the development of a mix of town centre uses including retail, commercial, office and civic use, and to provide for 'Living Over the Shop' residential accommodation, or other ancillary residential accommodation. To consolidate and facilitate the development of the central area, and to identify, reinforce, strengthen and promote urban design concepts and linkages between town centre activity areas.
VC: Village Centre	To protect, provide for, and improve a mix of village centre services and facilities, which provide for the day-to-day needs of the local community.

NC: Neighbourhood Centre	To protect, provide for, and improve a mix of neighbourhood centre services and facilities, which provide for the day-to-day needs of the local community.
SLC: Small Local Centre	To protect, provide for, and improve a mix of neighbourhood centre services and facilities (between approximately three and five retail/retail service units), excluding supermarkets or premises with a gross floor area greater than approximately 150m ² .
E: Employment	To provide for economic development, enterprise, industry, distribution, warehousing and employment.
E1: Employment	To provide for a mix of employment creating developments, in accordance with objective EMP4 for this area, and subject to the agreement of a Master Plan.
CE: Community and Education	To provide for civic, community, institutional, health, educational facilities and burial grounds.
OS: Open Space	To preserve, provide for and improve public and private open space for recreational amenity and passive open space.
AOS: Active Open Space	To provide for active recreational open space.
GB: Greenbelt ¹	To generally protect the open nature and landscape quality of lands, to protect and enhance local biodiversity, and to maintain the primary use of the land for agricultural purposes.
AT: Agri-Tourism	To protect and provide for agri-tourism uses at Glenroe Open Farm. ²
T: Tourism	To provide for the development of an Integrated Tourism/Leisure/Recreational Complex at Druids Glen Golf Club, Woodstock Demesne.
MU: Mixed Use	To provide for the development of a mixed use area, in accordance with objective RES15 for this area, and subject to the agreement of a Master Plan.
PU: Public Utility	To provide for the development of public utilities and services, including all service installations necessarily required by electricity, gas, telephone, radio, television, drainage, water services and other statutory undertakers.
SLB: Strategic Land Bank ³	To provide a strategic land bank for future phases of development of the settlement after the lifetime of this plan.

¹ For the sake of clarity, GB lands form part of the rural area. Planning applications shall be assessed on the basis of the objectives and standards for the rural area, as set out in the Wicklow County Development Plan 2010-2016.

² Any proposal on AT lands will only be considered on the basis of forming part of an integrated, comprehensive tourism facility, held in single ownership. Residential development is only permissible in this zone in accordance with the rural development policies of the Wicklow County Development Plan 2010-2016.

³ These lands are identified as potentially being part of the envelope of the settlement with regard to proximity and accessibility to infrastructure. However detailed consideration of these areas and appropriateness for zoning will only be considered after the lifetime of this plan. For the sake of clarity, SLB lands form part of the rural area. Planning applications shall be assessed on the basis of the objectives and standards for the rural area, as set out in the Wicklow County Development Plan 2010-2016.

2.2 Flood Risk Zones and Justification Test

The following is an analysis of the vulnerability of land uses on sites that fall within Flood Zone A and B, and where appropriate, the application of the Justification Test for plan making. All sites are indicated on Map 2.

Site no. 1

Land zoning	Open Space
Flood Zone	A and B
Vulnerability of land use vs. Flood Zone	Land use zoning appropriate
Requirement for Justification Test	No

Site no.2

Land zoning	Existing Residential
Flood Zone	A and B
Vulnerability of land use vs. Flood Zone	Land use zoning not appropriate
Requirement for Justification Test	Yes

<i>Justification Test</i>		
1	The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act 2000, as amended.	Under the Wicklow County Development Plan 2010-2016, Greystones-Delgany is designated a 'Large Growth Town 2' and Kilcoole is designated a 'Small Growth Town'. Under the 'core strategy' of the CDP, the population of Greystones-Delgany is to grow from c.17200 to 24000 by 2022, and the population of Kilcoole is to grow from c.4000 to 5000 by 2022.
2	The zoning or designation of the lands for the particular use or development type is required to achieve the proper and sustainable planning of the urban settlement and in particular:	
	(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement;	No
	(ii) Comprises significant previously developed and/or under-utilised lands;	Yes
	(iii) Is within or adjoining the core of an established or designated urban settlement;	No
	(iv) Will be essential in achieving compact or sustainable urban growth;	No
	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	There is sufficient undeveloped zoned land that is not at risk of flooding within the plan area to provide for the growth of the settlement. Notwithstanding this, it should be noted that this is developed land.
3	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.	Assessment of flood risk has been incorporated into the SEA process.

<i>Conclusion</i>
Justification test failed
<i>Recommendation</i>
Justification test failed. These lands are currently developed for residential housing. As such, it is considered appropriate to retain the RE zoning objective. Applications for minor development (e.g. extensions) are unlikely to raise significant flooding issues. Should expansion of existing uses be proposed, flood mitigation measures are required (refer Section 2.3 of this document).

Site no.3

Land zoning	Open Space
Flood Zone	A and B
Vulnerability of land use vs. Flood Zone	Land use zoning appropriate
Requirement for Justification Test	No

Site no.4

Land zoning	Existing Residential
Flood Zone	A and B
Vulnerability of land use vs. Flood Zone	Land use zoning not appropriate
Requirement for Justification Test	Yes

<i>Justification Test</i>		
1	The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act 2000, as amended.	Under the Wicklow County Development Plan 2010-2016, Greystones-Delgany is designated a 'Large Growth Town 2' and Kilcoole is designated a 'Small Growth Town'. Under the 'core strategy' of the CDP, the population of Greystones-Delgany is to grow from c.17200 to 24000 by 2022, and the population of Kilcoole is to grow from c.4000 to 5000 by 2022.
2	The zoning or designation of the lands for the particular use or development type is required to achieve the proper and sustainable planning of the urban settlement and in particular:	
	(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement;	No
	(ii) Comprises significant previously developed and/or under-utilised lands;	Yes
	(iii) Is within or adjoining the core of an established or designated urban settlement;	No
	(iv) Will be essential in achieving compact or sustainable urban growth;	No
	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	There is sufficient undeveloped zoned land that is not at risk of flooding within the plan area to provide for the growth of the settlement. Notwithstanding this, it should be noted that this is developed land.
3	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse	Assessment of flood risk has been incorporated into the SEA process.

	impacts elsewhere.	
<i>Conclusion</i>		
Justification test failed		
<i>Recommendation</i>		
Justification test failed. These lands are currently developed for residential housing. As such, it is considered appropriate to retain the RE zoning objective. Applications for minor development (e.g. extensions) are unlikely to raise significant flooding issues. Should expansion of existing uses be proposed, flood mitigation measures are required (refer Section 2.3 of this document).		

Site no.5

Land zoning	Open Space, Harbour and North Beach Action Plan
Flood Zone	A
Vulnerability of land use vs. Flood Zone	Land use zoning appropriate
Requirement for Justification Test	No

Site no.6

Land zoning	Town Centre
Flood Zone	A
Vulnerability of land use vs. Flood Zone	Land use zoning not appropriate
Requirement for Justification Test	Yes

<i>Justification Test</i>		
1	The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act 2000, as amended.	Under the Wicklow County Development Plan 2010-2016, Greystones-Delgany is designated a 'Large Growth Town 2' and Kilcoole is designated a 'Small Growth Town'. Under the 'core strategy' of the CDP, the population of Greystones-Delgany is to grow from c.17200 to 24000 by 2022, and the population of Kilcoole is to grow from c.4000 to 5000 by 2022.
2	The zoning or designation of the lands for the particular use or development type is required to achieve the proper and sustainable planning of the urban settlement and in particular:	The site is currently developed and zoned TC for town centre uses and is currently developed with apartments/ house and coffee shop/take away facility.
	(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement;	Yes. The site is located within a town centre location, adjoining the Greystones Harbour and North Beach Action Plan – a site for the development of a mixed use harbour and marine development. The site is at an important gateway of the Cliff Walk, and is a significant site in terms of tourism and commercial potential.
	(ii) Comprises significant previously developed and/or under-utilised lands;	Yes
	(iii) Is within or adjoining the core of an established or designated urban settlement;	Yes – the site is within Greystones town centre
	(iv) Will be essential in achieving compact or sustainable urban growth;	Yes – the site is currently developed with apartments, a house and a coffee shop/take away facility.
	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	No suitable alternative lands available for this use.

3	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.	Assessment of flood risk has been incorporated into the SEA process.
<i>Conclusion</i>		
Justification test passed.		
<i>Recommendation</i>		
No further action		

Site no.7

Land zoning	Zone 1, Greystones Harbour and North Beach Action Plan
Flood Zone	A and B
Vulnerability of land use vs. Flood Zone	Land use zoning appropriate – this land is in use as a harbour
Requirement for Justification Test	No

Site no.8

Land zoning	Open Space
Flood Zone	A and B
Vulnerability of land use vs. Flood Zone	Land use zoning appropriate
Requirement for Justification Test	No

Site no.9

Land zoning	Open Space
Flood Zone	A and B
Vulnerability of land use vs. Flood Zone	Land use zoning appropriate
Requirement for Justification Test	No

Site no.10

Land zoning	Town Centre
Flood Zone	A
Vulnerability of land use vs. Flood Zone	Land use zoning not appropriate
Requirement for Justification Test	Yes

<i>Justification Test</i>		
1	The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act 2000, as amended.	Under the Wicklow County Development Plan 2010-2016, Greystones-Delgany is designated a 'Large Growth Town 2' and Kilcoole is designated a 'Small Growth Town'. Under the 'core strategy' of the CDP, the population of Greystones-Delgany is to grow from c.17200 to 24000 by 2022, and the population of Kilcoole is to grow from c.4000 to 5000 by 2022.
2	The zoning or designation of the lands for the particular use or development type is required to achieve the proper and sustainable planning of the urban settlement and in particular:	The site is zoned TC for town centre uses and forms part of the South Beach Action Plan. The site is currently developed with Council offices, playground and parking facilities. Under the South Beach Action Plan it is proposed to redevelop the site for a mix

		of retail, office, civic and residential use, including a park and ride and recreational facilities.
	(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement;	Yes. The site is located within the core retail area of the town centre. The site can make a significant contribution in terms of expanding retail and employment offer and is ideal for the provision of high density residential use, at a central location within approximately 400m of the DART station.
	(ii) Comprises significant previously developed and/or under-utilised lands;	Yes
	(iii) Is within or adjoining the core of an established or designated urban settlement;	Yes – the site is within the core retail area of Greystones town centre
	(iv) Will be essential in achieving compact or sustainable urban growth;	Yes – this is a strategically important site, that can make a significant contribution to the achievement of compact and sustainable growth.
	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	No suitable alternative lands available for this use.
3	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.	Assessment of flood risk has been incorporated into the SEA process.
<i>Conclusion</i>		
Justification test passed.		
<i>Recommendation</i>		
No further action		

Site no.11

Land zoning	Active Open Space
Flood Zone	A and B
Vulnerability of land use vs. Flood Zone	Land use zoning appropriate
Requirement for Justification Test	No

Site no.12

Land zoning	Greenbelt
Flood Zone	A and B
Vulnerability of land use vs. Flood Zone	Land use zoning not appropriate (i.e. GB objective includes to maintain primary use of lands for agriculture)
Requirement for Justification Test	Yes

<i>Justification Test</i>		
1	The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives	Under the Wicklow County Development Plan 2010-2016, Greystones-Delgany is designated a 'Large Growth Town 2' and Kilcoole is designated a 'Small Growth

	provisions of the Planning and Development Act 2000, as amended.	Town'. Under the 'core strategy' of the CDP, the population of Greystones-Delgany is to grow from c.17200 to 24000 by 2022, and the population of Kilcoole is to grow from c.4000 to 5000 by 2022.
2	The zoning or designation of the lands for the particular use or development type is required to achieve the proper and sustainable planning of the urban settlement and in particular:	These lands are located in the rural area. The zoning objective has three key aims – (i) protect the open nature and landscape quality of lands, (ii) protection of biodiversity, (iii) maintain primary use for agriculture. The GB zoning objective indicates that residential development shall be limited to 'strictly necessary' housing (in accordance with CDP rural standards). The lands are in use as low density housing. There are no buildings located within the majority of flood risk lands. Flood risk lands generally form the gardens of residential properties.
	(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement;	No
	(ii) Comprises significant previously developed and/or under-utilised lands;	Yes
	(iii) Is within or adjoining the core of an established or designated urban settlement;	No
	(iv) Will be essential in achieving compact or sustainable urban growth;	Yes – GB objective aims to protect the open nature of lands, providing a demarcation between urban and rural areas, thus contributing to the achievement of a compact settlement.
	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes – there are agricultural lands available in proximity that are not at risk of flooding.
3	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.	Assessment of flood risk has been incorporated into the SEA process.
Conclusion		
Justification test failed. The GB zoning objective indicates that residential development shall be limited to 'strictly necessary' housing (in accordance with CDP rural standards). Applications for minor development (e.g. extensions) are unlikely to raise significant flooding issues. Should expansion of existing uses be proposed, flood mitigation measures are required.		
Recommendation		
Mitigation objectives shall apply (refer Section 2.3 of this document).		

Site no.13

Land zoning	Open Space
Flood Zone	A and B
Vulnerability of land use vs. Flood Zone	Land use zoning appropriate
Requirement for Justification Test	No

Site no.14

Land zoning	R5 (Residential – 5/ha)
Flood Zone	A
Vulnerability of land use vs. Flood Zone	Land use zoning not appropriate
Requirement for Justification Test	Yes

<i>Justification Test</i>		
1	The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act 2000, as amended.	Under the Wicklow County Development Plan 2010-2016, Greystones-Delgany is designated a 'Large Growth Town 2' and Kilcoole is designated a 'Small Growth Town'. Under the 'core strategy' of the CDP, the population of Greystones-Delgany is to grow from c.17200 to 24000 by 2022, and the population of Kilcoole is to grow from c.4000 to 5000 by 2022.
2	The zoning or designation of the lands for the particular use or development type is required to achieve the proper and sustainable planning of the urban settlement and in particular:	This site is zoned for residential use at a very low density of 5 units per hectare. This zoning is reflective of the environmental constraints of the site, including the fact that the lands are at flood risk. These lands are currently developed for low density single houses on large plots.
	(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement;	No
	(ii) Comprises significant previously developed and/or under-utilised lands;	Yes
	(iii) Is within or adjoining the core of an established or designated urban settlement;	No
	(iv) Will be essential in achieving compact or sustainable urban growth;	No
	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	n/a – these lands are already developed. There are suitable lands available for development of housing at locations which are not at risk of flooding.
3	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.	Assessment of flood risk has been incorporated into the SEA process.
<i>Conclusion</i>		
Justification test failed. It should be noted that these lands are already developed for low density housing. As such, it is appropriate to retain the residential zoning objective. Applications for minor development (e.g. extensions) are unlikely to raise significant flooding issues. Should expansion of these existing uses be proposed, flood mitigation measures are required.		
<i>Recommendation</i>		
Mitigation objectives shall apply (refer Section 2.3 of this document).		

Site no.15

Land zoning	Existing Residential (RE)
Flood Zone	A
Vulnerability of land use vs. Flood Zone	Land use zoning not appropriate
Requirement for Justification Test	Yes

<i>Justification Test</i>		
1	The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act 2000, as amended.	Under the Wicklow County Development Plan 2010-2016, Greystones-Delgany is designated a 'Large Growth Town 2' and Kilcoole is designated a 'Small Growth Town'. Under the 'core strategy' of the CDP, the population of Greystones-Delgany is to grow from c.17200 to 24000 by 2022, and the population of Kilcoole is to grow from c.4000 to 5000 by 2022.
2	The zoning or designation of the lands for the particular use or development type is required to achieve the proper and sustainable planning of the urban settlement and in particular:	This site is developed as a residential housing estate and accordingly is zoned RE: existing residential use, to reflect its current use. The lands that fall within the Flood zone form part of the designated public open space for the housing estate, Delgany Park.
	(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement;	No
	(ii) Comprises significant previously developed and/or under-utilised lands;	Yes
	(iii) Is within or adjoining the core of an established or designated urban settlement;	No
	(iv) Will be essential in achieving compact or sustainable urban growth;	No
	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	n/a – these lands are already developed. There are suitable lands available for development of housing at locations which are not at risk of flooding.
3	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.	Assessment of flood risk has been incorporated into the SEA process.
<i>Conclusion</i>		
Justification test failed. These lands are currently developed as a residential housing estate. As such, it is considered appropriate to retain the RE zoning objective. Objective SOC8 of this plan aims to preserve public open space within housing estates and restricts development that would compromise the integrity of this space. The use of the land for public open space is safeguarded and as such does not raise significant flooding issues. Should significant expansion of existing uses be proposed, flood mitigation measures are required.		
<i>Recommendation</i>		
Mitigation objectives shall apply (refer Section 2.3 of this document).		

Site no.16

Land zoning	Existing Residential (RE)
Flood Zone	A
Vulnerability of land use vs. Flood Zone	Land use zoning not appropriate
Requirement for Justification Test	Yes

<i>Justification Test</i>		
1	The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act 2000, as amended.	Under the Wicklow County Development Plan 2010-2016, Greystones-Delgany is designated a 'Large Growth Town 2' and Kilcoole is designated a 'Small Growth Town'. Under the 'core strategy' of the CDP, the population of Greystones-Delgany is to grow from c.17200 to 24000 by 2022, and the population of Kilcoole is to grow from c.4000 to 5000 by 2022.
2	The zoning or designation of the lands for the particular use or development type is required to achieve the proper and sustainable planning of the urban settlement and in particular:	This site is currently developed for a single house. The site is zoned RE: existing residential use, to reflect its current use.
	(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement;	No
	(ii) Comprises significant previously developed and/or under-utilised lands;	Yes
	(iii) Is within or adjoining the core of an established or designated urban settlement;	No
	(iv) Will be essential in achieving compact or sustainable urban growth;	No
	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	n/a – these lands are already developed. There are suitable lands available for development of housing at locations which are not at risk of flooding.
3	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.	Assessment of flood risk has been incorporated into the SEA process.
<i>Conclusion</i>		
Justification test failed. These lands are currently developed for residential use. As such, it is considered appropriate to retain this zoning. Applications for minor development (e.g. extensions) are unlikely to raise significant flooding issues. Should expansion of these existing uses be proposed, flood mitigation measures are required.		
<i>Recommendation</i>		
Mitigation objectives shall apply (refer Section 2.3 of this document).		

Site no.17

Land zoning	Community and Education (CE)
Flood Zone	A
Vulnerability of land use vs. Flood Zone	Land use zoning not appropriate
Requirement for Justification Test	Yes

<i>Justification Test</i>		
1	The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act 2000, as amended.	Under the Wicklow County Development Plan 2010-2016, Greystones-Delgany is designated a 'Large Growth Town 2' and Kilcoole is designated a 'Small Growth Town'. Under the 'core strategy' of the CDP, the population of Greystones-Delgany is to grow from c.17200 to 24000 by 2022, and the population of Kilcoole is to grow from c.4000 to 5000 by 2022.
2	The zoning or designation of the lands for the particular use or development type is required to achieve the proper and sustainable planning of the urban settlement and in particular:	This site is currently developed for Nazarene Church. The site is zoned for community use, to reflect its current use.
	(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement;	No
	(ii) Comprises significant previously developed and/or under-utilised lands;	Yes
	(iii) Is within or adjoining the core of an established or designated urban settlement;	No
	(iv) Will be essential in achieving compact or sustainable urban growth;	No
	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	n/a – these lands are already developed. There are suitable lands available for development of community facilities at locations which are not at risk of flooding.
3	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.	Assessment of flood risk has been incorporated into the SEA process.
<i>Conclusion</i>		
Justification test failed. These lands are currently developed for community use. As such, it is considered appropriate to retain this zoning. Applications for minor development (e.g. extensions) are unlikely to raise significant flooding issues. Should expansion of these existing uses be proposed, flood mitigation measures are required.		
<i>Recommendation</i>		
Mitigation objectives shall apply (refer Section 2.3 of this document).		

Site no.18

Land zoning	Existing Residential (RE)
Flood Zone	A
Vulnerability of land use vs. Flood Zone	Land use zoning not appropriate
Requirement for Justification Test	Yes

<i>Justification Test</i>		
1	The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act 2000, as amended.	Under the Wicklow County Development Plan 2010-2016, Greystones-Delgany is designated a 'Large Growth Town 2' and Kilcoole is designated a 'Small Growth Town'. Under the 'core strategy' of the CDP, the population of Greystones-Delgany is to grow from c.17200 to 24000 by 2022, and the population of Kilcoole is to grow from c.4000 to 5000 by 2022.
2	The zoning or designation of the lands for the particular use or development type is required to achieve the proper and sustainable planning of the urban settlement and in particular:	This site is developed as a residential housing estate and accordingly is zoned RE: existing residential use, to reflect its current use. The lands that fall within the flood zone are largely developed for housing. Undeveloped lands form part of the designated public open space for the housing estate.
	(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement;	No
	(ii) Comprises significant previously developed and/or under-utilised lands;	Yes
	(iii) Is within or adjoining the core of an established or designated urban settlement;	No
	(iv) Will be essential in achieving compact or sustainable urban growth;	No
	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	n/a – these lands are already developed. There are suitable lands available for development of housing at locations which are not at risk of flooding.
3	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.	Assessment of flood risk has been incorporated into the SEA process.
<i>Conclusion</i>		
Justification test failed. These lands are currently developed as a residential housing estate. As such, it is considered appropriate to retain the RE zoning objective. Applications for minor development (e.g. extensions) are unlikely to raise significant flooding issues. Should expansion of these existing uses be proposed, flood mitigation measures are required. Objective SOC8 of this plan aims to preserve public open space within housing estates and restricts development that would compromise the integrity of this space. The use of the land for public open space is safeguarded and as such does not raise significant flooding issues.		
<i>Recommendation</i>		
Mitigation objectives shall apply(refer Section 2.3 of this document).		

Site no.19

Land zoning	Existing Residential (RE)
Flood Zone	A and B
Vulnerability of land use vs. Flood Zone	Land use zoning not appropriate
Requirement for Justification Test	Yes

<i>Justification Test</i>		
1	The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act 2000, as amended.	Under the Wicklow County Development Plan 2010-2016, Greystones-Delgany is designated a 'Large Growth Town 2' and Kilcoole is designated a 'Small Growth Town'. Under the 'core strategy' of the CDP, the population of Greystones-Delgany is to grow from c.17200 to 24000 by 2022, and the population of Kilcoole is to grow from c.4000 to 5000 by 2022.
2	The zoning or designation of the lands for the particular use or development type is required to achieve the proper and sustainable planning of the urban settlement and in particular:	This site is developed as the Charlesland residential development and accordingly is zoned RE: existing residential use, to reflect its current use. The lands that fall within Flood zone A/B are located at the periphery of the development and are developed as public open space and pathways.
	(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement;	No
	(ii) Comprises significant previously developed and/or under-utilised lands;	Yes
	(iii) Is within or adjoining the core of an established or designated urban settlement;	No
	(iv) Will be essential in achieving compact or sustainable urban growth;	No
	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	n/a – these lands are already developed. There are suitable lands available for development of housing at locations which are not at risk of flooding.
3	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.	Assessment of flood risk has been incorporated into the SEA process.
<i>Conclusion</i>		
Justification test failed. These lands are currently developed as a residential housing estate. As such, it is considered appropriate to retain the RE zoning objective. Objective SOC8 of this plan aims to preserve public open space within housing estates and restricts development that would compromise the integrity of this space. The use of the land for public open space is safeguarded and as such does not raise significant flooding issues. Should significant expansion of existing uses be proposed, flood mitigation measures are required.		
<i>Recommendation</i>		
Mitigation objectives shall apply (refer Section 2.3 of this document).		

Site no.20

Land zoning	Active Open Space (AOS)
Flood Zone	A
Vulnerability of land use vs. Flood Zone	Land use zoning appropriate
Requirement for Justification Test	No

Site no.21

Land zoning	Greenbelt
Flood Zone	A and B
Vulnerability of land use vs. Flood Zone	Land use zoning not appropriate (i.e. GB objective includes to maintain primary use of lands for agriculture)
Requirement for Justification Test	Yes

Justification Test

1	The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act 2000, as amended.	Under the Wicklow County Development Plan 2010-2016, Greystones-Delgany is designated a 'Large Growth Town 2' and Kilcoole is designated a 'Small Growth Town'. Under the 'core strategy' of the CDP, the population of Greystones-Delgany is to grow from c.17200 to 24000 by 2022, and the population of Kilcoole is to grow from c.4000 to 5000 by 2022.
2	The zoning or designation of the lands for the particular use or development type is required to achieve the proper and sustainable planning of the urban settlement and in particular:	These lands are located in the rural area. The zoning objective has three key aims – (i) protect the open nature and landscape quality of lands, (ii) protection of biodiversity, (iii) maintain primary use for agriculture. The GB zoning objective indicates that residential development shall be limited to 'strictly necessary' housing (in accordance with CDP rural standards).
	(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement;	No
	(ii) Comprises significant previously developed and/or under-utilised lands;	No, although some parts in use for rural housing.
	(iii) Is within or adjoining the core of an established or designated urban settlement;	No
	(iv) Will be essential in achieving compact or sustainable urban growth;	Yes – GB objective aims to protect the open nature of lands, providing a demarcation between urban and rural areas, thus contributing to the achievement of a compact settlement.
	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes – there are agricultural lands available in proximity that are not at risk of flooding.

3	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.	Assessment of flood risk has been incorporated into the SEA process.
<i>Conclusion</i>		
Justification test failed. Considering the existing use and nature of the lands, it is considered appropriate to retain the GB zoning objective. The objective for GB indicates that residential development shall be limited to 'strictly necessary' housing (in accordance with CDP rural standards). Should expansion of agricultural or other appropriate uses be proposed, flood mitigation measures are required.		
<i>Recommendation</i>		
Mitigation objectives shall apply (refer Section 2.3 of this document).		

Site no.22

Land zoning	Open Space
Flood Zone	A and B
Vulnerability of land use vs. Flood Zone	Land use zoning appropriate
Requirement for Justification Test	No

Site no.23

Land zoning	Employment
Flood Zone	B
Vulnerability of land use vs. Flood Zone	Land use zoning appropriate
Requirement for Justification Test	No

Site no.24

Land zoning	Existing Residential (RE)
Flood Zone	A and B
Vulnerability of land use vs. Flood Zone	Land use zoning not appropriate
Requirement for Justification Test	Yes

<i>Justification Test</i>		
1	The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act 2000, as amended.	Under the Wicklow County Development Plan 2010-2016, Greystones-Delgany is designated a 'Large Growth Town 2' and Kilcoole is designated a 'Small Growth Town'. Under the 'core strategy' of the CDP, the population of Greystones-Delgany is to grow from c.17200 to 24000 by 2022, and the population of Kilcoole is to grow from c.4000 to 5000 by 2022.
2	The zoning or designation of the lands for the particular use or development type is required to achieve the proper and sustainable planning of the urban settlement and in particular:	These sites are developed as residential housing estates and accordingly are zoned RE: existing residential use, to reflect the current use. The lands that fall within Flood zone A/B and are largely developed for housing. Undeveloped lands form part of the designated public open space for the housing estate.
	(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement;	No
	(ii) Comprises significant previously developed and/or under-utilised lands;	Yes

	(iii) Is within or adjoining the core of an established or designated urban settlement;	No
	(iv) Will be essential in achieving compact or sustainable urban growth;	No
	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	n/a – these lands are already developed. There are suitable lands available for development of housing at locations which are not at risk of flooding.
3	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.	Assessment of flood risk has been incorporated into the SEA process.
<i>Conclusion</i>		
Justification test failed. These lands are currently developed as residential housing estates. As such, it is considered appropriate to retain the RE zoning objective. Applications for minor development (e.g. extensions) are unlikely to raise significant flooding issues. Should expansion of the existing uses be proposed, flood mitigation measures are required. Objective SOC8 of this plan aims to preserve public open space within housing estates and restricts development that would compromise the integrity of this space. The use of the land for public open space is safeguarded and as such does not raise significant flooding issues.		
<i>Recommendation</i>		
Mitigation objectives shall apply (refer Section 2.3 of this document).		

Site no.25

Land zoning	Active Open Space
Flood Zone	A and B
Vulnerability of land use vs. Flood Zone	Land use zoning appropriate
Requirement for Justification Test	No

Site no.26

Land zoning	Open Space
Flood Zone	A and B
Vulnerability of land use vs. Flood Zone	Land use zoning appropriate
Requirement for Justification Test	No

Site no.27

Land zoning	Strategic Land Bank: To provide a strategic land bank for future phases of development of the settlement after the lifetime of this plan.
Flood Zone	A and B
Vulnerability of land use vs. Flood Zone	n/a zoning objective does not indicate what uses may be appropriate on these lands – to be determined after the lifetime of this plan.
Requirement for Justification Test	n/a

Site no.28

Land zoning	Tourism (T): To provide for the development of an Integrated Tourism/Leisure/Recreational Complex at Druids Glen Golf Club, Woodstock Demesne
Flood Zone	A and B
Vulnerability of land use vs. Flood Zone	Land use zoning appropriate – these lands are in use as part of the Druids Glen golf course, a form of outdoor sport and recreation.
Requirement for Justification Test	No

Site no.29

Land zoning	Active Open Space
Flood Zone	A and B
Vulnerability of land use vs. Flood Zone	Land use zoning appropriate
Requirement for Justification Test	No

Site no.30

Land zoning	Special R-C ⁴
Flood Zone	A and B
Vulnerability of land use vs. Flood Zone	Land use zoning not appropriate
Requirement for Justification Test	Yes

<i>Justification Test</i>		
1	The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act 2000, as amended.	Under the Wicklow County Development Plan 2010-2016, Greystones-Delgany is designated a 'Large Growth Town 2' and Kilcoole is designated a 'Small Growth Town'. Under the 'core strategy' of the CDP, the population of Greystones-Delgany is to grow from c.17200 to 24000 by 2022, and the population of Kilcoole is to grow from c.4000 to 5000 by 2022.
2	The zoning or designation of the lands for the particular use or development type is required to achieve the proper and sustainable planning of the urban settlement and in particular:	This site is developed for a residential housing development as part of the Druids Glen Golf resort. In reflection of its current use, the site is zoned for a low density residential development of up to 40 units. The lands that fall within Flood zone A/B form part of the public open space for the development
	(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement;	No
	(ii) Comprises significant previously developed and/or under-utilised lands;	Yes
	(iii) Is within or adjoining the core of an established or designated urban settlement;	No
	(iv) Will be essential in achieving compact or sustainable urban growth;	No

⁴ To provide for an especially high quality, discreetly designed, 40 unit low density golf resort related residential development on lands zoned 'SpecialR-C' on Map A. Development on this site shall be effectively and permanently screened from an early date from public view (including from the E761 on the east side of Kilmullin Lane on the west).

	(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	n/a – these lands are already developed. There are suitable lands available for development of housing at locations which are not at risk of flooding.
3	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.	Assessment of flood risk has been incorporated into the SEA process.

Conclusion

Justification test failed. These lands are currently developed as low density housing development on lands associated with the Druids Glen Golf complex. It is appropriate to retain the residential zoning objective. Objective SOC8 of this plan aims to preserve public open space within housing estates and restricts development that would compromise the integrity of this space. The use of the land for public open space is safeguarded and as such does not raise significant flooding issues. Should expansion of existing uses be proposed, flood mitigation measures are required.

Recommendation

Mitigation objectives shall apply (refer Section 2.3 of this document)

Site no.31

Land zoning	Existing Residential
Flood Zone	A
Vulnerability of land use vs. Flood Zone	Land use zoning not appropriate
Requirement for Justification Test	Yes

Justification Test

1	The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act 2000, as amended.	Under the Wicklow County Development Plan 2010-2016, Greystones-Delgany is designated a 'Large Growth Town 2' and Kilcoole is designated a 'Small Growth Town'. Under the 'core strategy' of the CDP, the population of Greystones-Delgany is to grow from c.17200 to 24000 by 2022, and the population of Kilcoole is to grow from c.4000 to 5000 by 2022.
2	The zoning or designation of the lands for the particular use or development type is required to achieve the proper and sustainable planning of the urban settlement and in particular:	These sites are developed for residential use and accordingly are zoned RE: existing residential use, to reflect the current use.
	(i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement;	No
	(ii) Comprises significant previously developed and/or under-utilised lands;	Yes
	(iii) Is within or adjoining the core of an established or designated urban settlement;	No
	(iv) Will be essential in achieving compact or sustainable urban growth;	No
	(v) There are no suitable alternative lands for the	n/a – these lands are already developed.

	particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	There are suitable lands available for development of housing at locations which are not at risk of flooding.
3	A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.	Assessment of flood risk has been incorporated into the SEA process.
Conclusion		
Justification test failed. These lands are currently developed as residential housing estates. As such, it is considered appropriate to retain the RE zoning objective. Applications for minor development (e.g. extensions) are unlikely to raise significant flooding issues. Should expansion of the existing uses be proposed, flood mitigation measures are required.		
Recommendation		
Mitigation objectives shall apply (refer Section 2.3 of this document).		

2.3 Mitigation Objectives

In order to properly manage flood risk, the following mitigation objectives are included in the Greystones-Delgany and Kilcoole LAP 2013-2019:

TS4: To implement flood management objectives as set out in the Wicklow County Development Plan 2010-2016 and to implement the 'Guidelines on the Planning System and Flood Risk Management' (DoEHLG/OPW, 2009).

TS5: To restrict the types of development permitted in Flood Zone A and Flood Zone B to the uses that are 'appropriate' to each flood zone, as set out in Table 3.2 of the Guidelines for Flood Risk Management (DoEHLG/OPW, 2009). Developments that are an 'inappropriate' use for a flood zone area, as set out in Table 3.2 of the Guidelines, will not be permitted, except where a proposal complies with the Justification Test for Development Managements, as set out in Box 5.1 of the Guidelines. Flood Risk Assessments shall be in accordance with the requirements set out in the Guidelines.

TS6: Notwithstanding the identification of an area as being at low or no risk of flooding, where the planning authority is of the opinion that flood risk may arise or new information has come to light that may alter the flood designation of the land, an appropriate flood risk assessment may be required to be submitted by an applicant for planning permission.

SOC9: Public open space within residential housing estates shall be preserved and enhanced. No development shall be permitted that would compromise the integrity of these spaces. In particular, residential development shall not be permitted on designated public open space within these areas.

The following objectives and policies of 'Section 12.6: Flooding' of the Wicklow County Development Plan 2010-2016 also apply to the plan area:

FL1 To prepare flood zone maps for all zoned lands within the County as part of future Local Area Plans.

FL2 Land will not be zoned for development in an area identified as being at high or moderate flood risk (as set out in the Guidelines), unless where it is fully justified (through the

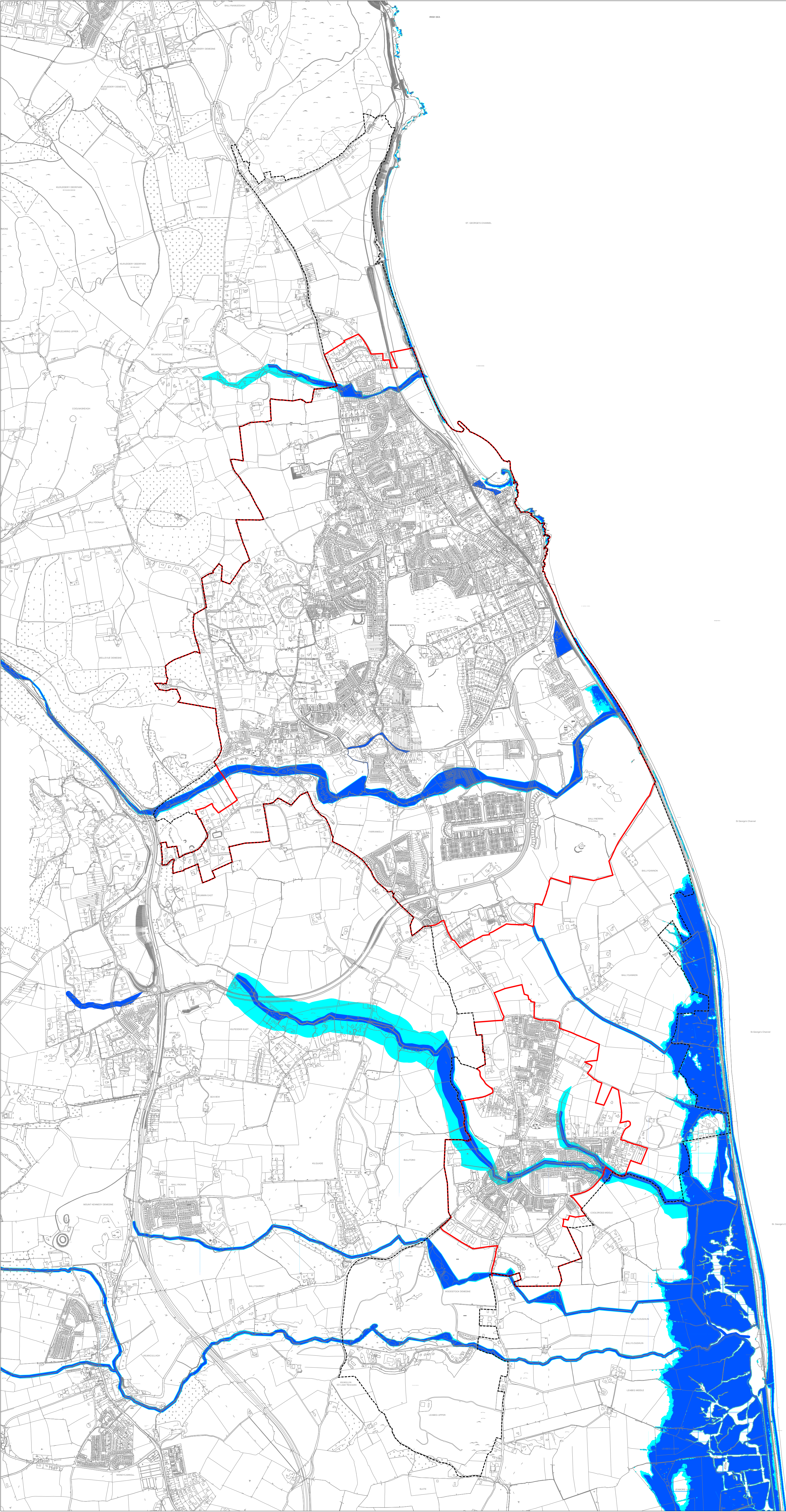
Justification Test set out in the Guidelines) that there are wider sustainability grounds for appropriate development and unless the flood risk can be managed to an acceptable level without increasing flood risk elsewhere and where possible, reducing flood risk overall.

- FL3 Applications for significant new developments or developments in high or moderate flood risk areas shall follow the sequential approach as set out above.*
- FL4 To prohibit development in river flood plains or other areas known to provide natural attenuation for floodwaters except where the development can clearly be justified with the guidelines 'Justification Test'.*
- FL5 To limit or break up large areas of hard surfacing in new developments and to require all surface car parks to integrate permeability measures such as permeable paving.*
- FL6 Excessive hard surfacing shall not be permitted for new, or extensions to, residential or commercial developments and all applications will be required to show that sustainable drainage techniques have been employed in the design of the development.*
- FL7 To require all new developments to include proposals to deal with rain and surface water collected on site and where deemed necessary, to integrate attenuation and SUDS measures.*
- FL8 Flood assessments will be required with all planning applications proposed in flood risk areas to ensure that the development itself is not at risk of flooding and the development does not increase the flood risk in the relevant catchment (both up and down stream of the application site). Generally a Flood Impact Assessment will be required with all significant developments and a certificate (from a competent person stating that the development will not contribute to flooding within the relevant catchment) will be required with all small developments of areas of 1 hectare or less.*
- FL9 For developments adjacent to all watercourses of a significant conveyance capacity or where it is necessary to maintain the ecological or environmental quality of the watercourse, any structures (including hard landscaping) must be set back from the edge of the watercourse to allow access for channel clearing/ maintenance/ vegetation. A minimum setback of up to 10-15m will be required either side depending on the width of the watercourse.*

3. DISCLAIMER

It is important to note that compliance with the requirements of The Planning System and Flood Risk Management-Guidelines for Planning Authorities is a work in progress and is currently based on emerging and incomplete data as well as estimates of the locations and likelihood of flooding. In particular, the assessment and mapping of areas of flood risk awaits the publication of the Catchment-based Flood Risk Assessment and Management Plans (CFRAMs). As a result, this Strategic Flood Risk Assessment is based on available information.

All information in relation to flood risk may be substantially altered in light of future data and analysis. As a result, all landowners and developers are advised that Wicklow County Council can accept no responsibility for losses or damages arising due to assessments of the vulnerability to flooding of lands, uses and developments. Owners, users and developers are advised to take all reasonable measures to assess the vulnerability to flooding of lands in which they have an interest prior to making planning or development decisions.



Flood Zone A: High likelihood of flooding

Where the probability of flooding from rivers and the sea is highest (greater than 1% or 1 in 100 for river flooding or 0.5% or 1 in 200 for coastal flooding)

Flood Zone B: Moderate likelihood of flooding

Where the probability of flooding from rivers and the sea is moderate (between 0.1% or 1 in 1000 and 1% or 1 in 100 for river flooding and between 0.1% or 1 in 1000 year and 0.5% or 1 in 200 for coastal flooding)

Disclaimer

These Indicative Flood Zones are based on currently available information. All information may be substantially altered in light of future data and analysis. In particular, the assessment and mapping of areas of flood risk awaits the publication of the CFRAMS. Full Disclaimer is included in Section 3 of SFRA.

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Wicklow County Council
Planning Section
December 2012

Strategic Flood Risk Assessment: Indicative Flood Zones

Map 1

DRAFT GREYSTONES - DELGANY AND KILCOOLE LOCAL AREA PLAN (LAP) 2013-2019



Drawn by: AM
Checked by: AM
Scale: NTS

