



**An Roinn Tithíochta,  
Pleanála agus Rialtais Áitiúil**  
Department of Housing,  
Planning and Local Government



# Development Infrastructure

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**Connections & Developer Services**

**Clayton Silver Springs Hotel, Cork**

**10 October 2019**



# Development Infrastructure



# A national utility approach

- Enable development & partner with industry
- Encourage and support growth where people want to live and work
- New networks
  - *High quality water services*
  - *Resilient and future proofed*
  - *Low maintenance*
  - *Low leakage/ingress*
- Cost effective = efficient investment
  - *Deliver in a plan led way*
  - *Design and build 1<sup>st</sup> time right*



# Legacy Development Infrastructure

## Cross Industry Working Groups IW, LAs, DHPLG, NFGWS

**Taking In Charge MOU**

20% estates complete  
915 sites  
43,305 units  
468km water main  
412km waste water network

**Developer Provided Infrastructure (DPIs)**

Multi Annual Programme Proposed  
  
Phase I underway

**Group Schemes**

81 complete  
3,969 connections  
341km water main  
64 actively managed,  
17 orphan schemes

**Historically**

- Inconsistent industry practices
- Lack of resources

**Need to ensure**

- Solutions identified
- Past short comings not repeated

**Looking ahead**

- Learn lessons
- Apply best practice

# Identifying Best Practice



- Local Authority Consultative Group established
- Expert practitioners
  - *input into national technical documents*
  - *evaluated technical documents developed by Irish Water*
  - *identified gaps*
- Irish Water consulted wider industry
  - *CIF/ IHBA*
  - *Material providers*



Comhairle Cathrach Chorcaí  
Cork City Council



Comhairle Cathrach  
Bhaile Átha Cliath  
**Dublin City Council**



Cork  
County Council  
Comhairle Contae Chorcaí



Comhairle Contae Lú  
Louth County Council



Comhairle Contae Thiobraid Árann  
Tipperary County Council



Comhairle Cathrach & Contae Phort Láirge  
Waterford City & County Council



Comhairle Cathrach  
& Contae **Luimnigh**  
**Limerick City**  
& County Council



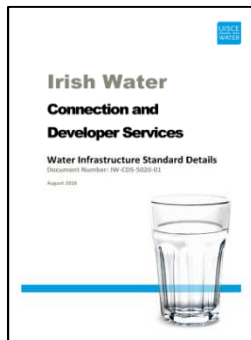
**WESTMEATH COUNTY COUNCIL**  
Comhairle Chontae na hIarmhí



Comhairle Chontae na Gaillimhe  
Galway County Council

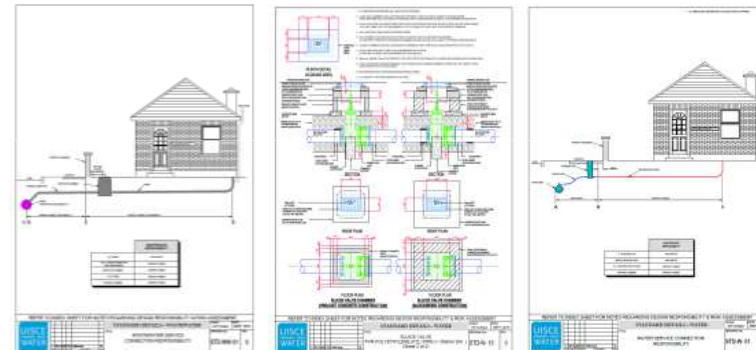
## Standard Details

- Published April 2016
- Revised December 2017



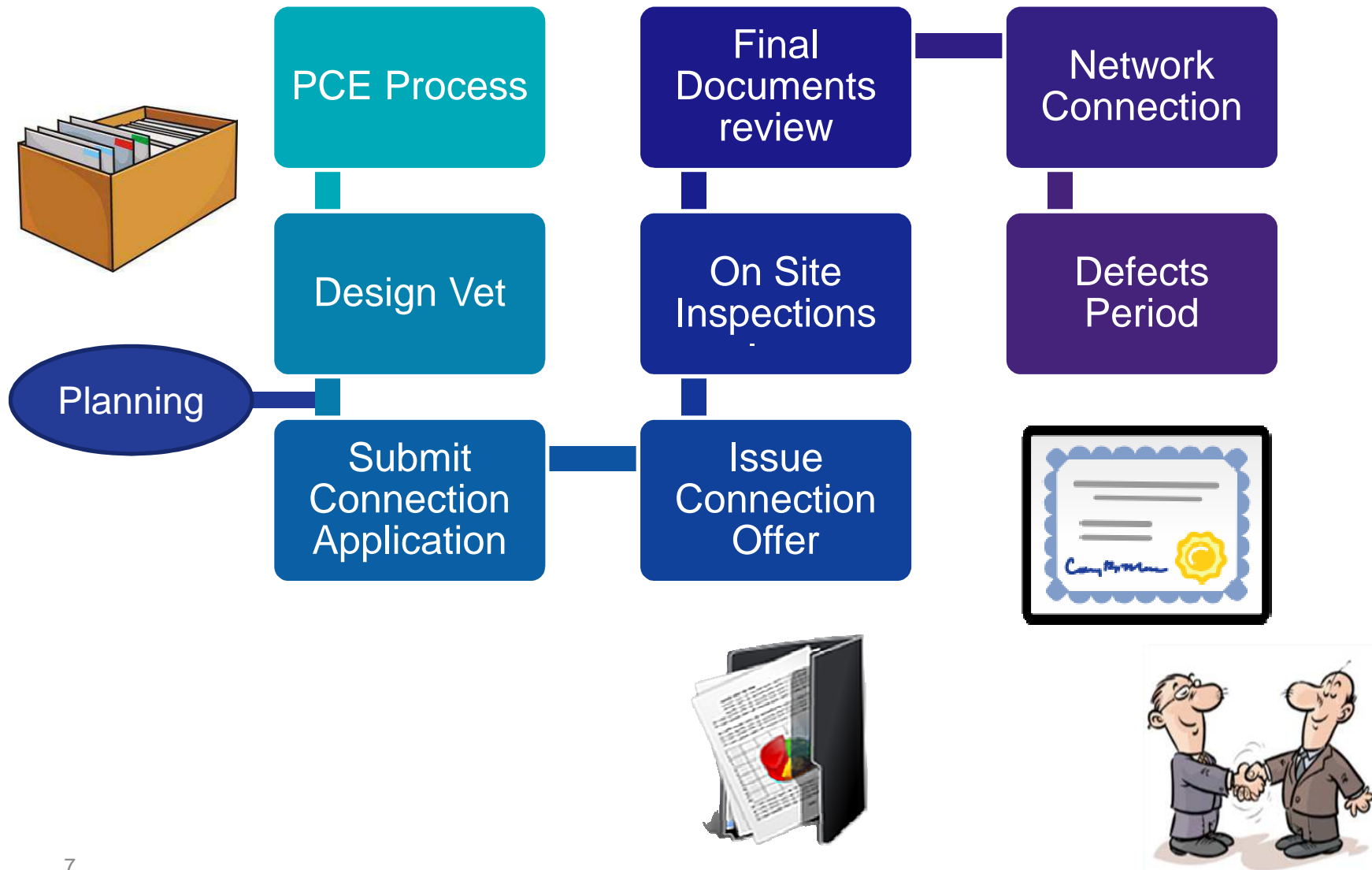
## Codes of Practice

- Published in December 2016
- Revised December 2017



- Available on [www.water.ie/connections/](http://www.water.ie/connections/)
- Revisions proposed in 2019
- Self-Lay connection agreements for residential developments in use since March 2018 (to mandate Irish Water QA requirements)

# How Quality Assurance process works



# Embedding QA Regime

- Pilot 18 sites with CIF & developer support
- Mandated Self Lay Connection Agreement
  - *4,000 Irish Water site visits undertaken since Apr'18*
  - *Supported by LA staff*
- Early Days
  - *Gap between the high quality water services designs and the infrastructure constructed*
  - *Learning for developers as significant change in work practices required*
- Good engagement once rationale explained





# Non Compliances, Separation, Water Quality



# Quality & Integrity of PE Watermain

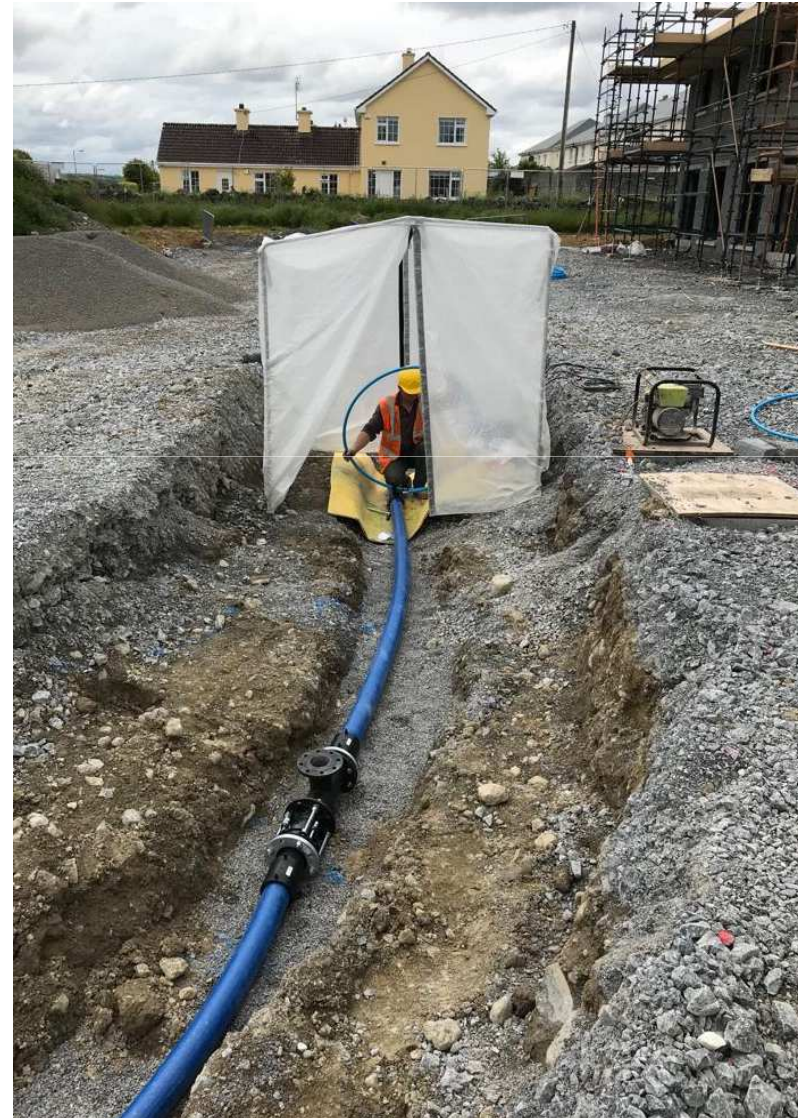


# Good Industry Practices on Site

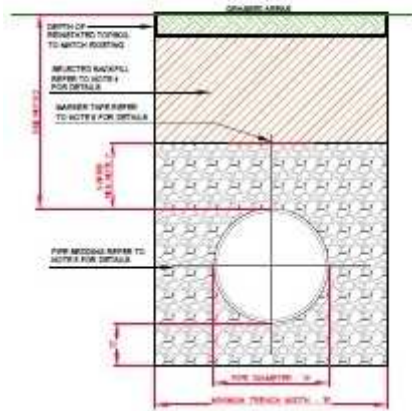
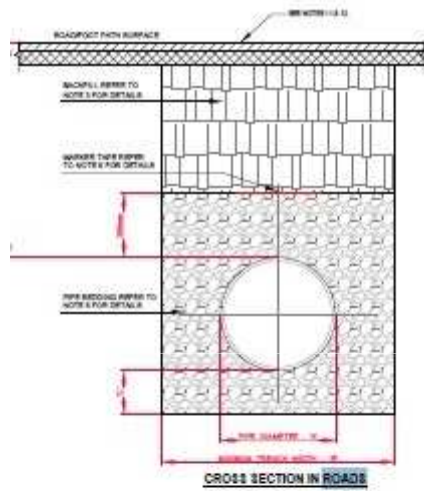
Melted fitting identified by sub contractor's own QA process



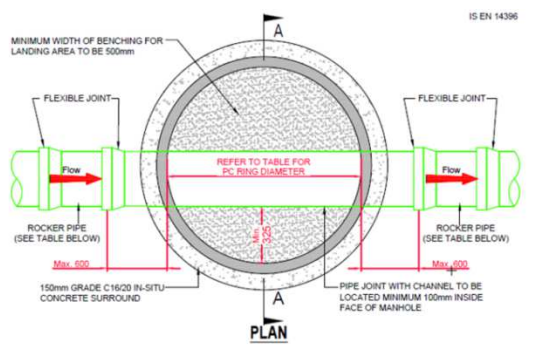
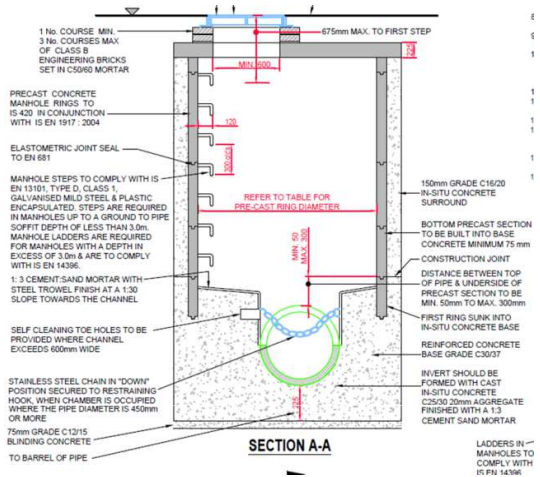
Fittings appropriately marked to indicate it's compromised



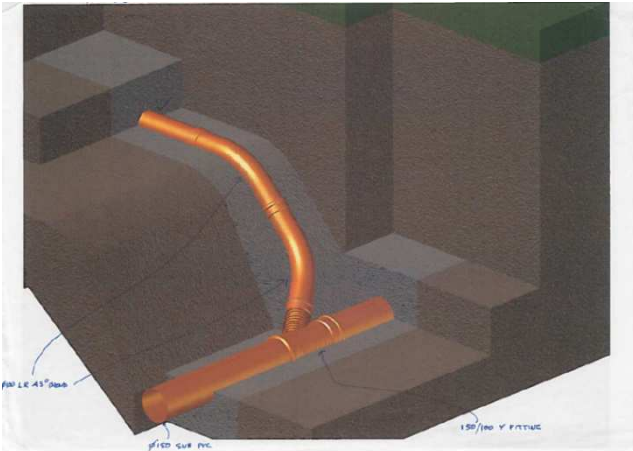
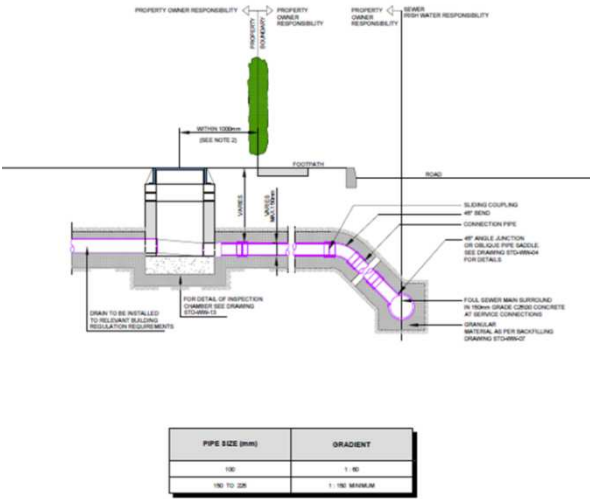
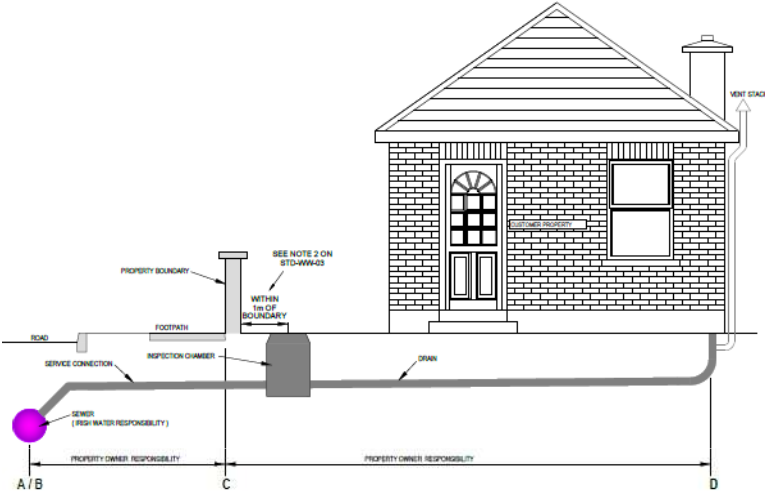
# Sewer Infrastructure Alignment



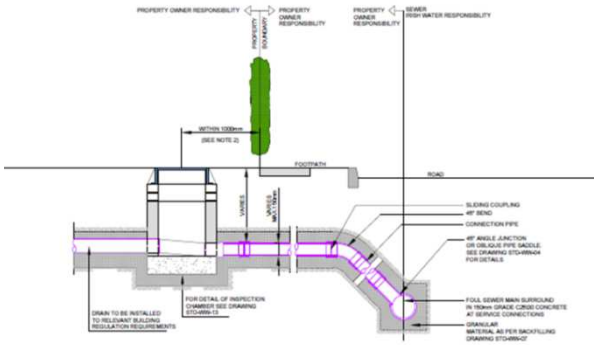
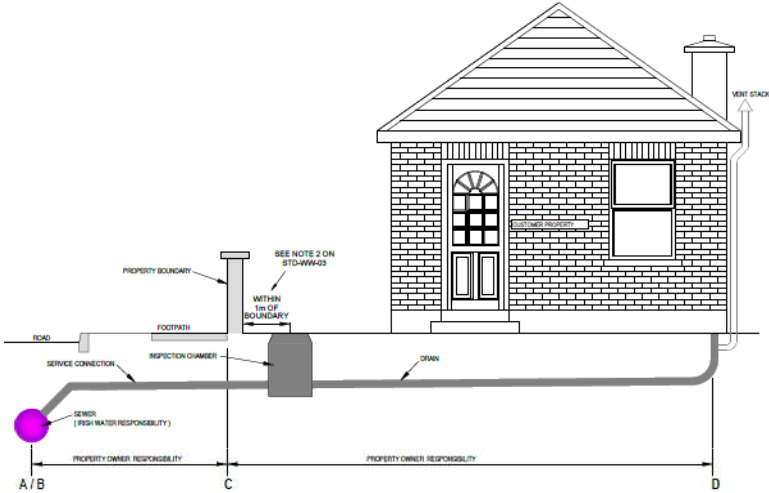
# Manhole Construction, Bends, Flow



# Service Connections



# Service Connections



PIPE SIZE (MM)	GRADIENT
100	1:80
150 TO 225	1:100 MINIMUM



# Re-educating the industry

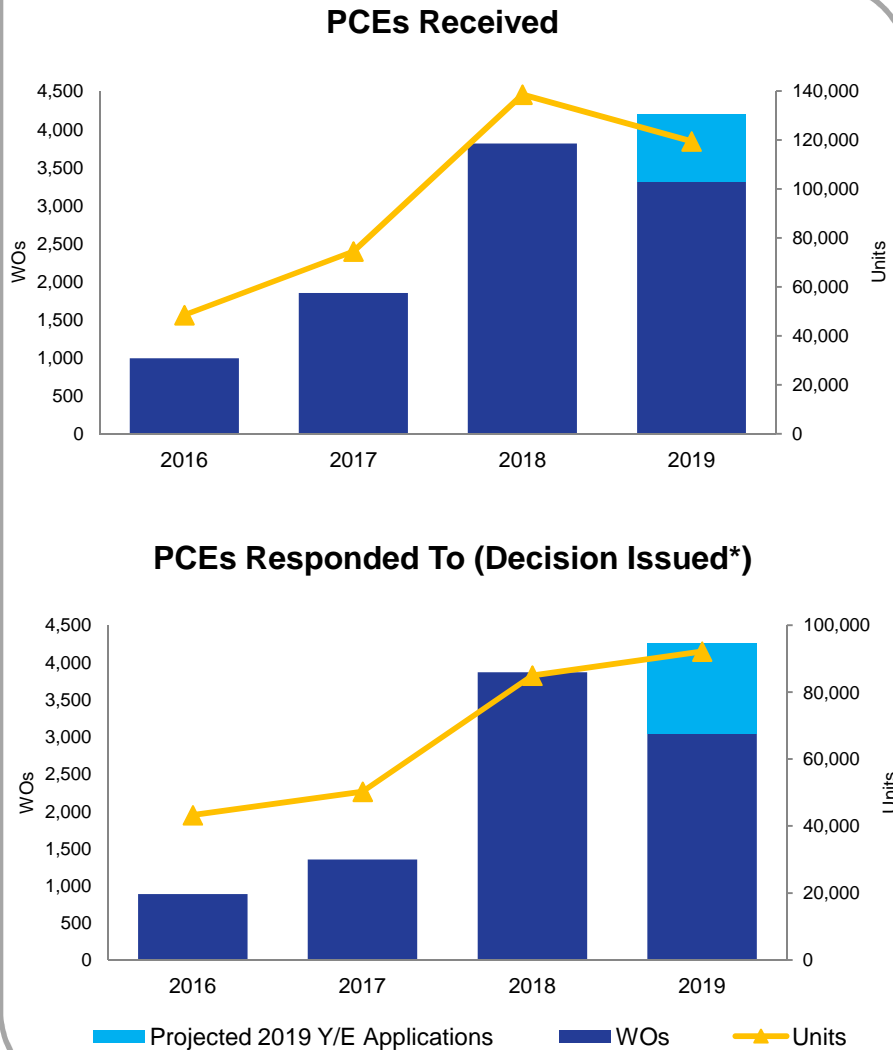
- Pragmatic Approach
- Not tolerating non-compliances
  - *Since Apr'18 ~1,500 non conformance notices issued*
- Identifying trends and communicating re-occurring issues to stakeholders and industry bodies
  - *CIF / IHBA / ACEI / LAs*
- Development industry is engaging positively in what is a **big industry change**

UISCE EIREANN - IRISH WATER	
Non-Conformance Notice No: <u>001</u>	
IW Ref No	6650002042
Developer Name	OBR Group
Contractor Name	OBR Group
Date of Inspection	01/08/18
Development Name	Riverside Farm
Address	Model Farm Road, Cork
Details of Non-Conformance	Inspection Chamber STD-WW-13 - Verticality - In excess of 1.2m in depth - No inspection chamber for last house - Covers to suit IS EN 124 loading - Chamber full of mortar/spoil - Query over cover to shaft detail - Exemption required – using PVC stacker boxes – not approved as part of IW Standard Details – either blockwork or precast concrete required - Incorrect ope – IW Standard Details required 600mm square ope – exemption required
Action to be taken by Developer-Contractor:	Exemption Cert will be applied for the use of a proprietary inspection chamber from Wavin instead of the precast concrete or blockwork inspection chamber on Irish Water STD-WW-13. The depth of the chamber is a result of meeting the requirements of Section 3.6.6 of the Irish Water Code of Practice of a 1/40 gradient where there are no WC's connected. This increases to a 1/60 gradient after a WC connection in accordance with TDG-H-2010- Drainage and Waste Water Disposal
Date of IW Notice	21/09/18
	Developer to response to this notice within 5 working days
Date of Developer Reply	25/09/2019
IW Authorisation	(IW Field Engineer)
Email	(IW Field Engineer)
IW Authorisation	(IW Design Engineer)
Email	(IW Design Engineer)

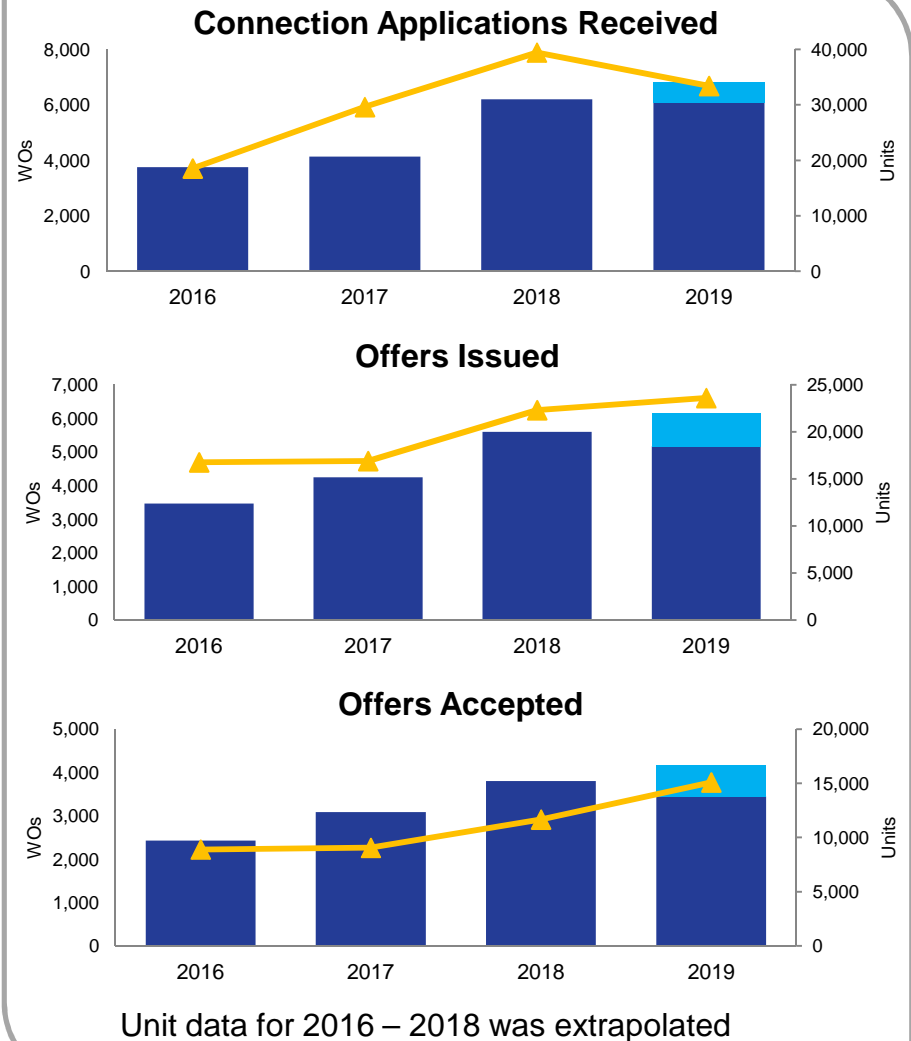


# Development activity

## Pre Connection Enquiries & Associated Units



## Connection Applications & Associated Units



# Connections and Developer Services

- Immediate Challenges
  - *Responding to customer needs and the timely delivery of housing*
- It's a Journey
  - *System Changes*
  - *Mobilisation of new ways to deliver connections*
  - *Transition to Irish Water's Connection Charging Policy*
  - *Embed national approaches*
- Looking ahead
  - *Innovate and identify new ways of working*



**Thank you  
for your time**

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