



ATTACHMENT A.1.1:

**NON-TECHNICAL SUMMARY,
DECEMBER 2022**

ATTACHMENT A.1.1 NON-TECHNICAL SUMMARY

1. Introduction

Bandon Town is located in County Cork and straddles the River Bandon. The agglomeration covers 21 no. townlands, namely, Shinagh, Coolfadda, Gully, Kilbrogan, Cloghmacsimon, Curryclogh, Clogheenavodig, Kilbeg North, Killountain, Clancool Beg, Clancool More, Ballylangley, Laragh, Roundhill, Castlebernard, Knockbrogan, Kilbeg South, Moanarone, Knockanreagh, Clashafree and Knocknagarrane.

The agglomeration is served by a sewerage system that comprises gravity sewers, pumping stations, rising mains and a Waste Water Treatment Plant (WwTP). The WwTP is located to the east of the town on the banks of the River Bandon.

Discharges from the Bandon agglomeration are currently authorised under Waste Water Discharge Licence (WWDL) D0136-01. Following a Waste Water Discharge Authorisation examination by the EPA in June 2021, it was recommended that a Waste Water Discharge Authorisation (WWDA) application was prepared and submitted to the EPA for determination. It was considered that the current WWDA: D0136-01, does not satisfy the environmental requirements of the WWDA Regulations as amended, and that a WWDA review was required.

As part of this WWDL Review, the Bandon IDA Laragh Agglomeration (A0362-01) is to be amalgamated into the Bandon agglomeration, along with the inclusion of 5 no. overflows (*i.e.*, SW016, SW017, SW018, SW019 and SW020) into the licence.

The Bandon WwTP was constructed in the early 1960's and was significantly upgraded and extended in 1993. More recently, further upgrade works were completed in Q2 2021. The upgraded plant has a current design population equivalent (p.e) of 14,456. The current plant has adequate capacity to treat the current load of 9,744 p.e (AER, 2021).

The effluent from the agglomeration arises mainly from domestic sources. There are 8 no. licensed Trade Effluent activities discharging to the agglomeration sewers under Section 16 of the Local Government (Water Pollution) Acts 1977 and 1990. There are no IED/IPC or waste licensed activities in the vicinity with discharges to the agglomeration.

Improvement works within the Bandon agglomeration have been taking place over recent years and involve several elements:

- Bandon Wastewater Treatment Plant and Glasslinn Road Pumping Station Upgrade (Bandon Sewerage Scheme) – These works were completed in Q2 2021.
- Bandon IDA Laragh WwTP Upgrade - This upgrade project was completed in Q3 2018. As part of this WWDL Review, the Bandon IDA Laragh Agglomeration (A0362-01) is to be amalgamated into the Bandon agglomeration.
- Bandon Watermain & Sewer Network Project including the removal of 10 no. Storm Water Overflows (SWOs) – These works are due to be completed by the end of Q1 2023.

Refer to **Section 3** below and **Attachment B.8.** for details on these projects.

Refer to **Attachment A.1.2** for the area of interest and **Attachment B.2.1** for a map of the Bandon agglomeration.

2. Description of the waste water discharges from the waste water works serving the agglomeration

Discharge Scenario as per D0136-01

Primary Discharge (SW001):

The primary discharge (SW001) discharges treated effluent to the River Bandon (Bandon_090) at NGR 150411E, 055785N via 3 no. diffusers.

Secondary Discharges:

There are no secondary discharge points associated with the waste water works.

Agglomeration Overflows:

Of the current 14 no. SWOs, 9 no. do not meet the definition of 'Storm Water Overflow' as per Regulation 3 of the Waste Water Discharge (Authorisation) Regulations, 2007, as amended and the criteria as set out in the DoEHLG 'Procedures and Criteria in Relation to Storm Water Overflows', 1995 (SW003, SW006-SW007, SW009-SW013 and SW015). 4 no. SWOs (SW002, SW004, SW008 and SW014) meet the DoEHLG criteria and 1 no. SWO (SW005) has not been assessed against the DoEHLG criteria.

Under the Bandon Watermain & Sewer Network Project, 9 no. overflows have already been decommissioned, with 1 no. (SW012) to be decommissioned by end of Q1 2023.

Overflow	Asset	Type	Discharges Co-ordinates
SW002	WwTP	SWO/EO	150368E, 055690N
SW003*	Glasslinn Road PS	SWO	150077E, 055316N
SW004	Watergate Street PS	SWO/EO	149316E, 055104N
SW005*	Network	SWO	149265E, 055150N
SW006*	Network	SWO	149552E, 055172N
SW007*	Network	SWO	149096E, 055045N
SW008	Network	SWO	149738E, 055164N
SW009*	Network	SWO	149281E, 055040N
SW010*	Network	SWO	149250E, 055069N
SW011*	Network	SWO	149929E, 055254N
SW012**	Network	SWO	149297E, 054974N
SW013*	Network	SWO	149116E, 054830N
SW014	Network	SWO	148826E, 054484N
SW015*	Network	SWO	148562E, 054290N

* Decommissioned

** To be decommissioned by end of Q1 2023

Discharges as per Subject Matter of Licence Review

Primary Discharge (SW001):

The primary discharge from the Bandon WwTP remains at the existing primary discharge location at NGR 150411E, 055785N.

Secondary Discharges:

There are no secondary discharge points associated with the waste water works.

Overflows:

There will be 9 no. overflows within the agglomeration.

2 no. of the existing Dual Function Overflows will be retained as part of the upgrade works (SW002 at the WwTP and SW004 at the Watergate Street Pumping Station).

2 no. existing SWOs (SW008 and SW014) will be retained as part of the network upgrade.

There is 1 no. new network SWO (SW018)

There are 3 no. new Dual Function Overflows (SW016, SW017 and SW020) from the Glasslinn Road Pumping Station, Laragh Pumping Station and Kilbrogan Pumping Station

There will be 1 no. new EO from Castlewoods Pumping Station (SW019).

All Storm Water Overflows have been designed to meet the definition of 'Storm Water Overflow' as per Regulation 3 of the Waste Water Discharge (Authorisation) Regulations, 2007, as amended and the criteria as set out in the DoEHLG 'Procedures and Criteria in Relation to Storm Water Overflows', 1995.

The Dual Function Overflow at the WwTP and 4 no. at Pumping Stations (*i.e.*, Watergate Street Pumping Station, Glasslinn Road Pumping Station, Laragh Pumping Station and Kilbrogan Pumping Station) have been designed primarily as a SWO, as per Irish Water's Standard IW-TEC-800-03 and the 1995 DoEHLG criteria, but will function as an EO should a catastrophic and highly unlikely event occur where there is a double failure mode at the WwTP or Pumping Stations *e.g.*, duty and stand-by pump fails and/or power outage and back-up generator fails or other double failure scenarios.

All overflows when activated discharge to the River Bandon (Bandon_090), apart from SW017, which discharges to the River Bandon (Bandon_080).

Overflow	Asset	Type	Discharge Co-ordinates
SW002	WwTP	SWO/EO	150368E, 055690N
SW004	Watergate Street PS	SWO/EO	149316E, 055104N
SW008	Network	SWO	149738E, 055164N
SW014	Network	SWO	148826E, 054484N
SW016	Glasslinn PS	SWO/EO	150070E, 055290N
SW017	Laragh PS	SWO/EO	145152E, 054669N
SW018	Network	SWO	149039E, 054717N
SW019	Castlewoods PS	EO	147749E, 053889N
SW020	Kilbrogan PS	SWO/EO	148713E, 055617N

Refer to **Attachment B.2.2: Map 4** and **Map 5** for the location of the proposed discharges.

3. Description of the wastewater works and associated waste water treatment plant

Works as per D0136-01

The Bandon WwTP, located at NGR 150425E, 055700N, was constructed in the early 1960's and was significantly upgraded and extended in 1993. More recently, further upgrade works were completed in Q2 2021.

Treated effluent from the WwTP discharges to the River Bandon at NGR 150411E, 055785N which is part of the Bandon Ilen catchment area (HA 20).

Details of all overflows currently licensed under D0136-01 are provided in **Section 2** above.

Works as per Subject Matter of Licence Review

The Waste Water Treatment Works (WwTW) which is the subject matter of this Waste Water Discharge Licence (WWDL) Review application, consists of an upgraded WwTP at Ballylangley Townland (NGR 150425E, 055700N) with a design capacity of 14,456 p.e; an existing Primary Discharge (SW001) which discharges to the River Bandon; 5 no. Dual Function Overflows (*i.e.*, overflows which can act as a Storm Water Overflow (SWO) or Emergency Overflow (EO) depending on the event); 3 no. network SWOs, 1 no. Emergency Overflow, associated sewer network, and 5 no. Pumping Stations.

The upgraded WwTP has been designed to meet the ELVs as per WWDL D0136-01 (Tech A), with the exception of Ortho-P, where a more onerous ELV of 1.6mg/l is now proposed, as provided in **Table A.1.1** below.

A Total Phosphorus (TP) ELV of 2mg/l is being proposed as part of this Review due to the Upper Bandon Estuary nutrient sensitive estuary (P limited) being located *ca.* 5km downstream of the primary discharge point, and the fact that the p.e. of the agglomeration will be greater than 10,000.

Table A.1.1 – WWDL Review Proposed ELVs

Parameter	Proposed ELVs
BOD	25mg/l
COD	125mg/l
Suspended Solids	35mg/l
Total Ammonia (as N)	3mg/l
Ortho-P (as P)	1.6mg/l
Total Phosphorus	2 mg/l
pH	6.0 - 9.0

A Waste Assimilative Capacity (WAC) calculation based on the proposed primary discharge ELVs at DWF for 14,456 p.e was completed in 2022 to inform this WWDA review application in order to ensure that the proposed ELVs as per D0136-01 were fit for purpose based on the latest available data (refer to **Attachment D.2.3**: Waste Assimilative Capacity (WAC), October 2022)). It was concluded, based on the latest available background data, that a more onerous Ortho-P ELV of 1.6mg/l was required in order to meet the Good-status 95%ile EQS downstream of the primary discharge.

Effluent arriving at the upgraded WwTP receives secondary treatment with Phosphorus removal to comply with the proposed ELVs.

All flows are monitored continuously and recorded at the electromagnetic flowmeters at the upgraded WwTP.

The proposed effluent standards give effect to the principle of the Combined Approach as defined in Waste Water Discharge (Authorisation) Regulations, 2007 to 2020 in that they accommodate the Urban Waste Water Regulations, and the status and objectives of the receiving waterbody, the River Bandon.

The design of the upgraded WwTP is greater than 2,000 p.e. and therefore in line Article 4 of the Urban Waste Water Treatment Directive, "*Member States shall ensure that urban waste water entering a collecting system shall before discharge be subject to secondary treatment or an equivalent treatment [...] for discharges to freshwater from agglomerations of between 2,000 and 10,000 pe*". In line with the above, the upgraded WwTP provides for secondary treatment, with P removal.

Details of the overflows, which are the subject matter of this WWDL review, are provided in **Section 2** above.

Refer to **Attachment B.8** for details on the following Projects:

- Bandon Wastewater Treatment Plant and Glasslinn Road Pumping Station Upgrade (Bandon Sewerage Scheme) which was completed in Q2 2021.
- Bandon IDA Laragh WwTP Upgrade Project which was completed in Q3 2018. As part of this WWDL Review, the Bandon IDA Laragh Agglomeration (A0362-01) is to be amalgamated into the Bandon agglomeration.
- Bandon Watermain & Sewer Network Project which includes for the removal of 10 no. SWOs. This Project is underway and is due to be completed by the end of Q1 2023.

4. Description of the features and measures, if any, envisaged to avoid, prevent, or reduce and, if possible, offset the significant adverse effects on the environment

Irish Water are committed to ensuring that water services infrastructure operates in a manner that supports the achievement of the water body objectives under the Water Framework Directive, and their obligations under the Birds and Habitats Directives.

The WwTP upgrade works have been designed to cater for a biological load of 14,456 p.e. Secondary Treatment with Phosphorous removal is provided to ensure that the treated effluent discharge does not have a significant adverse effect on the receiving aquatic environment, and that all relevant legislative requirements are complied with (see **Attachment D.2.1**: Impact Assessment Report, December 2022, and **Attachment D.2.3**: Waste Assimilative Capacity (WAC), October 2022).

Design measures to prevent deleterious discharges from the agglomeration include the below:

- All SWOs meet the definition of '*Storm Water Overflow*' as per Regulation 3 of the Waste Water Discharge (Authorisation) Regulations, 2007, as amended and the criteria as set out in the DoEHLG '*Procedures and Criteria in Relation to Storm Water Overflows*', 1995.
- Provision of 900m³ of storm storage at the WwTP.
- Provision of 250m³ of storm storage at the Glasslinn Road Pumping Station.
- Provision of 80m³ of storm storage at the Laragh Pumping Station.
- Provision of backup generators and bunded fuel tanks at the Bandon WwTP and at Glasslinn Pumping Station.
- Connection for generator available at Castlewoods Pumping Station and Kilbrogan Pumping Station.
- The design of the Bandon Laragh IDA Pumping Station includes an Uninterruptible Power Supply (UPS) to allow all instrumentation, controllers, alarms and data storage systems to operate for up to 30 minutes following a power outage.
- At the WwTP, a standby pump will activate automatically upon failure of duty pump.
- At all Pumping Stations, a standby pump will activate automatically upon failure of duty pump.
- UPS backup for telemetry/plant controllers at WwTP.
- Alarms for WwTP fed to SCADA with alarms sent to operators.

- High level/pump failure/power outage alarms at network Pumping Stations with alerts sent to operator.
- An Emergency Response Plan and Procedures, Operation and Maintenance Procedures for all equipment will be in place and implemented by the appointed plant operator, as required.
- All operators will be fully familiar with all operational plans and procedures pertaining to the plant and network *etc.*
- All flows will be monitored continuously and recorded at the electromagnetic flowmeters which will be installed at the WwTP.
- The remedial network upgrade works will retain additional reserve storage capacity in foul network and will lead to reduced overflows from the SWOs.

Refer also to **Section C.2** for further details of the proposed robust measures to prevent any unintended discharges to the River Bandon.

5. The proposed technology and other techniques for preventing or, where this is not possible, reducing discharges from the wastewater works

The WwTP has been designed, and will be operated, to ensure that the operational discharges from the agglomeration do not cause a deterioration in the quality of the receiving waters *i.e.*, Bandon_080 and Bandon_090.

Refer to **Section C.2** for details of the proposed measures to prevent any unintended discharges to the Bandon_080 and Bandon_090.

6. Description of the receiving waterbody

Bandon WwTP primary discharge (SW001) and eight of the overflows (SW002, SW004, SW008, SW012, SW016, SW018, SW019 and SW020) discharge to the River Bandon (Bandon_090). One overflow (SW017) discharges to the Bandon_080. Bandon_080 and Bandon_090 are within the Bandon Ilen catchment area (Hydrometric Area 20). This catchment includes the area drained by the Rivers Bandon and Ilen and all streams entering tidal water between Templebreedy Battery and Mizen Head, Co. Cork, draining a total area of 1,803km².

The draft 3rd cycle Catchment Report (2021) for this hydrometric area, determined that the main significant issues are impacts from nutrient pollution, followed by sediment, organic pollution, and morphological impacts. The main significant pressures are agricultural pressures followed by urban waste water, forestry and hydromorphological pressures and urban run-off. The Bandon agglomeration SWOs are listed as a significant pressure in At Risk waterbodies (Bandon_090 and Bandon_100) in the draft 3rd cycle catchment assessment. However, in the draft 3rd cycle catchment assessment, it is noted that the SWO upgrades are included in Irish Water's Capital Investment Programme.

The Bandon_090 is listed as an area for action under the 3rd cycle under the and is classified as an area for Restoration. The reasons for assigning the Bandon_090 as an area for action are reported as follows:

- Review status waterbody which is failing to meet its WFD objective. Level 1 abstraction catchment.
- Builds on existing work of Cork County Council.
- Potential pressures from Bandon WwTP, & AIBP Bandon discharge, major flood relief works, intensive dairy & tillage catchment.

Based on the recently published 2016-2021 data, the WFD status of the Bandon_080 and Bandon_090 is Good status. Further downstream, the Bandon_100 is also classified as Good. This is an improvement from the 2013-2018 assessment period where a Moderate status was assigned to these waterbodies.

No significant pressures for the Bandon_080 were identified. Significant pressures for the Bandon_090 have been identified, within the draft 3rd cycle Catchment Report, as domestic waste water, unknown anthropogenic pressures, urban run-off, and urban waste water.

The EPA undertake biological monitoring of the River Bandon at various locations. Upstream of the primary discharge point at RS20B020800 (*ca.* 0.12 km upstream), the 2020 monitoring reported a Q value of 4 (Good). Downstream of the primary discharge point at RS20B020900 (*ca.* 5.3 km downstream), the 2020 monitoring reported a Q value of 4 (Good). The Q value at station RS20B020800 adjacent to Bandon WwTP has improved relative to the Q value of 3-4 achieved in 2018, indicating the Moderate water quality conditions have improved to Good which is consequently reflected in the recent WFD status update.

Based on ambient monitoring results upstream of the current primary discharge point for the period between January 2020 to May 2022, the mean concentrations of Ortho-P, BOD and Ammonia at upstream RS20B020800 station are within the required EQSs for Good status (mean and 95%ile). For the time period of January 2020 – June 2022 the mean concentrations of Ammonia at downstream RS20B020850 station are within the required EQSs for Good status (mean and 95%ile). In terms of BOD and Ortho-P at RS20B020850, the EQSs for Good status (mean) are not met. However, the EQSs for Good status (95%ile) are met.

There is a drinking water abstraction point at Innishannon located *ca.* 4.5km downstream of the primary discharge point. A Drinking Water Risk Assessment was carried out by Irish Water and was included in the 2015 AER, and it was determined that the overall risk of the WwTP on the Drinking Abstraction is classified as Low Risk. It is considered based on the Bandon WwTP and Glasslinn Road Pumping Station Upgrade which was completed to improve the treatment processes at the WwTP, thereby resulting in an improved effluent discharge quality, along with the removal of 10 no. SWOs from the agglomeration by the end of Q1 2023, and the assimilative capacity in the receiving waters, that the overall risk of the WwTP to this Drinking Abstraction remains as a Low Risk, even based on the WwTPs increased loadings.

The Bandon Estuary Upper which lies *ca.* 5km downstream of the primary discharge point is designated as nutrient sensitive area (P limited) in accordance with the Urban Waste Water Treatment (UWWT) Directive 91/271/EEC on Urban Waste Water Treatment and S.I. No. 254 of 2001, S.I. No. 440 of 2004 and S.I. No. 48 of 2010. The River Bandon is not listed as Sensitive in Parts 1 and 2 of the Urban Wastewater Treatment Regulations. However, based on the distance of the Bandon Estuary Upper waterbody downstream of the agglomeration, along with the fact that the p.e. of the agglomeration is greater than 10,000, a TP ELV of 2mg/l is proposed. It should be noted however that this downstream estuary waterbody is not TN limiting as per the EPA's Urban Waste Water Treatment Directive (UWWTD) (91/271/EEC) Article 5 Report (*i.e.*, Review of nutrient sensitive areas (freshwater and marine) as required by the Urban Waste Water Treatment Directive (91/271/EEC), 2020), and therefore a TN ELV is not required.

Kinsale shellfish area is located *ca.* 18 km downstream of the primary discharge point. It is considered however that there is no significant risk to this shellfish area due to the assimilative capacity of the river, and the nature of the operational discharges from the agglomeration.

The River Bandon is not a designated salmonid waterbody. However, the River Bandon is important for fishing and is primarily a salmon and sea trout river but also has resident brown trout and there are a number of angling associations in the area. The completion of the upgrade works at the WwTP, and the completion of the ongoing Bandon Watermain & Sewer Network Project will contribute towards compliance with the European Communities Environmental Objectives (Surface Water) Regulations, 2009, as amended, and will assist in the efforts to maintain the Good WFD Status (2016-2021) of the waterbody. This will provide a high level of protection to the River Bandon and the salmon contained therein.

The River Bandon downstream of the agglomeration is not a designated Freshwater Pearl Mussel (FWPM) catchment under the European Communities Environmental Objectives (Freshwater Pearl Mussel) Regulations (2009), as amended. ELVs were set in Schedule A of D0136-01 to meet 'Good' status in the European Communities Environmental Objectives (Surface Water) Regulations, 2009, as amended for BOD, Ortho-phosphate and Ammonia. These ELVs were set by the EPA following consultation with the National Parks & Wildlife Service (NPWS), on the basis that this part of the River Bandon is not a suitable habitat for the FWPM. It should be noted, however, that FWPM are known from the Bandon River SAC further upstream of the agglomeration and there may be *ex-situ* populations downstream of the SAC, but upstream of Bandon. Connectivity to the operational discharges is indirectly established to the Bandon River SAC FWPM population due to the role salmonid species play in the FWPM life cycle.

There are no pNHAs in the immediate vicinity of the operational discharges. The nearest pNHAs in the vicinity of the operational discharges are the Bandon Valley above Inishannon which extends from *ca.* 1.3km downstream of the primary discharge point for *ca.* 5km and Bandon Valley West of Bandon pNHA which extends from *ca.* 3km upstream of the primary discharge point for *ca.* 3km.

The Bandon River SAC (*ca.* 29km upstream of primary discharge) is potentially within the zone of influence of the Bandon discharges, due to the fact that migratory salmonid species using or transiting through the river in Bandon are a key element of the life cycle of the FWPM population upstream. In addition, due to their mobile nature and potential to use the Bandon River on an *ex-situ* basis, qualifying waterbird species of the Courtmacsherry Bay SPA (*ca.* 10km south of primary discharge), Clonakilty Bay SPA (*ca.* 16km southwest of primary discharge) and Sovereign Islands SPA (*ca.* 29km downstream of primary discharge) are potentially within the zone of influence of the Bandon discharges.

Refer to **Attachment B.5** for a copy of the Environmental Impact Assessment Report and **Attachment D.2.2** for a copy of the combined AA Screening Report & Natura Impact Statement for further details on the receiving environment.

7. Description of the likely significant effects of the discharges on the environment

Based on the proposed effluent discharge standards (see **Table A.1.1** above) and the WAC calculations carried out for same (see **Attachment D.2.3**), it is considered that the operational discharges from the Bandon agglomeration would have no real likelihood of significant adverse effects on the receiving aquatic environment, alone or in combination with other plans and projects.

The effluent discharge standards will ensure that the discharge from the Bandon WwTP contributes towards maintaining the Good WFD status of the Bandon_090 in accordance with the Surface Water Regulations, and thereby will ultimately ensure that there is no environmental risk posed to the receiving water environment, as a result of the discharges from the agglomeration.

Refer to **Attachment B.5** for a copy of the Environmental Impact Assessment Report and **Attachment D.2.2** for a copy of the combined AA Screening & Natura Impact Statement Report for further details on the effects of the operational discharges on the environment.

8. Measures planned to monitor discharges into the environment

Effluent Monitoring:

It is proposed that effluent from Bandon WwTP will be sampled and analysed (using the standard method of analysis) as follows:

Table A.1.4 – Proposed Effluent Monitoring Regime (as per D0136-01 & Including Total Phosphorus)

Parameter	Units	Monitoring Frequency	Sampling Method	Analysis method/Technique
pH	pH Units	Daily	Continuous	pH Meter and recorder
cBOD	mg/l	Monthly	Composite	Standard Method
COD	mg/l	Monthly	Composite	Standard Method
Suspended Solids	mg/l	Monthly	Composite	Standard Method
Ortho-Phosphate (as P)	mg/l	Monthly	Composite	Standard Method
Total Ammonia	mg/l	Monthly	Composite	Standard Method
Total Phosphorus	mg/l	Monthly	Composite	Standard Method
Visual Inspection	Descriptive	Weekly	Grab	Standard Method
Flow	m ³ /24 hours	Continuous	Online	On-line flow meter with recorder

Ambient Monitoring:

It is proposed that ambient monitoring and analysis will continue to be carried out upstream and downstream of the primary discharge, in line with any new licence requirements.

Table A.1.5 – Proposed Ambient Monitoring Locations and Parameters

Monitoring Location					Name of Receiving Water
150362	E	055674	N	Upstream aSW1u	Bandon_090
151648	E	056935	N	Downstream aSW1d	Bandon_100

Table A.1.6 – Proposed Ambient Monitoring Regime

Parameter	Units	Monitoring Frequency	Analysis method
pH	pH Unit	Bi-monthly	pH Meter and Recorder
BOD	mg/l	Bi-monthly	Standard Method
Orthophosphate (as P)	mg/l	Bi-monthly	Standard Method
Total Ammonia	mg/l	Bi-monthly	Standard Method
Suspended Solids	mg/l	Bi-monthly	Standard Method
COD	mg/l	Bi-monthly	Standard Method
Total Phosphorus	mg/l	Bi-monthly	Standard Method
Visual inspections	Descriptive	Bi-monthly	Standard Method

9. Hours during which the wastewater works is supervised or manned and days per week of this supervision

The Bandon WwTP runs automatically and is capable of being monitored on a daily basis *via* the SCADA system. The WwTP is a manned site during normal working hours on Monday – Friday with 24 hour call out response where the amount of time spent on site will vary depending on various factors *e.g.*, weather or breakdowns in plant or maintenance works required such as cleaning of the intake screens, *etc.* In general, there are 1-2 people on site during normal operation of the plant. There is also a maintenance team on site for approximately one week a month to carry out any repairs or any other scheduled larger maintenance that may be required.

10. In the event of a review application, state the grounds for which this review application is being made

Following an examination of the Bandon WWDL in June 2021, the EPA concluded that the WWDL does not satisfy the environmental requirements of the WWDA 2007 regulations, as amended. The reasoning for their conclusion and recommendation for a review of the current WWDL (D0136-01) was based on the following:

1. The licence was granted over 3 years ago.
2. Planning permission has been granted for proposed development works associated with the licence.
3. The agglomeration is included in Irish Water's investment plan.
4. There has been a material change, which could not reasonably have been foreseen when the licence was granted, in relation to the receiving waters, namely, the deterioration of the status of the Bandon river (Bandon_090) from 'Good' to 'Moderate'.

The p.e at the time of the determination of D0136-01 in 2015 was less than 10,000 p.e. This application relates to a p.e. of 14,456 i.e., > 10,000 p.e. threshold band.

As part of this WWDL Review a more onerous Ortho-P ELV of 1.6mg/l is being proposed in order to meet the Good-status 95%ile Environmental Quality Standard (EQS) downstream of the primary discharge.

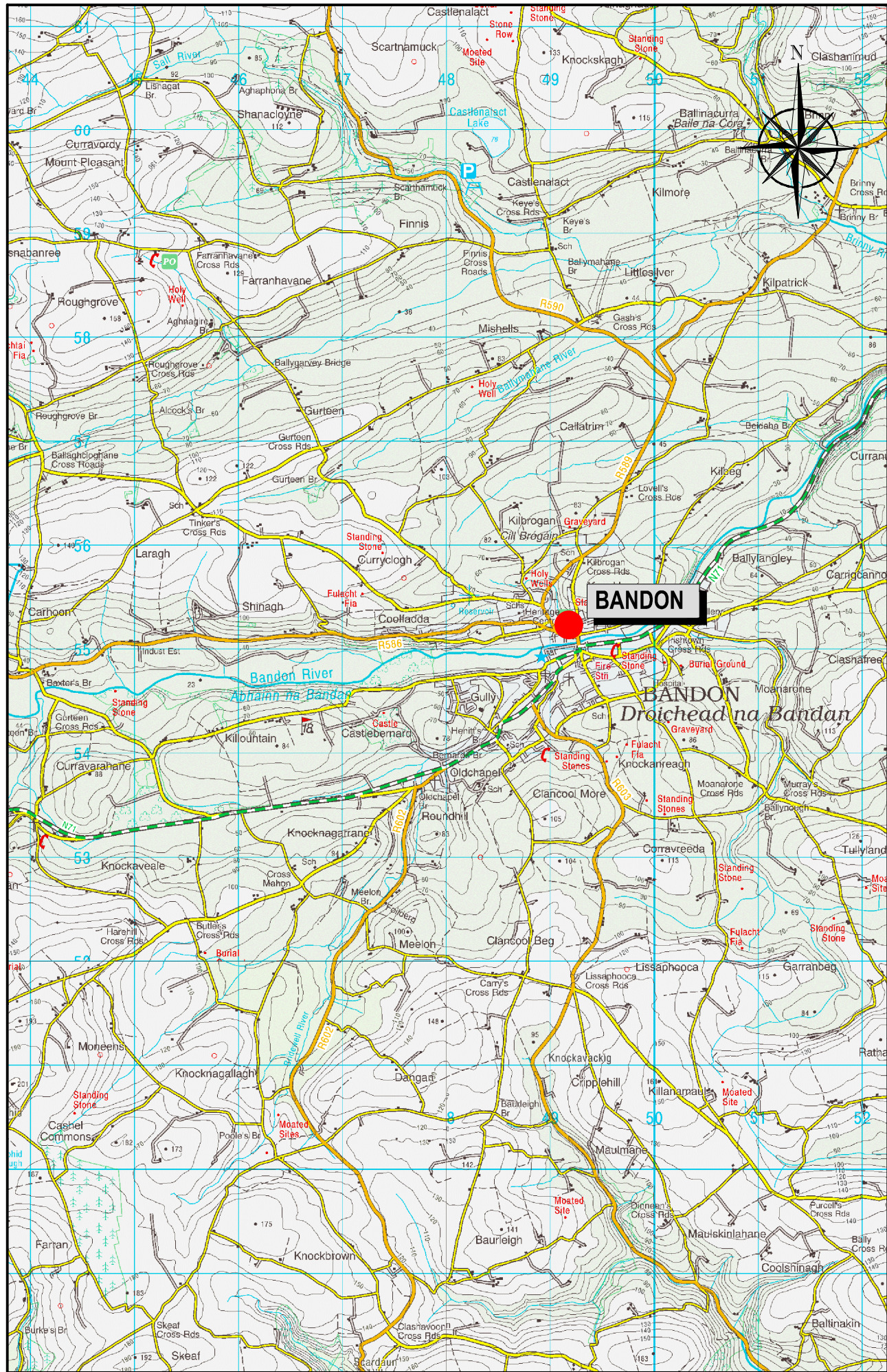
The inclusion of a Total Phosphorus (TP) ELV of 2mg/l is being proposed as part of this Review due to the Upper Bandon Estuary nutrient sensitive estuary (P limited) being located *ca.* 5km downstream of the primary discharge point, and the fact that the p.e. of the agglomeration will be greater than 10,000.

As part of this WWDL Review, the Bandon IDA Laragh Agglomeration (A0362-01) will be amalgamated into the current Bandon agglomeration, and CoA A0362-01 will be surrendered.

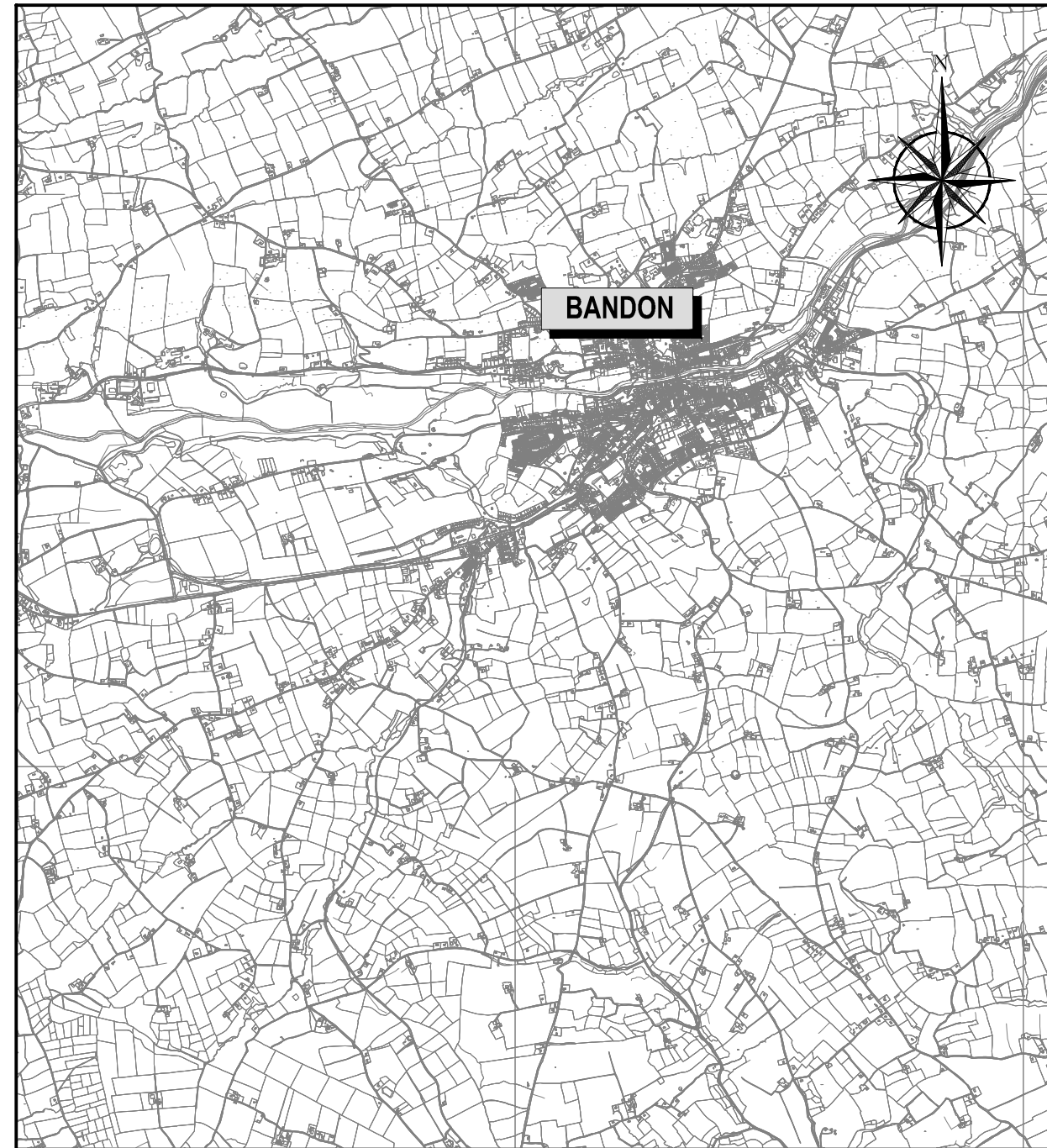
This Review also relates to inclusion of 5 no. overflows (*i.e.*, SW016, SW017, SW018, SW019 and SW020) into the licence, and the removal of 10 overflows from the agglomeration (*i.e.*, SW003, SW005-SW007, SW009-SW013, SW015).



ATTACHMENT A.1.2:
MAP 1 – AREA OF INTEREST



BANDON LOCATION MAP
SCALE 1:50,000



BANDON LOCATION PLAN
SCALE 1:50,000

NOTES
Ordnance Survey Ireland Licence No. EN0083316
Copyright Ordnance Survey Ireland / Government of Ireland.

SIGNED: _____
 PRINT NAME: _____
 POSITION: _____
 DATE: _____
 FOR IRISH WATER

REV	DATE	DESCRIPTION	D	C	A

DISCHARGE LICENCE

CLIENT
 **IRISH WATER**
 Colvill House,
 24-26 Talbot Street,
 Dublin 1.
 Tel. 1890 278 278 Web. www.water.ie

PROJECT
**BANDON
 WASTE WATER DISCHARGE
 LICENCE APPLICATION**

TITLE
**MAP 1
 AREA OF INTEREST**

SCALES 1:50,000	DRAWN A. McIntyre	DATE 09.09.2022
CAD REFERENCE 20893-NOD-WWDL-10	ATTACHMENT A.1.2	REV -