

15. CUMULATIVE IN-COMBINATION IMPACTS ASSESSMENT

15.1 Introduction

Each chapter of this EIAR includes a description of likely significant impacts of the project and an assessment of cumulative impacts that may arise. The factors considered in relation to cumulative effects include human beings, flora and fauna, soil, water, climatic factors, landscape, cultural heritage and material assets.

The potential for cumulative impacts arising from the proposed development in combination with other projects is therefore been fully considered throughout this Environmental Report. This section of the Environmental Report provides an overview of other projects located within the wider area that have been considered within the cumulative impact assessments.

15.2 Methodology for the Cumulative Assessment of Projects

The potential for cumulative effects to arise from the proposed development was considered in the subject areas of human beings, flora and fauna, soil, water, climatic factors, landscape, cultural heritage and material assets. To comprehensively consider potential cumulative impacts, the final section of each relevant section within this Environmental Report includes a cumulative impact assessment where appropriate.

The potential cumulative impact of the proposed residential development and other relevant developments has been carried out with the purpose of identifying what influence the proposed development will have on the surrounding environment when considered cumulatively and in combination with relevant permitted, proposed and constructed projects in the vicinity of the application site.

The Cumulative Impact Assessments (CIA) of projects has four principle aims:

- 1. To establish the range and nature of existing projects within the cumulative impact study area of the proposed residential development.*
- 2. To summarise the relevant projects which have a potential to create cumulative impacts.*
- 3. To establish anticipated cumulative impact findings from expert opinions within each relevant field. Detailed cumulative impact assessments are included in each relevant section of the EIAR.*
- 4. To identify the projects that hold the potential for cumulative interaction within the context of the proposed development and discard projects that will neither directly or indirectly contribute to cumulative impacts.*

Assessment material for this cumulative impact assessment was compiled on the relevant developments within the vicinity of the proposed development. The material was gathered through a search of the Galway City Council online Planning Register, reviews of relevant Environmental Report, or Environmental Impact Assessment Report (EIAR) documents, planning application details and planning drawings, and served to identify past and future projects, their activities and their environmental impacts. These projects are summarised in Section 2.6.2 below.

15.3

Projects Considered in Cumulative Assessment

MKO conducted a comprehensive review of the Galway County Council planning register and An Bord Pleanála website was undertaken in October 2020 to identify relevant planning applications within the vicinity of the proposed works, most of which relate to the provision of, or improvement of, residential development. These are set out in the table below and have been considered for the purposes of this cumulative assessment.

Planning Search						
Planning Ref.	Applicant	Lodgement Date	Description	Location	Final grant	Zoning
Pre-planning	Michael McDonagh		Bearna Village SHD – Prospective SHD development of approximately 105 units	Freeport, Bearna, Co. Galway.		
ABP-302848-18	Galway County Council	23/10/2018	Galway County Council (“the road authority”) on its own behalf and on behalf of Galway City Council pursuant to an agreement under section 85 of the Local Government Act, 2001 (as amended) and as approved by Transport Infrastructure Ireland (the operational name of the National Roads Authority) pursuant to section 14(8) of the Roads Act 1993 (as amended), has applied under section 51(2) of the Roads Act, 1993 (as amended by section 9(1)(e)(i) of the Roads Act 2007) to An Bord Pleanála (“the Board”) for approval in relation to a proposed road development consisting of:- <ul style="list-style-type: none"> • A dual carriageway, consisting of 2 lanes and a hard shoulder in each direction divided by a segregating barrier • A single carriageway, consisting of 1 lane and a hard shoulder in each direction • New link roads • The realignment / improvement of regional, county and local roads crossed by the proposed road development • Localised works to the existing electricity transmission and distribution networks (specifically comprising of the diversion of the 110kV and 38kV services) together with all ancillary and consequential works associated therewith. 	located in the County Galway electoral divisions of:(i) Bearna/Barna, (ii) Bearna [i bParóiste Dlí Rathún]/Barna [in the Civil Parish of Rahoon], (iii) Rathún/Rahoon, (iv) An Daingean/Dangan, (v) Mionlach/Menlough, (vi) An Caisleán Gearr/Castlegar, (vii) Baile an Teampaill/Ballintemple, (viii) Baile an Bhriotaigh/Ballybrit, and (ix) An Baile Bán/Ballybaan		
19/1749	Denalibrook Ltd	08/11/2019	for minor amendments to previously granted planning permissions ref. 17/1314 and 18/1527 for 48 units at An	Na Forá Maola Thoir (Forramoyle East)	Granted subject to 18	Residential phase 1

Planning Search						
			Maolán. Amendments to include; Minor elevation and internal floor plan changes to D type houses (numbers 37 to 47 inclusive) and associated site works. Gross floor space of proposed works: 2187.00 sqm		no. conditions (17/02/2020)	
19/314	M. Walsh	06/03/2019	for the construction of 20 no. residential units (4 no. 3 bed semi-detached dwellings & 16 no. 5 bed detached dwellings) including the construction of a new road accessed via the existing Dreasla housing development, infrastructure, ESB Substation and all associated external works. Gross floor space of proposed works: 4461 sqm	An Cnocán Carrach	Granted Subject to 32 no. conditions (13/01/2020)	Open Space/Recreation and Amenity (OS)
16/147	Tribal Investments Ltd.	11/02/2016	for development on site accessed from the main street (R336). The proposed development will consist of the following: (1) modifications and improvements to 2 no. existing 2 storey street front houses, new public footpath and access to the houses, on-street car-parking spaces and boundary treatments. Construction of 1 no. new infill 1 bedroomed terraced house between the existing street front houses (2) demolition of existing partially-built garage structure on the site (3) construction of 15 no. new houses provided as follows: 4 no. in a terrace and 2 no. semi-detached Type A houses; 2 storey, 3 bedroomed houses with optional future attic conversion; 5 no. in a terrace Type B houses; 2.5 storey 3-bedroomed houses; 4 no. in a terrace Type C houses; 2.5 storey 3-bedroomed houses arranged around a shared landscaped home zone/village green amenity space (4) connection of all houses to existing drainage and watermain services, provision of new access road and associated carparking spaces (gross floor space proposed 2216sqm; retention 224sqm;demolition 68sqm)	Rinn Na Mara	Granted subject to 15 no. conditions (02/03/2017)	Village Centre (VC)
18/148	Seán Ó Chonchobhair	13/02/2018	le haghaidh Forbairt Cónaithe ar shuíomh sa Phríomhshráid (R336). Is éard a bheidh sa fhorbairt ná tógáil na nithe seo a	Seapoint, Bearna	Granted subject to 20	Village Centre (VC)

Planning Search						
			leanas: (1) Comhshó athruithe agus síneadh scioból leath-thréigthe chun freastal ar 1 uimh. (2 leaba), (2) Foirgneamh dhá stór a thógáil chun freastal ar 2 uimh (3 leaba) agus (3) Tógáil 6 uimh. dhá theach agus dhá urláir (3 leaba) teorainneacha (4) Cóireálacha Teorainneacha Athbhreithnithe agus (5) Dúnadh ar bhealaí isteach láithreach agus tógáil bóithre rochtana nua ón bpríomhshráid agus (6) le seirbhísí draenála agus uisce reatha, mar aon le na hoibreacha agus na seirbhísí ar fad a bhaineann leo. Tá RPS Uimh. 748. Struchtúr faoi Chosaint, suite ar an suíomh. Gross floor space of proposed works 1165.6 sqm. (9 no. residential units)		no. conditions (13/08/2018)	
17/1305	M O Sullivan	31/08/2017	for the construction of three no. two storey houses (comprising 2 no. 3 bedroom & 1 no. 5 bedroom) including infrastructural sewer connection, vehicular access on waterfront & parking and associated site works.	Freeport	Refused subject to 3 no. reasons (23/02/2018) ABP granted ABP-301244-18	17/1305
20/771	Eoghan Ó Ceallaigh	22/06/2020	for the demolition of an existing substandard house and for the construction of a replacement dwelling house. Gross floor space of proposed works: 271.8 sqm. Gross floor space of any demolition: 140.6 sqm	Trusky West	Granted subject to 9 no. conditions (13/08/2020)	Existing Residential
20/698	Michelle Lyons	05/06/2020	to construct a dwelling house and domestic garage with a waste water treatment plant, percolation area and all associated site works. Gross floor space of proposed works: 250 sqm House, 60 sqm Garage	Boleybeg	Granted subject to 14 no. conditions (29/07/2020)	
20/135	Billy Archbold & Ruth Storan	06/02/2020	for construction of new two storey house, waste water treatment system, new site access and all associated site works. Gross floor space of proposed works: 207.9 sqm	Truskey West	Granted subject to 8 no. conditions (24/07/2020)	Existing residential

Planning Search						
19/1853	Johnathan Lydon	28/11/2019	of alterations to existing planning reference P05/1073. Gross floor space of work to be retained: 107 sqm	Rinn na Mara (Seapoint)	Granted subject to 1 no. condition (06/07/2020)	Village Centre (VC)
19/1687	Breandán MacGearailt	30/10/2019	for alterations to the design of previously approved Planning Reference. P17/731. Gross floor space of proposed works: 249.5 sqm. Gross floor space to be retained: 7.5 sq. Gross floor space of any demolition: 50 sqm	Forramoyle West	Granted subject to 14 no. conditions (03/02/2020)	
19/1680	Deirdre O'Farrell	29/10/2019	for development consisting of the rising of the existing roof with construction of a new dormer extension to the rear plus new front porch and alterations to existing elevations with associated site works. Gross floor space of proposed works: 44 sqm. Gross floor space of work to be retained: 205 sqm	Aille	Granted subject to 6 no. conditions (08/06/2020)	
19/1593	Conor Evans	11/10/2019	for construction of extensions to the front, sides and rear of an existing dwelling with replacement of the roof including amendments to the associated landscaping, boundary walls and fences, and site services. Also permission is sought for an upgrade to a treatment plant and percolation area for the dwelling. Gross floor space of proposed works: 47.8 sqm ground level and 56.2 sqm. Gross floor space of any demolition: 5 sqm (porch) plus walls (amendments)	Na Forai Maola Thiar	Granted subject to 12. No conditions (29/06/2020)	
19/1546	Pat and Mary Hanley	04/10/2019	for 1. demolition of existing garage to side of house, and construction of 2 storey extension comprising garage and bedrooms, 2. minor elevational changes, and 3. interior alterations. Gross floor space of proposed works: 84 sqm. Gross floor space of work to be retained: 147 sqm. Gross floor space of any demolition: 30 sqm	An Cloch Scoilte	Granted subject to 7 no. conditions (13/01/2020)	
19/1497	Michael O'Grady	27/09/2019	for the construction of a single storey extension at first floor level to the rear of an existing dwelling house. Gross floor space of proposed works: 23.50 sqm	Áth an Ghlugair (Ahaglugger)	Granted subject to 4 no. conditions (09/01/2020)	Existing Residential

Planning Search						
19/1437	Mike Walsh	17/09/2019	for a change of house type to that previously granted under pl. ref: 18/1152. The proposed dwelling is to be 1 - 2 storey with all associated site development works. Gross floor space of proposed works: 291 sqm	Knockaunnacarragh	Granted subject to 11 no. conditions (16/12/2019)	Existing Residential
19/1337	Caitríona Ní Chonchobhair	27/08/2019	chun umair gáis a choinneál ar chúl an bhialann reatha (to maintain gas tanks at the rear of the existing restaurant)	Áth an Ghlugair, Bearna	Granted subject to 2 no. conditions (25/11/2019)	Village Centre (VC)
19/1169	S O'Shea	26/07/2019	for alterations and extension to an existing dwelling house to include a two storey and porch extension to the South West, the addition of a first floor over the Kitchen, minor elevational changes and all associated site and external works. Gross floor space of proposed works: 124 sqm. Gross floor space of work to be retained: 250 sqm	Na Foráí Maola Thior	Granted subject to 6 no. conditions (23/03/2020)	Existing Residential and Residential phase 2
19/1123	Alma & Eoghan Ó'Ceallaigh	23/07/2019	for alterations and extensions to an existing single storey dwelling house to include (1) a ground and first floor (attic) level extension to the south, (2) the construction of a new roof and use of the attic level for habitable rooms, (3) conversion of existing attached garage to a bedroom, (4) associated elevational changes and (5) all associated site works including a new connection to the public sewer. Gross floor space of proposed works: 133.2 sqm	Trusky West	Granted subject to 4 no. conditions	Existing Residential
19/966	Mr Martin Kearney	26/06/2019	Extension of Duration for a new service station to include the following: single storey service station building with shop and ancillary off licence, restaurant, stores, office, sanitary facilities, pump canopy, refuse containment building, service area, underground oil storage tanks, underground rainwater harvesting system, signage, parking and revised boundary treatments and associated works (Gross floor space 298sqm). Previous Planning Reference No. 14/563.	Freeport	Granted (19/08/2019)	Village Centre (VC)

Planning Search						
19/713	Paula Kerr	13/05/2019	to make alterations to existing dwelling by constructing a new pitched roof to the front and constructing a single storey extension to the rear including new utility room and bathrooms. Gross floor space of proposed works: 30 sqm	An Baile Ard Thiar (Ballard West)	Granted subject to 6 no. conditions (12/08/2019)	
19/612	Gerry Curran	25/04/2019	for alterations and extension to existing dwelling to form a granny flat with a new dwelling attached and to construct a new effluent treatment system, percolation area, to serve both units and to replace existing septic tank. Gross floor space of proposed works: 158.6 sqm	Forramoyle West	Granted subject to 7 no. conditions (29/07/2019)	
19/218	Breda Fallon	15/02/2019	for the replacement of 3 No. existing split sloped dormer windows with 3 No. boxed dormer windows to an existing two storey dwelling house and associated site works	Boleybeg East	Granted subject to 3 no. conditions (20/05/2019)	
18/1637	Emma Bradley	16/11/2018	of minor elevation alterations to the side extension previously granted under Pl. Ref No. 18/117. Gross floor space of proposed works: 17 sqm. Gross floor space of work to be retained: 185 sqm	Áth an Ghlugair, Barna	Granted subject to 3 no. conditions (17/01/2019)	Existing Residential
18/1639	Barry O'Donovan & Sheila Murphy	16/11/2018	for the demolition of an existing shed and for the construction of a new detached garage (floor area of garage 88.8 sqm) including all associated site works and ancillary services. Gross floor space of proposed works: 88.80sqm. Gross floor space of any demolition work: 22.49 sqm (Existing shed)	Lacklea	Granted subject to 7 no. conditions (25/02/2019)	Existing Residential
18/1616	Noel Murphy	14/11/2018	to construct a new dwelling and connect to the existing public sewer. Gross floor space of proposed works: 107 sqm	Seapoint	Refused by LA (15/01/2019), Granted by ABP ref. 303685 (28/05/2019)	Village Centre (VC)

Planning Search						
18/1527	Denalibrook Ltd	25/10/2018	for minor amendments to previously granted planning permission ref. 17/1314. Amendments to include: (A) Revised site boundary to South, (B) Footprint to previously granted houses 3 to 6 amended to cater for boundary re-alignment, (C) Previously granted Terrace block units 7 to 10 to be redesigned, and (D) associated site work. Gross floor space of proposed works: 911sqm.	Forramoyle East	Granted subject to 18 no. conditions (28/01/2019)	Residential phase 1
18/1250	Mrs. G Greaney & Mr. J Dorgere	04/09/2018	for alterations and extension to existing dwelling house to include: 1) Construction of porch and entrance hall with feature canopy at ground floor level. 2) Addition of bedroom, en-suite and playroom/study room at first floor level. 3) Construction of garage. 4) Retention of garden shed. Gross floor space of proposed works, 95sqm and gross floor space of work to be retained, 164sqm	Seapoint, Barna	Granted subject to 5 no. conditions (03/12/2018)	Existing Residential
18/1211	S. O'Shea	24/08/2018	for alterations and extension to an existing two storey dwelling house to include 1) a 1 1/2 storey extension to the south-west, 2) a single storey porch south-west, 3) associated elevational changes, 4) all associated site and external works. Gross floor space of proposed works, 81sqm.	Forramoyle East	Granted subject to 7 no. conditions (26/11/2018)	Existing Residential
18/910	T. Lydon	28/06/2018	for 1) the demolition of an existing dwellinghouse and 2) the construction of a two storey mixed use building consisting of 3 no. ground floor retail units and 3 no. first floor office units and 3) removal of palisade fencing, together with all associated access, parking, landscaping, signage, site works and services on an infill and brownfield development site previously permitted under PL. Ref. No. 16/294. Gross floor space of proposed works 753.50 sqm. Gross floor space of any demolition 68.5 sqm.	Freeport, An Chéibh	Granted subject to 17 no. conditions	Village Centre
18/750	Roisin O'Flynn	01/06/2018	Retention for roadside boundary wall and existing access point as constructed with all associated works and ancillary services.	Trusky West	Granted subject to 4 no. conditions	

Planning Search						
18/712	Galway Coast Cottages	30/05/2018	for 1) demolition of existing old building and 2) construction of 3 no. terraced holiday units and all ancillary works. Gross floor space of proposed works 303.6 sqm. Demolition 90sqm	Forramoyle East	Granted subject to 7 no. conditions (03/09/2018)	Existing Residential
18/688	Aoife Duffy	25/05/2018	for construction of new dwelling house, treatment system and percolation area, and all associated site works and for retention of unauthorized groundworks, importation of fill and trackway. Gross floor space of proposed works (house) 240 sqm. (garage) 25 sqm.	Forramoyle East	Granted subject to 11 no. conditions (18/02/2019)	Residential phase 2
18/505	Breege Creaven & Mick Doneghan	25/04/2018	for a serviced dwelling house including new site access, connection to services and all ancillary site works. Gross floor space of proposed works 140 sqm.	Freeport	Granted subject to 11 no. conditions	Existing Residential
18/487	Aengus & Nicole Burns	23/04/2018	for a single storey rear extension. Gross floor space of proposed works 38.96 sqm.	Trusky West	Granted subject to 13 no. conditions	Existing residential
18/335	Roisin O'Flynn	21/03/2018	for dwelling house, garage/shed and private wastewater treatment system with all associated works and ancillary services. Gross floor space of proposed works (house) 200 sqm. (garage) 48 sqm.	Trusky West	Granted subject to 13 no. conditions	
18/117	Emma Bradley	08/02/2018	for the construction of a single storey side extension to an existing dwelling house. Gross floor space of proposed works 17 sqm.	Barna	Granted subject to 5 no. conditions (07/05/2018)	Existing Residential
18/64	Jim Hickey	25/01/2018	for development to consist of 1) construction of front porch; 2) construction of shed; 3) retention of alterations to extension previously granted under 07/3572 and 12/1299. Gross floor space of proposed works 50 sqm	Forramoyle West, Barna	Granted subject to 6 no. conditions (23/04/2018)	Existing Residential
17/1872	Caitríona Ní Chonchobhair	22/12/2017	This development will consist of (1) Permission for a change of use of the ground floor, from retail to a sitting restaurant. (2) Permission for change of use of first floor from ancillary retail area to restaurant storage area. (3) Permission for	Bearna	Granted subject to 7 no. conditions (02/04/2018)	

Planning Search						
			additional surface parking to the rear of the site and (4) Permission for revised elevation signage, together with associated site works and services. Gross floor space of proposed works 198.9sqm.			
17/1865	Michael & Roisin O'Donnell	21/12/2017	to construct a dwelling house, domestic garage and all associated services. Gross floor space of proposed works Dwelling 227sqm, Garage 48sqm.	Bearna	Granted subject to 17 no. conditions (20/08/2018)	Coastal Edge
17/1685	Ali Jalilvand	24/11/2017	for (a) Change of use of existing Ali's Fish Market retail unit (Unit 20) to retail and seafood bistro restaurant and deli (b) full change of use of adjoining retail unit (unit 19) to seafood bistro restaurant and deli (c) to make alterations to front and rear elevations (d) to include advertisement signage to the front, (3) ventilation ducting, gas storage and associated fittings, fitting of extraction and air handling units, all to the rear of the building (e) provision of a roof type cover to contain the extraction and air handling units to the rear of the building, (f) all associated services and works. Gross floor space of proposed works 142.5 Existing - part change of use only.	An Leac Liath, Barna	Granted subject to 4 no. conditions (05/03/2018)	Village Centre (VC)
17/1521	Brenda Murphy	20/10/2017	for (a) change of use of previous hairdresser unit no. 9 to extension of café at unit no. 8 (b) change of use and subdivision of unit no. 5 from retail/crèche to barber and hairdresser, (c) the associated changes to the relevant elevations, (d) all associated services and works at unit 5, 8 and 9, Barna Village Centre. Gross floor space of works to be retained 133.0sqm.	Barna Village	Granted subject to 4 no. conditions (13/12/2017)	Village Centre (VC)
17/731	Conor O'Carroll	24/05/2017	of the demolition of existing sub-standard house and for the construction of a replacement 1 and a half storey dwelling house, (242 sqm.) treatment plant, percolation area and for	Furrymelia West	Granted subject to 15 no. conditions (28/08/2017)	

Planning Search						
			all associated site development works. (Gross floor space of works for demolition: 50 sqm. proposed 242sqm)			
17/726	Mike & Maggie Power	23/05/2017	of conservatory to side of dwelling, roof window to rear of dwelling, septic tank and percolation area and permission is sought to construct a new garage including all associated services. Gross floor space of proposed works: 43.75sqm, retention 16.84sqm	Bearna	Granted subject to 8 no. conditions (21/08/2017)	
17/580	John & Sheila Flynn	26/04/2017	to (1) increase the existing low roof pitch to accommodate 3 no. bedrooms and associated bathrooms. (2) To demolish existing single story garage attached to the side of the existing dwelling. (3) All associated site services. (Gross floor space of proposed works:144 sqm., gross floor space of demolition works:31 sqm.)	Forramoyle East	Granted subject to 5 no. conditions (11/09/2017)	
17/575	Bernadette Conneely	25/04/2017	for the construction of a dwelling house, garage, wastewater treatment system and all ancillary works. (Gross floor space of proposed works: House 274 sqm.)	Corboley	Granted subject to 15 no. conditions (18/09/2017)	
16/1663	Rory Browne	08/12/2016	for retention of a front porch, rear sunroom and first floor south facing gable window. (Gross floor space of works to be retained: 23.33 sqm.)	Barna	Granted subject to 3 no. conditions (20/03/2017)	
16/1478	Carmel O'Connor	28/10/2016	or alterations to dwelling house and private wastewater treatment system with all associated site works and ancillary services on revised site boundaries from that permitted under planning reference number 14/588. (Gross floor space of proposed works: 114.2 sqm.)	Forramoyle East	Granted subject to 12 no. conditions (20/03/2017)	
16/1448	Spencer Lacey	24/10/2016	for the construction of a one and a half storey dwelling house (255sqm) and associated site services and works.	Truskey West	Granted subject to 9 no. conditions (31/07/2017)	Existing Residential

Planning Search						
16/1327	K & H Davies	29/09/2016	to construct a single storey extension to the side and rear of existing 2 storey detached dwelling house. (Gross Floor space of proposed works: 17 sqm.)	Barna	Granted subject to 5 no. conditions (02/01/2017)	Existing Residential
16/1287	Shane Howard	19/09/2016	for an extension to the rear of the existing dwelling house along with all associated ancillary works. Gross floor space of works to be retained: 22.85sqm	Barna	Granted subject to 1 no. condition (19/12/2016)	Existing Residential
16/892	Eileen & Joe Hemon	04/07/2016	for (a) Retention of dwelling house, domestic shed and associated services on site with revised boundaries (b) Permission sought for proposed new extension with minor modifications to existing dwelling house. Gross floor space of proposed works: 99m ²	Barna	Granted subject to 7 no. conditions (19/12/2016)	
16/491	D & L Keane	20/04/2016	for (a) a rear extension with built-in roof space (b) a two storey front extension to an existing two storey dwelling including associated alterations and external site works and services at No. 1 Thornberry (gross floor space 73sqm)	Barna	Granted subject to 5 no. conditions (25/07/2016)	Existing Residential
16/294	T Lydon	10/03/2016	to demolish fire damaged building and reinstate as a site with green palisade fencing and associated site works at buildings formerly known as Bearna Tyre Centre in Bearna Village on R336 Bearna-Galway Road (Gross floor space demolition 663sqm)	Barna	Granted subject to 3 no. conditions (13/06/2016)	Village Centre (VC)
15/1460	John & Sheila Flynn	01/12/2015	on grant of outline permission (pl. ref. 08/2127) for 2 dwellings houses and advanced sewage treatment systems and percolation areas (gross floor space 2 x 236sqm). (Previous planning ref: 11/926)	Forramoyle East	Granted (03/03/2016)	Residential phase 2
15/1367	Stephen & Suzette Kearns	05/11/2015	for change of house plans from previously approved planning permission reference 15/684, for the proposed construction of a two storey dwellinghouse, site entrance and associated site works (gross floor space 408sqm)	Barna	Granted subject to 16 no. conditions (15/02/2016)	Existing Residential

Planning Search						
15/932	James Craven and Nora Madden	31/07/2015	1) The demolition of substandard dwelling and 2) full planning permission for the construction of a new dwelling, a new proprietary effluent treatment system and percolation area and all the associated site works (gross floor space 208.34sqm)	Boleybeg East	Granted subject to 14 no. conditions (02/11/2015)	
15/924	Jean Parkinson	29/07/2015	is sought for elevations of existing dwelling house, additional bedrooms, and permission is sought to enlarge roof window including all associated services (gross floor space 23.93 sqm)	Boleybeg East	Granted subject to 2 no. conditions (21/12/2015)	
15/830	Jean Boyd	09/07/2015	For the construction of a playroom and study, including all associated services. Gross floor space of proposed works: 21.61sqm	Barna	Granted subject to 5 no. conditions (27/08/2015) ABP granted 21/12/2015 (third party appeal)	Existing Residential
15/608	Robert Condon	21/05/2015	chun teach nua, garaiste agus coras searachais a thogail, previous planning reference no. 09/1911 (gross floor space 275sqm)	Truskey West	Granted (13/07/2015)	Existing Residential
15/457	Keith Kissane	17/04/2015	for construction of a single storey extension to the side and rear of existing dwellinghouse and conversion of a stone outbuilding for habitable purposes and associated site works (Gross floor space 59sqm)	Barna	Granted subject to 8 no. conditions (20/07/2016)	Existing Residential
15/385	A. Elberse & T. Culhane	07/04/2015	for (a) a two storey front porch extension and alterations to roof at rear of dwelling (b) alterations to entrance drive, (c) front, rear and side elevational changes (d) reconstruction of rear terrace, connection to the public foul sewer and associated external works to an existing 2 1/2 storey detached dwelling (Gross floor space proposed 10sqm)	Lacklea	Granted subject to 6 no. conditions (06/07/2015)	Existing Residential and Coastal Edge

Planning Search						
15/345	Alan Kearney	07/12/2015	Permission for development to consist of an ancillary off-licence use within the existing retail unit together with all associated site works	Silverstrand Service Station, Barna Road, Galway	Granted subject to 1 no. condition (01/03/2016)	
15/314	Mr Michael O'Grady	20/03/2015	to construct a single storey extension to the side and rear of existing dwelling house and associated site works at 1 Leac Lian, Barna, Co. Galway. (Gross floor space of proposed works 66m ²)	1 Leac Lian, Barna, Co. Galway	Granted subject to 3 no. conditions (22/06/2015)	Existing Residential
15/320	L Clifford	20/03/2015	for a dormer dwellinghouse with effluent treatment plant, percolation area, domestic garage and all associated site works including new entrance and boundary walls (gross floor space 258sqm & garage 27sqm)	Loughinch	Granted subject to 16 no. conditions (10/08/2015)	
15/273	Mr & Mrs McInerney	12/03/2015	to construct a single storey extension to part of the front of elevation of the existing dwelling (gross floor space 18.24sqm)	Forramoyle East	Granted subject to 4 no. conditions (24/08/2015)	

15.4

Summary of Potential Cumulative In-Combination Impacts

The potential cumulative effects of the proposed development in combination with the other projects listed in Table 15.1 have been considered in terms of impacts on the various resource areas. This section summarises the likely, significant cumulative in-combination impacts of the Proposed development and the other projects listed in Table 15.1. Where appropriate the application documentation, EIAR and NIS for these projects have been reviewed to inform the assessment.

Potential cumulative in-combination effects are discussed in detail in each of the resource chapters of this EIAR and the residual cumulative effects are re-iterated here.

15.4.1

Population and Human Health

The potential cumulative effects between the proposed development and the other projects listed in Table 15.1 have been considered in terms of impacts on population and human health. Of the projects listed in Table 15.1 it was determined that, due to proximity and scale, there are seven projects with the potential for cumulative effects on Population and Human Health in combination with the proposed development (Table 5.6). There are 5 no. proposed housing developments with permission granted in the locality, 1 housing development at pre-planning and the proposed Galway City Ring road in the locality. Where appropriate the application documentation, EIAR and NIS have been reviewed to inform the assessment.

Health and Safety

Any potential cumulative impacts between the construction of the proposed residential development and the other projects in terms of health and safety will be mitigated by the requirement for all projects to adhere to Health & Safety legislation. There will therefore be no cumulative effects in terms of health and safety.

Dust and Noise

Potential cumulative effects associated with dust and noise are addressed in Chapters 9 and 10 of this EIAR respectively and conclude that there will be imperceptible effects. Furthermore, it is highly unlikely that all projects would be constructed at the same time and so the potential for cumulative dust and noise effects during the construction phase is limited. The mitigation measures outlined in Chapter 9 of this EIAR will ensure that cumulative effects on human health in terms of dust and air quality as a result of the proposed development in combination with other projects will be short term, imperceptible, negative.

Traffic

Potential cumulative effects associated with traffic are addressed in Section 13.12 of this EIAR. The findings of the assessment indicate that there are a number of small scale developments that are imminent or have been granted permission that could result in potential cumulative traffic impacts with the proposed development. The cumulative impact of these residential development projects has been accounted for and it will result in a likely, long term, not significant negative effect.

The proposed N6 Galway City Ring Road is located approximately 0.7 km north of the proposed development. The EIAR for the N6 Galway City Ring Road was reviewed as part of the assessment of potential cumulative impacts. In terms of the proposed strategic housing development subject of this EIAR, the proposed GCRR will have a positive impact by providing an alternative safe and efficient

route into the city and by improving the environment within Bearna Village and facilitating the potential for future improvements to the public realm, walking and cycling environment.

The proposed strategic housing development will not have any negative impacts on the GCRR as the GCRR is design with the objective to facilitate population growth of compact and sustainable development, such as the proposed strategic housing development.

Employment and Investment

In terms of employment and economic benefit, there will be a significant, short-term, positive, cumulative impact between the proposed residential site and the other projects due to the majority of construction workers and materials being sourced locally, thereby helping to sustain employment in the construction trade.

The injection of money in the form of salaries and wages to those employed during the construction phase of the proposed residential site and the other projects, has the potential to result in a slight increase in household spending and demand for goods and services in the local area. This would result in local retailers and businesses experiencing a short-term, slight positive impact on their cash flow.

Land-use

The surrounding land-uses of residential and agricultural will continue during the operation phase of the proposed residential site.

The impact of the proposed development site is negligible as the site will have a positive impact on the surrounding area. As there will be a negligible impact the potential for cumulative impacts are negligible.

Tourism and Amenity

As discussed in Section 5.4.6.2 there are no tourist attractions pertaining specifically to the site of the proposed development, however there are numerous attractions located in the Bearna area and the wider area of Galway City.

There will be a slight positive cumulative operational impact on tourism between the proposed site and other projects in the area, where an increase in workers, residents, and tourists within the area will allow for a slight, positive influence on local tourism.

15.4.2 Biodiversity

Following the detailed assessment provided in Chapter 6 of this EIAR, it is concluded that, the proposed development will not result in any likely significant effects on biodiversity either within the site of the proposed development or outside it. There is therefore no potential for the proposed development to contribute to any likely significant cumulative effects on biodiversity when considered in-combination with other projects.

In the review of the projects that was undertaken, no connection, that could potentially result in additional or cumulative impacts was identified. Neither was any potential for different (new) impacts resulting from the combination of the various projects in association with the proposed development.

15.4.3 Land, Soils and Geology

The potential cumulative effects of the proposed development in combination with the other projects described in Chapter 15 of this report have been considered in terms of impacts on land, soils and

geology. Where appropriate the application documentation, EIAR and NIS have been reviewed to inform the assessment. There are no active quarries, major earthworks, or other associated activities which could impact upon the soils and geological environment adjacent the proposed development site.

The EIAR for the N6 Galway City Ring Road was reviewed as part of the assessment of potential cumulative impacts. The proposed N6 Galway City Ring road will require significant earthworks throughout its length. However, the scale of the proposed earthworks at the Proposed Development site is negligible in the context of the other projects within and around the City and so the potential cumulative effects are considered imperceptible.

With the implementation of mitigation measures for the proposed development as outlined above, no significant cumulative impacts on land, soils and geology environment are anticipated during the construction or operation phases of the proposed development in combination with other developments. Potential cumulative impact will be permanent, imperceptible, and neutral.

15.4.4 Hydrology and Hydrogeology

The potential cumulative effects of the proposed development in combination with the other projects described in Chapter 15 of this report have been considered in terms of impacts on hydrology and hydrogeology.

Of the projects listed in Chapter 15 of this EIAR it was determined that, due to proximity and scale, the seven projects listed below have the potential for cumulative effects in combination with the proposed development. There are 5 no. proposed housing developments with permission granted in the locality, 1 housing development at pre-planning, and the proposed Galway City Ring road in the locality. A description of the development types is included below within Table 8-10 and where appropriate the application documentation, EIAR and NIS have been reviewed to inform the assessment.

There are no proposed discharges of any substance from the site during the construction phase of the proposed development. The hydrological regime, which includes shallow subsurface flows to the Trusky Stream and some percolation of rainfall to ground, will not be altered significantly during the construction phase. Potential emissions from the site are therefore related to potential uncontrolled releases and so a range of procedures, management plans and infrastructural mitigation proposals have been identified and described earlier in this chapter and will be implemented to ensure that such uncontrolled releases do not occur. The potential for residual impacts on water and ground water receptors is considered to be imperceptible and so the potential for cumulative effects associated with these receptors is limited. It is highly unlikely that all projects would be constructed at the same time and so the potential for multiple uncontrolled releases to water are also not likely. Should some or all projects be constructed at the same time, the water quality controls at the Proposed Development site will ensure no likely significant cumulative effects will occur. Furthermore, it should be noted that planning and construction standards require that similar water quality controls will be implemented at the other sites, thus further reducing the potential for likely, significant cumulative effects.

During the operational phase, discharges are proposed to the Trusky Stream and this has been assessed as leading to a potential imperceptible effect as the discharge rate will be as per pre-development rates and water quality will be controlled. Again, the water quality controls at the Proposed Development site will ensure no likely significant effects cumulatively will occur during the operational phase. Mandated water quality controls at the other project sites will further reduce the potential for likely, significant cumulative effects.

Wastewater effluent arising from the operational phase of the proposed development will be piped to, and treated at, the municipal wastewater treatment plant. The Mutton Island treatment plant operates under licence from the EPA. The EPA cannot issue a licence in the event that emissions from that facility could lead to unacceptable environmental emissions. In circumstances where Irish Water has confirmed that the waste water arising from the proposed development will be treated at the Mutton

Island wastewater treatment plant, the potential for cumulative effects associated with the wastewater discharges does not arise.

No significant cumulative impacts on the water environment are anticipated during the construction or operational phases in circumstances where the proposed mitigation measures are implemented effectively. The 6 no. developments in the locality of the proposed development have been designed with appropriate water and wastewater services as has the Proposed Development.

15.4.5 Air and Climate

The majority of the developments listed in Table 15.1 consist of modifications to, or extensions of, existing houses or buildings and it was determined that there was no potential for cumulative impacts on Air and Climate from these project in combination with the Proposed development. There are no other large developments proposed in the immediate vicinity of the proposed development.

There are a number of small scale developments in the Bearna area that are imminent or have been granted permission. The list of development projects is as follows:

➤ 105 unit SHD Bearna Village : Freeport	Ref: pre-planning
➤ 48 unit development - An Maolán:	Ref: 19/1749
➤ 20 unit development – An Cnocán Carrach	Ref: 19/314
➤ 15 unit development - Rinn Na Mara	Ref: 16/147

In addition, the proposed N6 Galway City Ring Road is located within 1km of the proposed development. It was determined that, due to proximity and scale, the five projects listed above have the potential for cumulative effects in combination with the proposed development. Where appropriate the application documentation, EIAR and NIS have been reviewed to inform the assessment.

General Air Quality

Agriculture, residential heating, transport vehicles and other local construction activities and the construction of the proposed development will require the consumption of fossil fuels and therefore will lead to a minor level of air emissions cumulatively. However, with the implementation of the mitigation measures discussed above, there will be no significant cumulative impacts arising from the construction phase of the proposed development (as the air quality impacts will be imperceptible) and other local existing and planned developments. Cumulative impacts resulting from the proposed development, in combination with other projects, will be negative, short term, and imperceptible.

Dust Emissions

Dust emissions from the other land use activities in the area are likely to be imperceptible and localised to the immediate area of those projects. The N6 works area is proposed to occur c0.7km from this site and will be subject to strict dust control measures and so there will be no impact in-combination with this project. The potential for dust emissions from the construction phase of the proposed development exist but the residual effects will be imperceptible given the proposed mitigation measures in Sections 9.2.5.2.2 above. Therefore, cumulative impacts resulting from the proposed development, in combination with other projects, will be negative, short term, and imperceptible.

Climate

The construction of the proposed development, in conjunction with other developments in the area (listed in Chapter 15 of this EIAR), will require plant items which consume fossil fuels and therefore will lead to a minor emission of greenhouse gases cumulatively. However, given the small-scale operations and proposed mitigation measures for the proposed development, the cumulative impacts will be short

term, negative, and imperceptible in the context of the potential for impacts on climate change. There is no potential for significant cumulative climate impacts between the operational phase of the proposed development and the other projects listed in Table 15.1.

15.4.6 Noise and Vibration

The potential cumulative noise and vibration effects of proposed development, in combination with other developments in the vicinity, including all those listed in Table 15.1, were also considered as part of this assessment. Where appropriate the application documentation, EIAR and NIS have been reviewed to inform the assessment. There are no large scale developments previously permitted or proposed in the immediate vicinity of the Proposed Development. Thus potential cumulative noise and vibration impacts are unlikely to arise. Landscape

The potential cumulative effects of the proposed development in combination with the other projects described in Table 15.1 have been considered in terms of impacts on landscape.

Of the projects listed in Table 15.1 it was determined that, due to proximity and scale, the following relevant projects may result in cumulative landscape and visual effects when seen together with the Proposed Development:

- N6 Ring Road (Currently at Oral Hearing with ABP)
- Dreasla 20-unit. housing development (permitted) ; and
- Cumulative effects with Bearna Village SHD approximately 105 units SHD (pre-planning)

Where appropriate the application documentation, EIAR and NIS have been reviewed to inform the assessment.

The proposed N6 development will be located approximately 350m north of the Proposed Development. However, is not similar in type, nature and scale when compared to this residential development. Combined views of the proposed N6 development and the proposed residential development will likely increase following the construction of the N6 due to substantial earthworks and vegetation removal required to facilitate the road carriageway. Considering the difference in development types, there will be no cumulative effects resulting from the intervisibility of both developments. Combined views of the Proposed Development and the permitted and/or proposed residential development within Bearna Village extents will be limited to elevated locations within the proposed and permitted development sites or from elevated locations within existing housing estates towards Bearna village. Combined views are considered not significant as both developments will be seen in conjunction with surrounding existing residential housing estates.

The permitted Dreasla 20-unit housing development is approximately 500m east from the proposed development. Although, the units of this permitted development are of similar type and scale to the proposed development, there will be no intervisibility between these two developments Hence, direct cumulative landscape and visual effects will not arise from the proposed development in combination with the permitted Dreasla housing development.

The proposed Bearna Village SHD will include the development of 105 no. units approximately 500 metres to the south of the proposed development. Again due to intervening landform, vegetation and buildings there will be no intervisibility between these two developments, hence direct cumulative landscape and visual effects will not arise from the proposed development in combination with the proposed Bearna Village SHD.

The overall cumulative impact of the Proposed Development, in combination with other projects is considered to be slight, negative.

15.4.7 Cultural Heritage

The proposed development was considered in the context of a number of existing, proposed and permitted developments in the area as listed in Table 15.1. Where appropriate the application documentation, EIAR and NIS associated with these projects have been reviewed to inform the assessment.

The nearest existing developments comprise residential properties immediately to the west, with agricultural land to the east and north. The addition of the proposed development to this already largely altered landscape will not result in a visual impact to any nearby recorded monuments, protected structures or NIAH structures or features.

In terms of potential cumulative direct impacts, potential direct impacts which may occur to sub-surface archaeological features within the proposed development site will be mitigated against as discussed in Section 12.6.2. There is no potential for cumulative impacts to sub-surface archaeological features arising from the proposed development in combination with other projects.

The analysis of potential direct and indirect impacts on cultural heritage concludes that the proposed development will result in no significant impacts. There is little potential for cumulative impacts arising from the proposed development in combination with other projects in the vicinity. The other projects in the vicinity of the proposed development are small in scale and are in keeping with the sub-urban character of the area. No significant cumulative impacts on cultural heritage are anticipated during the construction or operation phases as long as mitigation measures outlined are put in place.

15.4.8 Material Assets

15.4.8.1 Traffic

Other Developments

The potential cumulative effects of the proposed development in combination with the other projects described in Table 15.1 have been considered in terms of impacts on traffic and transport.

Review of the Bearna Local Area Plan (LAP) 2015-2021 indicates that there some other smaller future development lands zoned residential Phase 1 and Phase 2 adjacent the proposed development. There are also some future development lands zoned residential Phase 1 and Phase 2 on the periphery of Bearna to the east and west.

A further detailed review of projects listed in Table 15.1 has identified a number of small scale developments that are imminent or have been granted permission. The list of development projects is as follows:

- | | |
|---|-------------------|
| ➤ 105 unit SHD Bearna Village : Freeport | Ref: pre-planning |
| ➤ 48 unit development - An Maolán: | Ref: 19/1749 |
| ➤ 20 unit development – An Cnocán Carrach | Ref: 19/314 |
| ➤ 15 unit development - Rinn Na Mara | Ref: 16/147 |

Where appropriate the application documentation, EIAR and NIS have been reviewed to inform the assessment.

As is standard industry practice, the growth rates applied during the opening year, opening year plus 5 and opening year plus 15 assessment has been applied so as to take account of future traffic growth on the local road network and it is considered that this growth on the local road network within and

adjacent Bearna and its environs will be predominantly associated with future residential development such as the confirmed projects as listed above.

However, an exercise has been undertaken to demonstrate that the traffic growth rate applied comfortably accounts for the potential traffic generated by the noted cumulative development projects. This has been undertaken by comparing the anticipated traffic generation of these cumulative developmental against the increase in traffic contributed by the traffic growth rate projections between the base year and the opening plus 5 year.

Given the spatial relationship of the cumulative development project sites and the proposed development it is anticipated that there will be only one location of the road network where all traffic associated with the these developments will converge, namely the Bearna Road (R336) / Local Road (L1321) junction. As such traffic increase volumes associated with this junction has been utilised. It should be noted, that whilst traffic associated with the noted cumulative development projects will in reality distribute onto the local road network in different proportions to the west north and east, it has been conservatively assumed that all traffic generated by these cumulative development projects will pass through this junction.

With reference to the trip generation rates used in the trip generation section of this Chapter the cumulative traffic volumes of these developments is expected to generate a total of 101 vehicle trips in the AM peak, and 87 vehicle trips in the PM peak.

With reference to the base year traffic volumes compared to the opening plus 5 year volumes at the R336 / L1321 junction there is a traffic increase of 191 vehicle trips and 240 vehicle trips. The results are shown in Table 15.2 below

Table 15.2 Cumulative Impact of Other Developments

Traffic Type	2 - Way Traffic	
	AM	PM
Generated Traffic		
Cumulative Development Traffic	101	87
Traffic at R336/L1321		
Traffic Count (2018)	1160	1350
Opening Year + 5 (2026)	1351	1570
Increase from 2018 to 2026	191	220
Relative contribution%	53%	40%

The traffic generated by the cumulative development projects only represents 53% of the traffic increase assessed in the opening year plus 5 AM period, whilst this figure reduces to 43% during the PM period.

As such the cumulative impact of the small scale confirmed residential development projects as noted above has been accounted for through application of the projected growths rates and the assessment of the opening year scenarios and by virtue of the same assessments has been demonstrated as representing a long term, not significant, negative effect.

N6 Galway City Ring Road (GCRR)

The proposed N6 GCRR comprises of approximately 5.6km of a single carriageway from 2km west of Bearna Village as far as the Ballymoneen Road and approximately 11.9km of dual carriageway from Ballymoneen Road to the eastern tie in with the existing N6 at Coolagh, Briarhill.

As stated in the EIAR Traffic Chapter for the N6 GCRR, there will be no negative traffic impacts associated with the proposed development of the road. The traffic impact carried out shows that the

introduction of the road proposal will result in significant benefits in terms of junction operation, network performance and journey time savings. This alternative route around the city will result in reduced traffic levels and congestion in Galway City Centre, it's existing approaches and the towns and villages on those approaches.

In terms of Bearna, the road proposal will have a significant positive impact through reducing traffic levels within the village and thereby facilitating the future provision of public realm plans and infrastructure to support walking, cycling and public transport.

In terms of the proposed strategic housing development subject of this EIAR, the proposed GCRR will have a positive impact by providing an alternative safe and efficient route into the city and by improving the environment within Bearna Village and facilitating the potential for future improvements to the public realm, walking and cycling environment.

The proposed strategic housing development will not have any negative impacts on the GCRR as the GCRR is design with the objective to facilitate population growth of compact and sustainable development, such as the proposed strategic housing development.

15.4.8.2 **Other Material Assets**

The potential cumulative impacts and associated effects between the proposed development and the projects described in Table 15.1 have been considered in terms of telecoms and other services.

The measures outlined in Chapter 13 of this EIAR and in the Construction, and Environmental Management Plan (CEMP), included as Appendix 4-2 of this EIAR, will eliminate any potential for cumulative effects in relation to telecommunications and other services during the construction phases of the proposed development and the other projects.

There will be no cumulative operational phase effects in relation to telecommunications and other services.

15.5 **Conclusion**

Based on the analysis above there will be no significant cumulative effects resulting from the proposed development in combination with other projects.