

- Howth Head cSAC (site code 000202)
- Malahide Estuary cSAC (site code 000205)
- Malahide Estuary SPA (site code 004025)
- Baldoyle cSAC (site code 004016)
- Baldoyle SPA (site code 000199)

in view of the sites' conservation objectives, a Stage 2 Appropriate Assessment is not therefore required in respect of these sites. Potential for significant indirect effects on the features of interest of the following European sites, having regard to their conservation objectives, cannot be ruled out in respect of the remaining seven European sites:

- South Dublin Bay and River Tolka Estuary SPA (site code 004024)
- South Dublin Bay cSAC (site code 000210)
- North Bull Island SPA (site code 004006)
- North Dublin Bay cSAC (site code 000206)
- Howth Head Coast SPA (site code 004113)
- Dalkey Islands SPA (site code 004172)
- Rockabill to Dalkey Island cSAC (site code 003000)

13.2.22. Accordingly, a Stage 2 Appropriate Assessment is required to determine the potential of the proposed development to adversely affect the integrity of the said European Sites.

13.3. **Appropriate Assessment – Stage 2**

13.3.1. **Introduction**

13.3.2. The sites brought forward to stage two, seven in total, are listed in the Stage 1 Screening conclusion above. The project description is set out in detail in Section 4 of my overall assessment and summarised above in consideration of Appropriate Assessment – Stage 1 Screening.

13.3.3. **European Sites**

- 3.4. Below I provide a brief description of each of the European sites with specific regard to their qualifying interests and their conservations objectives. I have examined the sites potential for significant effects on the integrity of the European sites arising from the proposed development. I have drawn on information provided by the applicant including information in their submitted Natura Impact Statement and throughout relevant sections of the EIAR, particularly those which deal with Biodiversity and Water. I have also extensively referred to the NPWS website. The qualifying interests for each of the seven sites are identified and are as set out in Tables 5 and 6 above.

South Dublin Bay and River Tolka Estuary SPA (Site Code 004024)

- 3.5. As noted in the NPWS site synopsis, the South Dublin Bay and River Tolka Estuary SPA is of ornithological importance as it supports an internationally important population of light-bellied Brent Goose and nationally important populations of a further nine wintering species. Furthermore, the site supports a nationally important colony of breeding Common Tern and is an internationally important passage/staging site for three tern species. Four of the species that regularly occur at this site are listed on Annex I of the E.U. Birds Directive, i.e. Bar-tailed Godwit, Common Tern, Arctic Tern and Roseate Tern.

- 13.3.6. **Conservation Objectives** for South Dublin Bay and River Tolka Estuary SPA (March 2015) are to ensure that waterbird populations and their wetland habitats are maintained at, or restored to, favourable conservation condition. Grey Plover is proposed for removal from the list of Special Conservation Interests for the SPA. As a result, a site-specific conservation objective has not been set for this species.

South Dublin Bay cSAC (Site Code 000210)

- 13.3.7. The NPWS lists the South Dublin Bay cSAC as a fine example of extensive intertidal flats, of predominantly sand with muddy sands in more sheltered areas. It provides a supporting role to important populations of wintering bird populations of Dublin Bay.
- 13.3.8. **Conservation Objectives** for the South Dublin Bay cSAC (NPWS, 2013) are to maintain the favourable conservation condition of mudflats and sandflats not covered by seawater at low tide in South Dublin Bay SAC which is defined by a list of

attributes and targets.

North Bull Island SPA (Site Code 004006)

- 13.3.9. The North Bull Island SPA is considered an excellent example of an estuarine complex and is one of the top sites in Ireland for wintering waterfowl. It is stated to be of international importance because of both the total number of waterfowl and the individual populations of Light-bellied Brent Goose, Black-tailed Godwit and Bar-tailed Godwit that use it. There is a regular presence of several species that are listed on Annex I of the E.U. Birds Directive, notably Golden Plover and Bar-tailed Godwit.
- 13.3.10. **Conservation Objectives** for the North Bull Island SPA (NPWS 2014) are to ensure that waterbird populations and their wetland habitats are maintained at, or restored to favourable conservation condition.

North Dublin cSAC (Site Code 000206)

- 13.3.11. The NPWS lists the North Dublin cSAC (Site Code 000206) as a fine example of extensive intertidal flats. This site covers all of the inner part of north Dublin Bay, with the seaward boundary extending from the Bull Wall lighthouse across to Drumleck Point at Howth Head. This European site is of international importance because of both the total number of waterfowl and the individual populations of light-bellied Brent Goose, black-tailed godwit and bar-tailed godwit that use it. Also of note is the regular presence of several species that are listed on Annex I of the EU Birds Directive.
- 13.3.12. **Conservation Objectives** for the North Dublin cSAC (NPWS, 2013) are to maintain the favourable conservation condition of qualifying interests, which are defined by a list of attributes and targets.

Howth Head Coast SPA (Site Code 004113)

- 13.3.13. The NPWS lists the Howth Head Coast SPA as being of high ornithological importance as it supports a nationally-important population of Kittiwake. It is also a traditional nesting site for Peregrine Falcon, a species that is listed in Annex I of the E.U. Birds Directive. The site is easily accessible and has important amenity and

educational value due to its proximity to Dublin City.

- 13.3.14. **Conservation Objective** for Howth Head Coast SPA (Feb 2018) are to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.

Dalkey Island SPA (Site Code 004172)

- 13.3.15. The NPWS lists this SPA of particular importance as a post-breeding/pre-migration autumn roost area for Roseate Tern, Common Tern and Arctic Tern. The NPWS also notes that the recent nesting by Roseate Tern is highly significant. All three of the tern species using the site are listed on Annex I of the E.U. Birds Directive.

- 3.16. **Conservation Objective** for Dalkey Island SPA are to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.

Rockabill to Dalkey Island cSAC (Site Code 003000)

- 13.3.17. This Rockabill to Dalkey Island cSAC site is of conservation importance for reefs, listed on Annex I, and Harbour Porpoise, listed on Annex II of the E.U. Habitats Directive. A number of marine species have also been identified in the cSAC. The NPWS site synopsis notes that a large number of terns (Arctic, Common and Roseate) are known to use Dalkey Island as a staging area (c. 2,000) after breeding. Other seabirds commonly seen include Kittiwake, Razorbill, Guillemot, Puffin, Fulmar, Shag, Cormorant, Manx Shearwater, Gannet and gulls.

- 13.3.18. **Conservation Objective** for the Rockabill to Dalkey Island cSAC (May 2013) are to maintain or restore the favourable conservation condition of the habitats/ species for which the cSAC has been selected.

13.4. **Significant Effects on European Sites**

- 13.4.1. The direct and indirect impacts from the proposed project components that have the potential (in the absence of mitigation) to result in a likelihood of significant adverse effects on qualifying interests having regard to the conservation objectives of the European sites brought forward to Stage 2 Appropriate Assessment are listed and

assessed below.

13.4.2. Direct Effects as a result of the Ringsend WwTP component

Impact	Temporary disturbance to habitat and species as a result of laying of a new underground electrical connection to an existing underground ESB cable in an area c.30m x 10m, which is within the South Dublin Bay and River Tolka Estuary SPA (site code 004024).
Assessment of Likely Significant Effects	<p>The grassland area is used by bird species including light-bellied Brent Goose, Oystercatcher, black-tailed Godwit, Redshank and Curlew, all of which are qualifying interests of the SPAs in Dublin Bay.</p> <p>Works are proposed to take place in summer months (May to August) outside of the nesting season and when the Brent Geese are absent from the SPA. The construction area would be fully reinstated by backfilling with the original soil and laying of grass turves in their original position. The grassland is proposed to be fully reinstated in time for the return of the geese in September/October.</p> <p>No remaining significant effects are anticipated.</p> <p>Monitoring of waterbirds on the grassland south of the project is proposed each winter between October and April during construction and for a year after to allow the efficacy of the mitigation measures to be verified.</p>
Assessment Conclusion	In conclusion, the proposed development would not adversely affect the integrity of the designated site and no reasonable scientific doubt remains as to the absence of such effects.

13.4.3. Indirect /Secondary Effects as a result of the Ringsend WwTP component

Impact	<p>Discharge of treated effluent from the WwTP both during the construction and operational phases of the proposed Ringsend WwTP Component. As the proposed discharge point would remain at the same location in the Liffey Estuary, there is potential that these changes could affect habitats or species that occur in the tidal part of Dublin Bay.</p>
Assessment of Likely Significant Effects	<p>During construction, there would be some reduction in treatment capacity during a nine-month period between the construction of AGS and SBR retrofit. In addition, there would be an increase in stormwater overflows. Temporary impacts on marine ecology could arise but the duration of the project and the magnitude of impact would not be of a sufficient scale as to result in adverse significant effects on European sites, having regard to the sites' conservation objectives.</p> <p>During the operation phase, water quality in the inner part of Dublin Bay would be improved primarily as a result of reduction of P and N leading towards a more diverse community of species and positive effects are predicted on the significant effects on the favourable conservation status of the qualifying interests or on the conservation objectives of the European sites within Dublin Bay. Given the relatively high background nutrients in Dublin Bay, no significant effects on waterbirds including Brent Geese and Wigeon that forage on macroalgae, Harbour Porpoise (a qualifying interest of the Rockabill to Dalkey cSAC), Kittiwake (a qualifying interest for Howth Head SPA) and Artic Tern, Common Tern and Roseate Tern (a qualifying interest for Dalkey Island SPA) that forages on shoaling fish, are anticipated.</p> <p>Overall it is submitted that the resulting impacts would not give rise to any significant effects on the favourable conservation status of the qualifying interests or on the conservation objectives of the</p>

	<p>European sites within Dublin Bay. It is assessed that it would be unlikely that the food resource of waterbirds in the Tolka Estuary would be negatively affected given the increase in diversity of species that would occur. Such changes are expected to be slow and would result in long-term positive impacts.</p> <p>Apart from the adherence to the project CEMP and related Environmental Incident response procedures as standard best practice, no other specific mitigation measures are required.</p> <p>No significant adverse effects are anticipated.</p> <p>Outside of monitoring of waterbirds on the grassland for construction and a year after construction, no other specific monitoring of waterbirds is proposed. Instead, it is proposed to make use of a monitoring programme by Birdwatch Ireland for all of Dublin Bay which can be conditioned to extend to a three year period post construction.</p>
Assessment Conclusion	<p>In conclusion, the proposed development would not adversely affect the integrity of the designated sites and no reasonable scientific doubt remains as to the absence of such effects.</p>

Impact	<p>Deterioration of receiving water quality during construction and operation phases arising from accidental discharge or pollution and resulting in deterioration of receiving watercourses and associated habitats and species.</p>
Assessment of Likely Significant Effects	<p>Accidental release of contaminants / pollution in the form of oils, hydrocarbons, concrete/cement could potentially discharge into the Liffey Estuary and thereafter travel to Dublin Bay. If this were to occur at significant magnitude and duration, it could result in significant effects on intertidal and subtidal habitats in South Dublin Bay cSAC and North Dublin Bay cSAC and qualifying</p>

	<p>interests of SPAs within Dublin Bay.</p> <p>Apart from the adherence to the project CEMP and related Environmental Incident response procedures as standard best practice, no other specific mitigation measures are required.</p> <p>Remaining significant effects are unlikely.</p> <p>No specific monitoring is proposed or required.</p>
Assessment Conclusion	<p>In conclusion, the proposed development would not adversely affect the integrity of the designated sites and no reasonable scientific doubt remains as to the absence of such effects.</p>

Impact	<p>Construction activities on site at Ringsend WwTP Component have the potential to cause visual disturbance to waterbird populations that use the replacement grassland area that forms part of the South Dublin Bay and River Tolka Estuary SPA, immediately south of the WwTP.</p>
Assessment of Likely Significant Effects	<p>Any visual disturbance has potential to result in significant effects on the qualifying interests of the Tolka Estuary SPA (important population of Light-bellied Brent Goose and nationally-important populations of a further nine wintering species), having regard to the site's conservation objectives.</p> <p>Solid screening would be erected between the construction site and the grassland area prior to construction in order to reduce or eliminate any visual disturbance.</p> <p>No remaining significant effects are likely.</p> <p>Monitoring of waterbirds on the grassland south of the project is proposed each winter between October and April during construction and for a year after to allow the efficacy of the mitigation measures to be verified.</p>
Assessment	<p>In conclusion, the proposed development would not adversely affect the integrity of the designated site and no reasonable</p>

Conclusion	scientific doubt remains as to the absence of such effects.
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Impact	The construction phase of the Ringsend WwTP components has potential to give rise to temporary disturbance from dust and changes in air quality during construction.
Assessment of Likely Significant Effects	<p>The movement of excavated soils and other material has the potential to generate fugitive dust which could travel through wind exposure to adjacent European sites. As part of the CEMP, a dust management plan would be put in place such that dust emissions on site would remain at or below 350 mg/m²/day to ensure it does not impact on air quality.</p> <p>No significant effects are therefore anticipated as a result of dust. Dust monitoring would be undertaken in accordance with commitments outlined in the CEMP and the EIAR.</p> <p>Potential arises for NO_x emissions to impact on grasslands and intertidal habitats. The maximum increase in the NO₂ dry deposition rate is 0.22 kg(N)/ha/yr is well below the critical load for inland water habitats on the improved grassland or on the bird species that use the South Dublin Bay and River Tolka Estuary SPA. No significant effects are therefore likely to arise as a result of air quality.</p>
Assessment Conclusion	In conclusion, the proposed development would not adversely affect the integrity of the designated site and no reasonable scientific doubt remains as to the absence of such effects.

Impact	Construction noise may affect Brent geese and breeding terns within the South Dublin Bay and River Tolka Estuary SPA.
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Assessment of Likely Significant Effects	<p>Construction noise has the potential to cause disturbance to wintering waterbirds and nesting terns within South Dublin Bay and River Tolka Estuary SPA.</p> <p>The common tern (<i>Sterna hirundo</i>) colony at Poolbeg, which forms part of South Dublin Bay and River Tolka Estuary SPA is located c.380m from the nearest part of the proposed development.</p> <p>Construction noise has been assessed as typically ranging between 40 to 45 dB LA_{eq} at the tern colony area.</p> <p>It is submitted that the tern colony itself generates a noise level of up to 70 to 80 dB(A), well in excess of any construction noise, through calling of terns during the breeding season.</p> <p>While the noise made by terns themselves cannot in my view be considered as comparable to construction noise, I note that as stated in the EIAR, the tern colony and other waterbirds in the area are habituated to noise from the plant itself and from the surrounding industrial operations and the city itself.</p> <p>A construction noise and vibration management plan and CEMP are proposed.</p> <p>Therefore, I accept the conclusion overall that noise from the proposed upgrade site would not be threatening to birds and construction noise would have imperceptible impacts on conservation objectives for any of the European sites brought forward to Stage two of the AA.</p> <p>Monitoring of waterbirds on the grassland south of the project is proposed each winter between October and April during construction and for a year after to allow the efficacy of the mitigation measures to be verified. Birdwatch Ireland monitoring programme would also be used.</p>
Assessment	<p>In conclusion, the proposed development would not adversely</p>

Conclusion	affect the integrity of the designated site and no reasonable scientific doubt remains as to the absence of such effects.
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Impact	Potential spread of Invasive species could lead to loss/deterioration of habits on the South Dublin Bay and River Tolka Estuary SPA.
Assessment of Likely Significant Effects	<p>Japanese Knotweed (<i>Fallopia japonica</i>) is known to exist at four locations along the east boundary. Where it would be disturbed during construction, it has the potential to spread to surrounding sites and/or the receiving water. If left uncontrolled, this could be considered a permanent, significant impact on European sites due to habitat loss. The invasive species management plan, which is prepared to outline stage would be required to be further developed and adhered to and I am satisfied that subject to implementation and adherence to the plan, no significant effects are likely.</p> <p>Annual monitoring of invasive species is proposed and if the results indicate any failures or shortcomings, in consultation with NPWS and other statutory undertakers, the applicant would commit to develop and implement additional control measures.</p>
Assessment Conclusion	In conclusion, the proposed development would not adversely affect the integrity of the designated site and no reasonable scientific doubt remains as to the absence of such effects.

13.4.4. **Direct Effects as a result of the RBSF component**

- None

13.4.5. **Indirect /Secondary Effects as a result of the RBSF component**

13.4.6. The assessment as presented in the NIS has determined that there would be no

potential for adverse effects on habitats or species.

13.4.7. Within the 10km zone of influence of the RBSF, the only European site brought forward to Stage two is the South Dublin Bay and River Tolka Estuary SPA. This site is remote from the proposed RBSF and given that no hydrological or hydrogeological pathways are present, the possibility of significant numbers of birds from this SPA being impacted by the RBSF is unlikely. Consequently, it can be concluded that the proposed development would not adversely affect the integrity of this SPA having regard to the conservation objectives of the site.

13.4.8. Nonetheless, the site is required to be assessed as part of the applicant's overall assessment for in-combination effects and I have dealt with such effects directly below.

13.4.9. **In-combination Effects**

13.4.10. The NIS considers the potential in-combination/cumulative impacts which could possibly arise when other plans and projects are taken into account. The assessment carried out included the wider overall project, referred to as the 'proposed upgrade project'. The assessment and the EIAR (Water and Biodiversity section) concludes that the proposed WwTP would not give rise to impacts on waterbird population and long-term changes to the waterbird population might be difficult to discern in the context of wider cumulative changes arising beyond those caused by the proposed development.

13.4.11. Beyond impacts assessed in relation to water and terrestrial biodiversity, I am satisfied that the construction and operation of the proposed development (taking into account proposed mitigation) is unlikely to result in any other in-combination impacts that would lead to significant effects.

13.4.12. **Monitoring**

13.4.13. Monthly surveys of waterbirds (between October and April) would be undertaken by the applicant on the grassland area to the south for the duration of the project and for one year after. In addition, it is stated that monitoring carried out by BirdWatch Ireland would be utilised. Given that the construction period would extend for a

period of approximately 10 years and that the plant would operate as a live plant during this time, I am satisfied with this proposed monitoring period.

13.4.14. Monitoring of invasive species is proposed to be carried out on an annual basis.

13.4.15. Together the monitoring outcomes would allow an assessment of the efficacy of mitigation measures proposed and where any shortcomings are discovered, the applicant proposed to develop and implement additional control measures.

13.5. **Conclusion on Appropriate Assessment**

13.5.1. On the basis of the information provided with the application, including the Natura Impact Statement, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, I am satisfied that the proposed development, individually or in combination with other plans or projects, would not adversely affect the integrity of the following European sites:

- South Dublin Bay and River Tolka Estuary SPA (site code 004024)
- South Dublin Bay cSAC (site code 000210)
- North Bull Island SPA (site code 004006)
- North Dublin Bay cSAC (site code 000206)
- Howth Head Coast SPA (site code 004113)
- Dalkey Islands SPA (site code 004172)
- Rockabill to Dalkey Island cSAC (site code 003000)

or any other European site, in view of the sites' conservation objectives.

14.0 Recommendation

- 14.1. On the basis of the above assessment, I recommend that the Board grant permission for the proposed development for the reasons and considerations and subject to the conditions set out below.

15.0 Reasons and Considerations

- 15.1. In coming to its decision, the Board had regard to a range of matters including the following:

European legislation, including of particular relevance:

- EIA Directive 2011/92/EU amended by Directive 2014/52/EU (EIA Directive);
- European Union Water Framework Directive 2000/60/EC;
- The European Union Urban Waste Water Treatment Directive 91/271/EEC;
- The European Union Bathing Water Directive 2006/7/EC;
- Groundwater Directive (2006/118/EC);
- Sewage Sludge Directive (86/278/EEC);
- Nitrates Directive (91/676/EEC);

National legislation including of particular relevance:

- The European Communities Environmental Objectives (Surface Waters) Regulations 2009, as amended;
- European Communities (Water Policy) Regulations, 2003, as amended;
- European Communities Environmental Objectives (Groundwater) Regulations 2010, as amended;
- Urban Waste Water Treatment Regulations 2001, as amended;
- The Waste Water Discharge (Authorisation) Regulations 2007, as amended;

- Bathing Water Quality Regulations 2008, as amended;

National and regional planning and related policy including:

- 'National Planning Framework – Ireland 2040' including Strategic Outcome 9 and corresponding Investment Action contained in the National Development Plan, 2018-2027;
- Water Services Strategic Plan where the upgrading of Ringsend Treatment Plant is recognised as a significant contribution in meeting its obligation under the Urban Wastewater Treatment Directive;
- National Wastewater Sludge Management Plan (2016 – 2041);
- River Basin Management Plan for Ireland 2018 – 2021;
- Greater Dublin Strategic Drainage Study (2005) and Greater Dublin Drainage Strategy: Overview & Future Strategy (2018);
- Regional Planning Guidelines for the Greater Dublin Area 2010-2022;
- Draft Regional Spatial and Economic Strategy (RSES);
- Eastern-Midlands Region Waste Management Plan 2015 – 2021;

Local planning context – Ringsend WwTP component

- The provisions of the Dublin City Development Plan 2016-2022, including Policies SI1 and SI2 which support development of water and wastewater systems by Irish Water in which the upgrading of the Ringsend Wastewater Treatment Plant is specifically referenced; related Planning Objectives SIO1 and SIO2 together with stated policies and objectives in support of the proposed development in the context of proper planning and sustainable development. Regard was also had to the land use zoning objectives for the area.

Local planning context – RBSF component

- The provisions of the Fingal Development Plan 2017-2023 including stated policies and objectives, particularly Objective WM15 which requires to work with Irish Water and other relevant stakeholders to ensure the provision of facilities for the safe and sustainable management of sludges (sewage, waterworks, agricultural, industrial and septic tank) and Local Objective 78, in support the proposed development in the context of proper planning and sustainable development. Regard was also had to the land use zoning objectives for the area.

and to the following matters

- the current performance of the existing wastewater treatment plant and the demonstrated need to improve discharge standards in order to increase capacity and meet water quality standards for bathing waters, coastal waters, transitional waters and designated sensitive waters in Dublin Bay in accordance with the requirements set out under the legislation and emissions limit values contained in the licence granted by the EPA under licence number D00-34-01;
- the entirety of the documentation that accompanied the planning application and reports and submissions, which were submitted by all parties, planning authorities, prescribed bodies and observers and the further submission made by the applicant during the course of the application;
- the established site context on the Poolbeg peninsula, spatially separated from residential development and the pattern of development in the area;
- the planning history of the site;
- the nature, scale and design of the proposed development including in particular the proven AGS technology and the associated nitrogen and phosphorous removal in relation to the Ringsend WwTP component and the nature, scale, design and purpose of the RBSF component,

- the range of proposed mitigation measures set out in the submitted Environmental Impact Assessment Report and Natura Impact Statement (incorporating Appropriate Assessment Screening);
- the submissions made in relation to the application and the report and recommendation of the inspector;

15.2. **Proper Planning and Sustainable Development**

15.2.1. The benefits of the proposed development are considered to be overwhelmingly positive. It's delivery would assist Ireland in meeting obligations set down under EU Directives, national legislation and planning policy expressed through the hierarchy plans which regulate development at a national, regional and local level. The development would enable sustainable residential and economic growth through the delivery of increased wastewater treatment capacity while protecting the environment through improving the quality of effluent discharged to the receiving water environment. It has been demonstrated in the application that the improvement envisaged in final effluent quality can be achieved at the existing Ringsend Wastewater treatment plant by the incorporation of scientifically proven aerobic granular sludge technology into the treatment process together with associated nitrogen and phosphorous removal. When compared to the previously permitted and proposed long sea outfall (in tunnel) option, the current proposal has significant advantages and would be less intrusive on the receiving environment. The regional biosolids storage facility would assist in meeting the aims of the Sewage Sludge Directive, regulating the use of sewage sludge in agriculture to prevent harmful effects. Outside of matters considered above, environmental impact assessment and appropriate assessment are considered in the following sections of my assessment set out below. Subject to consideration of these matters, it can be concluded that the proposed development is in accordance with the proper planning and sustainable development of the area.

15.3. **Environmental Impact Assessment**

The Board completed an environmental impact assessment of the proposed development and wider proposed upgrade project, taking into account:

- (a) The nature, scale, location and extent of the proposed development across the Ringsend WwTP and RBSF components;
- (b) The environmental impact assessment report and associated documentation submitted with the application;
- (c) The reports and submissions received from the planning authority, observers and prescribed bodies and the applicant's further submission in the course of the application;
- (d) The planning inspector's report;

The Board agreed with the summary and examination set out in the inspector's report, of the information contained in the environmental impact assessment report and associated documentation submitted by the applicant and submissions made in the course of the application. The Board is satisfied that the inspector's report sets out how these were addressed in the examination and recommendation and are incorporated into the Board's decision.

The Board considered that the environmental impact assessment report, supported by the documentation submitted by the applicant, provided information which is reasonable and sufficient to allow the Board to reach a reasoned conclusion on the significant effects of the project on the environment, taking into account current knowledge and methods of assessment. The Board is satisfied that the information contained in the EIAR is up to date and complies with the provisions of EU Directive 2014/52/EU amending Directive 2011/92/EU. The Board considered that the main significant direct and indirect effects of the proposed development on the environment are those arising from the impacts listed below. A Construction Environmental Management Plan (CEMP) is the overarching general mitigation embedded in the project design and delivery for the construction stage. In addition, plans relating to Waste Management, Invasive Species Management, Traffic Management, Monitoring Plans and Emergency Response Plans are also proposed. The remaining impacts, both positive and negative are:

- Benefits/positive impacts to **population and human health** arising as a result of the overall project upgrade due to providing increased treatment

infrastructural capacity and improved level of treatment which would improve compliance with EU Directives and corresponding legislation and would be pivotal in supporting planned residential and economic growth in Dublin city and the region.

- Negative temporary impact on **population and human health** (recreational swimmers/water based sporting activities) because of a deterioration in water quality during a nine-month period of decommissioning of aspects of the WwTP (during construction) and a corresponding temporary loss of recreational amenity which would be partially mitigated by carrying out the works in winter period when the recreational water based activities are at seasonally low levels;
- Benefits/positive impacts on the environment (**soils, traffic, water quality, climate**) as a result of reduction in excavation and truck movements (estimated to be 70,000 HGV movements over an 18-month period) which would otherwise have been required to remove and transport rock and spoil during the construction phase of the undersea tunnel. During the operation phase, the proposal to omit the tunnel and associated diffuser point 9 km out to sea would also mean that there would be no deterioration of water quality at this location.
- Impacts arising on **land and soils** as a result of spread of invasive species (Japanese Knotweed) present on the Ringsend wastewater treatment site and which would be mitigated by the preparation and implementation of an Invasive Species Management Plan and method statement for the control of disturbance of soils containing Japanese Knotweed and the requirement that a suitably qualified ecologist would be engaged to oversee the implementation of the Invasive Species Management Plan and monitor the success of the mitigation measures post-construction;
- Risk of pollution of **receiving water environment** as a result of accidental spillages of chemicals, hydrocarbons or other contaminants entering the drainage system and discharging to the stream thereafter during the construction and operational phases. The impacts would be mitigated by

measures within a Construction and Environmental Monitoring Plan (CEMP) and adherence to best practice construction measures and incorporation of appropriate drainage facilities. Measures set out in the CIRIA guidance document on 'control and management of water pollution from construction sites' would be implemented. The guidelines provided by the Inland Fisheries Ireland (2016) on the protection of fisheries habitats during construction projects would also be adhered to.

- **Noise** impacts for the construction and operation phases which would be mitigated by the requirements to prepare and adhere to the Noise and Vibration Management Plans (NWMP) and comply with appropriate noise and vibration limits which are set out in the EIAR in respect of the development at Ringsend wastewater treatment plant and the development of the regional biosolids facility.
- **Odour impacts** for the operational phase which would be mitigated by the following:
 - Ringsend WwTP: odour from the wastewater treatment plant (excluding storm tanks) would be required not to exceed 10 ouE/m³ as the 99.4th percentile of hourly averages at the boundary of the Ringsend WwTP site. The adopted odour annoyance criterion of 3 ouE/m³ as the 98th percentile of hourly averages would not be exceeded at any sensitive receptor location. The Odour Management Plan would be updated as necessary and implemented to ensure the above standard is achieved during construction and operation.
 - RBSF: The adopted odour annoyance criterion of 3 ouE/m³ as the 98th percentile of hourly averages would not be exceeded at any sensitive receptor location.

The Board completed an environmental impact assessment in relation to the proposed development forming part of the overall proposed upgrade project and concluded that, subject to the implementation of the mitigation measures referred to above including proposed monitoring as appropriate, subject to compliance with the

conditions set out below, the effects on the environment of the proposed development, by itself and in combination with other development in the vicinity, would be acceptable. In doing so, the Board adopted the report and conclusions set out in the inspector's report.

15.4. Appropriate Assessment

- 15.4.1. The Board agreed with and adopted the screening (Appropriate Assessment Stage one) and conclusions carried out in the inspector's report that South Dublin Bay and River Tolka Estuary SPA (site code 004024), South Dublin Bay cSAC (site code 000210), North Bull Island SPA (site code 004006), North Dublin Bay cSAC (site code 000206), Howth Head Coast SPA (site code 004113), Dalkey Islands SPA (site code 004172) and Rockabill to Dalkey Island cSAC (site code 003000) are the only European Sites in respect of which the proposed development has the potential to have a significant effect.
- 15.4.2. The Board considered the Natura Impact Statement and associated documentation submitted with the application, the mitigation measures contained therein, the submissions and observations on file, and the inspector's assessment. The Board completed an appropriate assessment of the implications of the proposed development as part of the overall proposed upgrade project for the aforementioned European Sites in view of the sites' conservation objectives. The Board considered that the information before it was adequate to allow the carrying out of an appropriate assessment. In completing the appropriate assessment, the Board considered, in particular, the following:
- a. the likely direct and indirect impacts arising from the proposed development at Ringsend WwTP and the RBSF sites both individually, when taken together and in combination with other plans or projects,
 - b. the mitigation measures, which are included as part of the current proposal, and
 - c. the conservation objectives for the European Sites.

In completing the appropriate assessment, the Board accepted and adopted the appropriate assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on the aforementioned European

Sites, having regard to the sites' conservation objectives. In overall conclusion, the Board was satisfied that the proposed development, by itself or in combination with other plans or projects, would not adversely affect the integrity of the European Sites, in view of the sites' conservation objectives.

16.0 Conditions

16.1. Ringsend WwTP and the RBSF components

1. The proposed development shall be carried out and completed in accordance with the plans and particulars lodged with the planning application and the information contained in the Environmental Impact Assessment Report and Natura Impact Statement, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development, or in default of agreement, shall be referred to An Bord Pleanála for determination, and the proposed development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity and the proper planning and sustainable development of the area and to ensure the protection of the environment.

2. With the exception of the development hereby permitted, the proposed development at the Ringsend Wastewater Treatment Plant shall otherwise comply with the terms and conditions of permission granted under ABP Ref: 29N.YA0010, as amended by planning permission granted for alterations under ABP Ref. 29N.YM0002 and 29N.YM0004 and any further applications or alterations where permitted.

Reason: In the interest of clarity and the proper planning and sustainable

development of the area.

3. The period during which the development hereby permitted may be carried out shall be ten years from the date of this order.

Reason: Having regard to the nature and extent of the proposed development, the Board considered it appropriate to specify a period of validity of this permission in excess of five years.

4. Mitigation

- a) All mitigation and environmental commitments identified in the EIAR (Table 17-1 of Volume 3 and 4) shall be implemented in full as part of the proposed development except as may otherwise be required to comply with the following conditions.

Monitoring

- b) All monitoring measures identified in the EIAR (Table 17-2-of Volume 3 and 4) shall be carried out and the details of monitoring results shall be submitted to the Planning Authorities (Dublin City Council in respect of the Ringsend wastewater treatment plant and Fingal County Council in respect of the Regional Biosolids facility) except as may otherwise be required to comply with the following conditions.

Reason: In the interest of clarity and to protect the environment.

5. A contract specific Construction and Environmental Management Plan (CEMP) and Waste Management Plan (WMP) shall be submitted to and agreed in writing with both Planning Authorities in respect of the development at the Ringsend WwTP site and the RBSF site. The CEMPs and WMPs shall detail and ensure Best Construction Practice and compliance with statutory obligations.

As part of the CEMP, the submitted invasive species management plan

shall be updated as necessary for the control or disturbance to soils containing Japanese Knotweed in accordance with 'Irish Water Information and Guidance Document on Japanese Knotweed'. The plan shall include a method statement for the removal of invasive species identified as being present on site.

The implementation of the invasive species management plan shall be overseen by a suitably qualified ecologist/botanist familiar with Japanese Knotweed.

Reason: To protect the environment during construction.

6. a) Prior to commencement of the development, a Traffic Management Plan for the construction and operational phases shall be submitted to, and agreed in writing with the Planning Authorities in respect of the development at the Ringsend WwTP site and the RBSF site.
- b) The developer shall comply with the requirements of the Planning Authorities in respect of minimising traffic disruption on the local communities, cleaning and repair of any damage to the public road networks during the construction and operation phases.

Reason: To protect the public road network and in the interest of traffic safety.

7. The development shall adhere to the Noise and Vibration Management Plans (NWMP) and comply with appropriate noise and vibration limits set out in the EIAR in respect of the overall development at Ringsend wastewater treatment plant and the development of the regional biosolids facility.

During the construction and demolition phases, the proposal development shall comply with British Standard 5228 Noise Control on Construction and open sites Part 1. Code of practice for basic information

and procedures for noise control.

Construction Noise at the nearest sensitive receptor shall comply with the following limits:

- 70 L_{Aeq} (1 hour) dB – Daytime (07:00 – 19:00) and Saturdays (07:00 – 13:00)
- 65 L_{Aeq} (1 hour) dB – Evening (19:00 – 23:00)
- 55 L_{Aeq} (1 hour) dB – Night time (23:00 – 07:00)

Mitigation for the operation phase would include a number of items such as selection of 'low noise' equipment and plant, vibration isolation mounts and appropriate siting of fixed plant.

The developer(s) shall require the appointed contractor to employ and implement best practice construction noise and vibration management techniques throughout the construction phase in order to further reduce the noise and vibration impact to nearby noise sensitive receptors.

During the operation phase, noise shall be minimised by the selection of 'low noise' plant and equipment and incorporation of appropriate attenuation.

Noise monitoring during construction and commissioning and/or operation shall be carried out in accordance with the requirements of the Planning Authorities.

Reason: In the interest of the amenities of the surrounding area.

8. **a) Ringsend WwTP**

During operation, odour from the wastewater treatment plant (excluding storm tanks) shall not exceed 10 ouE/m³ as the 99.4th percentile of hourly averages at the boundary of the Ringsend WwTP site.

The adopted odour annoyance criterion of 3 ouE/m³ as the 98th percentile of hourly averages shall not be exceeded at any sensitive

receptor location. The Odour Management Plan shall be updated as necessary and implemented to ensure the above standard is achieved during construction and operation.

b) RBSF

The adopted odour annoyance criterion of 3 ouE/m³ as the 98th percentile of hourly averages shall not be exceeded at any sensitive receptor location.

Reason: In the interest of the amenities of the surrounding area.

9. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that that may exist within and proximate to the Ringsend wastewater treatment site.

In this regard the developer shall –

- a) Notify the Department of the Culture, Heritage and the Gaeltacht in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development.
- b) Employ a suitably qualified archaeologist who shall monitor all site investigations and other excavation works and,
- c) Provide arrangements for the recording and for the removal of any archaeological material which the Department of Culture, Heritage and the Gaeltacht considers appropriate to remove.

In default of an agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

Reason: In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.

10. a) Prior to the commencement of the development, the developer shall submit a detailed landscaping plan for each of the development components at Ringsend WwTP and the RBSF sites. Details, including strengthening of boundary treatment, screening of compounds and general landscape details including timescales shall be submitted to and agreed in writing with the planning authorities and the landscaping shall be carried out in accordance with the agreed details thereafter.
- b) Prior to the commencement of the development, a detailed decommissioning and site restoration plan in respect of the construction compounds, together with a timescale for its implementation, shall be submitted to and agreed in writing with the planning authorities.

Reason: In the interest of the amenities of the surrounding area.

11. a) The development shall comply with the requirements of the Planning Authorities with respect to surface water management.
- b) The existing surface water pipeline traversing the RBSF site shall be realigned and a wayleave provided in accordance with the requirements of the Planning Authority (Fingal County Council).

Reason: In the interest of providing best practice for surface water management and to provide for future maintenance of the realigned pipe at the RBSF site.

12. Prior to commencement of the development, the design details for the regional biosolids facility shall be submitted to and agreed in writing with the planning authority for the prevention of environmental pollution in the event of a fire occurrence. Such detail shall also include an assessment of the risk of environmental pollution due to fire water and any mitigation measures which may be necessary

Reason: In the interest of protection of the environment and amenities of

the area.

13. All works to be undertaken within and adjacent to designated European sites within Dublin Bay shall be undertaken in accordance with the requirements of a suitably qualified ecologist appointed following consultation with the National Parks and Wildlife Service.

Reason: In the interest of protection of designated European sites and qualifying interests, having regard to the sites conservation objectives.

14. The developer shall pay to the planning authority (Fingal County Council) a financial contribution as a special contribution under section 48(2) (c) of the Planning and Development Act 2000, as amended, in respect of the upgrade and signalisation of the R135 and the N2 North Bound Slip priority junction. The amount of the contribution shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála for determination. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate. The application of indexation required by this condition shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine.

Reason: It is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the planning authority which are not covered in the Development Contribution Scheme and which would benefit the proposed development.

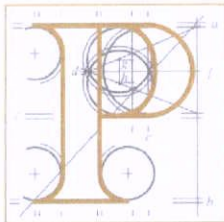
Patricia Calleary

Senior Planning Inspector

12th February 2019

APPENDIX B

Board Order – ABP-301798-18



An
Bord
Pleanála

Board Order ABP-301798-18

Planning and Development Acts, 2000 to 2018

Planning Authorities: Dublin City Council and Fingal County Council

Application for permission under section 37E of the Planning and Development Act 2000, as amended, in accordance with plans and particulars, including an environmental impact assessment report and Natura Impact Statement, lodged with An Bord Pleanála on the 6th day of June, 2018 by Irish Water care of Stephen Little and Associates of 26/27 Pembroke, Dublin.

Proposed Development: 10-year permission for development comprising revisions and alterations to the existing and permitted development at the Ringsend Wastewater Treatment Plant and for a new Regional Biosolids Storage Facility, being two components of an integrated wastewater treatment facility. The proposed development comprises revisions and alterations to the 2012 Approval (case reference number 29N.YA0010). The proposed revisions and alterations will continue to facilitate the expansion of the existing wastewater treatment plant (Ringsend Wastewater Treatment Plant) to its permitted capacity of 2.4 million population equivalent within the confines of its current site. However, this will now be achieved primarily through the introduction of aerobic granular sludge (AGS) technology at the Ringsend Wastewater Treatment Plant. The introduction of this technology will facilitate the omission of the nine-kilometre Long Sea Outfall Tunnel and the continued use of the existing outfall.

Component 1 – Ringsend Wastewater Treatment Plant, Pigeon House Road, Dublin 4

Permission is sought for development comprising revisions and alterations to the 2012 Approval on an overall site. The proposed development consists of:

- Reconfiguration and retrofitting of the existing Sequential Batch Reactor (SBR) Tanks, up to 24 number in total, to facilitate the use of a new AGS technology.
- Associated works, including the provision of:
 - A Sludge Pasteurisation Building (approximately circa 31.5 metres x circa 14.5 metres x circa 8.5 metres high).
 - A Phosphorous Recovery Building (approximately circa 38.5 metres x circa 15.5 metres x circa 20 metres high).
- Ancillary site development works (pipework and electrical works), plant (new and adjustments to existing) and landscape works (including boundary treatments) to accommodate the above development, including:
 - The use on a permanent basis of a vehicular entrance off Pigeon House Road and associated landscaping and internal road along the eastern boundary of the site, previously granted a temporary permission under case reference number 29N.YM0002.
 - A new underground electrical connection to an existing underground ESB cable, along the southern boundary of the site (at the south-west corner only) and at the edge of, and extending to within, the South Dublin Bay and River Tolka Estuary Special Protection Area.
 - Bypass culvert, ultraviolet (UV) lamps, internal road reconfigurations and additional car parking.
 - The continued use of two number temporary construction compounds (C1 and C2) for the 10-year duration of the permission sought. These compounds were previously permitted under case reference number 29N.YM0004 for a period of three years. Proposals for the temporary construction compound C1 include a pedestrian connection to the south-west corner of Ringsend Wastewater Treatment Plant. Temporary construction compound C1 is partially located within the Poolbeg West Strategic Development Zone as defined by Statutory

Instrument No. 279 of 2016. A Protected Structure (Pigeon House Fort) (RPS No. 6794) is partially located within temporary construction compound C2.

- The omission of the permitted nine-kilometre Long Sea Outfall (in tunnel) for the purposes of discharging into the Dublin Bay area from an onshore inlet shaft approximately 350 metres east of the existing Ringsend Wastewater Treatment Plant (including any associated construction works) which in turn provides for the continued use of the existing outfall to the River Liffey serving the Ringsend Wastewater Treatment Plant.
- The omission of two number temporary construction compounds located to the west of the Ringsend Wastewater Treatment Plant and also the omission of one temporary construction compound on Pigeon House Road to serve the Long Sea Outfall (in tunnel); all of which were previously permitted under case reference number 29N.YA0010.

The overall application site area of the development proposed at the Ringsend Wastewater Treatment Plant is approximately 17.9 hectares and includes a Protected Structure (RPS No. 6794). The overall existing Ringsend Wastewater Treatment Plant is 14.7 hectares and is divided into two sites by Pigeon House Road; 11.2 hectares to the south of the road where the Ringsend Wastewater Treatment Plant is located, with a further 3.5 hectares located to the north of the road. The two number temporary construction compounds which are the subject of this application amount to approximately 3.79 hectares, part of which is located within the 14.7 hectare site of the Ringsend Wastewater Treatment Plant. Part of the application site is within the Poolbeg West Strategic Development Zone as defined by Statutory Instrument No. 279 of 2016. The Ringsend agglomeration, including the wastewater treatment plant, has an existing discharge authorisation licence in accordance with the requirements of the Waste Water Discharge (Authorisation) Regulations 2007, as amended. A licence review will be carried out in accordance with the requirements of the licence review process.

Component 2 – Proposed Development of a Regional Biosolids Storage Facility at Newtown, North Road (R135), Dublin 11

Permission is also sought for development of a Regional Biosolids Storage Facility at a separate 11-hectare site comprising:

- Demolition of existing single storey structures on site comprising of a security kiosk (approximately 22 square metres gross floor area), the weighbridge kiosk (approximately 19 square metres gross floor area), an ESB sub-station (approximately 16 square metres gross floor area) and an administration building (approximately 85 square metres gross floor area), together with the partial removal of existing internal roads and partial removal/diversion of existing drainage infrastructure as appropriate to accommodate the development.
- Provision of two number biosolids storage buildings, each approximately 50 metres wide, 105 metres long and 15 metres in height, including solar panels on the roof of one building. These buildings have a combined capacity to store up to 48,000 cubic metres of biosolids waste at any one time.
- Provision of four number odour control units, each with 18.2 metre-high discharge flues.
- Mechanical and electrical control building (approximately 35 square metres gross floor area, four metres high).
- Provision of a single storey site administration building for office, welfare facilities and meeting rooms (approximately 130 square metres gross floor area) and associated staff car parking.
- Use of the existing vehicular access off the R135, including provision of new 2.7 metre-high entrance gates to serve the Regional Biosolids Storage Facility.
- All ancillary landscape and site development works, including:
 - Provision of two number new weighbridge facilities (one number weighbridge on entry and exit of the Regional Biosolids Storage Facility).
 - Provision of new ESB sub-station (approximately 40 square metres gross floor area).

- Landscaping and boundary treatments, including new 2.7-metre-high boundary to North Road/R135.
- Provision of fire protection holding tank (approximately 6.7 metres high).
- Provision of a Heavy Goods Vehicle (HGV) cleaning and set-down area.
- Formation of a new footpath and landscaped verge to R135 along site frontage.
- Provision of drainage, water, external lighting and other utilities.
- Diversion of 450 millimetres surface water pipe.
- One number signage structure, 5.2 metres in height erected on posts accommodating two number signage zones: 2.4 metres x 1.7 metres and 2.4 metres x 1.2 metres, located at the site entrance.

All at the Ringsend Wastewater Treatment Plant, Pigeon House Road, Dublin and Newtown, North Road (R135), Dublin.

Decision

Grant permission under section 37G of the Planning and Development Act 2000, as amended, for the above proposed development in accordance with the said plans and particulars based on the reasons and considerations under and subject to the conditions set out below.

Determine under section 37H(2)(c) the sum to be paid by the applicant in respect of costs associated with the application as set out in the Schedule of Costs below.

Matters Considered

In making its decision, the Board had regard to those matters to which, by virtue of the Planning and Development Acts and Regulations made thereunder, it was required to have regard. Such matters included any submissions and observations received by it in accordance with statutory provisions.

Reasons and Considerations

In coming to its decision, the Board had regard to a range of matters, including the following:

European legislation, including of particular relevance:

- The EIA Directive 2011/92/EU amended by Directive 2014/52/EU (EIA Directive),
- The European Union Water Framework Directive 2000/60/EC,
- The European Union Urban Waste Water Treatment Directive 91/271/EEC,
- The European Union Bathing Water Directive 2006/7/EC,
- The Groundwater Directive (2006/118/EC),
- The Sewage Sludge Directive (86/278/EEC), and
- The Nitrates Directive (91/676/EEC).

National legislation, including of particular relevance:

- The European Communities Environmental Objectives (Surface Waters) Regulations 2009, as amended,
- The European Communities (Water Policy) Regulations, 2003, as amended,

- The European Communities Environmental Objectives (Groundwater) Regulations 2010, as amended,
- The Urban Waste Water Treatment Regulations 2001, as amended,
- The Waste Water Discharge (Authorisation) Regulations 2007, as amended, and
- The Bathing Water Quality Regulations 2008, as amended.

National and regional planning and related policy, including:

- The National Planning Framework – Ireland 2040 including Strategic Outcome 9 and corresponding Investment Action contained in the National Development Plan, 2018-2027,
- The Water Services Strategic Plan where the upgrading of Ringsend Treatment Plant is recognised as a significant contribution in meeting its obligation under the Urban Wastewater Treatment Directive,
- The National Wastewater Sludge Management Plan 2016 – 2041,
- The River Basin Management Plan for Ireland 2018 – 2021,
- The Greater Dublin Strategic Drainage Study (2005) and the Greater Dublin Drainage Strategy: Overview & Future Strategy (2018),
- The Regional Planning Guidelines for the Greater Dublin Area 2010-2022,
- The Draft Regional Spatial and Economic Strategy (RSES), and
- The Eastern-Midlands Region Waste Management Plan 2015 – 2021.

Local planning context – Ringsend Wastewater Treatment Plant component:

- The provisions of the Dublin City Development Plan 2016-2022, including Policies SI1 and SI2 which support development of water and wastewater systems by Irish Water in which the upgrading of the Ringsend Wastewater Treatment Plant is specifically referenced; related Planning Objectives SIO1 and SIO2 together with stated policies and objectives in support of the proposed development in the context of proper planning and sustainable development. Regard was also had to the land use zoning objectives for the area.

Local planning context – Regional Biosolids Facility component:

- The provisions of the Fingal County Development Plan 2017-2023, including stated policies and objectives, particularly Objective WM15 which requires to work with Irish Water and other relevant stakeholders to ensure the provision of facilities for the safe and sustainable management of sludges (sewage, waterworks, agricultural, industrial and septic tank) and Local Objective 78, in support of the proposed development in the context of proper planning and sustainable development. Regard was also had to the land use zoning objectives for the area.

The following matters:

- the current performance of the existing wastewater treatment plant and the demonstrated need to improve discharge standards in order to increase capacity and meet water quality standards for bathing waters, coastal waters, transitional waters and designated sensitive waters in Dublin Bay in accordance with the requirements set out under the legislation and emissions limit values contained in the licence granted by the Environmental Protection Agency under licence number D00-34-01,

- the entirety of the documentation that accompanied the planning application and reports and submissions which were submitted by all parties, planning authorities, prescribed bodies and observers and the further submission made by the applicant during the course of the application,
- the established site context on the Poolbeg peninsula, spatially separated from residential development and the pattern of development in the area,
- the planning history of the site,
- the nature, scale and design of the proposed development, including, in particular, the proven AGS technology and the associated nitrogen and phosphorous removal in relation to the Ringsend Wastewater Treatment Plant component and the nature, scale, design and purpose of the Regional Biosolids Facility component,
- the range of proposed mitigation measures set out in the submitted Environmental Impact Assessment Report and Natura Impact Statement (incorporating Appropriate Assessment Screening), and
- the submissions made in relation to the application and the report and recommendation of the Inspector.

The Board considered that, subject to compliance with the conditions set out below, the proposed development would enable sustainable residential and economic growth through the delivery of increased wastewater treatment capacity, would improve the quality of effluent discharged to the receiving water environment, would assist Ireland in meeting obligations set down under EU Directives, national legislation and planning policy, and would be acceptable in terms of odour, noise, vibration and traffic. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

Appropriate Assessment: Stage 1 Screening:

The Board agreed with and adopted the screening (Appropriate Assessment Stage one) and conclusions carried out in the Inspector's report that the South Dublin Bay and River Tolka Estuary Special Protection Area (site code: 004024), the South Dublin Bay Candidate Special Area of Conservation (site code: 000210), the North Bull Island Special Protection Area (site code: 004006), the North Dublin Bay Candidate Special Area of Conservation (site code: 000206), the Howth Head Coast Special Protection Area (site code: 004113), the Dalkey Islands Special Protection Area (site code: 004172) and the Rockabill to Dalkey Island Candidate Special Area of Conservation (site code: 003000) are the only European Sites in respect of which the proposed development has the potential to have a significant effect.

Appropriate Assessment: Stage 2:

The Board considered the Natura Impact Statement and associated documentation submitted with the application, the mitigation measures contained therein, the submissions and observations on file, and the Inspector's assessment. The Board completed an appropriate assessment of the implications of the proposed development as part of the overall proposed upgrade project for the aforementioned European Sites in view of the sites' Conservation Objectives. The Board considered that the information before it was adequate to allow the carrying out of an appropriate assessment. In completing the appropriate assessment, the Board considered, in particular, the following:

- (a) the likely direct and indirect impacts arising from the proposed development at the Ringsend Wastewater Treatment Plant and the Regional Biosolids Facility sites both individually, when taken together and in combination with other plans or projects,
- (b) the mitigation measures, which are included as part of the current proposal, and
- (c) the conservation objectives for the European Sites.

In completing the appropriate assessment, the Board accepted and adopted the appropriate assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on the aforementioned European Sites, having regard to the sites' Conservation Objectives. In overall conclusion, the Board was satisfied that the proposed development, by itself or in combination with other plans or projects, would not adversely affect the integrity of the European Sites, in view of the sites' Conservation Objectives.

Environmental Impact Assessment:

The Board completed an environmental impact assessment of the proposed development and wider proposed upgrade project, taking into account:

- (a) The nature, scale, location and extent of the proposed development across the Ringsend Wastewater Treatment Plant and Regional Biosolids Facility components.
- (b) The Environmental Impact Assessment Report and associated documentation submitted with the application.
- (c) The reports and submissions received from the planning authorities, observers and prescribed bodies and the applicant's further submission in the course of the application.
- (d) The Inspector's report.

The Board agreed with the summary and examination set out in the Inspector's report, the information contained in the Environmental Impact Assessment Report and associated documentation submitted by the applicant and submissions made in the course of the application. The Board is satisfied that the Inspector's report sets out how these were addressed in the examination and recommendation and are incorporated into the Board's decision.

Reasoned Conclusions on the Significant Effects:

The Board considered that the Environmental Impact Assessment Report, supported by the documentation submitted by the applicant, provided information which is reasonable and sufficient to allow the Board to reach a reasoned conclusion on the significant effects of the proposed development on the environment, taking into account current knowledge and methods of assessment. The Board is satisfied that the information contained in the Environmental Impact Assessment Report is up to date and complies with the provisions of EU Directive 2014/52/EU amending Directive 2011/92/EU. The Board considered that the main significant direct and indirect effects of the proposed development on the environment are those arising from the impacts listed below. A Construction Environmental Management Plan (CEMP) is the overarching general mitigation embedded in the project design and delivery for the construction stage. In addition, plans relating to Waste Management, Invasive Species Management, Traffic Management, Odour Management, Monitoring Plans and Emergency Response Plans are also proposed. The remaining impacts, both positive and negative are:

- Benefits/positive impacts to **population and human health** arising as a result of the overall project upgrade due to providing increased treatment infrastructural capacity and improved level of treatment which would improve compliance with EU Directives and corresponding legislation and would be pivotal in supporting planned residential and economic growth in Dublin City and the region.
- Negative temporary impact on **population and human health** (recreational swimmers/water-based sporting activities) because of a deterioration in water quality during a nine-month period of decommissioning of aspects of the Wastewater Treatment Plant (during construction) and a corresponding temporary loss of recreational amenity which would be partially mitigated by carrying out the works in winter period when the recreational water-based activities are at seasonally low levels.

- Benefits/positive impacts on the environment (**soils, traffic, water quality, climate**) as a result of reduction in excavation and truck movements (estimated to be 70,000 HGV movements over an 18-month period) which would otherwise have been required to remove and transport rock and spoil during the construction phase of the undersea tunnel. During the operation phase, the proposal to omit the tunnel and associated diffuser point nine kilometres out to sea would also mean that there would be no deterioration of water quality at this location.
- Impacts arising on **land and soils** as a result of spread of invasive species (Japanese Knotweed) present on the Ringsend wastewater treatment site and which would be mitigated by the preparation and implementation of an Invasive Species Management Plan and method statement for the control of disturbance of soils containing Japanese Knotweed and the requirement that a suitably qualified ecologist would be engaged to oversee the implementation of the Invasive Species Management Plan and monitor the success of the mitigation measures post-construction.
- Risk of pollution of **receiving water environment** as a result of accidental spillages of chemicals, hydrocarbons or other contaminants entering the drainage system and discharging to the stream thereafter during the construction and operational phases. The impacts would be mitigated by measures within a Construction and Environmental Monitoring Plan (CEMP) and adherence to best practice construction measures and incorporation of appropriate drainage facilities. Measures set out in the CIRIA guidance document on 'control and management of water pollution from construction sites' would be implemented. The guidelines provided by Inland Fisheries Ireland (2016) on the protection of fisheries habitats during construction projects would also be adhered to.

- **Noise** impacts for the construction and operation phases which would be mitigated by the requirements to prepare and adhere to the Noise and Vibration Management Plans (NWMP) and comply with appropriate noise and vibration limits which are set out in the Environmental Impact Assessment Report in respect of the development of the Ringsend Wastewater Treatment Plant and the development of the Regional Biosolids Facility.
- **Odour impacts** for the operational phase which would be mitigated by the following:
 - Ringsend Wastewater Treatment Plant: Odour from the wastewater treatment plant (excluding storm tanks) would be required not to exceed 10 ouE/m³ as the 99.4th percentile of hourly averages at the boundary of the Ringsend Wastewater Treatment Plant site. The adopted odour annoyance criterion of 3 ouE/m³ as the 98th percentile of hourly averages would not be exceeded at any sensitive receptor location. The Odour Management Plan would be updated as necessary and implemented to ensure the above standard is achieved during construction and operation.
 - Regional Biosolids Facility: The adopted odour annoyance criterion of 3 ouE/m³ as the 98th percentile of hourly averages would not be exceeded at any sensitive receptor location.

The Board completed an environmental impact assessment in relation to the proposed development forming part of the overall proposed upgrade project and concluded that, subject to the implementation of the mitigation measures referred to above, including proposed monitoring as appropriate, and subject to compliance with the conditions set out below, the effects on the environment of the proposed development, by itself and in combination with other development in the vicinity, would be acceptable. In doing so, the Board adopted the report and conclusions set out in the Inspector's report.

Conclusion on Proper Planning and Sustainable Development:

The benefits of the proposed development are considered to be positive. Its delivery would assist Ireland in meeting obligations set down under EU Directives, national legislation and planning policy expressed through the hierarchy plans which regulate development at a national, regional and local level. The proposed development would enable sustainable residential and economic growth through the delivery of increased wastewater treatment capacity while protecting the environment through improving the quality of effluent discharged to the receiving water environment. It has been demonstrated in the application that the improvement envisaged in final effluent quality can be achieved at the existing Ringsend Wastewater Treatment Plant by the incorporation of scientifically proven aerobic granular sludge technology into the treatment process together with associated nitrogen and phosphorous removal. When compared to the previously permitted and proposed long sea outfall (in tunnel) option, the current proposal has significant advantages and would be less intrusive on the receiving environment. The Regional Biosolids Storage Facility would assist in meeting the aims of the Sewage Sludge Directive, regulating the use of sewage sludge in agriculture to prevent harmful effects. Environmental impact assessment and appropriate assessment have also been considered as set out in the sections above. It can, therefore, be concluded that the proposed development is in accordance with the proper planning and sustainable development of the area.

CONDITIONS

Ringsend Wastewater Treatment Plant and Regional Biosolids Facility:

1. The proposed development shall be carried out and completed in accordance with the plans and particulars lodged with the planning application and the information contained in the Environmental Impact Assessment Report and Natura Impact Statement, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development or, in default of agreement, the matter shall be referred to An Bord Pleanála for determination, and the proposed development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity and the proper planning and sustainable development of the area and to ensure the protection of the environment.

2. **Mitigation:**

- (a) All mitigation and environmental commitments identified in the Environmental Impact Assessment Report (Table 17-1 of Volume 3 and 4) shall be implemented in full as part of the proposed development except as may otherwise be required to comply with the following conditions.

Monitoring:

- (b) All monitoring measures identified in the Environmental Impact Assessment Report (Table 17-2-of Volume 3 and 4) shall be carried out and the details of monitoring results shall be submitted to the Planning Authorities (Dublin City Council in respect of the Ringsend Wastewater Treatment Plant and Fingal County Council in respect of the Regional Biosolids Facility) except as may otherwise be required to comply with the following conditions.

Reason: In the interest of clarity and to protect the environment.

3. With the exception of the development hereby permitted, the proposed development at the Ringsend Wastewater Treatment Plant shall otherwise comply with the terms and conditions of permission granted under An Bord Pleanála case reference number 29N.YA0010, as amended by planning permission granted for alterations under An Bord Pleanála case reference numbers 29N.YM0002 and 29N.YM0004 and any further applications or alterations where permitted.

Reason: In the interest of clarity and the proper planning and sustainable development of the area.

4. The period during which the proposed development hereby permitted may be carried out shall be ten years from the date of this order.

Reason: Having regard to the nature and extent of the proposed development, the Board considered it appropriate to specify a period of validity of this permission in excess of five years.

5. A contract specific Construction and Environmental Management Plan (CEMP) and Waste Management Plan (WMP) shall be submitted to and agreed in writing with both planning authorities in respect of the proposed development at the Ringsend Wastewater Treatment Plant site and the Regional Biosolids Facility site. The CEMP and WMP shall detail and ensure Best Construction Practice and compliance with statutory obligations. As part of the CEMP, the submitted invasive species management plan shall be updated as necessary for the control or disturbance to soils containing Japanese Knotweed in accordance with Irish Water Information and Guidance Document on Japanese Knotweed. The plan shall include a method statement for the removal of invasive species identified as being present on site. The implementation of the invasive species management plan shall be overseen by a suitably qualified ecologist/botanist familiar with Japanese Knotweed.

Reason: To protect the environment during construction.

6.
 - (a) Prior to commencement of development, a Traffic Management Plan for the construction and operational phases shall be submitted to, and agreed in writing with, the planning authorities in respect of the development at the Ringsend Wastewater Treatment Plant site and the Regional Biosolids Facility site.
 - (b) The developer shall comply with the requirements of the planning authorities in respect of minimising traffic disruption on the local communities, cleaning and repair of any damage to the public road networks during the construction and operation phases.

Reason: To protect the public road network and in the interest of traffic safety.

7. The proposed development shall adhere to the Noise and Vibration Management Plans (NWMP) and comply with appropriate noise and vibration limits set out in the Environmental Impact Assessment Report in respect of the overall development at Ringsend Wastewater Treatment Plant and the development of the Regional Biosolids Facility. During the construction and demolition phases, the proposed development shall comply with British Standard 5228 Noise Control on Construction and open sites Part 1, code of practice for basic information and procedures for noise control.

Construction Noise at the nearest sensitive receptor shall comply with the following limits:

- 70 LAeq (1 hour) dB – Daytime (07:00 – 19:00) and Saturdays (07:00 – 13:00)
- 65 LAeq (1 hour) dB – Evening (19:00 – 23:00)
- 55 LAeq (1 hour) dB – Night time (23:00 – 07:00)

Mitigation for the operation phase shall include a number of items such as selection of 'low noise' equipment and plant, vibration isolation mounts and appropriate siting of fixed plant.

The developer shall require the appointed contractor to employ and implement best practice construction noise and vibration management techniques throughout the construction phase in order to further reduce the noise and vibration impact to nearby noise sensitive receptors.

During the operation phase, noise shall be minimised by the selection of 'low noise' plant and equipment and incorporation of appropriate attenuation.

Noise monitoring during construction and commissioning and/or operation shall be carried out in accordance with the requirements of the planning authorities.

Reason: In the interest of the amenities of the surrounding area.

8. **Ringsend Wastewater Treatment Plant:**

During operation, odour from the wastewater treatment plant (excluding storm tanks) shall not exceed 10 ouE/m³ as the 99.4th percentile of hourly averages at the boundary of the Ringsend Wastewater Treatment Plant site. The adopted odour annoyance criterion of 3 ouE/m³ as the 98th percentile of hourly averages shall not be exceeded at any sensitive receptor location. The Odour Management Plan shall be updated as necessary and implemented to ensure the above standard is achieved during construction and operation.

Regional Biosolids Facility:

The adopted odour annoyance criterion of 3 ouE/m³ as the 98th percentile of hourly averages shall not be exceeded at any sensitive receptor location.

Reason: In the interest of the amenities of the surrounding area.

9. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within and proximate to the Ringsend Wastewater Treatment Plant site and the Regional Biosolids Facility site.

In this regard, the developer shall –

- (a) Notify the Department of Culture, Heritage and the Gaeltacht in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development.
- (b) Employ a suitably qualified archaeologist who shall monitor all site investigations and other excavation works.
- (c) Provide arrangements for the recording and for the removal of any archaeological material which the Department of Culture, Heritage and the Gaeltacht considers appropriate to remove.

In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

Reason: In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.

10. (a) Prior to commencement of development, the developer shall submit a detailed landscaping plan for each of the development components at the Ringsend Wastewater Treatment Plant and the Regional Biosolids Facility sites. Details, including strengthening of boundary treatment, screening of compounds and general landscape details, including timescales, shall be submitted to, and agreed in writing with, the planning authorities and the landscaping shall be carried out in accordance with the agreed details thereafter.
- (b) Prior to commencement of development, a detailed decommissioning and site restoration plan in respect of the construction compounds, together with a timescale for its implementation, shall be submitted to and agreed in writing with the planning authorities.

Reason: In the interest of the amenities of the surrounding area.

11. (a) The proposed development shall comply with the requirements of the planning authorities with respect to surface water management.
- (b) The existing surface water pipeline traversing the Regional Biosolids Facility site shall be realigned and a wayleave provided in accordance with the requirements of the planning authority (Fingal County Council).

Reason: In the interest of providing best practice for surface water management and to provide for future maintenance of the realigned pipe at the Regional Biosolids Facility site.

12. Prior to commencement of development, the design details for the Regional Biosolids Facility shall be submitted to and agreed in writing with the planning authority (Fingal County Council) for the prevention of environmental pollution in the event of a fire occurrence. Such detail shall also include an assessment of the risk of environmental pollution due to fire water and any mitigation measures which may be necessary.

Reason: In the interest of the protection of the environment and the amenities of the area.

13. All works to be undertaken within and adjacent to designated European Sites within Dublin Bay shall be undertaken in accordance with the requirements of a suitably qualified ecologist appointed following consultation with the National Parks and Wildlife Service.

Reason: In the interest of the protection of designated European Sites and qualifying interests, having regard to the sites' Conservation Objectives.

14. The developer shall pay to the planning authority (Fingal County Council) a financial contribution as a special contribution under section 48(2)(c) of the Planning and Development Act 2000, as amended, in respect of the upgrade and signalisation of the R135 and the N2 North Bound Slip Priority Junction. The amount of the contribution shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála for determination. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate. The application of indexation required by this condition shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine.

Reason: It is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the planning authority which are not covered in the Development Contribution Scheme and which would benefit the proposed development.

Schedule of Costs

In accordance with the provisions of section 37H(2)(c) of the Planning and Development Act 2000, as amended, the amount due to be paid by the applicant to the Board is **€70,459**.

A breakdown of the Board's costs is set out in the attached Appendix 1.

Stephen Bohan
Member of An Bord Pleanála
duly authorised to authenticate
the seal of the Board.

Dated this day of 2019

APPENDIX 8.4

INVASIVE ALIEN PLANT SPECIES:

SITE ASSESSMENT REPORT & MANAGEMENT PLAN



invasiveplantsolutions

INVASIVE ALIEN PLANT SPECIES : SITE ASSESSMENT REPORT & MANAGEMENT PLAN

DEVELOPMENT SITE @ MILLTOWN PARK, SANDFORD ROAD, DUBLIN 6

FOR

SANDFORD LIVING LIMITED

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DOCUMENT NAME	STATUS	REV	DATE	COMMENT	AUTHOR	CKD.
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DC-04-20/SARMP/01	2 nd . ISSUE	01	09/02/2021	REVISED SITE BOUNDARY	KYRAN COLGAN	K.C.
DC-04-20/SARMP/02	3 rd . ISSUE	02	10/03/2021	SECTION 5 & BOUNDARY UPDATE	KYRAN COLGAN	K.C.
DC-04-20/SARMP/03	4 th . ISSUE	03	27/04/2021	UPDATE FOLLOWING 2 ND . SURVEY	KYRAN COLGAN	K.C.
DC-04-20/SARMP/04	5 th . ISSUE	04	30/07/2021	FINAL SITE BOUNDARY REVISIONS	KYRAN COLGAN	K.C.
DC-04-20/SARMP/05	6 th . ISSUE	05	12/08/2021	SECTION 15 UPDATED	KYRAN COLGAN	K.C.
DC-04-20/SARMP/06	7 th . ISSUE	06	20/08/2021	SEC. 16 ILLUSTRATION UPDATED	KYRAN COLGAN	K.C.
DC-04-20/SARMP/07	8 th . ISSUE	07	23/08/2021	UPDATE AFTER LEGAL REVIEW	KYRAN COLGAN	K.C.
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DC-04-20/SARMP/09	11 th . ISSUE	10	06/06/2023	2023 FOLLOW UP SURVEYS	KYRAN COLGAN	K.C.

DEVELOPMENT SITE @ MILLTOWN PARK							
PROJECT NO.	DC-04-20	LOCATION : ITM	X	716944	Y	731255	TIME VARIOUS
DATE OF ASSESSMENT	12/20, 04/21, 09/21, 04/22, 03/23 & 04/23	WEATHER	SUITABLE FOR I.A.P.S. SURVEY WORK				

EXECUTIVE SUMMARY

In December 2020 Invasive Plant Solutions were retained by their client, Sandford Living Limited, to provide IAPS (invasive alien plant species) consultancy services in connection with their proposed residential development on lands at Milltown Park, Sandford Road, Dublin 6.

Our appointment came on foot of observations made in the Biodiversity chapter of the draft Environmental Impact Assessment Report for the lands, dated August 2020, prepared by JBA Consulting at that time. Their report identified the presence of non-native plant species on the lands but did not find particular evidence of any Invasive Alien Plant Species listed in Part 1 of the Third Schedule of the *European Communities (Birds and Natural Habitats) Regulations 2011* (SI 477 of 2011, as amended).

Invasive Plant Solutions were commissioned to carry out further survey work, specifically focusing on the Third Schedule plants referenced above, to further validate the plants absence from the lands in question, and to satisfy the relevant authorities that no specific management measures would be required for any IAPS covered by the relevant legislation, codes of practice and guidance documents, including Dublin City Council's *Dublin City Invasive Alien Species Action Plan 2016 – 2020*.

A walk through survey of the site was carried out on 27 December 2020, and no evidence of Invasive Alien Plant Species was found on site at that time. A further follow up site survey was carried out between the 8th. and 9th. of April 2021. This survey detected the presence of spring emerging IAPS, namely Three Cornered Garlic and Spanish/Hybrid Spanish Bluebell, mainly concentrated within the woodland fringe running along the western end of the northern boundary, with an additional stand in the eastern sector of the site.

The client approved the immediate deployment of bio-security measures and the commencement of an active herbicide treatment regime, spanning across the months of April, May and June 2021. The purpose of these initial measures was to protect the plant stands from disturbance, by the erection and fencing and signage, and to mitigate the risk of seed dispersal and plant reproduction by the spot application of approved herbicide. The 2021 treatment programme was completed in June.

A follow up site survey was carried out on 28 September 2021, with no evidence of further IAPS found during the inspection.

A follow up site survey was carried out on 21 April 2022. Varying degrees of plant regrowth were recorded at the previously identified IAPS locations. In addition, a new infestation was identified which comprises primarily of Three Cornered Garlic but also contains a small quantity of Spanish Bluebell plants. This document was updated to include this new stand, and recommends that the bio-security measures, and the treatment programme, are extended to include this new stand.

The most recent site survey was carried out on 8th. April 2023. The prevailing climatic conditions meant that Three Cornered Garlic and Spanish Bluebell plants had started to emerge from winter dormancy, with sheltered plants starting to come into flower. Varying degrees of Three Cornered Garlic plant and Spanish Bluebell regrowth were recorded at all previously identified IAPS locations. In addition, a number of new small infestations of Three Cornered Garlic were identified outside these locations. This document was updated to include the results of this survey, and recommends that the bio-security measures, and the treatment programme, are extended to include the new Three Cornered Garlic stands.

The first treatment of the 2023 treatment programme was completed in the month of April, with a follow up treatment carried out in late May. The management and treatment programme will continue multi-annually, until either eradication has been fully achieved or future development proposals have been approved and scheduled, whichever is the sooner.

In the event of development being approved in the short term, this management plan recommends the deployment of an IAPS infested soil remediation programme, comprising the bio-secure off-site disposal of all IAPS infested soils, under NPWS licence, to an approved and licenced waste acceptance facility. This process will be based on up to date survey information, to validate the full extent of IAPS present, carried out over the intervening period and immediately in advance of the remediation process commencing. The management plan also recommends that the remediation process should be carried out independently of, and in advance of, the primary development works commencing. It should be executed by, or carried out under the direct management of, an IAPS specialist.

In its ongoing implementation, this management plan will ensure that initial bio-security measures are deployed at all IAPS locations, that a structured, multi annual, site monitoring and herbicide control programme will be employed across the duration planning consent process, and that, if then necessary, a full IAPS infested soil remediation process will be carried out and completed in advance of the commencement of any proposed development project.

I.A.P.S. SITE ASSESSMENT REPORT

SECTION 1 : INTRODUCTION

This Site Assessment Report has been prepared for the client / agency referenced in Section 3 below, and is for their sole and exclusive use. The report reflects the particular site circumstances and conditions, as they presented on the days of inspection. Depending on the time of year of the site assessment, and particularly in advance of, the annual IAPS growing season, the evidence of invasive plant species on site may be limited. In these circumstances follow up site inspections, later in the growing season, may be recommended. This will be included in our Conclusions and Recommendations, at Section 13 of the report.

By their nature, IAPS are aggressive interlopers to our native habitat, are capable of aggressive and rapid dominance, and if left untreated generally result in extensive habitat impairment. It is therefore reasonable to conclude that, where IAPS are identified, but control measures are not applied, these plant species will spread beyond their observed extents.

In addressing invasive alien plant species the precautionary principle should always be applied to their assessment, management and control. All recommended management and control measures should be carried out strictly in accordance with a Site Specific Treatment Plan, and follow "best practice" principles, as set out in technical reference documents such as the UK Environment Agency's *The Knotweed Code of Practice*

Control measures should be implemented using a recognised professional service with expertise in this field of work, and take into account any and all sensitivities highlighted in this report. Particular care should be taken in circumstances where the invasive plant species are located within a designated site of ecological importance, such as an SAC, SPA or NHA, or are set within the context of known ecological sensitivities. Where the use of herbicides are proposed, these should be applied strictly in accordance with the manufacturers recommendations, by a registered Professional Pesticides User, and fully in compliance with the European Communities (Sustainable Use of Pesticides) Regulations, 2012, (S.I. 155 of 2012).

Under no circumstances should any IAPS be cut or dug out without the advice, direction and supervision of an invasive species specialist. Many plant species have extensive root / rhizome systems which spread beyond the footprint of the above ground plant, and some can regenerate themselves from very small fragments of root or stem. Some plants produce very substantial quantities of seeds, which remain viable for many years, while others produce a sap which causes severe skin damage.

The off-site removal of Japanese knotweed, its variants, soil infested with knotweed material, and other IAPS, is strictly controlled by legislation and requires a licence from the National Parks and Wildlife Service in advance of its removal, in accordance with the European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477).

SECTION 2 : LEGISLATIVE CONTEXT

Japanese Knotweed, *Fallopia japonica*, and other invasive plant species, are listed as Invasive Alien Plant Species in Part 1 of the Third Schedule of the *European Communities (Birds and Natural Habitats) Regulations 2011* (SI 477 of 2011, as amended). In addition, soils and other material containing Knotweeds are classified in Part 3 of the Third Schedule as vector materials and are subject to the same strict legal controls. Failure to comply with the legal requirements set down can result in either civil or criminal prosecution, with very severe penalties accruing. A person who commits an offence under Regulations 49 & 50 is liable (a) on summary conviction, to a Class A fine or imprisonment for a term not exceeding six months, or both, or (b) on conviction on indictment, to a fine not exceeding €500,000.00, or imprisonment for a term not exceeding three years, or both. A person who knowingly incites, directs, procures, permits or assists another person to carry out an action that is an offence under these Regulations shall also be guilty of an offence. The relevant sections of the regulations are reproduced below.

- 49(2) *Save in accordance with a licence granted [by the Department of Arts, Heritage and the Gaeltacht], any person who plants, disperses, allows or causes to disperse, spreads or otherwise causes to grow in any place [a restricted non-native plant], shall be guilty of an offence.*
- 49(3) *... it shall be a defence to a charge of committing an offence under paragraph (1) or (2) to prove that the accused took all reasonable steps and exercised all due diligence to avoid committing the offence.*
- 50(1) *Save in accordance with a licence, a person shall be guilty of an offence if he or she [...] offers or exposes for sale, transportation, distribution, introduction or release—*
- (a) *[any restricted non-native animal or plant species],*
 - (b) *anything from which an animal or plant referred to in subparagraph (a) can be reproduced or propagated, or*
 - (c) *a vector material listed in the Third Schedule, [which includes] soil or spoil taken from places infested with Japanese Knotweed...and its hybrids...*

It is an offence under regulations 49(2) and 50(1) to spread, or cause to spread, Japanese Knotweed and other IAPS. An offence may only be avoided if the relevant party can prove that they took all reasonable steps to avoid causing an offence under the legislation. To comply with these regulations, therefore, this management plan relies solely on methodologies necessary to ensure strict compliance with the legislation.