

Appendix 2 – Infrastructure Assessment and Land Use Evaluation

1.0 Introduction

The National Planning Framework emphasises the requirement for better linkage between the zoning of land for development and the availability of or investment in infrastructure that is required to facilitate development. This is to be implemented through a tiered approach to land use zoning that will differentiate between zoned land that is serviced and zoned land that is serviceable within the life of the Plan.¹

The objective of this approach is to avoid zoning lands that will be unable to be brought forward for development due to deficiencies in necessary infrastructure. Appendix 3 of the NPF sets out the Methodology for this two-tier approach to land zoning.²

Tier 1: Serviced Zoned Land	These are lands that can connect to existing services and are therefore 'ready to go'.
Tier 2: Serviceable Zoned Land	These are lands that are presently not sufficiently serviced to support new development but have the potential be fully serviced within the life of the Plan. The potential for delivery of the required services and/or upgrades to existing infrastructure is to be identified.

This report identifies the infrastructure requirements of potential development sites in each settlement in County Louth. At the time of writing no detailed national guidance had been published in relation to the Methodology for the Tiered Approach to Land Zoning. In the absence of this guidance a Methodology has been developed by the Planning Department that is consistent with the provisions set out in Appendix 3 of the National Planning Framework.

1.1 Delivery of Infrastructure

The nature and complexity of infrastructure projects often means that there can be a lengthy lead in time between the identification of the need for a piece of infrastructure and its delivery. These projects are required to go through a number of phases prior to entering the construction phase. This includes preliminary designs and appraisals, feasibility studies, site evaluations, environmental reports, and detailed design. Securing funding and dealing with landowners and other key stakeholders are also critical elements of the process. This means that such projects often span more than the lifetime of a Development Plan, which is 6 years in duration. It is important to acknowledge that even though a project may not be delivered during a Development Plan, it may have met a milestone e.g. obtained planning permission or Compulsory Purchase Order confirmed. This has been a consideration in this Infrastructure Assessment.

¹ [National Policy Objective 72a of the NPF](#)

² [Appendix 3 of the NPF](#)

1.1.1 Funding

The delivery of infrastructure is dependent on funding. The sources of funding vary depending on the nature and scale of the particular project and can include:

- i) Central Government – The National Development Plan sets out the list of key projects to be delivered nationally up to 2040. Capital investment funding by government departments and agencies include LIHAF, the Urban and Rural Regeneration Funds, Irish Water Capital Investment Plan, Smarter Travel funding by the NTA, and Transport Infrastructure Ireland funding.
- ii) Louth County Council – Funding of projects included in the Development Contribution Scheme
- iii) Private – The developer of lands can privately finance the delivery of infrastructure.

1.1.2 Methodology

This assessment involved a review of undeveloped lands in each settlement in the County. The majority of these lands are zoned for residential or employment uses. An assessment of the lands identified as a 'Strategic Reserve' has also been carried out.

The focus of the assessment is on transportation and water and waste water infrastructure. The Council will continue to engage and work closely with the Department of Education to provide education facilities and energy and telecommunications providers to enhance these services.

There were a series of internal consultations between the Planning Department and the Infrastructure and Water Services Sections in addition to an external consultation with Irish Water. These consultations provided an overview of future infrastructure requirements in each settlement in addition to more detailed analysis on a site by site basis where this was deemed necessary.

Each department was requested to provide details of the following:

- i) Any infrastructure deficits that would impede the development of the lands;
- ii) The current status of any plans/programmes in place to address these infrastructure deficits;
- iii) The anticipated timeframe for the delivery of these projects.

A more detailed breakdown of this Assessment at Departmental level is as follows:

Sector	Infrastructure Type	Assessment Overview
Transportation	Roads	Can the lands be accessed directly from the public road?
		Are the lands dependent on the construction of any Link Roads?
	Footpath	Is there a public footpath to the lands?
	Public Lighting	Is there public lighting to the lands?
Water Services	Water	Is there a public water main in proximity to the lands?
		Is there available capacity in the water supply to accommodate the development of the lands?
		Is there capacity in the distribution network?
	Wastewater	Is there a public sewer in proximity to the lands?
		Is there capacity in the wastewater treatment plant the lands would discharge to?
		Is there capacity in the local foul sewer network to accommodate any additional loading?

1.1.3 Transport Infrastructure

The County Development Plan identifies the major transport infrastructure projects required to ensure that people and goods can continue to be efficiently transported around the County and the wider region. This includes the construction of new roads, the upgrade of existing roads, and the provision of public transport infrastructure.

In addition there are many local projects that will focus on delivering more sustainable travel patterns. This includes walking and cycling infrastructure and improvements to public transport infrastructure including bus stops/shelters, bus lanes etc.

1.1.4 Water and Waste Water Infrastructure

Irish Water is responsible for the delivery of water service infrastructure. In association with the Water Services section of the Council, Irish Water has identified the necessary investments in the water and waste water treatment plants and associated collection and distribution network in Louth to facilitate future population and economic growth.

1.1.5 Tier 1 and Tier 2 Lands

In order for a parcel of land to be identified as 'Tier 1' there shall be no infrastructure impediments restricting the development of the lands i.e. all transportation and water services infrastructure needs to be in place. Sites which may require minor additional works or investment have also been identified as Tier 1 in certain circumstances. This is dependent on the nature and scale of the works required.

The identification of a site in Tier 2 highlights to landowners and potential investors that there are deficiencies in infrastructure that need to be addressed prior to the lands being developed. The nature of the deficiencies can vary between lands and settlements.

A traffic light matrix has been developed that highlights any deficiencies in the lands analysed. A green colour indicates that services/infrastructure are available; an amber colour indicates that services are not available or further investment in infrastructure is required and this investment is likely to be provided during the lifetime of the Plan; and a red colour indicates services are unavailable and unlikely to be provided during the lifetime of the Plan. An example of this matrix is set out overleaf.

Settlement	
Tiered Assessment Analysis	
Land Use	RES
Infrastructure Type	Site 1
Roads	
Footpath	
Public Lighting	
Water	
Wastewater	
Tier 1 or Tier 2	

Legend	Tier
Services/Infrastructure available	
Further investment required	
Provision of infrastructure unlikely during the Plan period	

1.1.6 Infrastructure Requirements

To supplement the Tiered Assessment tables information has also been provided in relation to any potential additional works or investment required in order to release the lands for development in each settlement. It should be noted that the works included in these tables is not exhaustive and there may be additional works required when a more detailed analysis of the area and subject lands/site is carried out as part of a planning application. The level of works required will also be dependent on the nature and scale of the development on the subject lands/site. This will be assessed and reviewed in greater detail at the planning application stage of any development proposals on the subject lands/sites.

1.2 Alignment of Infrastructure Requirement with Land Use Evaluation

The NPF acknowledges that infrastructure availability is not the only criteria in determining the suitability of a site for development. Other factors include location, the scale of development envisaged, proximity to and availability of services and amenities, accessibility to transport, and environmental issues such as flooding.

Taking this into account it was decided to merge this infrastructure assessment with a land use evaluation as it will provide a more coherent overview of the suitability of lands for development in each settlement.

A matrix setting out the criteria that each site is to be assessed against was prepared. These criteria are as follows:

- Proximity to town centre;
- Contribution to the delivery of consolidated, compact growth;
- Proximity shops/services;
- Proximity to schools;
- If the location of the lands will facilitate the delivery of infill or backland development;
- Availability of public transport;
- If there are any issues with flooding.

The scoring for each of the criteria is as follows:

Criteria	Assessment	Scoring										
Proximity to town centre	Based on walking distance and connectivity with town centre.	1 point allocated for each 500 metres from town centre										
Contribution to the delivery of consolidated, compact growth	How the development of the lands would result in a more compact, sustainable settlement.	A score ranging between 1 and 5 is allocated to each category with 1 being the most optimal and 5 being the least optimal score Legend: <table><tr><td></td><td>1</td></tr><tr><td></td><td>2</td></tr><tr><td></td><td>3</td></tr><tr><td></td><td>4</td></tr><tr><td></td><td>5</td></tr></table>		1		2		3		4		5
	1											
	2											
	3											
	4											
	5											
Proximity to schools and services	The distance of the lands to existing schools and services and the likely mode of transport used.											
Infill or Backland	If the location of the lands will facilitate the delivery of infill or backland development.											
Availability of public transport	The location of the lands along a public transport corridor or proximity to bus/rail stops.											
Flooding	If the lands are at risk of flooding.											

An example of the matrix is set out below. A lower score is represented by a green colour, a mid-range score by amber, and a high score with red. The sites with the lower score are considered to be more optimal locations for development.

Land Use Evaluation	RES
	Site 1
Proximity to Town Centre	3
Contribute to Consolidated/Compact growth	4
Proximity to Shops/services	3
Proximity to schools	2
Infill/Backland	4
Availability to public transport	1
Flooding	1
Total	18

2.0 Infrastructure Assessment and Land Use Evaluation by Settlement

The following sections sets out the details of the Infrastructure Assessment and Land Use Evaluation for each settlement. A map indicating the lands for which the assessment was carried out and tables indicating the level of services available, the tiered ranking of the lands, and the infrastructure required in order to release the lands for development is included.

The land uses in the Draft County Development Plan which were evaluated are as follows:

Land Use Zoning on Draft County Development Plan Maps	Abbreviation in the Tables
A1 – Existing Residential	RES
A2 – New Residential	RES
B1 – Town or Village Centre	TC or VC
C1 – Mixed Use	MU
C3 – Commercial and Business	C&B
E1 – General Employment	EMP
E2 – Business and Technology	BT
I1 – Tourism and Leisure	TOU
L1 – Strategic Reserve	SR

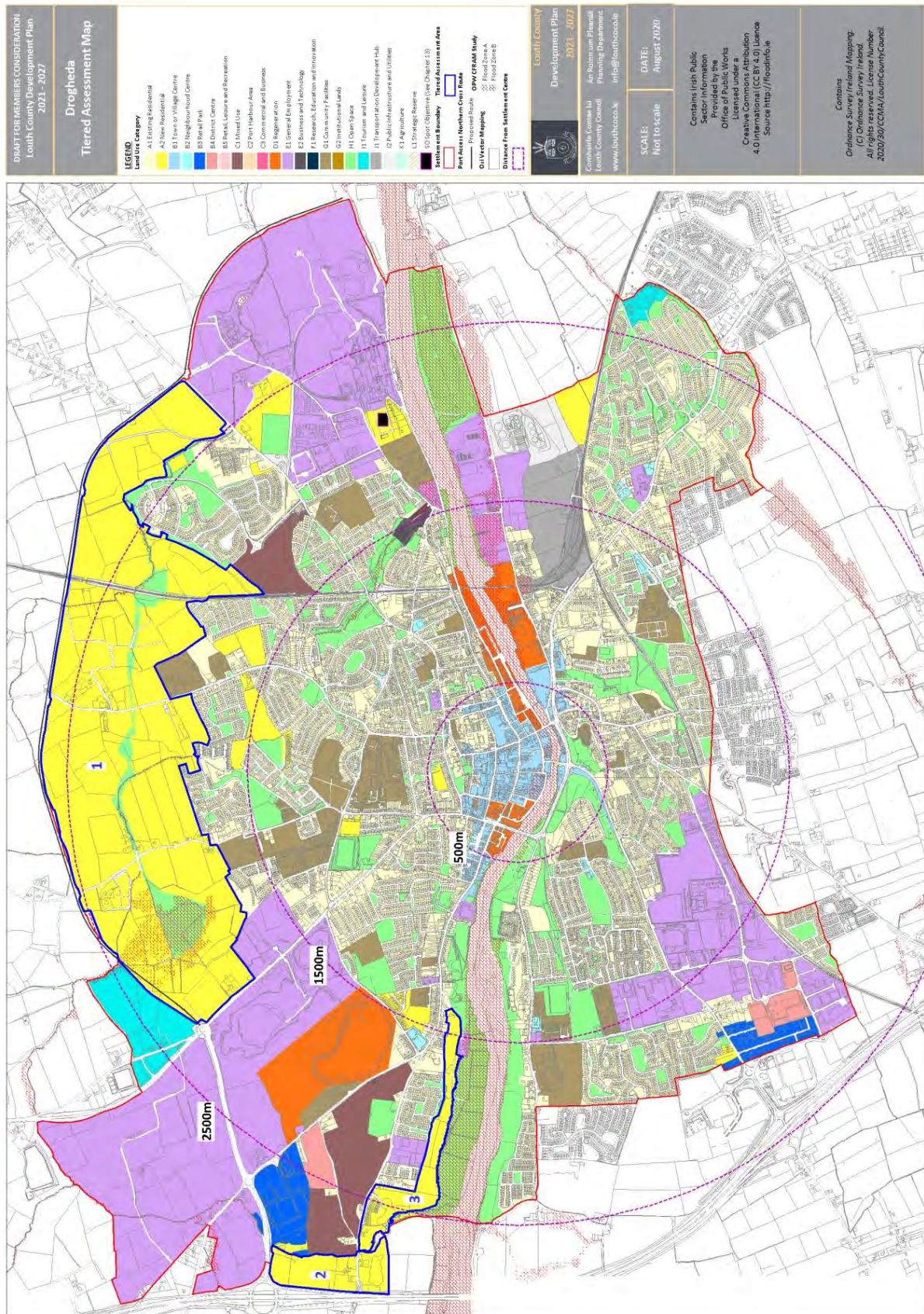
2.1 Regional Growth Centres

Settlement - Drogheda			
Tiered Assessment Analysis			
Land Use	RES	RES	RES
Infrastructure Type	Site 1	Site 2	Site 3
Roads			
Footpath			
Public Lighting			
Water			
Wastewater			
Tier 1 or Tier 2			
Land Use Evaluation			
Proximity to Town Centre	5	5	5
Contribute to Consolidated/compact growth	4	5	3
Proximity to shops and services	5	1	3
Proximity to schools	1	4	3
Infill/Backland	5	5	1
Availability to public transport	1	3	1
Flooding	2	1	1
Total	23	24	17

Settlement – Drogheda

Site	Potential Infrastructure investment required to facilitate the development of the lands	
	Roads	Water Services
Site 1	Partial or full Port Access Northern Cross Route	Development of part of the lands could be accommodated. Water and Waste Water infrastructure under review by Irish Water (North Drogheda Waste Water Strategic Infrastructure Study). Flows from these lands cannot be accommodated in the existing Wastewater network without detriment to overflows. Any substantial development will need infrastructure. (Go from East to West).
Site 2	Realigned Leonards Cross Junction On street cycleway c.1000m in length Traffic management Public Lighting extension	Possible, but private infrastructure could delay connections. IW looking at solutions in this area through a CDS application (Significant infrastructure - Pumping Station to be provided by developer). Pumping Station and Rising Main along R168 to connect to existing sewer,(possibly extending the gravity sewer north to meet the Rising Main)
Site 3	Realigned Leonards Cross Junction On street cycleway c.1000m in length Traffic management Public Lighting extension	Irish Water looking at solutions in this area through connection application. Pumping Station required. Developer led.

Map 1 – Drogheda Tiered Assessment Map



Settlement - Dundalk																		
Tiered Assessment Analysis																		
Land Use	EMP	EMP	EMP	RES	SR	SR	SR	EMP	RES	SR	SR	SR	BT+RES	MU	RES	RES/SR	SR	SR
Infrastructure Type	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10	Site 11	Site 12	Site 13	Site 14	Site 15	Site 16	Site 17	Site 18
Roads																		
Footpath																		
Public Lighting																		
Water																		
Wastewater																		
Tier 1 or Tier 2																		
Land Use Evaluation																		
Proximity to Town Centre	5	5	5	5	5	5	5	5	4	5	5	5	5	5	3	4	5	5
Contribute to Consolidated/compact growth	4	4	4	4	4	4	5	4	2	5	5	3	4	4	4	4	5	5
Proximity to shops and services	3	3	3	3	3	3	5	3	3	4	5	4	3	2	2	4	4	4
Proximity to schools	N/A	N/A	N/A	4	4	4	5	N/A	2	4	4	4	N/A	N/A	4	4	3	3
Infill/Backland	5	5	5	5	5	5	5	4	3	5	5	5	5	4	4	5	5	5
Availability to public transport	3	3	3	3	4	4	5	3	3	2	1	3	3	4	4	4	5	5
Flooding	1	4	4	4	1	1	1	4	1	1	1	1	1	1	3	3	1	1
Total	21	24	24	28	26	26	31	23	18	26	26	25	21	20	24	28	28	28

Settlement - Dundalk

Site	Potential Infrastructure investment required to facilitate the development of the lands	
	Roads	Water Services
Site 1	Possible extension of public lighting. Possible construction of roundabout.	Developer led solution under review. Drainage Area Plan Solutions (Marlish Red Cow developments - strategic Pumping Station required)
Site 2	Possible extension of public lighting. Possible construction of roundabout at Red Cow. Possible pedestrian crossing depending on the type of development.	Developer led solution under review and Drainage Area Plan Solutions.
Site 3	Potential construction of roundabout. Potential pedestrian crossing.	Issues with both Water and Waste Water.
Site 4	Upgrade/amendments to the geometry of the junctions may be required. Off road cycle lane required from the Tain Bridge to the lands and the Newry Road to the lands	Dundalk Drainage Area Plan (DAP) is being progressed – this will assess all sewerage networks and identify/determine necessary improvements required to facilitate development. New sewerage infrastructure including a pumping station are required. Constraints in the Water Supply Network. Network assessment and possible upgrade required.
Site 5	Possible construction of roundabout at Red Cow. Possible pedestrian crossing. Potential footpath along east side of R215 c.200m in length.	Developer led solution under review and Drainage Area Plan. Depends on size of development (limits at Newry Road Pumping Station)
Site 6	Upgrade to Lisdoon Junction and Lights. Construction of section of the R177 (Armagh Road) to R215 (Old Newry Road) Link road c.970m in length to be constructed. Public Lighting on Doylestown Road within 50km/h zone 400m in length Cycle and pedestrian crossing to Coulter Place	Water Supply may be constrained. Works by developer needed. Waste Water capacity depends on the size of the development - limits at Newry Road Pumping Station to the east of the site

Settlement - Dundalk

Site	Potential Infrastructure investment required to facilitate the development of the lands	
	Roads	Water Services
	Construction of cycleway / walking Route from Coulter Place to R215 Traffic calming along the R177 from speed limit back to town	
Site 7	Upgrade to Lisdoon junction Construction of the R177 (Armagh Road) to R215 (Old Newry Road) Link Road c.1.5km in length Potential new M1 interchange on the Armagh Road New Footpath and Cycleway to speed limit 660m Additional Footpath for 840m Construction of Cycleway / walking Route from Coulter Place to R215 Traffic calming along the R177 from speed limit back into town	Water and waste water issues which could be addressed but at considerable cost and timescale.
Site 8	Upgrade to Lisdoon junction Construction of the R177 (Armagh Road) to R215 (Old Newry Road) Link Road c.1.5km in length required Potential new M1 interchange on the Armagh Road New Footpath and Cycleway to speed limit c.660m in length Additional Footpath for 840m Construction of cycleway / walking Route from Coulter Place to R215 Traffic calming along the R177 from speed limit back into town	Issues with both Water and Wastewater, may be outside timescale of CDP. Nearest sewer c.300m.
Site 9	Construction of the Mount Avenue Road upgrade.	Can service part of the site, future upgrades would be needed. Boyle O'Reilly Wastewater Pumping Station may require upgrade

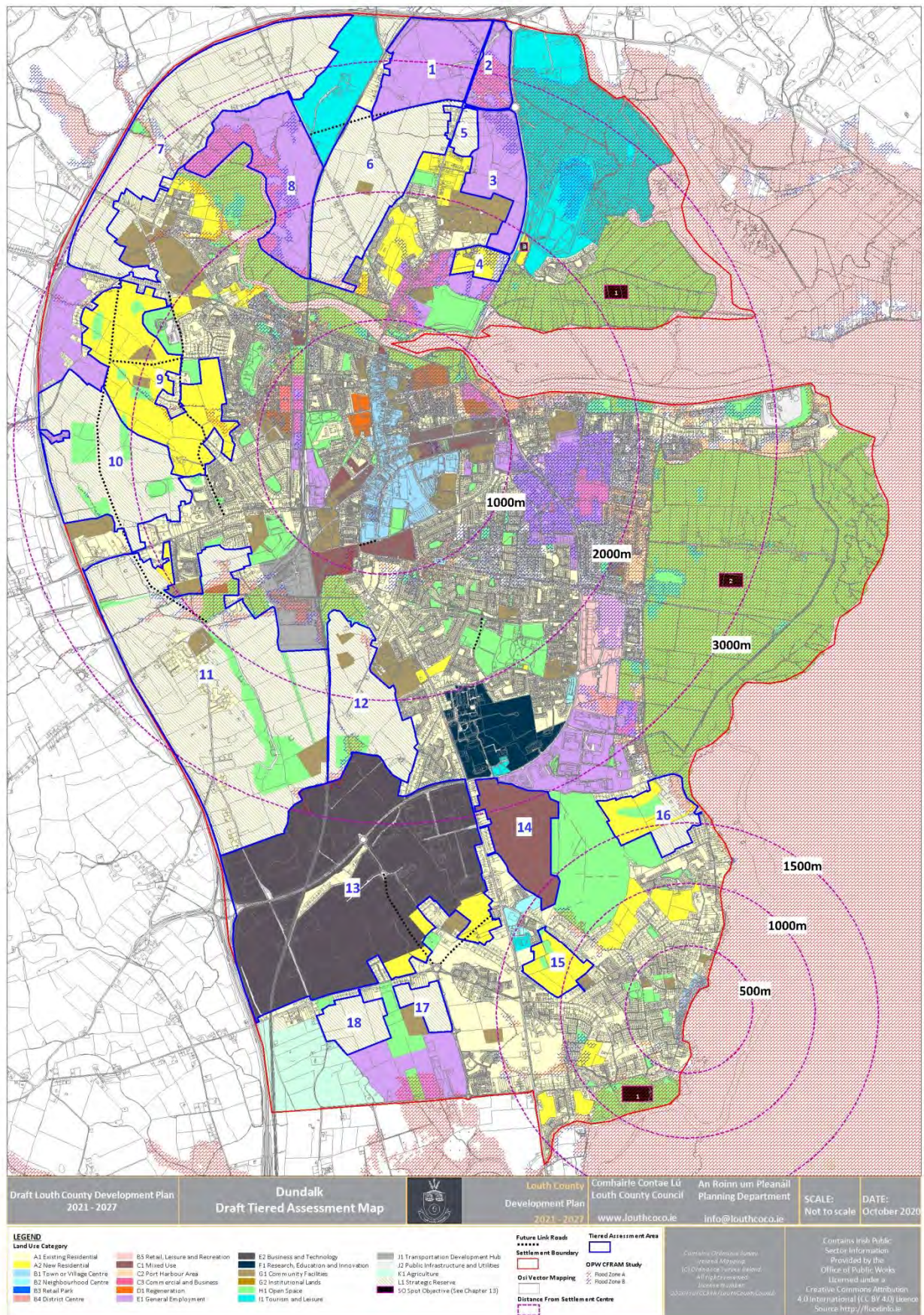
Settlement - Dundalk

Site	Potential Infrastructure investment required to facilitate the development of the lands	
	Roads	Water Services
	Footpath and Cycleway along the R934 (old N53) Light sequencing upgrade along the R934 (old N53) Construction of section of the R934 (Castleblaney Road) to the R178 (Carrickmacross Road) Link Road c.900m in length McEntee/ R178 junction upgrade On-street Cycleway and Pedestrian/Cyclist crossing on the R178.	depending on scale of development. Drainage Area Plan to address.
Site 10	Footpath and Cycleway along R178. Construction of section of the R934 (Castleblaney Road) to the R178 (Carrickmacross Road) Link Road c.1.6km in length. McEntee / R178 junction upgrade Traffic Calming over 800m along the R178	Can service part of the site, future upgrades would be needed. Boyle O'Reilly Waste Water Pumping Station may require upgrade depending on scale of development. Drainage Area Plan to address. Dependent on size of development.
Site 11	Footpath and Cycleway along R178 Construction of the R178 (Carrickmacross Road to the R171) (Old Ardee Road) Link Road c.0.8km in length. McEntee / R178 junction upgrade Traffic Calming over 800m along the R178 Traffic calming along the R171 Ardee Road Upgrade Ardee Road / Haggardstown Road junction On street cycleway along the Ardee Road	Can service part of the site, future upgrades would be needed. Drainage Area Plan to address. Dependent on size of development

Settlement - Dundalk		
Site	Potential Infrastructure investment required to facilitate the development of the lands	
	Roads	Water Services
Site 12	On street Cycleway markings Revision to Mullaharlin / R215 junction	Can service part of the site, future upgrades would be needed. Drainage Area Plan to address. Dependent on size of development.
Site 13	Link Road from Marlbog to IDA Business Park Upgrade of cycleway to Xerox site and Xerox Junctions (segregated) Potential upgrade to Haggardstown Road and Southern Link Road junction Potential future upgrade to IDA roundabout on Southern Link Road Xerox junction upgrade	Can service part of the site, future upgrades would be needed. Drainage Area Plan to address. Dependent on size of development. IDA have provided some infrastructure. Coes Road Pumping Station requires upgrade to accommodate full development.
Site 14	Xerox junction upgrade Entrance on R215 Entrance	LNRP under review. Drainage Area Plan to address.
Site 15	Depending on the scale of development the junction with the Rock Road will need to be reviewed. Footpath and public lighting. Possible pedestrian crossing	LNRP under review. Subject to upgrades there will be increased capacity.
Site 16	Xerox junction upgrade Footpath with cycleway On road cycleway markings into Blackrock village Traffic Calming on the R172	Drainage Area Plan solutions, limited Capacity. Significant distance to sewer. Part of lands may be able to connect to Blackrock.
Site 17	Xerox junction upgrade Section of Road from Marlbog to IDA Road Or Section of road from Old Golf links Road to Marlbog road to be completed Upgrade of cycleway to Xerox site and Xerox Junctions (segregated)	Limited capacity. Pumping station upgrades will be required downstream. The Drainage Area Plan will identify solutions.

Settlement - Dundalk		
Site	Potential Infrastructure investment required to facilitate the development of the lands	
	Roads	Water Services
Site 18	Xerox junction upgrade Section of Road from Marlbog to IDA Road Or Section of road from Old Golf links Road to Marlbog road to be completed Upgrade of cycleway to Xerox site and Xerox Junctions (segregated)	Limited capacity. Pumping station upgrades will be required downstream. The Drainage Area Plan will identify solutions.

Map 2 - Dundalk Tiered Assessment Map

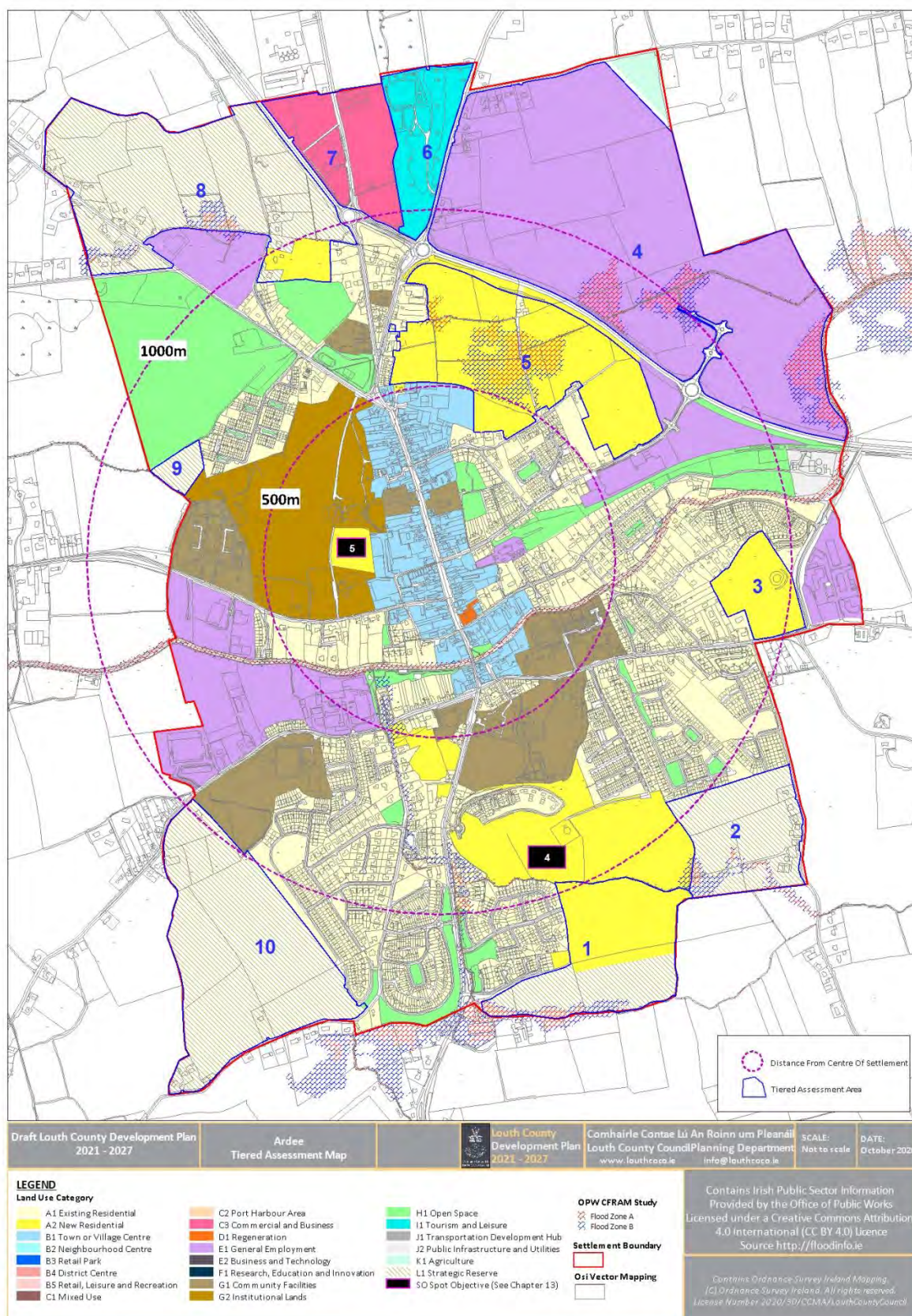


2.2 Self-Sustaining Growth Towns

Settlement - Ardee										
Tiered Assessment Analysis										
Land Use	RES	SR	RES	EMP	RES	TOU	C&B	SR	RES	SR
Infrastructure Type	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10
Roads										
Footpath										
Public Lighting										
Water										
Wastewater										
Tier 1 or Tier 2										
Land Use Evaluation										
Proximity to Town Centre	3	3	2	3	2	3	3	3	2	3
Contribute to Consolidated/Compact growth	4	4	3	5	2	5	5	5	3	5
Proximity to Shops/services	3	4	3	N/A	1	3	3	3	3	5
Proximity to schools	2	3	2	N/A	2	N/A	N/A	4	3	3
Infill/Backland	4	4	4	5	4	5	5	5	2	5
Availability to public transport	1	4	3	1	1	1	1	3	3	3
Flooding	1	1	1	3	4	1	1	2	1	1
Total	18	23	18	17	16	18	18	25	17	25

Settlement – Ardee		
Site	Potential infrastructure required to facilitate the development of the lands	
	Roads	Water Services
Site 1	Depending on the scale of development, new road linking the N2 to the Jumping Church Road	C.200m to adjacent housing estate. Capacity would need to be checked. C.500m to N2 from centre of site.
Site 2	Depending on the scale of development, new road linking the N2 to the Jumping Church Road	Wayleaves and pumping station may be required. May be issues with water capacity.
Site 3	None identified	Size of adjacent combined sewer will need assessment. (150mm dia). May need localised upgrades . Water Supply needs assessment.
Site 4	Potential Cycleway and Footpath along the N33 c.830m in length	Serviceable depending on size of development, water supply in particular. Waste water ok.
Site 5	None identified	Serviceable depending on size of development, water supply in particular. Wastewater ok.
Site 6	Extension and upgrade to public lighting Pedestrian crossing point	Serviceable depending on size of development, water supply in particular. Waste water ok.
Site 7	Pedestrian crossing	Serviceable depending on size of development, water supply in particular. Waste water ok.
Site 8	New Footpath Possible realignment safety works at Fair Green junction	C.400m from centre of site to nearest sewer, capacity check needed. Water supply could be an issue.
Site 9	The access to the lands would have to be Identified.	Issues such as wayleaves for water and waste water pipelines. Water Supply issue. (Possibly connect to Council Housing Estate adjacent to it).
Site 10	New Footpath Depending on the scale of development upgrade works at Sliabh Breagh junction with the N2. Depending on the scale of development upgrade works at John Street junction with the N2.	Not serviced and no project. Would have to be developer driven. Distance to nearest sewer could be expensive. Water Supply issue.

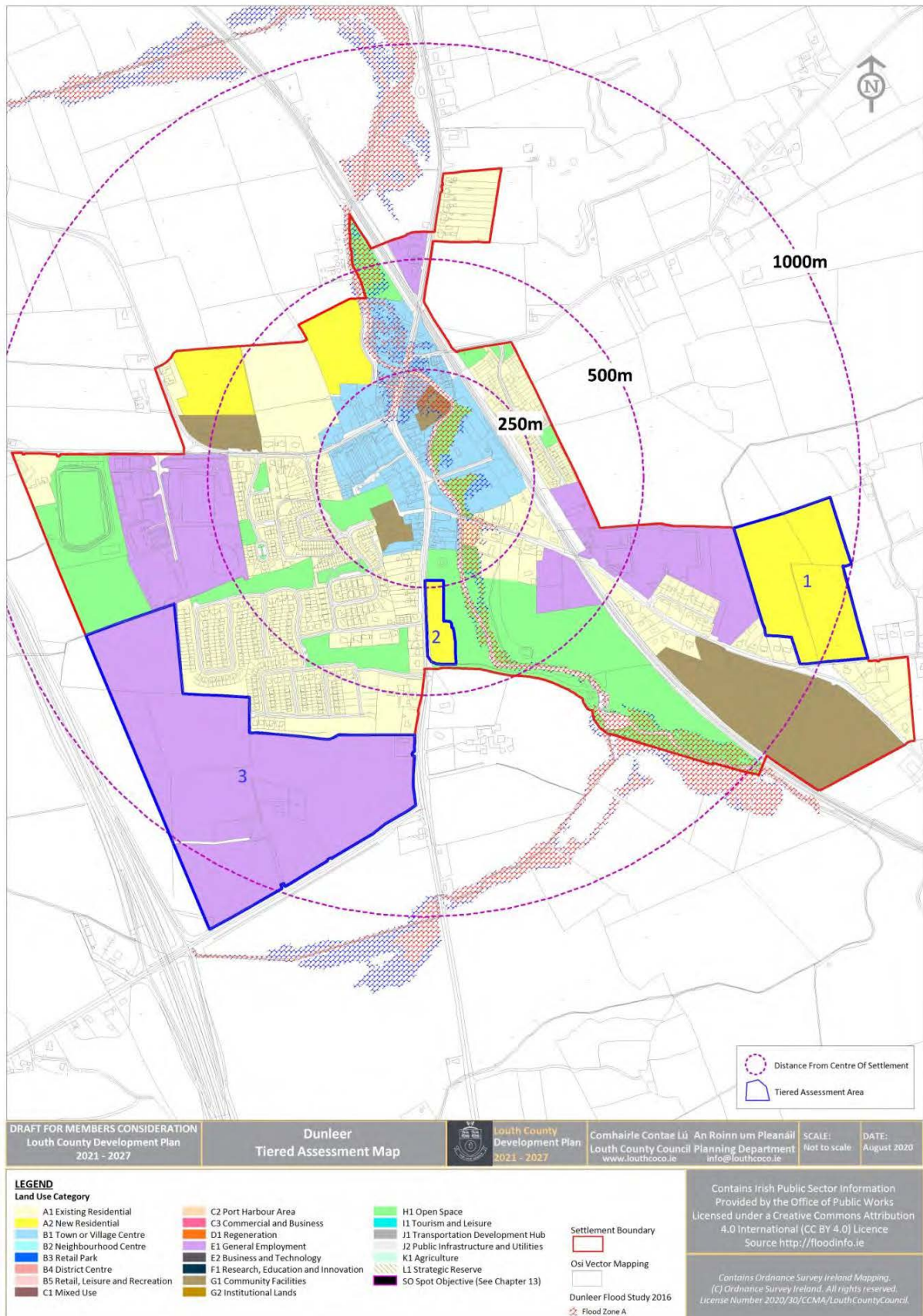
Map 3 – Ardee Tiered Assessment Map



Settlement - Dunleer			
Tiered Assessment Analysis			
Land Use	RES	RES	EMP
Infrastructure Type	Site 1	Site 2	Site 3
Roads			
Footpath			
Public Lighting			
Water			
Wastewater			
Tier 1 or Tier 2			
Land Use Evaluation			
Proximity to Town Centre	2	1	2
Contribute to Consolidated/compact growth	4	2	4
Proximity to Shops and services	4	1	N/A
Proximity to schools	2	2	N/A
Infill/Backland	5	1	5
Availability to public transport	4	1	1
Flooding	1	1	1
Total	16	7	13

Settlement – Dunleer		
Site	Potential infrastructure required to facilitate the development of the lands	
	Roads	Water Services
Site 1	Possible upgrade of existing Roundabout	Water Supply the main issue. Connection to a 225mm sewer. Local sewer network capacity check required.
Site 2	Pedestrian crossing	Water Supply the main issue. Connection to a 225mm sewer. Local sewer network capacity check required.
Site 3	Possible footpath upgrade along the R132 of c.183m and public lighting. Review and upgrade works at junction between R169 / R132 will be required	Water Supply the main issue. Adjacent estate required to be Taken in Charge. Extension of sewer required to connect to a 225mm sewer. Local sewer network capacity check also required.

Map 4 - Dunleer Tiered Assessment Map



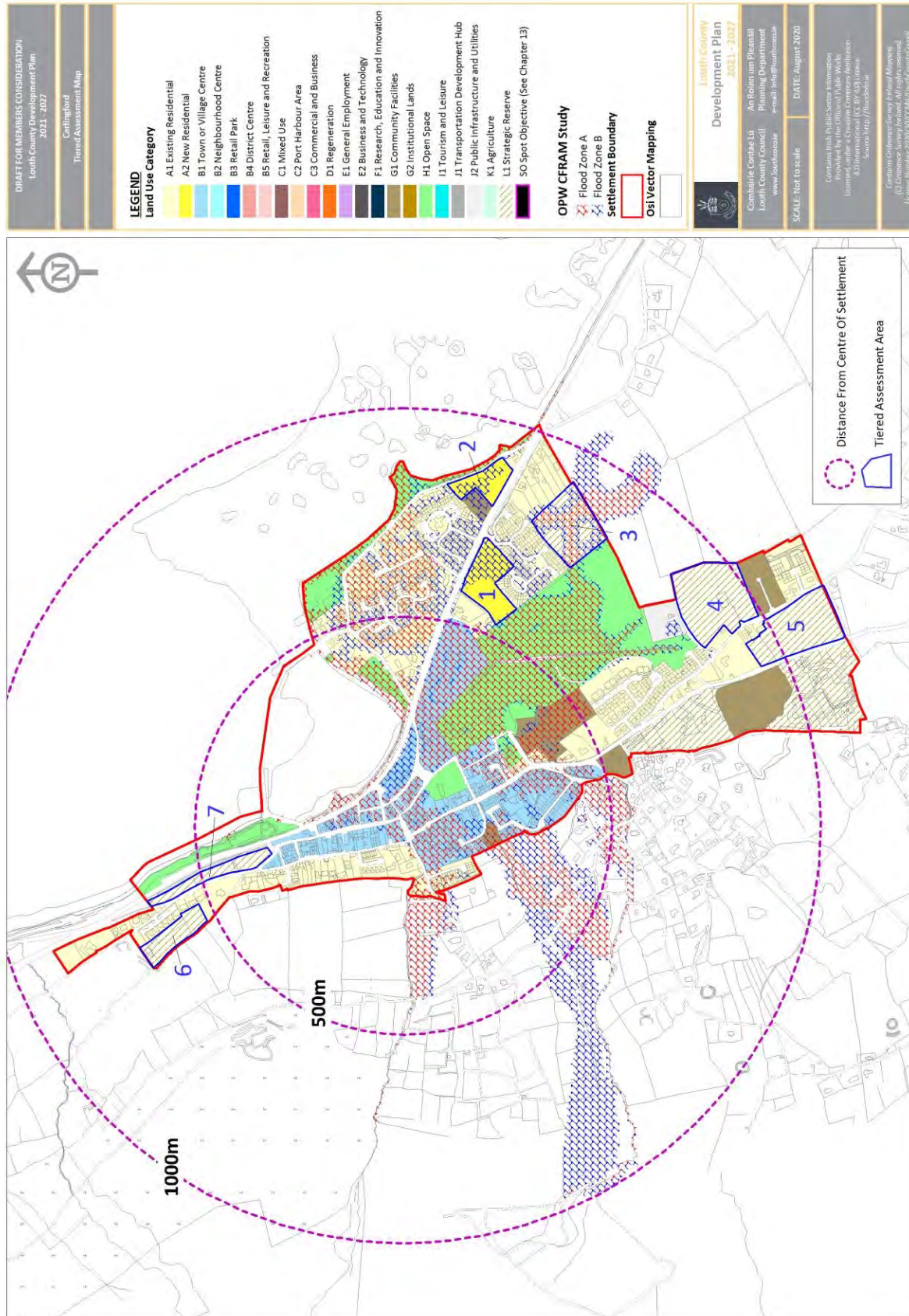
2.3 Self-Sustaining Towns

Settlement - Carlingford							
Tiered Assessment Analysis							
Land Use	RES	RES	SR	SR	SR	SR	SR
Infrastructure Type	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7
Roads							
Footpath							
Public Lighting							
Water							
Wastewater							
Tier 1 or Tier 2							
Land Use Evaluation							
Proximity to Town Centre	2	2	2	2	3	3	3
Contribute to consolidated/compact growth	2	3	4	5	5	3	3
Proximity to shops and services	2	3	4	5	5	2	2
Proximity to schools	3	3	4	2	2	4	4
Infill/Backland	1	1	3	4	5	2	5
Availability to public transport	3	3	3	4	4	3	2
Flooding	3	4	5	1	1	1	1
Total	16	19	25	23	25	18	20

Settlement – Carlingford		
Site	Potential infrastructure required to facilitate the development of the lands	
	Roads	Water Services
Site 1	None identified	None identified
Site 2	Extension of Public Lighting columns for c.150m Additional 50m of new footpath and public lighting Pedestrian Road Crossing New Cycle Lanes	None identified
Site 3	New access road to the site to be constructed (potentially the Road should link the R175 to the Grove Road L7062) Extension of Public Lighting over c.130m New section of Footpath Road Crossing / Traffic calming New Cycle Lane(s)	May be a wayleave issue
Site 4	Road Widening on the L7062 Grove Road New Footpath and public lighting over 95m Additional public lighting for c.132m Traffic calming on entry to speed limit (Potentially Road should link the R175 to the Grove Road L7062)	A buffer of c.100m may be required between this site and the Treatment Plant.
Site 5	Footpath and Public lighting over c.170m on the L7062 Footpath and public lighting over c.180m on the R173 Road widening and upgrade on the L7062 Additional public lighting over c.132m on the L7062 Traffic calming on speed limit entry on both the L7062 and R173	Pumping station may be required (developer driven)

Settlement – Carlingford		
Site	Potential infrastructure required to facilitate the development of the lands	
	Roads	Water Services
Site 6	Complete public lighting from existing to private estate Traffic calming at Junction (create a perpendicular junction and ramps and signage)	May be a wayleave issue
Site 7	Road widening and upgrade. Traffic calming on speed limit entry	None identified

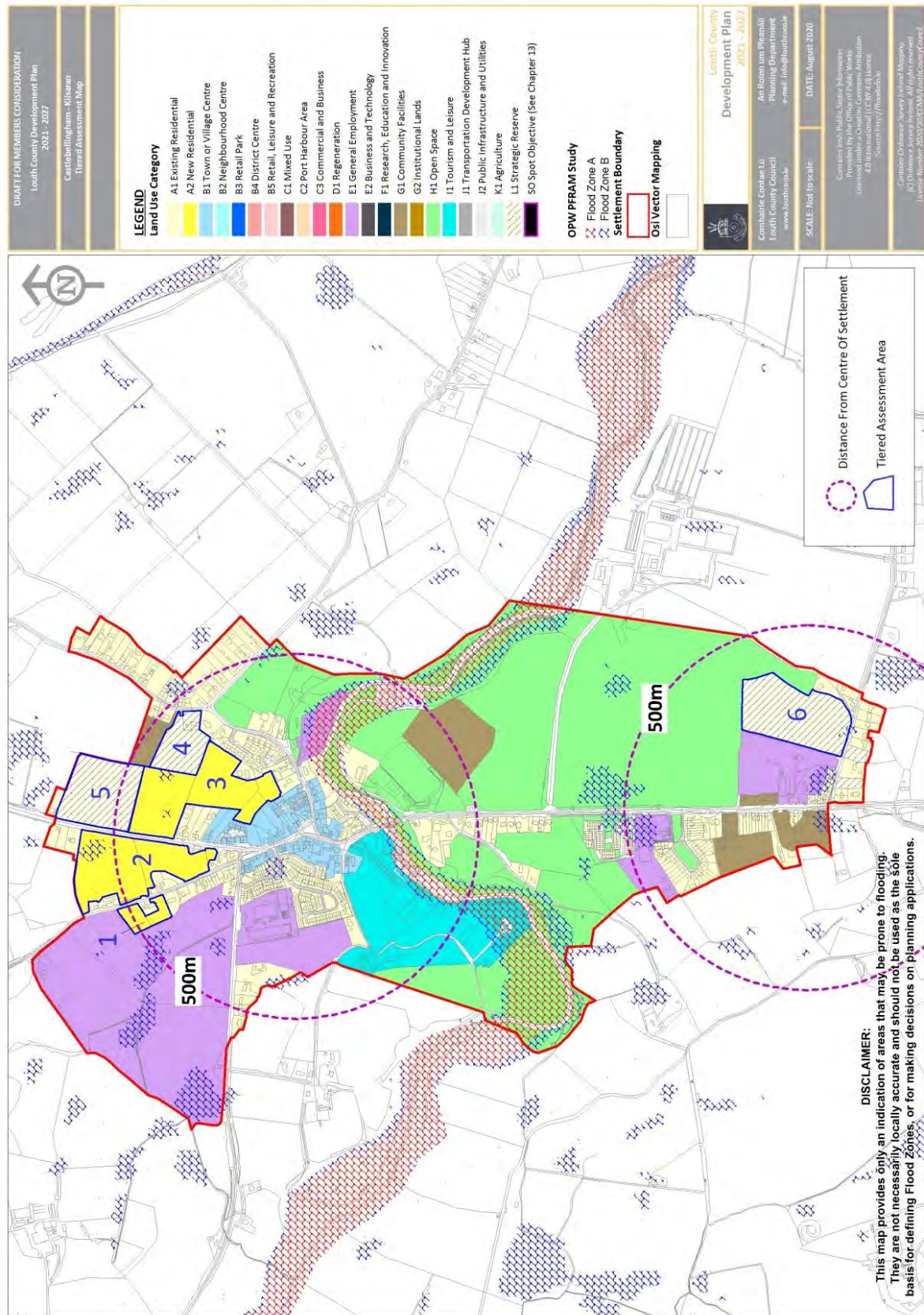
Map 5 - Carlingford Tiered Assessment Map



Settlement - Castlebellingham/Kilsaran						
Tiered Assessment Analysis						
Land Use	RES	RES	RES	SR	SR	SR
Infrastructure Type	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6
Roads						
Footpath						
Public Lighting						
Water						
Wastewater						
Tier 1 or Tier 2						
Land Use Evaluation						
Proximity to Town Centre	2	2	1	1	2	1
Contribute to consolidated/compact growth	2	2	2	4	4	5
Proximity to Shops and services	2	2	2	3	3	5
Proximity to schools	5	5	4	4	5	2
Infill/Backland	4	5	1	4	5	5
Availability to public transport	2	1	2	3	2	3
Flooding	1	1	1	1	1	1
Total	18	18	13	20	22	22

Settlement - Castlebellingham/Kilsaran		
Site	Potential infrastructure required to facilitate the development of the lands	
	Roads	Water Services
Site 1	Depends on the extent of the developments, i.e. single or multi-unit development. Public lighting for c.235m. Potential Footpath upgrade of existing footpath. Junction upgrade at R166, additional signage and traffic calming, pedestrian crossing.	c.100m to sewer
Site 2	It depends on the extent of the developments, and the access location L7187 - upgrade footpath and public lighting over c.94m. Junction upgrade at R166, additional signage and traffic calming, pedestrian crossing. Pedestrian crossing at site to opposite of carriageway. R132 - Footpath and public lighting and traffic calming	c.100m to sewer
Site 3	Access should be from within the Village Core and not at the existing speed limit. Footpath and public lighting for c.120m. Traffic calming scheme.	Possible wayleave required and water and waste water upgrades. Water Supply limited.
Site 4	Footpath and public lighting. Coopers Place L6188/R166 Junction upgrade and land acquisition.	Possible wayleave required and water and waste water upgrades. Water Supply limited.
Site 5	Footpath and public lighting along the R132.	Possible wayleave required and water and waste water upgrades. Water Supply limited.
Site 6	Footpath and public lighting for c.50m. Additional works at the junction with the R132.	Possible wayleave required and water and waste water upgrades. Water Supply limited.

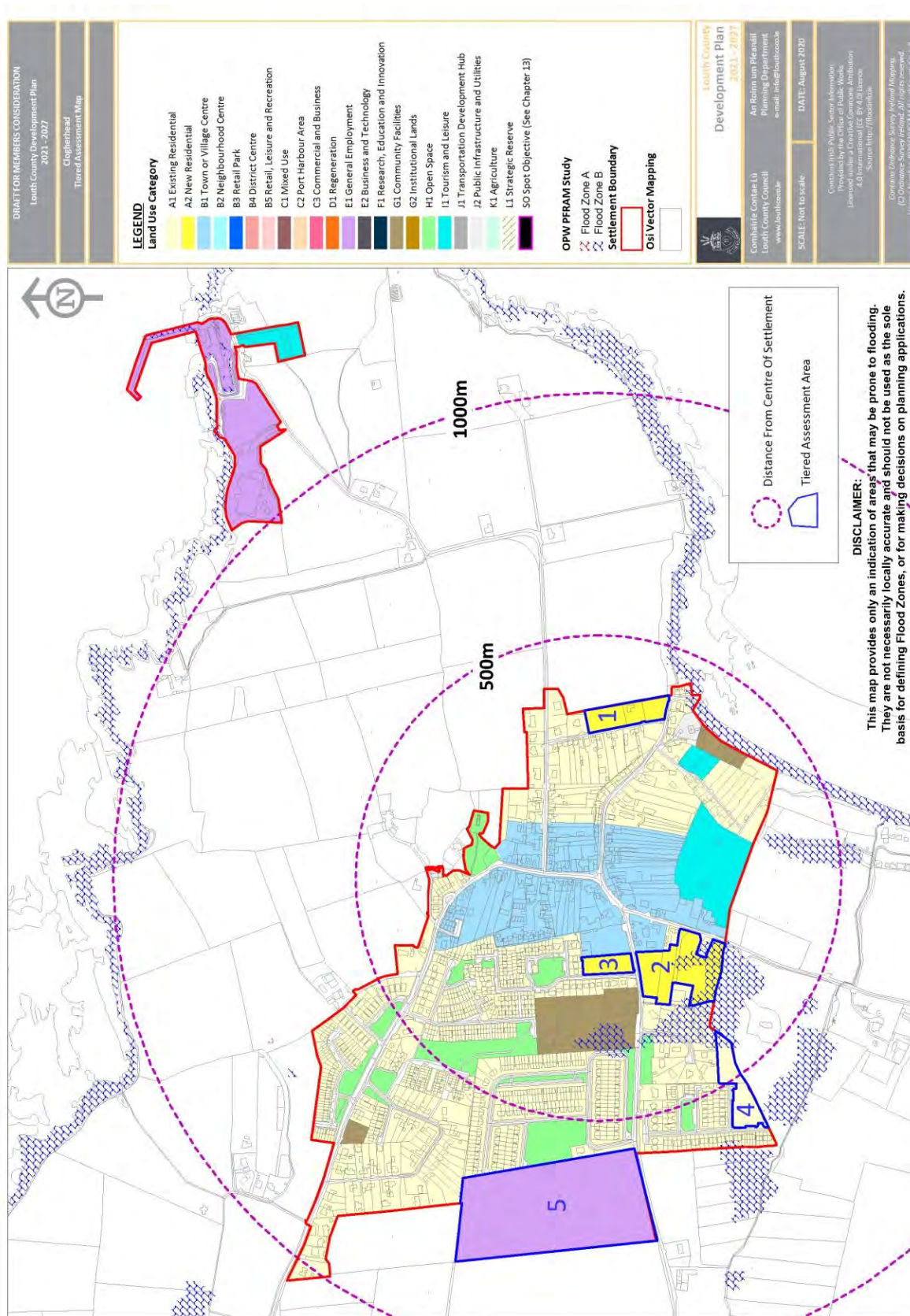
Map 6 - Castlebellingham/Kilsaran Tiered Assessment Map



Settlement - Clogherhead					
Tiered Assessment Analysis					
Land Use	RES	RES	RES	RES	EMP
Infrastructure Type	Site 1	Site 2	Site 3	Site 4	Site 4
Roads					
Footpath					
Public Lighting					
Water					
Wastewater					
Tier 1 or Tier 2					
Land Use Evaluation					
Proximity to Town Centre	1	1	1	2	2
Contribute to Consolidated/compact growth	3	1	1	4	4
Proximity to shops and services	3	2	2	3	4
Proximity to schools	3	1	1	2	N/A
Infill/Backland	1	1	1	1	5
Availability to public transport	2	2	2	3	3
Flooding	1	4	1	1	1
Total	14	12	9	16	19

Settlement – Clogherhead		
Site	Potential infrastructure required to facilitate the development of the lands	
	Roads	Water Services
Site 1	Footpath works and public lighting	None identified
Site 2	Additional footpath and public lighting along the R166. Pedestrian crossing	None identified
Site 3	Footpath on the R166 and public lighting. Pedestrian Crossing Upgrade Lighting on L-6283	None identified
Site 4	None identified	May need watermain upgrade
Site 5	None identified	Water and waste water upgrades may be needed

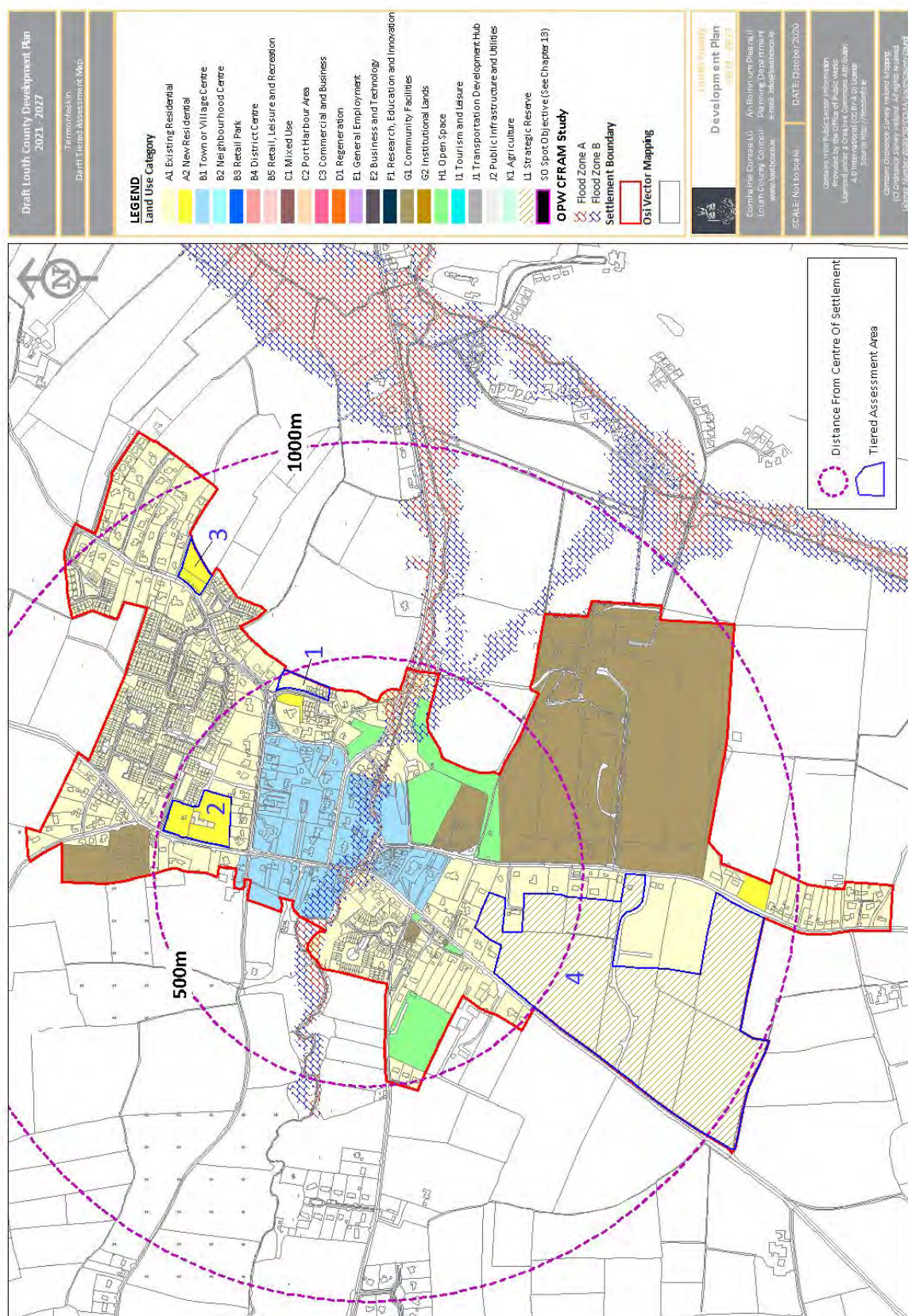
Map 7 - Clogherhead Tiered Assessment Map



Settlement - Termonfeckin				
Tiered Assessment Analysis				
Land Use	RES	RES	RES	SR
Infrastructure Type	Site 1	Site 2	Site 3	Site 4
Roads				
Footpath				
Public Lighting				
Water				
Wastewater				
Tier 1 or Tier 2				
Land Use Evaluation				
Proximity to Town Centre	1	1	2	2
Contribute to consolidated/compact growth	1	1	2	5
Proximity to Shops and Services	1	1	2	4
Proximity to schools	3	3	3	2
Infill/Backland	1	1	1	5
Availability to public transport	2	1	3	3
Flooding	1	1	1	1
Total	10	9	14	22

Settlement – Termonfeckin		
Site	Potential infrastructure required to facilitate the development of the lands	
	Roads	Water Services
Site 1	None identified	None identified
Site 2	Potential additional public lighting of 195m over the length of the site	None identified
Site 3	None identified	None identified
Site 4	Footpath and public lighting over c.431m	None identified

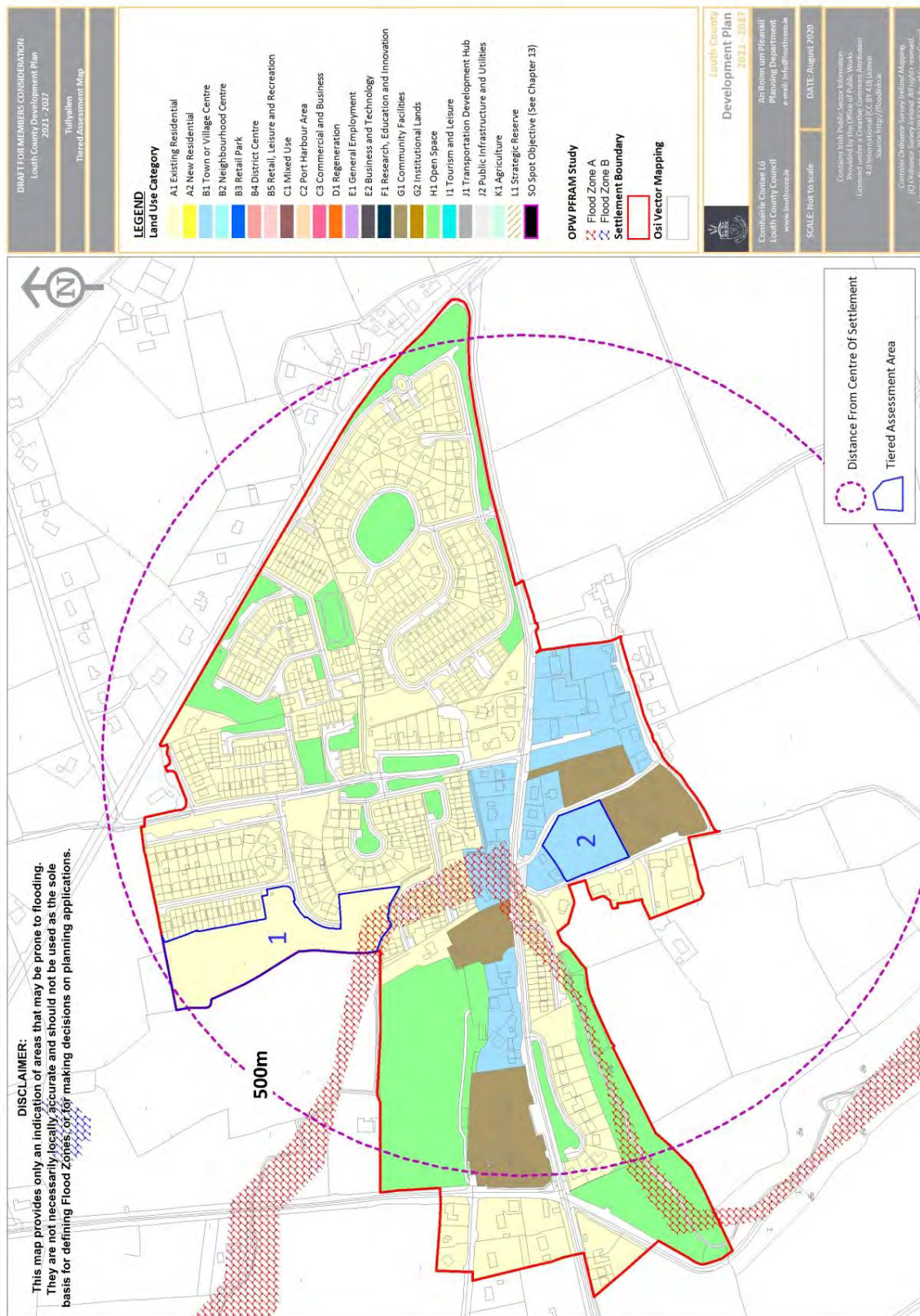
Map 8 -Termonfeckin Tiered Assessment Map



Settlement - Tullyallen		
Tiered Assessment Analysis		
Land Use	RES	TC
Infrastructure Type	Site 1	Site 2
Roads		
Footpath		
Public Lighting		
Water		
Wastewater		
Tier 1 or Tier 2		
Land Use Evaluation		
Proximity to Town Centre	1	1
Contribute to consolidated/compact growth	3	1
Proximity to Shops and Services	3	1
Proximity to schools	3	1
Infill/Backland	2	1
Availability to public transport	3	1
Flooding	4	1
Total	19	7

Settlement - Tullyallen		
Site	Potential infrastructure required to facilitate the development of the lands	
	Roads	Water Services
Site 1	None identified	Distance to the network could be cost prohibitive. Also may be wayleave issues
Site 2	Upgrade of access road and footpaths to the site	100m to watermain or possibility to join group water scheme.

Map 9 – Tullyallen Tiered Assessment Map

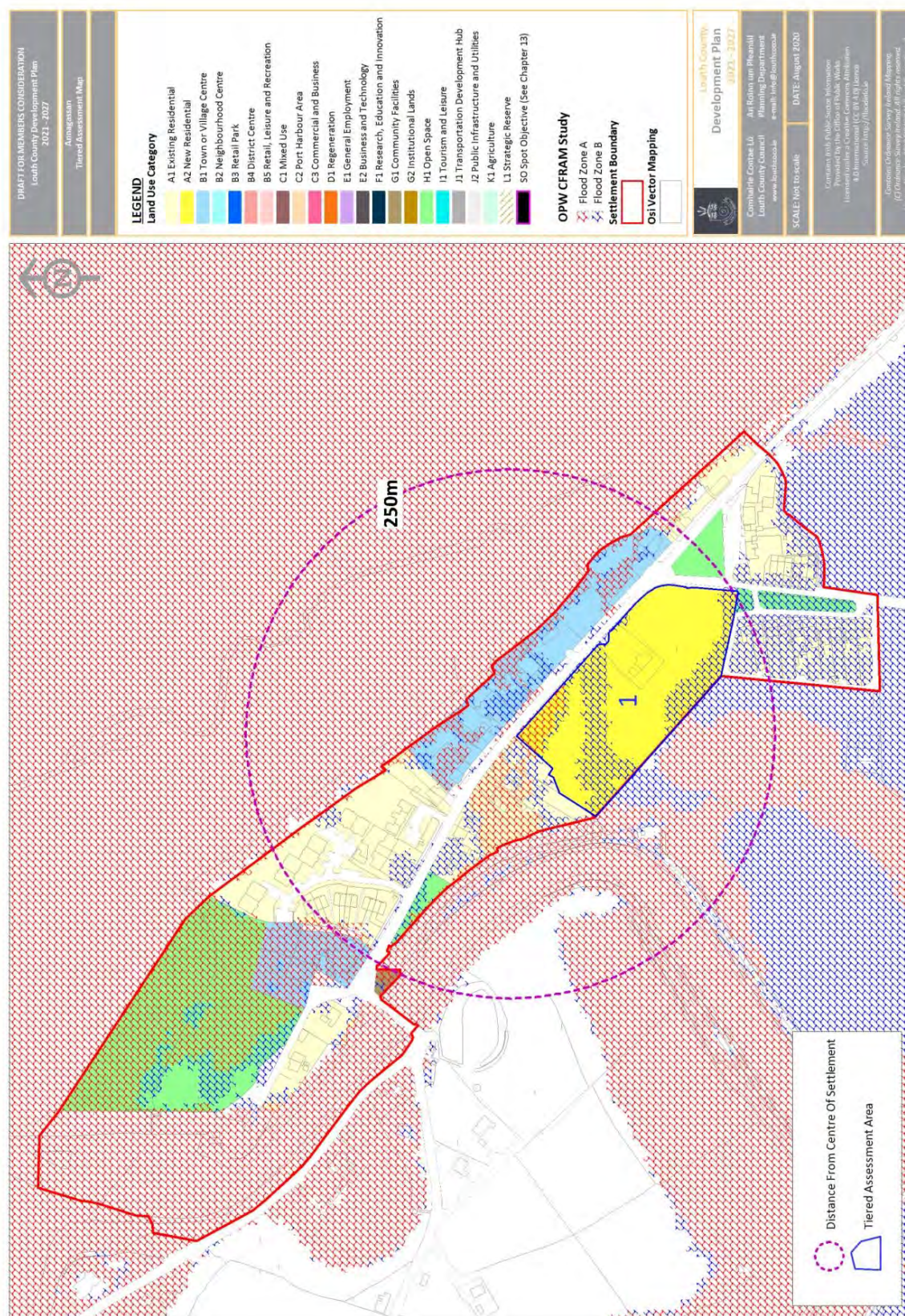


2.4 Small Towns and Villages

Settlement - Annagassan	
Tiered Assessment Analysis	
Land Use	RES
Infrastructure Type	Site 1
Roads	
Footpath	
Public Lighting	
Water	
Wastewater	
Tier 1 or Tier 2	
Land Use Evaluation	
Proximity to Town Centre	1
Contribute to consolidated/compact growth	1
Proximity to shops and services	1
Proximity to schools	5
Infill/Backland	2
Availability to public transport	1
Flooding	4

Settlement - Annagassan		
Site	Potential infrastructure required to facilitate the development of the lands	
	Roads	Water Services
Site 1	Footways Incorporating Public Lighting and Drainage c.270m in length On Road Cycleway c.190m in length	Serviceable depending on size of development, Water Supply in particular. c.50PE Waste Water available.

Map 10 - Annagassan Tiered Assessment Map

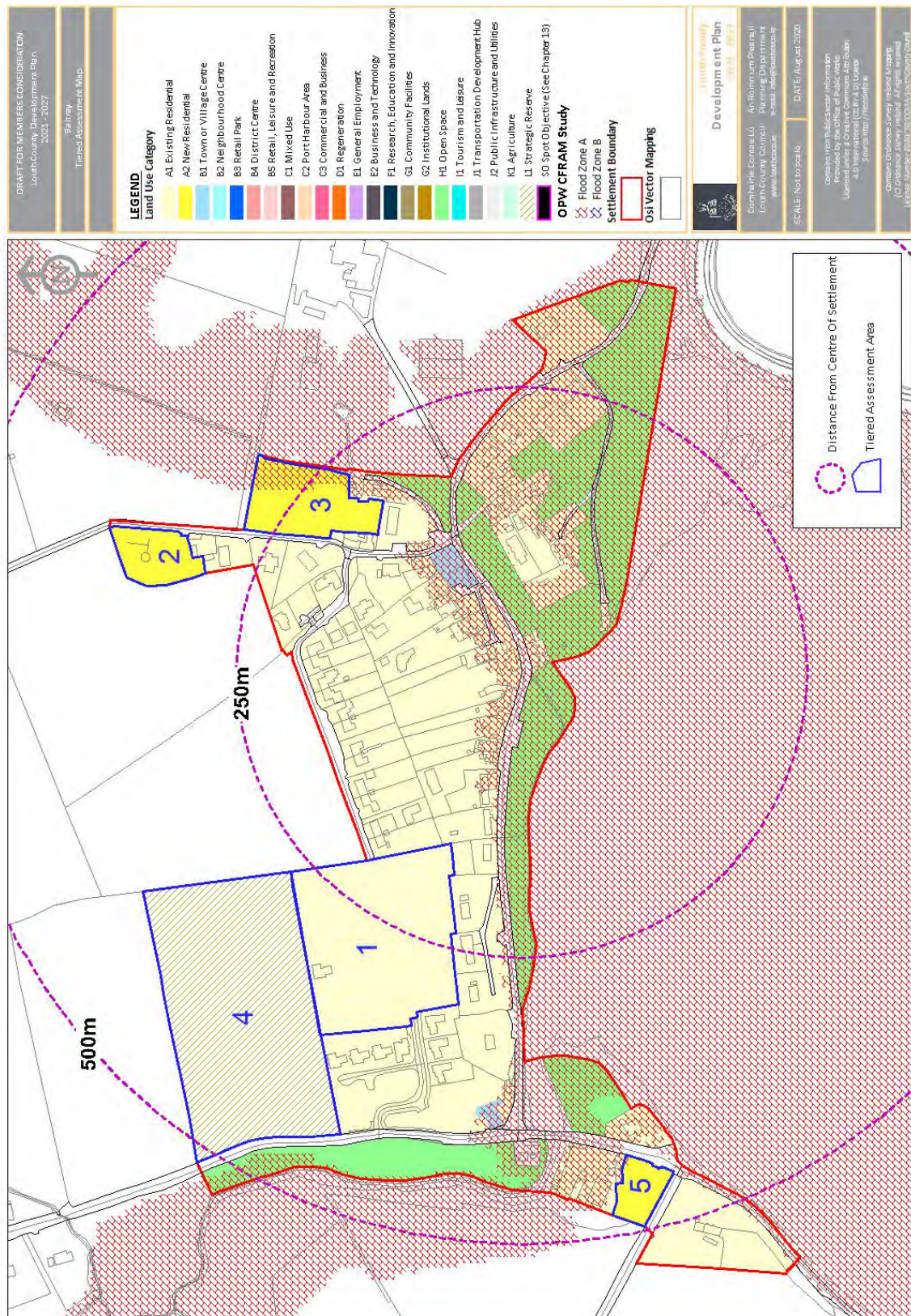


Settlement - Baltray					
Tiered Assessment Analysis					
Land Use	RES	RES	RES	SR	SR
Infrastructure Type	Site 1	Site 2	Site 3	Site 4	Site 5
Roads					
Footpath					
Public Lighting					
Water					
Wastewater					
Tier 1 or Tier 2					
Land Use Evaluation					
Proximity to Town Centre	1	1	1	1	2
Contribute to consolidated/compact growth	2	3	2	5	4
Proximity to shops and services	5	5	5	5	5
Proximity to schools	5	5	5	5	5
Infill/Backland	2	5	3	5	4
Availability to public transport	1	1	3	1	1
Flooding	1	1	3	1	1
Total	17	21	22	23	22

Settlement - Baltray		
Site	Potential infrastructure required to facilitate the development of the lands	
	Roads	Water Services
Site 1	Traffic Calming on entry to access of the main road entrance	Serviceable depending on size of development. May be a Taking In Charge/Wayleave issue.
Site 2	New road construction and footpath and associated infrastructure c.240m in length	c.150m to nearest sewer, would have to be developer driven.
Site 3	New road construction and footpath and associated infrastructure c.240m in length	None identified
Site 4	Extension of footpath and public lighting Traffic calming on entry to access entrance	None identified
Site 5	Traffic calming to the access to the site Construct footpath to tie into existing footpath at Village Green, c.140m in length	None identified

Settlement - Baltray		
Site	Potential infrastructure required to facilitate the development of the lands	
	Roads	Water Services
	Potential footbridge at river crossing	
	Extension of footpath and public lighting	
	Traffic Calming on entry to access entrance	

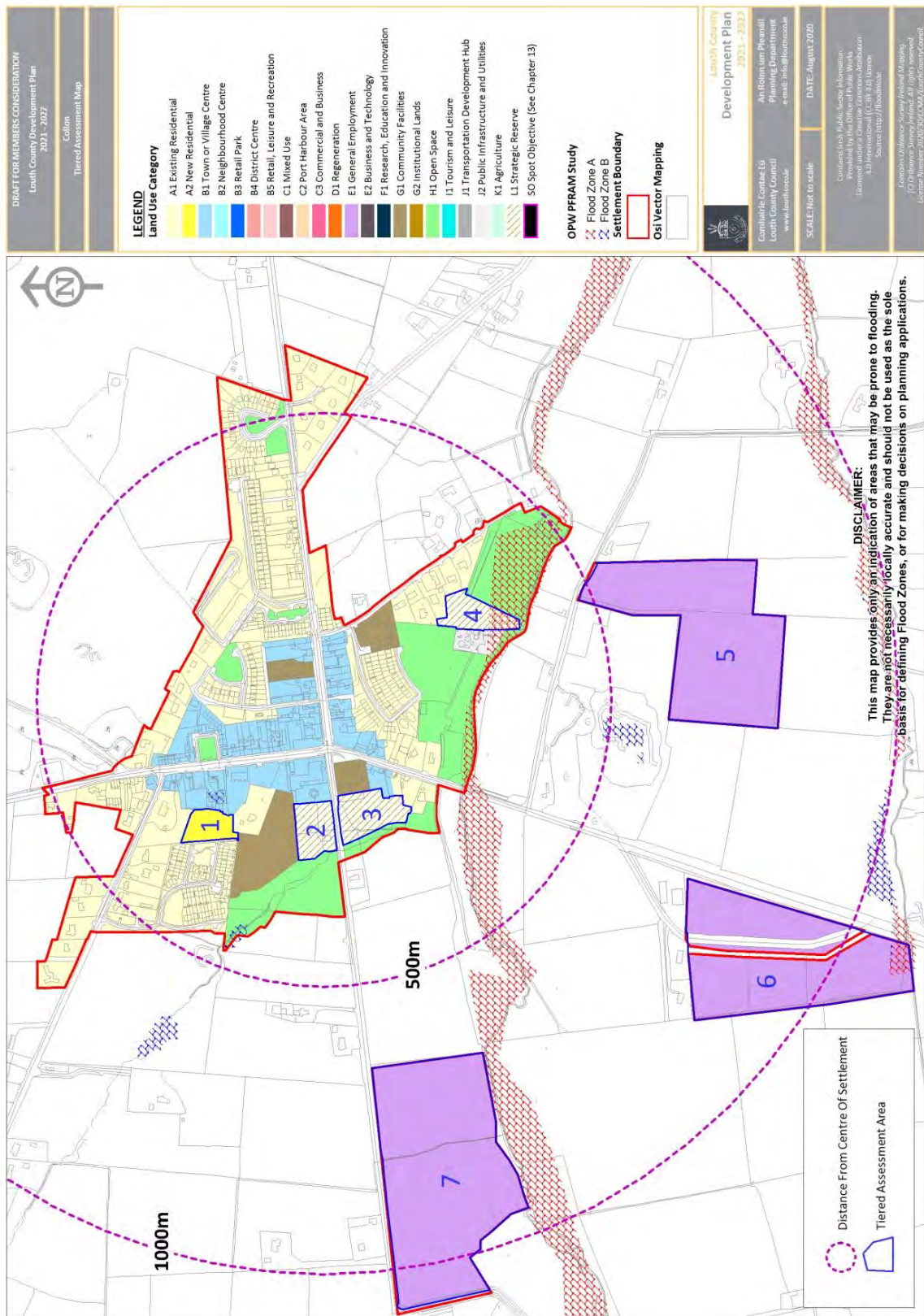
Map 11 - Baltray Tiered Assessment Map



Settlement - Collon							
Tiered Assessment Analysis							
Land Use	RES	SR	SR	SR	EMP	EMP	EMP
Infrastructure Type	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7
Roads							
Footpath							
Public Lighting							
Water							
Wastewater							
Tier 1 or Tier 2							
Land Use Evaluation							
Proximity to Town Centre	1	1	1	1	2	2	2
Contribute to Consolidated/compact growth	1	3	3	4	5	5	5
Proximity to shops and services	1	1	1	2	5	5	5
Proximity to schools	3	3	3	1	N/A	N/A	N/A
Infill/Backland	1	3	3	1	5	5	5
Availability to public transport	3	1	1	3	3	4	3
Flooding	1	1	1	1	1	3	1
Total	11	13	13	13	21	24	21

Settlement - Collon		
Site	Potential infrastructure required to facilitate the development of the lands	
	Roads	Water Services
Site 1	None identified	Site cut off, wayleave issues.
Site 2	Potential Upgrade of lights over c.118m	May need a pumping station
Site 3	Potential Upgrade of lights over c.118m Pedestrian crossing	May need a pumping station
Site 4	Pedestrian Crossing Public lighting and footpath	Water main and wayleave issues
Site 5	Road Upgrade and Widening Footpath and public lighting N2 Junction upgrade	Distance to main network and river crossing, could be cost prohibitive. No project, would have to be developer driven.
Site 6	None identified	No waste water network, would have to be developer driven.
Site 7	Public lighting, Footpath, and Pedestrian Crossing	No waste water network, 600m to network, would have to be developer driven

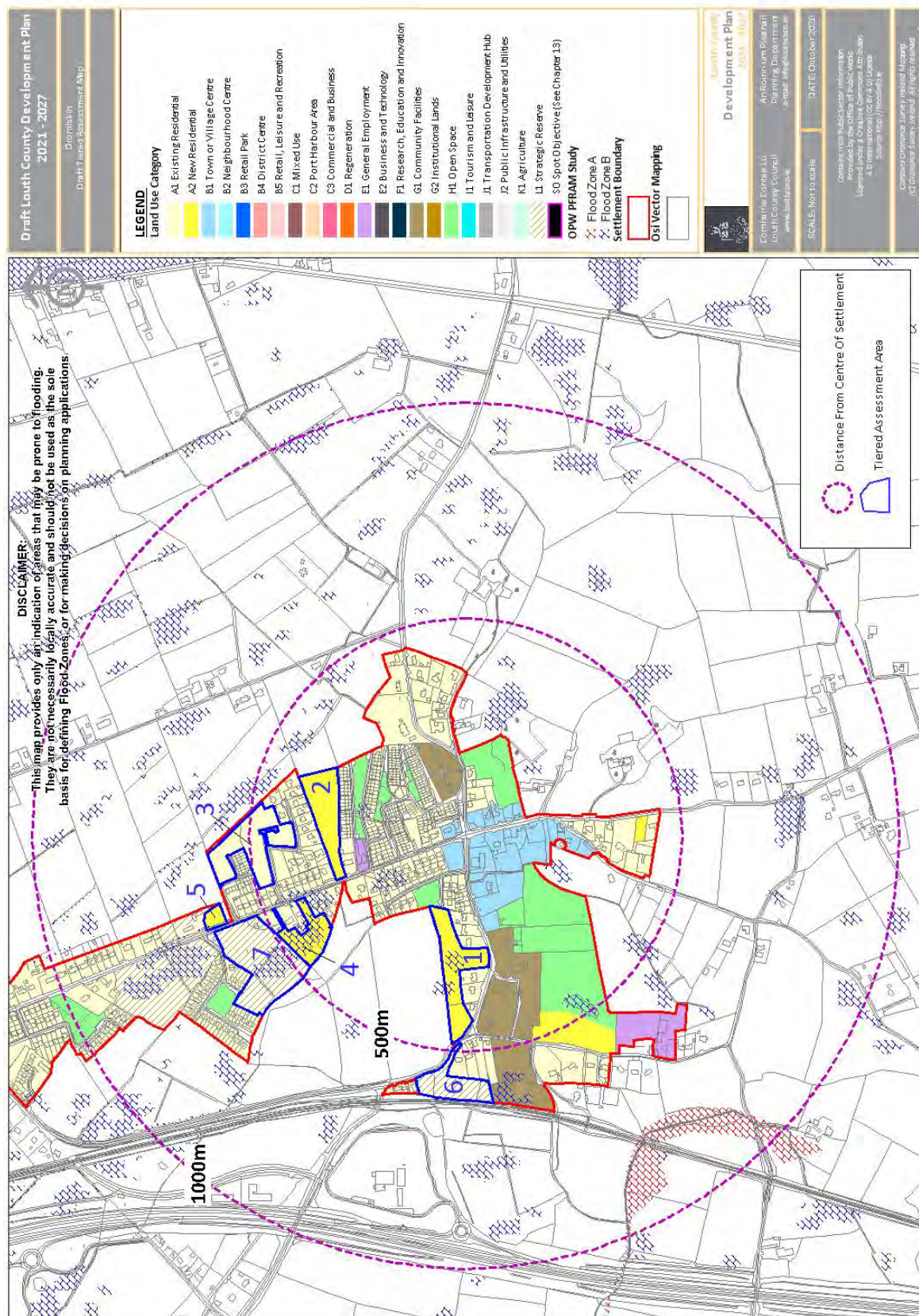
Map 12 - Collon Tiered Assessment Map



Settlement - Dromiskin							
Tiered Assessment Analysis							
Land Use	RES	RES	RES	RES	RES	SR	SR
Infrastructure Type	Site 1	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8
Roads							
Footpath							
Public Lighting							
Water							
Wastewater							
Tier 1 or Tier 2							
Land Use Evaluation							
Proximity to Town Centre	1	1	1	1	2	2	2
Contribute to consolidated/compact growth	1	2	3	3	3	4	3
Proximity to shops and services	1	2	3	2	3	4	3
Proximity to schools	1	3	3	3	3	1	3
Infill/Backland	5	1	1	1	1	5	3
Availability to public transport	4	1	1	5	1	1	5
Flooding	4	1	1	5	1	1	5
Total	17	11	13	20	14	18	24

Settlement - Dromiskin		
Site	Potential infrastructure required to facilitate the development of the lands	
	Roads	Water Services
Site 1	Traffic calming ramps	Watermain size to be checked
	Potential footpath	
Site 2	Traffic calming	None identified
	Pedestrian crossing	
	Upgrade of surface water system for c.800m	
	Potential 45m footpath on east side of the road	
Site 3	Traffic calming ramps	None identified
	Pedestrian crossing	
	Upgrade of surface water system over c.800m	
	Potential 300m footpath on east side, note not full construction	
Site 4	Traffic calming ramps	None identified
	Pedestrian crossing	
	Upgrade of surface water system over c.800m	
Site 5	Traffic calming ramps	None identified
	Pedestrian crossing	
	Upgrade of surface water system over c.800m	
Site 6	Footpath and public lighting Pedestrian crossing	Watermain size to be checked
	Potential Junction upgrade	
Site 7	Traffic calming ramps	None identified
	Upgrade of surface water system over c.800m	

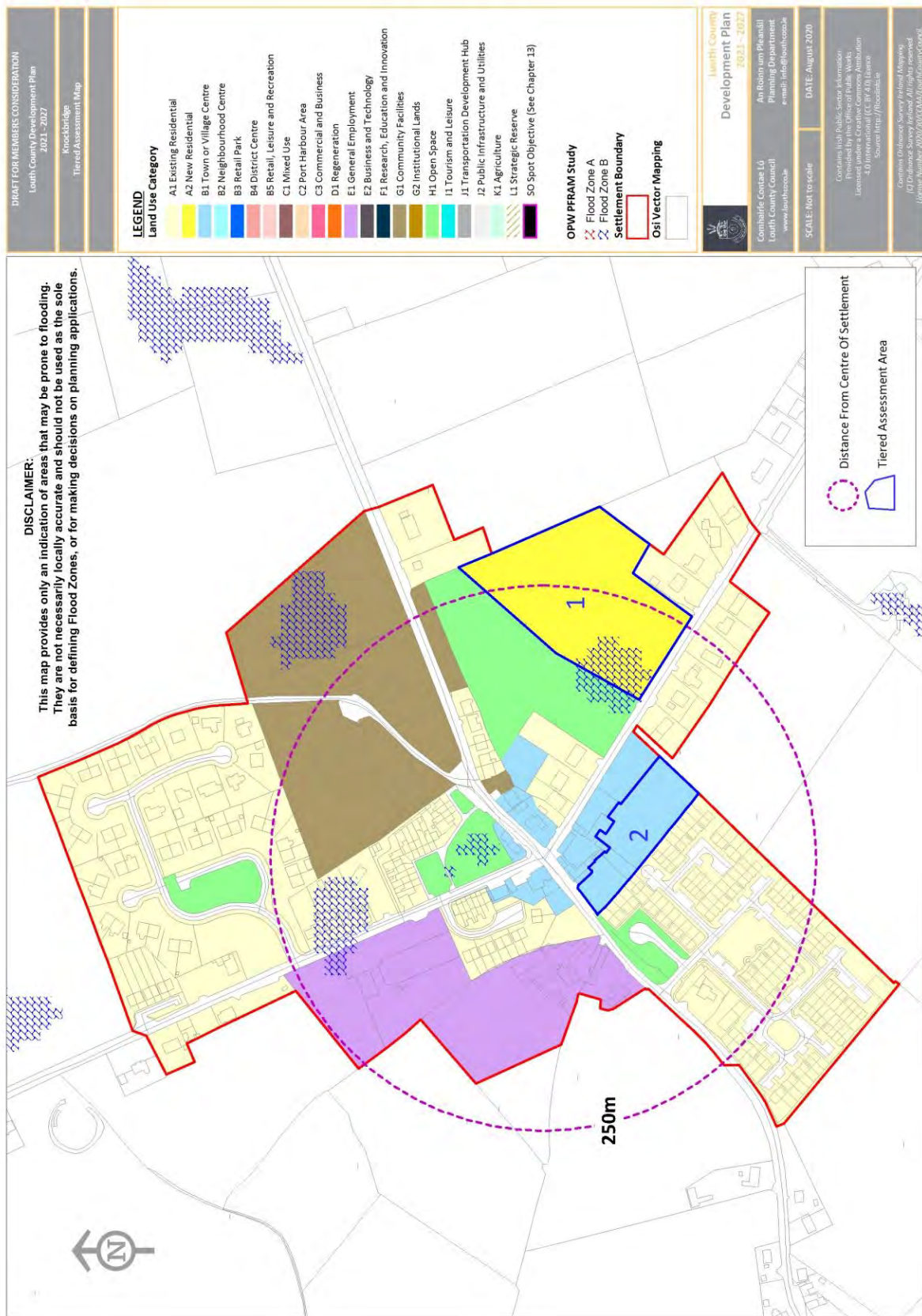
Map 13 - Dromiskin Tiered Assessment Map



Settlement - Knockbridge		
Tiered Assessment Analysis		
Land Use	RES	TC
Infrastructure Type	Site 1	Site 2
Roads		
Footpath		
Public Lighting		
Water		
Wastewater		
Tier 1 or Tier 2		
Land Use Evaluation		
Proximity to Town Centre	1	1
Contribute to consolidated/compact growth	1	1
Proximity to shops and services	1	1
Proximity to schools	2	2
Infill/Backland	1	3
Availability to public transport	1	1
Flooding	3	1
Total	10	10

Settlement - Knockbridge		
Site	Potential infrastructure required to facilitate the development of the lands	
	Roads	Water Services
Site 1	Pedestrian Crossings	Distance to sewer c.200m. Elevated site, will probably need a pumping station
	Traffic Calming	
Site 2	None identified	None identified

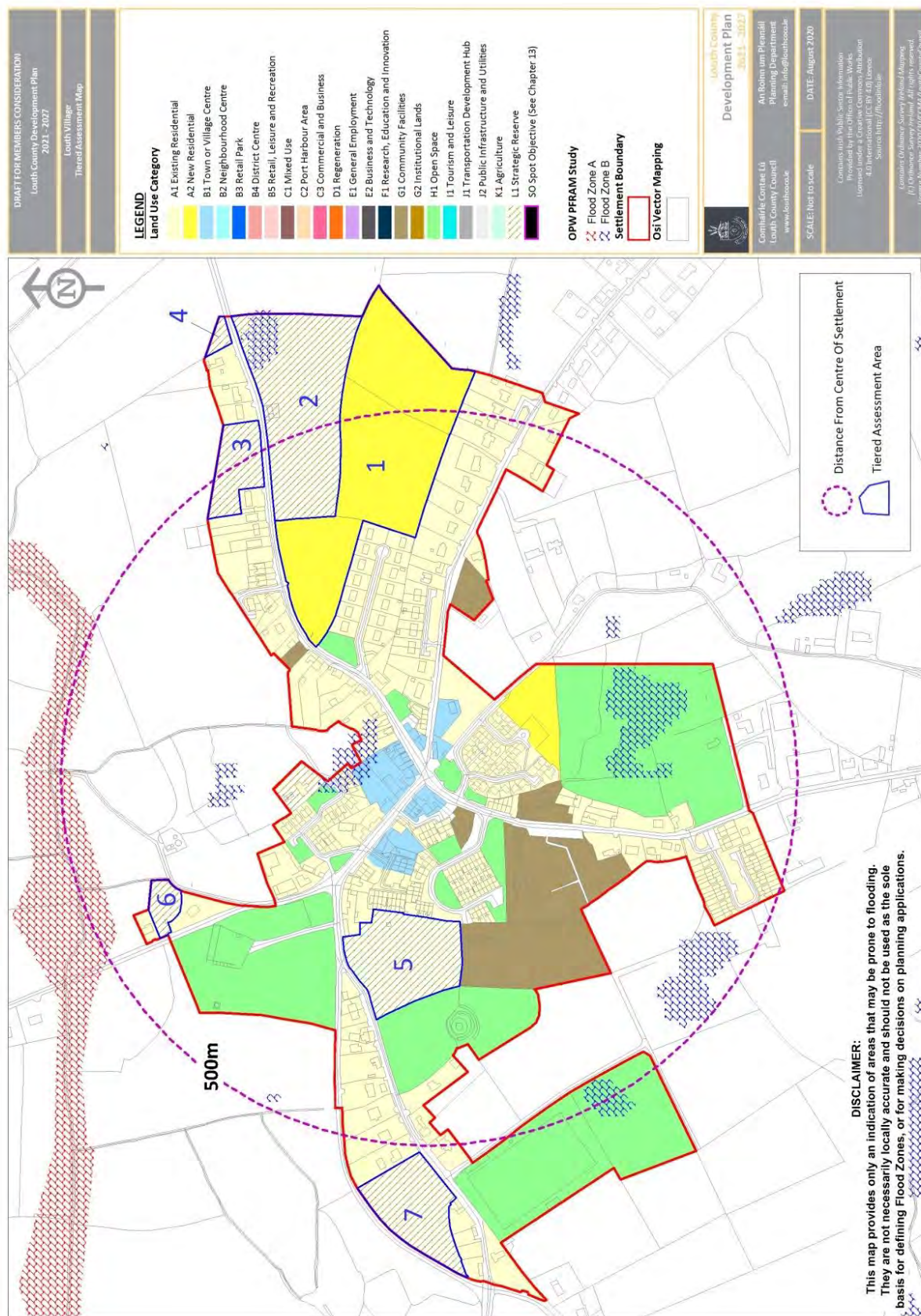
Map 14 - Knockbridge Tiered Assessment Map



Settlement - Louth Village							
Tiered Assessment Analysis							
Land Use	RES	SR	SR	SR	SR	SR	SR
Infrastructure Type	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7
Roads							
Footpath							
Public Lighting							
Water							
Wastewater							
Tier 1 or Tier 2							
Land Use Evaluation							
Proximity to Town Centre	1	1	2	2	2	1	2
Contribute to consolidated/compact growth	3	4	4	5	3	4	5
Proximity to shops and services	3	3	4	5	2	4	5
Proximity to schools	3	3	4	5	2	4	5
Infill/Backland	3	5	3	5	3	5	5
Availability to public transport	2	2	3	3	2	2	3
Flooding	1	2	1	1	1	1	1
Total	16	20	21	26	15	21	26

Settlement – Louth Village		
Site	Potential Infrastructure required to facilitate the development of the lands	
	Roads	Water Services
Site 1	Pedestrian Crossing Traffic Calming Gateway Surface water within the Village	Detailed assessment of waste water needed to see if it can serve whole of site. Water pressure could be an issue
Site 2	Pedestrian Crossing Traffic Calming Gateway Surface water within the Village	180m of sewer needed and water pressure assessment
Site 3	Change to speed limit by laws to allow development Traffic Calming Gateway Surface water within the Village	180m of sewer needed and water pressure assessment
Site 4	Traffic Calming Gateway	400m of sewer needed and water pressure assessment. Cost could be an issue
Site 5	Increase L5154 road width over 100m New Junction Layout	None identified
Site 6	Change speed limit to allow development Extend Footpath	None identified
Site 7	Increase L5154 road width over 300m New Junction Layout	300m of sewer needed

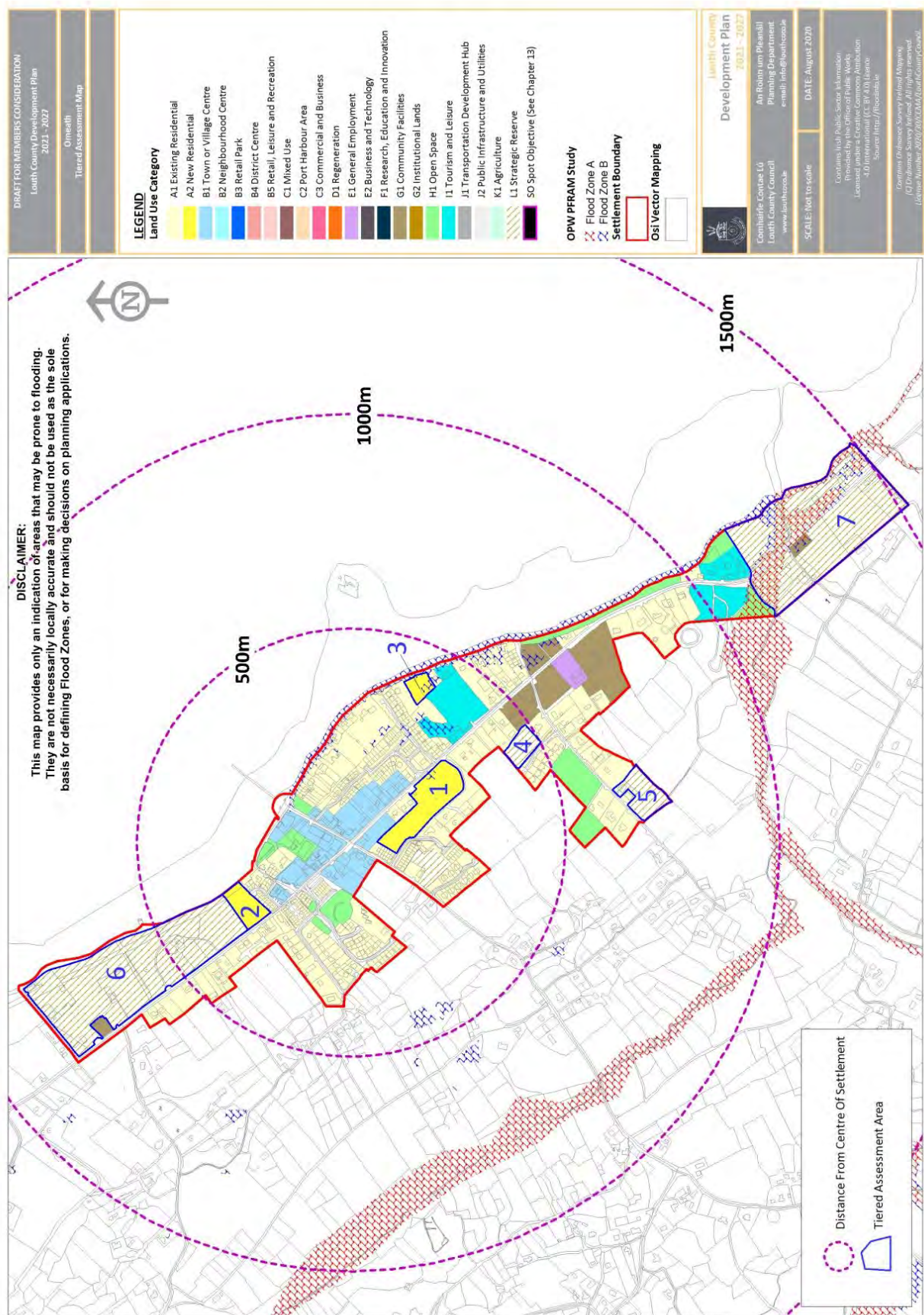
Map 15 -Louth Village Tiered Assessment Map



Settlement - Omeath							
Tiered Assessment Analysis							
Land Use	RES	RES	RES	SR	SR	SR	SR
Infrastructure Type	Site 1	Site 2	site 3	Site 4	Site 5	Site 6	Site 7
Roads							
Footpath							
Public Lighting							
Water							
Wastewater							
Tier 1 or Tier 2							
Land Use Evaluation							
Proximity to Town Centre	1	1	1	1	2	2	3
Contribute to consolidated/compact growth	1	1	2	3	5	5	5
Proximity to shops and services	1	1	2	4	4	4	5
Proximity to schools	2	4	3	2	3	5	3
Infill/Backland	1	2	2	2	5	5	5
Availability to public transport	1	2	2	1	2	2	3
Flooding	1	1	2	1	1	1	4
Total	8	12	14	14	22	24	28

Settlement - Omeath		
Site	Potential infrastructure required to facilitate the development of the lands	
	Roads	Water Services
Site 1	Pedestrian Crossing	limited WS, dependent of size of development
Site 2	Close off existing and open alternative entrance in Shore Court to vehicular traffic Make good existing stone retaining wall	Right beside Treatment Works not enough buffer room
Site 3	Site is for new IW Pumping Station	Site is for new IW Pumping Station
Site 4	Potential Footpath along Chapel Road for c.135m Pedestrian Crossing at Chapel Road and R173 junction	Limited capacity in water supply. May be a requirement for a pumping station - Developer led
Site 5	Footpath and public lighting	Limited capacity in water supply; dependent on size of development
Site 6	Traffic Calming and Gateway	Limited capacity in water supply. May be a requirement for a pumping station - Developer led
Site 7	New Footpath public lighting over c.591m. Retaining wall at Grave Yard Potential works to Raise Road for Flooding 251m	Long site, cost of infrastructure may be prohibitive. Pumping Station would be required and water supply limited.

Map 16 - Omeath Tiered Assessment Map



Settlement - Tallanstown						
Tiered Assessment Analysis						
Land Use	RES	RES	RES	SR	EMP	EMP
Infrastructure Type	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6
Roads						
Footpath						
Public Lighting						
Water						
Wastewater						
Tier 1 or Tier 2						
Land Use Evaluation						
Proximity to Town Centre	1	1	1	1	1	2
Contribute to Consolidated/compact growth	1	1	1	2	3	5
Proximity to shops and services	1	2	2	2	2	4
Proximity to schools	1	2	2	2	N/A	N/A
Infill/Backland	1	1	1	3	5	5
Availability to public transport	1	1	2	2	2	3
Flooding	4	1	1	1	1	4
Total	8	7	7	10	14	23

Settlement – Tallanstown		
Site	Potential infrastructure required to facilitate the development of the lands	
	Roads	Water Services
Site 1	None identified	It may be possible but check on site elevation needed. Pumping station may be required
Site 2	Section of footpath to Glyde View c.67m in length	None identified
Site 3	None identified	None identified
Site 4	Section of footpath to Glyde View c.67m in length	Limited water supply - Dependent on size of development. May be a requirement for a wayleave
Site 5	Speed Limit change to facilitate development Traffic Calming / Gateway Footpath and public lighting over c.103m Additional public lighting over c.70m	None identified
Site 6	Speed Limit change Traffic Calming / Gateway Footpath and public lighting over c.388m Additional public lighting over c.70m	The availability of a water supply is dependent on the size of the development. Upgrade may be required. Sewer c.300m in length will add to cost.

Map 17 - Tallanstown Tiered Assessment Map

