



DBFL CONSULTING ENGINEERS

Registered Office
Ormond House
Upper Ormond Quay
Dublin 7 Ireland
D07 W704

+ 353 1 400 4000
info@dbfl.ie
www.dbfl.ie

Cork Office
14 South Mall
Cork Ireland
T12 CT91

+ 353 21 202 4538
info@dbfl.ie
www.dbfl.ie

Galway Office
Odeon House
7 Eyre Square
Galway Ireland
H91 YNC8

+353 91 335599
info@dbfl.ie
www.dbfl.ie

Waterford Office
Suite 8b The Atrium
Maritana Gate Canada Street
Waterford Ireland
X91 W028

+ 353 51 309 500
info@dbfl.ie
www.dbfl.ie

12 December 2022

Christophe Teevan
Cairn Homes
45 Mespil Road
Dublin 4
D04 W2F1

RE: 210026 - Newcastle South Childcare Facility

Dear Christophe

In support of the planning submission to South Dublin County Council and as required for the above referenced site, we set out below DBFL's civil engineering element of the planning submission. It should be noted that the subject application benefits from primary road, drainage and watermain infrastructure granted under planning reference ABP-305343-19. No significant changes are proposed to this previously granted infrastructure as part of this planning submission as outlined in the following paragraphs.

Surface Water Drainage

The surface water drainage design approved under planning Reference ABP-305343-19 was designed to include the area within this planning application. It is proposed to connect the proposed creche to the surface water sewer network constructed under planning reference ABP-305343-19 as shown on drawing number 210026-DBFL-CS-SP-SK-C-1201 Site Services Layout - Childcare Facility . The surface water attenuation and outfalls have been approved and constructed under planning reference ABP-305343-19.

DBFL Consulting Engineers Limited
trading as DBFL Consulting Engineers

VAT. No. IE6355828Q
Company No. 335828



Directors

Bill Bates BEng MSc PhD CEng MIE MICE
Colm Doyle BE CEng MIE
Fergal English BE CEng MIE
Paul Forde (Chairman) BE CEng EITng FStructE FRI FConstE
John Hayes BScEng CEng MIE FConstE
Thomas Jennings BEng MSc MHT CMRI
John Keane BScEng CEng MCE MIE FConstE
Tracy Kearney BA BA MSc CEng MIE
Robert Kelly BA MA PGrodDip CEng MIE
Jim Lawler (Managing) BE DipComp CEng MIE FConstE
John Meaney AMStructE Eng
Dan Reilly BEng CEng MIE MOWEM MHT FConstE
Kevin Sturgeon BEng MSc CEng PGrodDip MIE

Consultant

Paddy G Darling BE BA CEng MIE

Associate Directors

Martin Bennett BE PGrodDip CEng MIE
Liam Brehon BScEng CEng MStructE DipH&S(Const) MIE
Aiden Burke BE MMongStc CEng Int PE (Int) MIE
Sarah Curran BA BA CEng MIE
Noel Gorman BE CEng MIE
Brendan Keogh BA BA PGrodDip CEng MIE
Shane McGovern BE CEng MStructE MIE
Colm Quirk BE CEng PMP MIE
Andrew Robertson BEng CEng MCHT MS&SA FRI
David Sheehan BScEng CEng MIE
Neil Wilson BA BA CEng MIE

Associates

Kevin Ahern BEng CEng MIE
David Bourke BE MSc PGCart CEng MIE
Conor Brady BEng CEng MStructE MIE
Kevin Burke BA MSc
John Carr BE MEng CEng MIE
Michael Connelly BEng CEng MIE
Kevin Coughlan BEng MSc CEng MStructE MIE
Chris Curley IT/BIM Manager
David Dolan BE CEng MIE
Aimee Dunne MEng BEngTech CEng MIE MBE
Nick Fenner MEng CEng MIE
Chash Gajanayaka BEng CEng MStructE
Ross Griffin BE PGrodDip CEng MIE
David Hutchinson BEng CEng MIE
Mark Kelly BA MA MSc PGrodDip CEng MIE
Andrew Lacey BE MSc CEng MIE
Brendan Manning BEng CEng MIE
Laura McLoughlin BEng CEng MIE
Danny Piu Murphy BEng MEng PGrodDip CEng MIE MCHT MTPS
Tanya Volschenk BEng CEng MIE
Karl Von Loggerenberg BEng MSc CEng MStructE MIE



DBFL CONSULTING ENGINEERS

Registered Office
Ormond House
Upper Ormond Quay
Dublin 7 Ireland
D07 W704
+ 353 1 400 4000
info@dbfl.ie
www.dbfl.ie

Cork Office
14 South Mall
Cork Ireland
T12 CT91
+ 353 21 202 4538
info@dbfl.ie
www.dbfl.ie

Galway Office
Odeon House
7 Eyre Square
Galway Ireland
H91 YNC8
+353 91 335599
info@dbfl.ie
www.dbfl.ie

Waterford Office
Suite 8b The Atrium
Maritana Gate Canada Street
Waterford Ireland
X91 W028
+ 353 51 309 500
info@dbfl.ie
www.dbfl.ie

Foul Drainage

Similar to the proposed surface water drainage, the foul drainage design submitted under planning reference ABP-305343-19 and approved by Irish Water was designed to include the area within this planning application. The constructed foul sewer drainage has capacity for the revised creche.

Water Supply and Distribution

The watermain design submitted under planning reference ABP-305343-19 and approved by Irish Water was designed to include the area within this planning application. The constructed watermain has capacity for the revised creche.

Flood Risk

The OPW Eastern CFRAM flood maps have been consulted to establish the flood zone of the subject site. It can be seen from the flood maps (Appendix A) that the subject site is in Flood Zone C (low risk).

We trust the above provides the relevant information in support of the overall planning submission. Should you require any further support information please do not hesitate to contact us.

Yours sincerely

Conor O' Loughlin

Conor O'Loughlin
DBFL CONSULTING ENGINEERS

Enclosed Drawing: 210026-DBFL-CS-SP-SK-C-1201 Site Services Layout - Childcare Facility

DBFL Consulting Engineers Limited
trading as DBFL Consulting Engineers

VAT. No. IE6355828Q
Company No. 335828



Directors
Bill Bates BEng MSc PhD CEng MIE MICE
Colm Doyle BE CEng MIE
Fergal English BE CEng MIE
Paul Forde (Chairman) BE CEng Earing RStructE FIE FConsE
John Hayes BScEng CEng MIE FConsE
Thomas Jennings BEng MSc MIE CMILT
John Keane BScEng CEng MICE MIE FConsE
Tracy Kearney BA BAU MSc CEng MIE
Robert Kelly BA MA PGrodDip CEng MIE
Jim Lawler (Managing) BE DipComp CEng MIE FConsE
John Meaney AMStructE IEng
Dan Reilly BEng CEng MIE MCIWEM MIE HT FConsE
Kevin Sturgeon BEng MSc CEng PGrodDip MIE
Consultant
Paddy G Darling BE BA CEng MIE

Associate Directors
Martin Bennett BE PGrodDip CEng MIE
Liam Brehon BScEng CEng MStructE Dip(H&C/Const) MIE
Aiden Burke BE MMongrSc CEng Int PE (Int) MIE
Sarah Curran BA BAU CEng MIE
Noel Gorman BE CEng MIE
Brendan Keogh BA BAU PGrodDip CEng MIE
Shane McGovern BE CEng MStructE MIE
Colm Quirk BE CEng PMP MIE
Andrew Robertson BEng CEng MCHT MSORSA FIE
David Sheehan BScEng CEng MIE
Neil Wilson BA BAU CEng MIE

Associates
Kevin Ahern BEng CEng MIE
David Bourke BE MSc PGCart CEng MIE
Conor Brady BEng CEng MStructE MIE
Kevin Burke BA MSc
John Carr BE MEng CEng MIE
Michael Connelly BEng CEng MIE
Kevin Coughlan BEng MSc CEng MStructE MIE
Chris Curley IT/BIM Manager
David Dolan BE CEng MIE
Aimee Dunne MEng BEngTech CEng MIE MIE
Nick Fenner MEng CEng MIE
Chash Gajanayaka BEng CEng MStructE
Ross Griffin BE PGrodDip CEng MIE
David Hutchinson BEng CEng MIE
Mark Kelly BA MA MSc PGrodDip CEng MIE
Andrew Lacey BE MIE CEng MIE
Brendan Manning BEng CEng MIE
Laura McLoughlin BEng CEng MIE
Danny Pío Murphy BEng MEng PGrodDip CEng MIE MCHT MTPS
Tanya Volschenk BEng CEng MIE
Karl Von Loggerenberg BEng MSc CEng MStructE MIE



DBFL CONSULTING ENGINEERS

Registered Office
Ormond House
Upper Ormond Quay
Dublin 7 Ireland
D07 W704

+ 353 1 400 4000
info@dbfl.ie
www.dbfl.ie

Cork Office
14 South Mall
Cork Ireland
T12 CT91

+ 353 21 202 4538
info@dbfl.ie
www.dbfl.ie

Galway Office
Odeon House
7 Eyre Square
Galway Ireland
H91 YNC8

+353 91 335599
info@dbfl.ie
www.dbfl.ie

Waterford Office
Suite 8b The Atrium
Maritana Gate Canada Street
Waterford Ireland
X91 W028

+ 353 51 309 500
info@dbfl.ie
www.dbfl.ie

Appendix A

DBFL Consulting Engineers Limited
trading as DBFL Consulting Engineers

VAT. No. IE6355828Q
Company No. 335828



Directors

Bill Bates BEng MSc PhD CEng MIEI MICE
Colm Doyle BE CEng MIEI
Fergal English BE CEng MIEI
Paul Forde (Chairman) BE CEng EIRing FStructE FIEI FConsEI
John Hayes BScEng CEng MIEI FConsEI
Thomas Jennings BEng MSc MIEI CMLI
John Keane BScEng CEng MICE MIEI FConsEI
Tracy Kearney BA BAI MSc CEng MIEI
Robert Kelly BAI MA PGradDip CEng MIEI
Jim Lawler (Managing) BE DipComp CEng MIEI FConsEI
John Meaney AMStructE IEng
Dan Reilly BEng CEng MIEI MCWEM MHT FConsEI
Kevin Sturgeon BEng MSc CEng PGradDip MIEI

Consultant

Paddy G Darling BE BA CEng MIEI

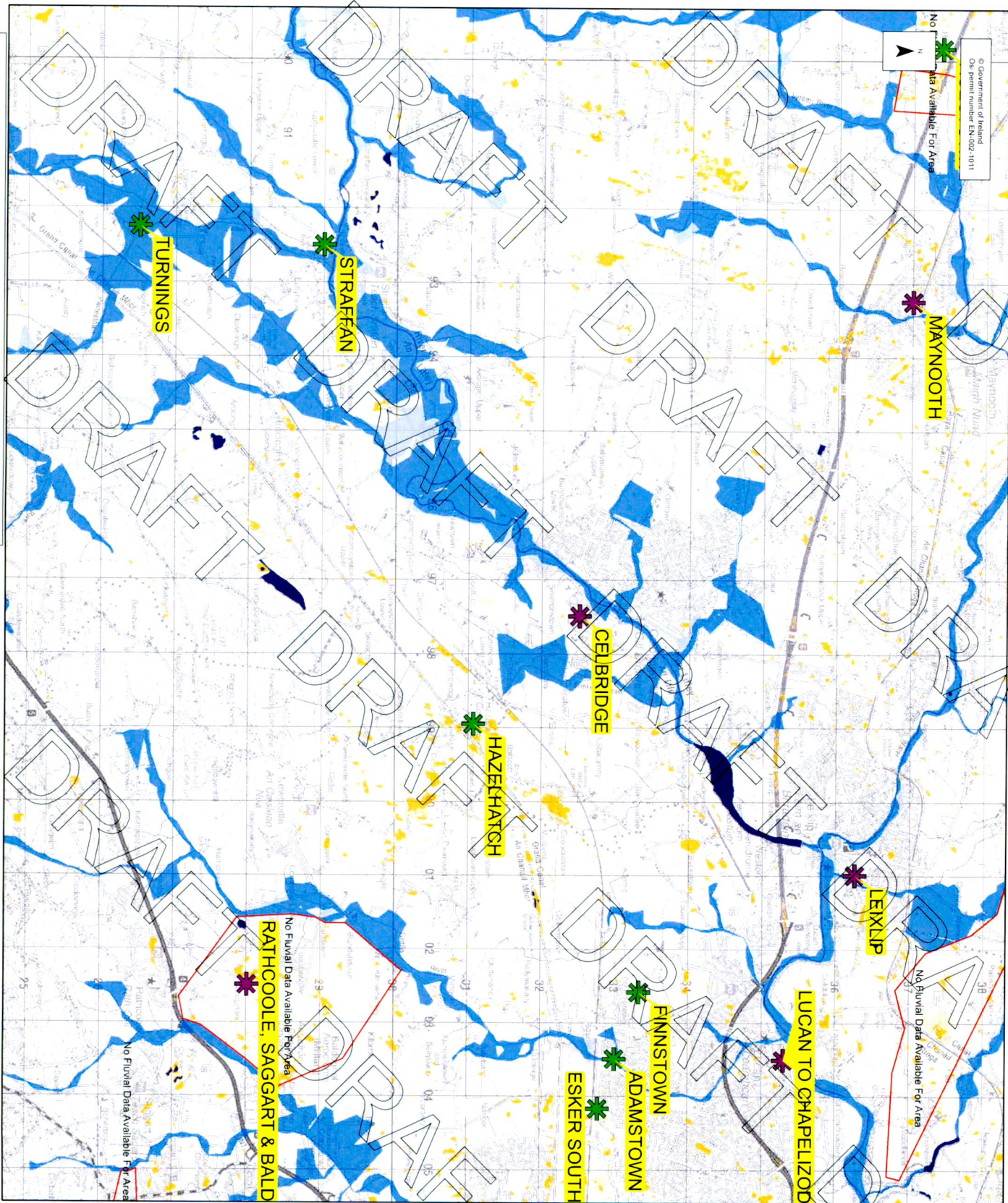
Associate Directors

Martin Bennett BE PGradDip CEng MIEI
Liam Brehon BScEng CEng MStructE DipH&S(ConsE) MIEI
Aiden Burke BE MMangtSc CEng Int PE (H) MIEI
Sarah Curran BA BAI CEng MIEI
Noel Gorman BE CEng MIEI
Brendan Keogh BA BAI PGradDip CEng MIEI
Shane McGovern BE CEng MStructE MIEI
Colm Quirk BE CEng PMP MIEI
Andrew Robertson BEng CEng MCINT MSORSA FIEI
David Sheehan BScEng CEng MIEI
Neil Wilson BA BAI CEng MIEI

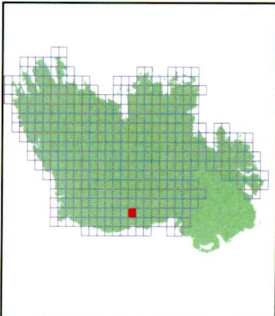
Associates

Kevin Ahern BEng CEng MIEI
David Bourke BE MSc PGCert CEng MIEI
Conor Brady BEng CEng MStructE MIEI
Kevin Burke BA MSc
John Carr BE MEng CEng MIEI
Michael Connolly BEng CEng MIEI
Kevin Coughlan BEng MSc CEng MStructE MIEI
Chris Curley IT/BIM Manager
David Dolan BE CEng MIEI
Aimee Dunne MEng BEngTech CEng MIEI MIEI
Nick Fenner MEng CEng MIEI
Chash Gajanayaka BEng CEng MStructE
Ross Griffin BE PGradDip CEng MIEI
David Hutchinson BEng CEng MIEI
Mark Kelly BAI MA MSc PGradDip CEng MIEI
Andrew Lacey BE MSc CEng MIEI
Brendan Manning BEng CEng MIEI
Laura McLoughlin BEng CEng MIEI
Danny Pio Murphy BEng MEng PGradDip CEng MIEI MCHT MTPS
Tanya Volschenk BEng CEng MIEI
Karl Von Loggerenberg BEng MSc CEng MStructE MIEI

No Data Available For Area



Location Plan :



Legend:

Flood Extents

- Fluvial - Indicative 1% AEP (100-yr) Event
- Fluvial - Extreme Event
- Coastal - Indicative 0.5% AEP (200-yr) Event
- Coastal - Extreme Event
- Pluvial - Indicative 1% AEP (100-yr) Event
- Pluvial - Extreme Event
- Groundwater Flood Extents

PFRA Outcomes

- Lakes / Turboughs
- Probable Area for Further Assessment
- Possible Area for Further Assessment

Important User Note

The flood extents shown on these maps are based on broad-scale simple analysis and may not be accurate for detailed information on the purpose, development and implications of these maps is available in the relevant reports (see www.dra.ie). Users should seek professional advice if they intend to rely on the maps in any way.

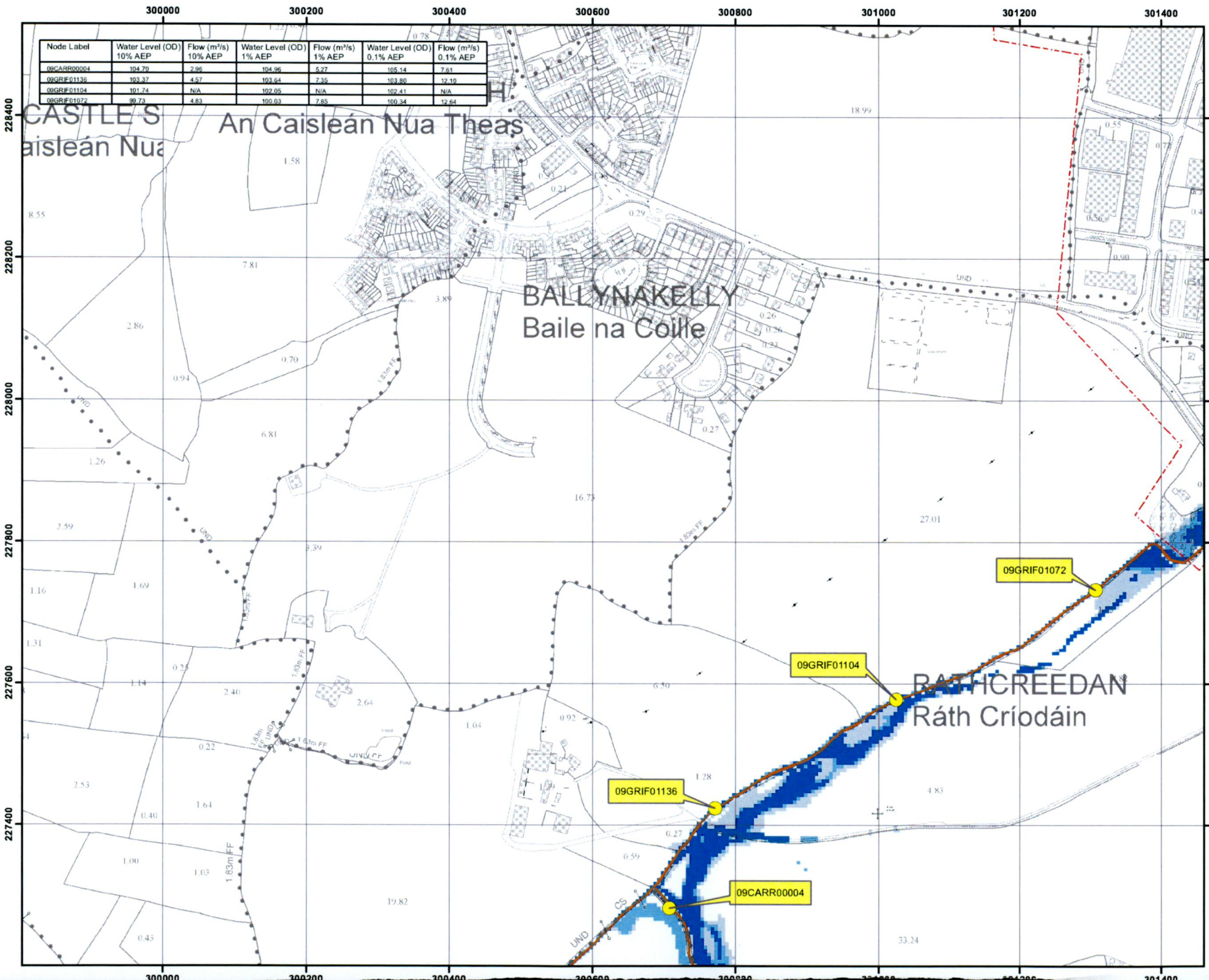
If you believe that the maps are inaccurate in some way please forward full details by contacting the OPW (refer to PFRA information leaflets or 'Have Your Say' on www.dra.ie).

Office of Public Works
Jonathan Swift Street
Trim
Co Meath
Ireland

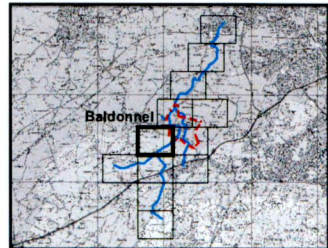


Project:
PRELIMINARY FLOOD RISK ASSESSMENT (PFRA)

| | |
|------------|--------------------------------------|
| Map | PFRA indicative extents and outcomes |
| Figure No. | PAW |
| Checked By | MA |
| Figure No. | 2019 / MAP / 237 / A |
| Revision | 0 |



| Node Label | Water Level (OD) 10% AEP | Flow (m³/s) 10% AEP | Water Level (OD) 1% AEP | Flow (m³/s) 1% AEP | Water Level (OD) 0.1% AEP | Flow (m³/s) 0.1% AEP |
|-------------|-----------------------------|------------------------|----------------------------|-----------------------|------------------------------|-------------------------|
| 09CARR00004 | 104.70 | 2.96 | 104.96 | 5.27 | 105.14 | 7.61 |
| 09GRIF01136 | 103.37 | 4.57 | 103.64 | 7.35 | 103.80 | 12.10 |
| 09GRIF01104 | 101.74 | N/A | 102.05 | N/A | 102.41 | N/A |
| 09GRIF01072 | 99.73 | 4.83 | 100.03 | 7.85 | 100.34 | 12.64 |




IMPORTANT USER NOTE:
THE VIEWER OF THIS MAP SHOULD REFER TO THE DISCLAIMER, GUIDANCE NOTES AND CONDITIONS OF USE THAT ACCOMPANY THIS MAP.

- Legend**
- 10% Fluvial AEP Event
 - 1% Fluvial AEP Event
 - 0.1% Fluvial AEP Event
 - Modelled River Centreline
 - AFA Extents
 - Node Point
 - Node ID


FINAL

| REV. | NOTE | DATE |
|------|------|------|
| | | |





The Office of Public Works
Jonathan Swift Street
Trim
Co Meath



Elmwood House T +44(0) 28 90 667914
74 Boucher Road F +44(0) 28 90 668296
Belfast W www.rpsgroup.com
BT12 6RZ E ireland@rpsgroup.com

| | | |
|--|---------------------------|--|
| Map: Ballynakelly Fluvial Flood Extents | | |
| Map Type: EXTENT | | |
| Source: FLUVIAL | | |
| Map Area: HPW | | |
| Scenario: CURRENT | | |
| Drawn By: C.C. | Date: 21 July 2016 | |
| Checked By: D.I. | Date: 21 July 2016 | |
| Approved By: G.G. | Date: 21 July 2016 | |
| Drawing No.: E09BAL_EXFCD_F0_05 | | |