

WHITECHURCH STREAM FLOOD ALLEVIATION SCHEME

Environmental Impact Assessment Screening Report



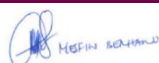
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6 July 2020

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Prepared by:

Prepared for:

RPS**South Dublin County Council**

Caitriona Reilly & **Hannah Fearon**
Principal Scientist Ecologist

David Grant
Project Resident Engineer

West Pier Business Campus
Dun Laoghaire, Co. Dublin A96 N6T7

South Dublin County Council, County Hall
Tallaght, Dublin 24

T +353 1 488 2900
E caitriona.reilly@rpsgroup.com
hannah.fearon@rpsgroup.com

T +353 1 414 9000
E dgrant@SDUBLINCOCO.ie

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1 INTRODUCTION

The Office of Public Works (OPW) in partnership with South Dublin County Council (SDCC) and Dublin City Council (DCC) carried out a Catchment Flood Risk Assessment and Management (CFRAM) Study for the River Dodder Catchment¹. Whitechurch Stream was included as part of the study as it is a sub catchment of the Dodder Catchment. The River Dodder Catchment Flood Risk Management Plan (CFRMP), which was published in November 2014, identified a preferred flood risk management option for the Area of Potential Significant Risk (APSR) named as Tara Hill and St. Enda's, now referred to as Whitechurch Stream.

The OPW and SDCC have initiated the development of a Flood Relief Scheme for Whitechurch Stream to alleviate fluvial flooding for the Tara Hill and St. Enda's APSR. The proposed Whitechurch Stream Flood Alleviation Scheme (FAS) (hereafter referred to as the proposed development), which is being designed and funded by the OPW, consists of a number of measures to improve the flood defences and improve conveyancing of flood water.

RPS were instructed by SDCC to undertake an Environmental Impact Assessment (EIA) Screening to determine if an Environmental Impact Assessment Report (EIAR) is required for the proposed flood alleviation scheme, a detailed description of which is presented in **Section 2** of this report. The EIA screening process ascertains whether a development requires an EIAR and is determined by reference to mandatory and discretionary provisions.

The proposed development site is located in South Dublin and comprises a corridor of land centred on the Whitechurch Stream extending north from St Enda's Park towards Willbrook Road. The site is located within a wider context comprised of the built-up residential areas of Rathfarnham and Willbrook. The southern end of the corridor lies adjacent and immediately west of St Enda's Park.

The purpose of this EIA screening report is to document findings from a desktop analysis of the receiving environment that may be affected by the proposed development and to further document the procedures and outcome of the process undertaken as part of the screening assessment. The report will establish the likely significant effects of the proposed development on the environment and advise if an EIAR is required. In addition, consideration was given in this screening exercise to associated cumulative impacts.

The requirements for the EIA Screening Report are provided in Schedule 7 and Schedule 7A of the Planning and Development Regulations 2001 as amended by the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018). The requirements of Schedule 7A, and where they are addressed in this report, are outlined in **Section 4** of this report.

Supporting documents (including stand-alone specialist reports) not included in this report but available for consideration to ensure a robust review of the proposed development on the selected site included the following:

- Preliminary Design Report, prepared by OPW;
- Preliminary Construction Environmental Management Plan, prepared by OPW;
- Ecological Impact Assessment, prepared by RPS;
- Screening for Appropriate Assessment, prepared by RPS;
- Natura Impact Statement (NIS), prepared by RPS;
- Archaeological Impact Assessment, prepared by ADCO;
- An Arboricultural Assessment of the Tree Vegetation (Tree Survey Report); prepared by Arborist Associates Ltd; and

¹ RPS (2014)

- Landscape & Visual Impact Assessment Report prepared by RPS.

The remainder of this EIA Screening Report is set out as follows:

- Section 2 - Description of the Proposed Development;
- Section 3 - EIA Legislative Context and Guidance;
- Section 4 - EIA Screening Evaluation; and
- Section 5 - Conclusion.

2 DESCRIPTION OF THE PROPOSED DEVELOPMENT

The proposed development is located in Rathfarnham in South County Dublin. It extends from the south-western corner of St. Enda's Park, downstream under Sarah Curran Road where it continues for approximately 700 m alongside the Whitechurch Road, flowing under a number of variously sized culverts before its arrival at the confluence with the Owendoher River at Ballyboden Road. With the exception of St. Enda's Park, the proposed development is located in a largely urban environment. The location and extent of the proposed project development is illustrated in **Figure 2-1** and the drawings showing the proposed works are included in **Appendix A**. These drawings also include the proposed design for the trash screens that have been designed to accommodate potential fish and otter passage, as well as elements for which the full detail or requirement is not yet known, e.g. the requirement to undertake remedial works to walls subject to further structural assessment or to install instream sheet piling alongside structures. A further set of drawings identify the trees to be retained and those being lost as a result of the proposed development as well as a number of areas proposed for replanting of trees and shrubs.

The objective of the project is to provide security from flood events and improve conveyance of flood waters. A 2019 Preliminary Design Report² prepared by the OPW identified the viable options for the proposed work. The report provided an assessment of the feasibility of the various options and identified a preferred option which is described below and is the subject of this EIA screening.

2.1 Study Area

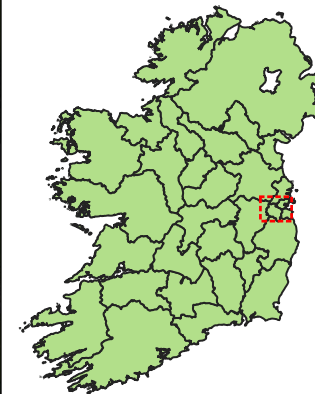
The Preliminary Design Report² indicates a study area for the purpose of the flood alleviation scheme illustrated in **Figure 2-1**. This extends from the upstream end of St. Enda's Park at Taylor's Lane to the stream's confluence with the Owendoher River where Whitechurch Road merges onto Willbrook Road.

No flood risk management measures are considered upstream of St. Enda's Park or for the Owendoher River as part of this flood alleviation scheme and EIA screening.

² OPW (2019). Whitechurch Stream Flood alleviation Scheme – Preliminary Design Report (July 2019) 2800/PDR/001/B



Legend



- Hydrological Connectivity Pathway
- Indicative Extent of Survey Territory

Client



Project Whitechurch stream Flood Alleviation Scheme

Title

Figure 2-1 Site Location and Survey Area



RPS | Consulting UK & Ireland
West Pier Business Campus
Dun Laoghaire
Co. Dublin
Tel: +353 1 488 2900

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2.2 Proposed Development

This section sets out a description of the proposed development and contains information on the project site, design, size and other relevant features in order to establish the characteristics of the project for the purposes of screening.

The proposed development, which is being designed and funded by the Office of Public Works, consists of a number of measures to improve the flood defences and improve conveyance of flood water.

A Preliminary Design Report has been prepared by the OPW (July 2019) which identified the viable options for the proposed work and identified a preferred option which is described below. The proposed development comprises a series of flood alleviation measures including debris management and the introduction of direct defences at various locations along Whitechurch Stream between St Enda's Park and the tie-in of the Whitechurch Stream to the Owendoher River. The extent of the proposed project development is illustrated in **Figure 2-1** and the various elements of the proposed development are illustrated in **Appendix A**, which have been developed from the preliminary design report issued by the OPW.

The project description and the various elements of the proposed works including identified chainages and sections (identified by letter A or W) mentioned in this report are based on the OPW Preliminary Design Report³.

2.2.1 Advance Works

Advance works for the proposed development will entail a temporary works compound, to be located in a corner of the existing car park at the front of St. Enda's Park, off Sarah Curran Road. This facility will be secured from unauthorised access for the duration of the works and will include offices, welfare facilities, parking for site vehicles and plant at night, storage of equipment materials used in the construction phase and also temporary storage of material to be re-used or awaiting removal by licenced waste contractor. Contaminated wastes, e.g. spoil containing third schedule Invasive Alien Plant species material, will be removed under appropriate waste collection permit and NPWS licence to a facility licenced to accept such waste therefore no quarantine area is required. Advance clearance of vegetation along and adjacent to the Whitechurch Stream in preparation for construction phase may also be required and material could be temporarily stored at the temporary works compound until disposal.

2.2.2 Construction Phase

The estimated timeframe for construction works is approximately 12 months. The works will be phased in sections due to accessibility and seasonal constraints with regard to instream works (where needed). There will be a requirement for traffic management measures to be implemented for sections of the proposed works, particularly where the Whitechurch Stream runs alongside the narrow Whitechurch Road. The proposed works at each section are outlined in the following sections.

2.2.2.1 Area 1 - Area downstream of Taylor's Lane and within St Enda's Park (Ch.: 0+000- 0+510.10),

- No flood alleviation measures proposed for this area.

2.2.2.2 Area 2 - Area between St Enda's Park and Sarah Curran Bridge Inlet(Ch.: 0+510.10- 0+572.25),

- Localised bank raising with rip rap erosion protection on the left bank to the design Level of 65.1m OD for approx. 50m length,

³ OPW (2019). Whitechurch Stream Flood alleviation Scheme – Preliminary Design Report (July 2019) 2800/PDR/002/A

- Woodland planting on the left bank of Whitechurch Stream in St Enda's Park;
- Removal of trees and bankside vegetation to accommodate the proposed Works,
- Debris Trap and slipway at a suitable location upstream of Sarah Curran Bridge.

2.2.2.3 Area 3 - Area downstream of Sarah Curran Bridge outlet to Whitechurch Road Bridge Inlet (weir) (Ch.: 0+578.80- 0+688.70),

- Tree removal along the left bank to reduce blockage risk at Whitechurch Rd. Bridge,
- Bank protection measures on the left bank,
- Replacement of the wooden foot bridge approximately at Ch. 620. The replacement bridge will be a timber bridge of similar size and in the same location as the existing.

Areas 1,2 and 3 are outlined in **Figure 2-2**.

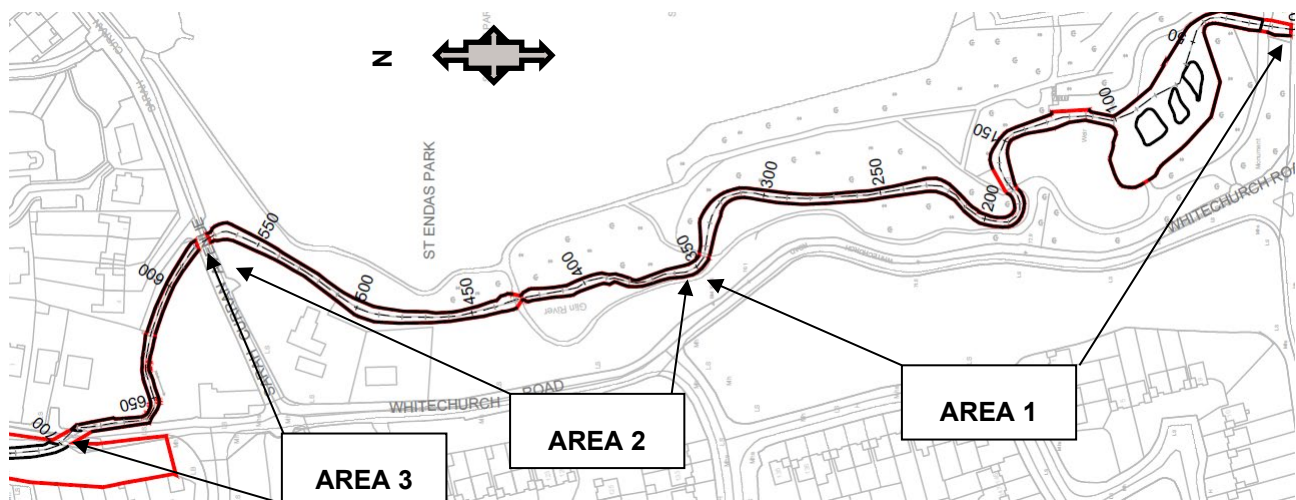


Figure 2-2: Areas 1, 2 and 3

2.2.2.4 Area 4 – Area from Whitechurch Road Bridge Outlet to St Gatiens Culvert inlet (Ch.: 0+700- 0+803.03),

- Tree clearing and vegetation removal on the right bank will be required to reduce blockage risk and to accommodate new flood defence walls.
- Bank protection will be required on the left bank.
- Underpinning will be required on the left bank.
- Proposed tree planting, bulb planting and grass seeding on Whitechurch Road – south of St Gatiens Court.
- New flood wall on the right bank side tying to existing stone wall (Level 62.95mOD) approximately 27m downstream of Whitechurch Rd. Bridge Outlet.
- New head wall at culvert inlet at level 62mOD with return wall on left bank which will replace existing railing.
- New right bank flood wall replacing existing fence. Design level at 62mOD. Wall height 1.1m-1.3m.
- Permanent sheet piling underneath new walls at St. Gatiens culvert inlet, extended upstream for approximately 30m.

2.2.2.5 Area 5 - Area from St Gatiens Court Culvert outlet to the inlet of the Garage Culvert at Rathfarnham Ford (Ch.: 0+828.07- 0+918.61)

- Removal of existing trees and vegetation from the right bank of Whitechurch Stream will be required to facilitate the works
- New head wall at St. Gatiens Court culvert outlet at level 61.8mOD with return wall left bank replacing railing and tying into existing wall
- New right bank flood wall replacing existing low wall and fence. Wall height generally 1.2m but raising to 1.9m at the Garage culvert
- Permanent sheet piling underneath new walls at St. Gatiens culvert outlet, extended downstream for 30m
- New head wall at culvert inlet level 60.4 mOD with return wall left bank tying into existing left bank wall. Wall height 1.9m
- New right bank flood wall tying into new head wall at Garage Culvert inlet at level 60.4mOD
- Permanent sheet piling underneath new wall at Garage Culvert inlet, extended upstream for 30m
- Proposed tree planting, bulb planting and grass seeding on Whitechurch Road – North of St Gatiens Court.
- Staged Trash screen with water level gauge to be provided at Garage Culvert inlet

2.2.2.6 Area 6 - Area from Garage Culvert at Rathfarnham Ford to Willbrook Lawn Twin Culvert Inlet (Ch.: 0+983.91- 1+132.91)

- Removal of existing trees and vegetation from both sides of Whitechurch Stream will be required to facilitate the works;
- Increase concrete plinth around culvert opening to 600mm above ground level and install new railing,
- New head wall to culvert outlet level 58.25mOD. Flood wall left and right bank tying into head wall to design level 58.25mOD. Wall height 1.2m above path level. Right bank wall to tie into existing wall downstream of existing bridge.
- Permanent sheet piling underneath new walls left and right bank, at Garage Culvert outlet, extended downstream for approximately 30m
- Retention of existing right bank walls downstream of existing bridge at Capri Site. Wall to be cladded with stone.
- Proposed beech hedgerow within existing open space upstream of Willbrook Lawn twin culvert
- Replace metal railing at parking area off Whitechurch Stream Bridge with low level 400mm defence wall and railing to tie into bridge parapet and railing.
- Replace left bank existing metal railing with low level defence wall with railing on the left bank, upstream of the inlet of Whitechurch Stream Bridge with wall height 600mm above existing ground levels. Wall and railing to tie into bridge parapet and railing.

Areas 4,5 and 6 are outlined in **Figure 2-3** below.

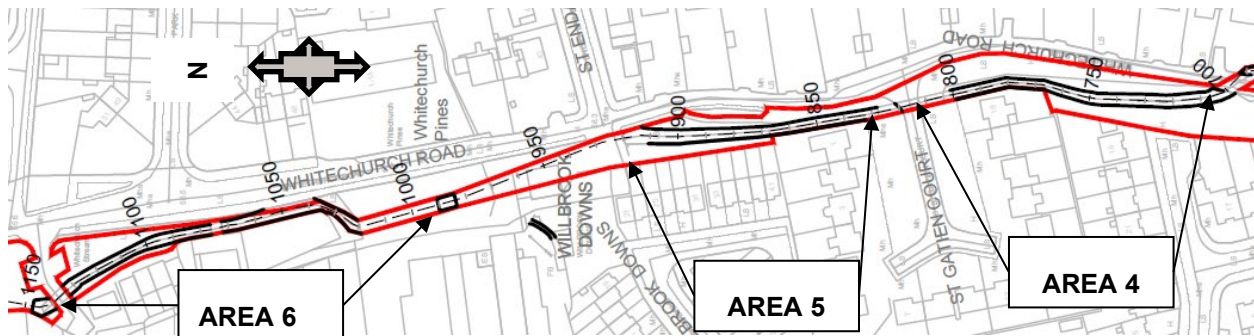


Figure-2-3: Areas 4, 5, and 6

2.2.2.7 Area 7 - Area from the outlet of the Twin Culvert at Willbrook Lawn to the Inlet of Bridge crossing Whitechurch Road (Ch.: 1+140.41- 1+410.43).

- Return wall around dual culvert inlet to tie into bridge parapet and existing boundary wall.
- Proposed tree planting on Whitechurch Road within existing open space immediately south of the junction between Whitechurch Road and Willbrook Lawn
- Localised left bank raising with rip rap erosion protection and permanent supports to be provided to decked structures along the bank.
- Left bank wire mesh fence panels at 1.2 m height above the footpath
- Proposed beech hedgerow along left bank fence.
- Right bank railing to be placed above existing wall. Top of railing at 1.2 m height above the footpath.
- Removal of existing trees and vegetation from both sides of Whitechurch Stream will be required. Existing walls right bank to be maintained at current level, however remedial works will be required.
- Suitably designed staged trash screen with water level gauge to be provided upstream of bridge/culvert face with access from the funeral home.
- Proposed planting at the open spaces immediately adjacent to the car park, upstream and downstream of the pedestrian bridge in Willbrook Lawn.

2.2.2.8 Area 8 - Bridge crossing Whitechurch Road outlet to Willbrook Road Culvert inlet (confluence with Owendoher) (Ch.: 1+420.20- 1+455)

- Tree and bankside vegetation management to reduce blockage risk to the culvert discharging to Owendoher.

Areas 7 and 8 are outlined in **Figure 2-4** below.

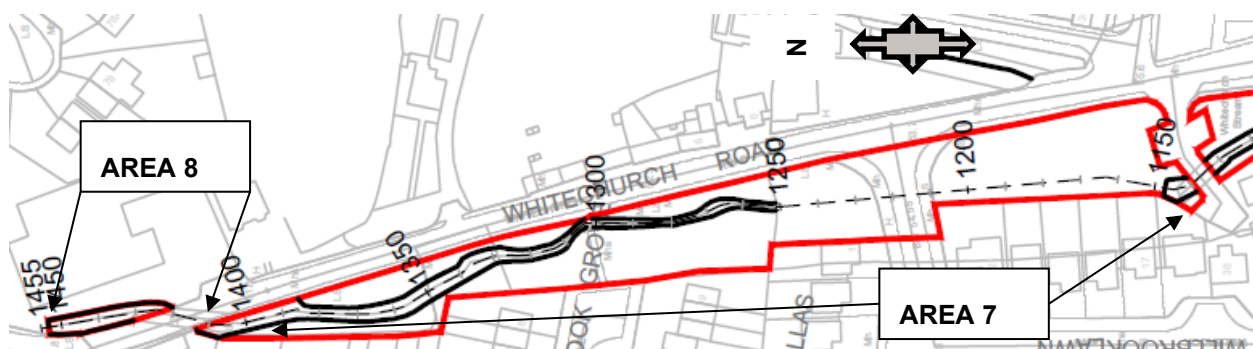


Figure 2-4: Areas 7 & 8

2.2.2.9 Landscape Works

New planting and seeding is proposed in St Enda's Park and at five locations along Whitechurch Road to mitigate adverse landscape and visual effects:

- Woodland planting on the left bank of Whitechurch Stream in St Enda's Park;
- Tree planting, bulb planting and grass seeding on Whitechurch Road, south of St Gatien Court;
- Tree planting, bulb planting and grass seeding on Whitechurch Road, north of St Gatien Court;
- Hedgerow planting within existing open space south of the Willbrook Lawn twin Culvert;
- Tree planting within the existing open space on Whitechurch Road, in the vicinity of Willbrook Lawn; and
- A mixed species hedgerow along the left bank of Whitechurch Stream near Willbrook Grove.

2.3 Operational Phase

The maintenance of the proposed flood alleviation scheme will be the responsibility of South Dublin County Council, although in terms of emergency repairs, the Local Authority would revert to the OPW. The following general measures will be required as part of the routine monitoring and maintenance. These include the following:

- Flood walls - Annual inspection and sealant replacement (every 5 years);
- Flap valves (if any) - Inspection once every 5 years and replacement (every 25 years);
- Bank protection - Inspection once every 5 years and maintenance (as required);
- Tree management – Annual inspection and maintenance (as required);
- Trash screens – Twice Weekly inspections and maintenance (as required); and
- Debris traps – Bi-annual inspections and maintenance (as required).

2.4 Preliminary Construction Environmental Management Plan

A Preliminary Construction Environmental Management Plan (CEMP) has been prepared by the OPW as part of the proposed design. The preliminary CEMP is designed to cover the potential environmental risks and the proposed environmental construction strategies that are to be carried out before and during the proposed works. It includes standard design and construction measures in relation to scheduling of works, preventing impacts to ground and surface waters, invasive species and scheduling of works within close proximity of the sensitive watercourse. The preliminary CEMP is a live document that will be updated according to changing circumstances on the project and to reflect current activities on site. It is intended that the preliminary CEMP will be finalised by the OPW, as the likely contractor, to include all mitigation measures identified in both the ECIA and NIS into a detailed CEMP, should the works progress to the construction stage.

3 EIA LEGISLATIVE CONTEXT AND GUIDANCE

EIA requirements derive from EU Directive 2011/92/EU as amended by 2014/52/EU on the assessment of the effects of certain public and private projects on the environment.

The primary objective of the EIA Directive is to ensure that projects which are likely to have 'significant effects' on the environment are subject to an assessment of their likely impacts.

3.1 Planning and Development Regulations 2001(as amended)

In the context of planning, the EIA Directive is given effect in Ireland through the Planning and Development Act 2000 (as amended). The European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (hereafter the EIA Regulations) transpose Directive 2014/52/EU into Irish Law and give further effect to the 2011 Directive.

3.2 Schedule 5 and EIA Screening

Ireland has implemented the EU EIA Directive(s) by requiring the preparation and submission of an Environmental Impact Assessment Report (EIAR) for projects falling within classes of development prescribed by Article 93 of, and Schedule 5 to, the Regulations. These Regulations are made pursuant to Section 176 of the Planning and Development Act 2000, as amended. In essence, every project listed in Part 1 of Schedule 5 must be subject to an EIA if the stated threshold set therein has been met or exceeded or where no thresholds are set, and accordingly, an EIAR must be submitted to the competent authority with an application for development consent in this regard. Projects listed in Part 2 of Schedule 5, which meet or exceed the thresholds set out, or where no thresholds are set, also require an EIA. Sub-threshold projects in Schedule 5 Part 2 require screening for EIA, except in cases where the likelihood of significant effects can be readily excluded.

The first step is to examine whether the proposed Flood Relief Scheme for Whitechurch Stream is a type that is prescribed in the Regulations. The proposed development, as described in **Section 2**, comprises a Flood Relief Scheme for Whitechurch Stream to alleviate fluvial flooding for the Tara Hill and St. Enda's APSR. The scheme comprises a series of measures extending along approximately 1.7 km length of the existing stream and hence the proposed development does not fall within Schedule 5 Part 1.

The proposed development is of a type that may occur within Schedule 5 Part 2 (refer **Section 3.2.1**). This schedule lists a range of development types with thresholds which, if exceeded, constitute development requiring the preparation and submission of an EIAR. Projects that do not exceed the stated thresholds are considered sub threshold development.

3.2.1 Sub Threshold Development

Article 92 (Part 10) of the regulations defines 'sub-threshold development' as:

"sub-threshold development" means development of a type set out in Part 2 of Schedule 5 which does not equal or exceed, as the case may be, a quantity, area or other limit specified in that Schedule in respect of the relevant class of development;"

The proposed development specifically falls under Item 10 Infrastructure Projects, subsection f(ii) which states:

'(ii) Canalisation and flood relief works, where the immediate contributing sub-catchment of the proposed works (i.e. the difference between the contributing catchments at the upper and lower extent of the works) would exceed 100 hectares or where more than 2 hectares of wetland would be affected or where the length of river channel on which works are proposed would be greater than 2 kilometres.'

On the basis that the Whitechurch Stream FAS is less than 2 km length and the immediate contributing sub-catchment is approximately 20 hectares and no wetlands are affected, the scheme is considered sub threshold development.

The proposed development would therefore not require a mandatory EIAR, however, an application for a screening for environmental impact assessment in respect of that development is required to be submitted to the planning authority in whose area the development would be situated.

3.2.2 Schedule 7 and Schedule 7a

Schedule 7 of the Regulations refers to criteria for determining whether development listed in Part 2 of Schedule 5 should be subject to an Environmental Impact Assessment. The criteria pertain to the characteristics of the proposed development, the location of the proposed development and the types and characteristics of the potential impacts.

Schedule 7A refers to information to be provided by the applicant or developer for the purposes of screening sub-threshold development for Environmental Impact Assessment. The information required is as follows:

1. *A description of the proposed development, including in particular:*
 - (a) *a description of the physical characteristics of the whole proposed development and, where relevant, of demolition works; and*
 - (b) *a description of the location of the proposed development, with particular regard to the environmental sensitivity of geographical areas likely to be affected.*
2. *A description of the aspects of the environment likely to be significantly affected by the proposed development.*
3. *A description of any likely significant effects, to the extent of the information available on such effects, of the proposed development on the environment resulting from:*
 - (a) *the expected residues and emissions and the production of waste, where relevant;*
 - (b) *the use of natural resources, in particular soil, land, water and biodiversity.'*
4. *The compilation of the information at paragraphs 1 to 3 shall take into account, where relevant, the criteria set out in Schedule 7.'*

The criteria in Schedule 7 is as follows:

1. Characteristics of proposed development

The characteristics of proposed development, in particular—

- (a) *the size and design of the whole of the proposed development,*
- (b) *cumulation with other existing development and/or development the subject of a consent for proposed development for the purposes of section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment,*
- (c) *the nature of any associated demolition works,*
- (d) *the use of natural resources, in particular land, soil, water and biodiversity,*
- (e) *the production of waste,*
- (f) *pollution and nuisances,*
- (g) *the risk of major accidents, and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge, and*
- (h) *the risks to human health (for example, due to water contamination or air pollution).*

2. Location of proposed development

The environmental sensitivity of geographical areas likely to be affected by the proposed development, with particular regard to—

- (a) the existing and approved land use,*
- (b) the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground,*
- (c) the absorption capacity of the natural environment, paying particular attention to the following areas:*
 - (i) wetlands, riparian areas, river mouths;*
 - (ii) coastal zones and the marine environment;*
 - (iii) mountain and forest areas;*
 - (iv) nature reserves and parks;*
 - (v) areas classified or protected under legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive and;*
 - (vi) areas in which there has already been a failure to meet the environmental quality standards laid down in legislation of the European Union and relevant to the project, or in which it is considered that there is such a failure;*
 - (vii) densely populated areas;*
 - (viii) landscapes and sites of historical, cultural or archaeological significance.*

3. *Types and characteristics of potential impacts*

The likely significant effects on the environment of proposed development in relation to criteria set out under paragraphs 1 and 2, with regard to the impact of the project on the factors specified in paragraph (b)(i)(I) to (V) of the definition of ‘environmental impact assessment report’ in section 171A of the Act, taking into account—

- (a) the magnitude and spatial extent of the impact (for example, geographical area and size of the population likely to be affected),*
- (b) the nature of the impact,*
- (c) the transboundary nature of the impact,*
- (d) the intensity and complexity of the impact,*
- (e) the probability of the impact,*
- (f) the expected onset, duration, frequency and reversibility of the impact,*
- (g) the cumulation of the impact with the impact of other existing and/or development the subject of a consent for proposed development for the purposes of section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment, and*
- (h) the possibility of effectively reducing the impact’.*

3.3 EIA Guidelines

3.3.1 EIA Guidance for Consent Authorities regarding Sub-threshold Development

The Minister of the Environment, Heritage and Local Government published an EIA guidance document in August 2003⁴. The criteria used in the guidance follows the criteria for determining whether a development would or would not be likely to have significant effects on the environment as set out in Schedule 7 of the Regulations.

3.3.2 Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment

In August 2018, the Minister for Housing, Planning and Local Government published Guidelines for Planning Authorities and An Bord Pleanála⁵. These guidelines address key areas introduced by Directive 2014/52/EU including procedures for screening and the introduction of new information requirements to be provided by the developer (Annex IIA) (Schedule 7A of the EIA Regulations) and revised selection criteria to be used by the competent authority in making a determination (Annex III of Directive) (Schedule 7 of the EIA Regulations).

3.3.3 Revised Guidelines on the Information to be contained in Environmental Impact Statements – Draft August 2017

The EPA published the 'Draft Revised Guidelines on the Information to be Contained in Environmental Impact Statements' in August 2017⁶. The stated primary objective of the guidelines is to improve *'the quality of EIS with a view to facilitating compliance (with the Directive) and thereby contributing to a high level of protection for the environment through better informed decision-making processes.'*

According to the guidelines the start of the EIA process involves making a decision about whether an EIAR needs to be prepared. The draft guidelines note that the decision-making process begins *'by examining the regulations and if this does not provide a clear answer then the nature and extent of the project, the site and the types of potential effects are examined.'* The Regulations also note that a reasoned conclusion must be reached by the decision maker in relation to the EIA.

⁴ Department of Environment, Heritage and Local Government (August 2003). 'Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-threshold Development'

⁵ Department of Housing, Planning and Local Government (August 2018). "Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment"

⁶ EPA (August 2017). "Guidelines on the Information to be Contained in Environmental Impact Assessment Reports" Draft

4 EIA SCREENING EVALUATION

4.1 Screening Methodology

Section 4 provides information on the project to support an application for EIA Screening and provides information to address the requirements of Schedule 7A having regard for the criteria in Schedule 7 of the Regulations.

The preparation of information for this report to support an application for EIA screening considered the following legislation and guidance:

- EIA Directives;
- The Planning & Development Act 2000, as amended;
- The Planning and Development Regulations 2001, as amended;
- European Commission (June 2001), Guidance on EIA, Screening ;
- EPA (2002), Guidelines on the Information to be contained in Environmental Impact Statements;
- EPA (2003), Advice Notes on Current Practice in the preparation of Environmental Impact Statements;
- DECLG (2003), EIA Guidance for Consent Authorities regarding Sub-threshold Development;
- DECLG (2013), Guidelines for Planning Authorities and An Bord Pleanála on Carrying out Environmental Impact Assessment;
- EPA (September 2015), Advice Notes for Preparing Environmental Impact Statements Draft ;
- EPA (August 2017), Revised Guidelines on the Information to be contained in Environmental Impact Statements Draft;
- Department of Housing, Planning & Local Government (August 2018), Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment.

The EIA screening exercise initially assesses the development for mandatory EIA using classifications defined in the appropriate legislation (refer **Section 3.1.1**). Where no mandatory requirement is concluded, screening advances to sub-threshold development assessment, where the competent authority evaluates whether the project is likely to have a significant effect on the environment, with reference to its scale, nature, location and context.

The following studies including environmental, archaeological, visual, human and cultural receptors in the vicinity of the proposed works were carried out to inform this screening assessment.

4.2 Characteristics of the Proposed Development

4.2.1 The Size & Design of the whole of the Proposed Development

The size and design of the proposed development is outlined in the project description in **Section 2** of this report. The proposed development is illustrated in **Appendix A**.

4.2.2 The Cumulation with other Existing Development and /or Development the Subject of a Consent for Proposed Development

Schedule 7 of the EIA Regulations requires that the characteristics of the development include an examination of the potential for cumulative impact of the proposed development with other existing developments and nearby consented developments, along with proposed developments, which are the subject of a consent which require EIA or other enactment e.g. Strategic Environmental Assessment (SEA).

A search was conducted of planning applications (projects) within the vicinity of the proposed development, using the South Dublin County Council planning portal map viewer⁷ and the Department of Housing, Planning and Local Government EIA portal map viewer⁸. The search was limited to the five-year period preceding the date of issue of this report and excluded retention applications (i.e. typically local-scale residential or commercial developments where an impact has already occurred), incomplete, withdrawn, and refused applications.

A search of An Bord Pleanála's website was completed to identify any relevant applications, including Strategic Infrastructure Development (SID) and Strategic Housing Development (SHD) in the past three years, or in close proximity to the proposed development. No relevant projects were identified that had potential for cumulative and in-combination impacts.

The relevant projects with potential for cumulative and in-combination impacts with the proposed Whitechurch Stream Flood Alleviation Scheme are detailed in **Table 4.1**.

⁷ Available online <https://www.sdcc.ie/en/services/planning/planning-applications/>. Accessed March 2020.

⁸ Available online at <http://housinggovie.maps.arcgis.com/apps/webappviewer/index.html?id=d7d5a3d48f104ecbb206e7e5f84b71f1>. Accessed March 2020.

EIA SCREENING REPORT

Table 4.1: Relevant Proposed Developments within the vicinity of the Whitechurch Stream Flood Alleviation Scheme

Planning Application Reference Number	Project/Applicant Name and Proposed Location	Brief Development Description and potential Cumulative Effects	Application Status/ Outcome	Approximate Distance and Direction from Proposed Development	Date Planning Application Granted
SD158/0013	Cycling and Walking Scheme. South Dublin County Council, Grange Road	The project involves the construction and upgrading of a walking and cycle scheme and public realm improvement scheme on Grange Road (R822). The scheme route runs parallel to proposed development at an approximate distance of 160m. The Grange Road proposed development is separated from the proposed Whitechurch Stream flood alleviation scheme by built up residential development and road networks and as a result, significant cumulative or in combination effects are not predicted to arise.	Closed to submissions 074/12/2015	On Grange Road, alongside the eastern boundary of St Enda's Park	Not given
Various	Housing Upgrades. Various applicants	There are a number of individual residential development planning applications in the vicinity of the proposed Whitechurch Stream flood alleviation scheme. The design data contained in these planning applications will have had to provide for drainage and any localised flood risk. Such developments are often subject to drainage and mitigation requirements under permission grants and construction is temporary and localised minimising the duration of potential disturbance. Significant cumulative or in combination effects are not predicted to arise.	-	-	-
S18A/0433	Gerard O'Connor. Change of house type of the approved dwellings to 4 semi-detached, 3 bed dwellings and associated car parking for 8 cars, access bridge, road and footpath and modify existing bridge for a pedestrian entrance and associated site works and landscaping on a site with permission granted for 4 semi-detached, 2 bedroom with study dwellings and associated works under	Although the centre application was refused by the Local Authority, there is a long planning history associated with this site and a permitted grant of planning and later modification to same remain valid. The original development was originally consented under SD09A/0055 after appeal to ABP. The conditions included confirmation prior to development of surface and foul water management on the site owing to the recognised potential to impact to the Whitechurch Stream. It is not known if these have been submitted. Further applications, the majority of which were refused, but for which a modification was approved after appeal. There were conditions that related back to the original planning Ref Sd09A/055 and ABP decision PL06S.235823. In the absence of final detail of management of construction and operational management of polluting substances and or disturbance by virtue of proximity to watercourse (suggested at less than 10 metres in accordance with objectives of County Development Plan), it cannot be ruled out that if the consented development were to be undertaken at the same time as the proposed flood alleviation scheme, that an in-combination impact would not occur without mitigation.	SD18A/0433 refused permission 12/02/19 Original Planning permission SD09A/055 & PL06S.235823 And follow on Modification to consented design SD11B/0236	Capri, on Whitechurch Road, alongside Whitechurch Stream	15/12/2009. ABP appeal not upheld. Permission granted 20/05/2010 17/02/2012, ABP appeal declared invalid. Date of Final grant: 24/10/2016

EIA SCREENING REPORT

Planning Application Reference Number	Project/Applicant Name and Proposed Location	Brief Development Description and potential Cumulative Effects	Application Status/ Outcome	Approximate Distance and Direction from Proposed Development	Date Planning Application Granted
SD20A/0016	SD09A/0055 and SD11B/0236. Gerard O'Connor. Change of house type of the approved dwellings to 4 semi-detached, 3 bed dwellings; replacement of existing bridge and 1.2m flood defence walls, internal road and footpaths; 8 car parking spaces and associated site works and landscaping on previously granted site for 4 semi-detached, 2 bedroom with study dwellings and associated works under SD09A/0055 and SD11B/0236.	This is the latest application associated with this site and previous applications are discussed above under application S18A/0433. Regarding the current application, there is direct connectivity to the Whitechurch Stream and waterborne pollution has the potential to be washed into the stream. The levels of pollution have been described as negligible and localised and mitigation measures are recommended, in-combination impacts were ruled out. Furthermore, the screening for appropriate assessment indicated that potential impacts as a result of the development would cause neither direct nor indirect significant impacts to any protected site or nearby waterbody. On the contrary, the Ecological Impact Assessment raises issues regarding the presence of third schedule invasive- Japanese Knotweed, but it was concluded that the spread of this species is negligible due to the proposal to excavate and dispose of all sources of this invasive species on site by a specialist contractor in advance of construction works. A proposal for Japanese Knotweed control is included but as this application is still pending and there is no final detail of the final management regime for this invasive species during the construction and operation phase it cannot be ruled out that if the consented development were to be undertaken at the same time as the proposed flood alleviation scheme, that an in-combination impact would not occur without mitigation.	Pending. Decision due 22/03/20.	Capri, on Whitechurch Road, alongside Whitechurch Stream.	N/a. Request for additional information.
SD16A/0247	Gordon Anderson. Demolition of existing buildings, closing vehicular access at southern end of site and retaining main vehicular entrance at northern end, construction of new 3 storey building over basement, with storage facilities in basement, two 1 bed apartments on ground floor, two 2 bed apartments on second	The Screening for Appropriate Assessment included environmental data relating to a previously detected hydrocarbon spillage in groundwater. There is connectivity via site culvert that ultimately discharge to the Whitechurch Stream and it was noted that contamination could ultimately arrive at Dublin Bay, although rated as low to moderate (Separate Consultants). It was stated that the risk to water quality from the proposed development would be protected against through the implementation of mitigation measures including stormwater attenuation and flood mitigation. No loss of Annexed habitat or impacts to SCI species were predicted. There is a reliance on mitigation measures to ensure that no adverse impacts on water quality within a small site. There was no data in respect of mobile species including Otter. The consented development has not yet commenced. There remains the possibility that an in-combination	Granted	Whitechurch Road, southern side of Rathfarnham Ford Garage, alongside Whitechurch Stream.	24//04/17

EIA SCREENING REPORT

Planning Application Reference Number	Project/Applicant Name and Proposed Location	Brief Development Description and potential Cumulative Effects	Application Status/ Outcome	Approximate Distance and Direction from Proposed Development	Date Planning Application Granted
	floor and third floors, a communal roof garden, and all associated site and development works.	impact on the water quality and disturbance to Otter were both developments to occur simultaneously without mitigation.			
D13A/0370/E	Housing development. M & N O'Grady Development Ltd, Nutgrove Avenue, Rathfarnham	Residential development consisting of 47 detached houses located 1km east of the proposed development with project extension granted. Permission is granted until 2024. The ongoing construction works for the Nutgrove housing development is separated from the proposed Whitechurch Stream flood alleviation scheme by 700m of residential development and road networks and as a result, significant cumulative or in combination effects are not predicted to arise.	Granted	1km East of proposed development on Nutgrove Avenue	Permission granted to 2024
SD17A/0263	Extension to Golf course. The Trustees of Grange Golf Club, Taylor's Lane, Rathfarnham	Extension to Grange Golf Club located immediately south of the proposed development. The extension of the golf course playing area into the car-park has potential for in-combination impacts to the Whitechurch stream during construction as this is immediately upstream of the proposed development. Permissions for the extension are however subject to the compliance of drainage and disposal of surface water with technical requirements of the Council's Water Services and/or Irish Water as appropriate including the Greater Dublin Regional Code of Practice for Drainage Works.	Granted	Upstream of St. Enda's Park	Permission granted 22/09/17
SD178/0003	Dodder Greenway. South Dublin County Council	A section of the proposed Dodder Greenway (within the administrative boundary of SDCC) is being developed 1km downstream of the proposed development. The Greenway route is approximately 14km in length and has potential to lead to in-combination impacts to water quality, as such providing a pathway for pollutants to South Dublin Bay SAC and South Dublin Bay and River Tolka Estuary SPA are located approximately 10km downstream. This development has however been subject to the environmental assessments informing the design process and it is currently understood that there will be further assessments to identify and mitigate such impacts.	Closed to Submissions 22/06/2017	Downstream of proposed development	Not given on website
3324/19	Private Development on Lands at the former Paper Mills site, bounded by the river Dodder to the east, Clonskeagh Road to the west, Clonskeagh	Planning permission sought for the following revisions to the previously approved development Planning reg. ref.- 3159/17 (96 units to 116 units) as part of an overall composite development on the site to include the following previous planning permission reg. ref.- 2620/14 (parent permission 88 units), reg. ref.- 2308/16 (88 units to 96 units), reg. ref.- 2477/17 (20 units) and reg. ref.- 2996/17 (ESB substation). The revisions to the development consist of a change of block to a	Last date for Observations 25/07/2019	Alongside River Dodder	Application withdrawn- 12/08/19

EIA SCREENING REPORT

Planning Application Reference Number	Project/Applicant Name and Proposed Location	Brief Development Description and potential Cumulative Effects	Application Status/ Outcome	Approximate Distance and Direction from Proposed Development	Date Planning Application Granted
	bridge to the South West, Dublin 6	Build to Rent; block of accommodation. Revisions to block 4 include the reconfiguration of ground floor plan including changing 3 no. 2 bed apartments to 1 no. 2 bed apartment and 2 no. 1 bed apartments, provision of a ground floor communal room and alterations to the penthouse plan consisting of changing 2 no. 2 bed apartments to 1 no. 2 bed apartment and 2 no. 1 bed apartments, incorporating an overall increase in apartment units from 14 to 15 with the addition of a new ground floor communal room, bringing the total number of units on the lands from 136 units to 137 units.			
N/A	Blood Stoney Bridge. Dublin City Council	The proposed Blood Stoney Bridge is currently at the preliminary design stage. It will provide a new crossing point from New Wapping Street to Blood Stoney Road in the Dublin Dockland Area and will be a pedestrian and cycling-only facility. The scope of works and potential impacts are currently unknown as this application is pre-planning, however the development will be subject to the appropriate environmental considerations before planning approval.	Pre-application Stage	Approximately 10km downstream	N/A

A number of planning applications in proximity to the proposed development have potential to result in surface water and/or groundwater pollution. The bulk of the projects are consented and include measures to ensure pollution to surface water or groundwater does not occur. Many of the small scale projects in the previous five years have been carried out.

There is a project, Reference SD09A/055 & PL06S.235823, for a number of which subsequent amendments to an original consent have been sought and refused. Taking a conservative approach, and in the absence of final detail of management of construction and operational management of the earlier consented development at the Capri site, there is a possibility for in-combination pollution to surface water or groundwater to occur, by virtue of its suggested proximity to the Whitechurch Stream (10m), particularly if the consented development were to be undertaken at the same time as the proposed flood alleviation scheme.

Furthermore, for the project SD20A/0016 also at the Capri site, its application contains a proposal for the control of identified invasive alien plant species but in the absence of a final management regime for the invasive plant species, there is a possibility for in-combination impacts.- This development also details the 'replacement of existing bridge' as part of the proposed works and as this would take place along Whitechurch Stream there is potential for in-combination impacts. However, where pollution prevention measures are outlined regarding this structural alteration, in-combination impacts can be deemed as null.

Another development SD16A/0247 was consented in April 2017 but has not yet commenced. It occurs along and atop the culverted sections of the river at of the former Maxol petrol station on Whitechurch Road.

While it is recognised that the above mentioned projects have the potential to result in combination impacts if carried out simultaneously and by virtue of the absence of detail on the management of invasive alien plant species and on construction and environmental protection measures and the measures provided for in respect of the Whitechurch Stream FAS, no in-combination pathways exist. However, it should be noted, that the OPW in light of any works associated with the proposed development should be cognisant of any future Invasive Species Management Plans prepared for Capri.

No other pathways have been identified by which any plan or project could have a likely significant in-combination effect on any of the European sites. It is then concluded that there is no potential for cumulative or in-combination impacts.

Environmental Control Measures during construction, outlined in the Preliminary Design Report have been designed to mitigate any potential adverse effects during construction and are thus designed to ensure protection of the environment. Furthermore, a detailed CEMP will be developed in Stage IIb (Detailed Design) of the project. The CEMP will be updated routinely, informed by monitoring of works on site and prior to the commencement of each stage of the construction works. It is therefore not anticipated that the proposed development will result in any significant cumulative or in-combination impacts on the EIA factors listed under Article 3 of Directive 2014/52/EU during construction.

There is no potential for significant likely cumulative impacts once the proposed development is in operation at the subject site.

4.2.3 The Nature of any Associated Demolition Works

The demolition works associated with the proposed development will be very limited.

A timber access bridge at Section A040 to W-024 (Sarah Curran Avenue Bridge to Weir/Bridge crossing Whitechurch Road) may have to be removed and replaced. The flood analysis suggests that the timber access bridge may require removal at detailed design stage to ensure that it doesn't pose a risk of blockage to downstream areas.

A preliminary CEMP has been prepared by the OPW as part of the Preliminary Design Report. A detailed CEMP will be developed at Stage IIb (Detailed Design) of the project. The preliminary CEMP states that material will be reused as far as possible.

Waste arisings from the potential demolition works may be reused depending on the suitability of the demolition material.

If low levels of contamination are encountered during the construction works, soil testing and a risk assessment of material shall be undertaken to assess its potential for re-use.

Any material requiring recovery or disposal offsite will be sent to an appropriate permitted or licensed facility based on Waste Management Acts 1996 as amended. In the event that disposal offsite is required, the material shall be tested for disposal at an appropriate waste management facility in accordance with the Waste management Act 1996 as amended.

The proposed development will therefore not give rise to significant demolition waste arisings or any other associated environmental impacts.

4.2.4 The Use of Natural Resources, Land, Soil, Water and Biodiversity

Use of Natural Resources: The proposed development will require the following natural resources:

- Fuel for the refuelling of construction vehicles;
- Granular material for construction works;
- Water resources for welfare facilities at site compound, water for concrete and water misting for dust minimisation.

Land & Soils: The proposed development has a very limited footprint in terms of effects relating to land use and soils.

The proposed development will include an excavation programme during construction works, which will be designed to take cognisance of the ground conditions existing within parts of the site. Construction of the proposed scheme will also require engineering fill for concrete for retaining walls. Exact quantities of material required have not been determined at this point, however, it is considered that there will be no significant effects on the environment given the scale and nature of the work proposed.

Material will be reused as far as possible. Excavated material is to be incorporated into the embankments and final landscaping of the works area or spread locally. This will depend however on the suitability of the excavated material, and unsuitable material will be removed off site for disposal in permitted facilities. If low levels of contamination are encountered during the construction works, soil testing and a risk assessment of material shall be undertaken to assess its potential for use.

Any material requiring disposal offsite will be disposed of at an appropriate permitted or licensed facility based on Waste Management Acts 1996 as amended. In the event that disposal offsite is required, the material shall be tested for disposal at an appropriate waste management facility in accordance with the Waste management Act 1996 as amended.

Water: A temporary works compound will be set-up and will remain operational for the duration of the works. to be located in a corner of the existing car park at the front of St. Enda's Park, off Sarah Curran Road. This facility will be secured from unauthorised access for the duration of the works and will include offices, welfare facilities, parking for site vehicles and plant at night, storage of equipment materials used in the construction phase and also temporary storage of material to be re-used or awaiting removal by licenced waste contractor. There is not likely to be a requirement for any substantial water use.

Biodiversity: In regard to biodiversity, there will be changes in vegetation composition however these are not considered to result in appreciable loss of habitat as the bulk of the works are linear in nature. Works will occur in close proximity to and at times within sections of the watercourse, but there should be no long-term alteration of instream habitat. The works are likely to be phased in sections due to accessibility and seasonal constraints with regard to instream works (where needed).

Planting will be required as detailed in **Section 2** to allow plantation for trees and vegetation lost as a result of the proposed scheme. Replacement soft landscaping, comprising small areas of shrub planting and trees, will be located within St Enda's Park and at locations along Whitechurch Road to mitigate landscape and visual effects. Planting is proposed at four locations as outlined in **Section 2.2.2.8**.

An Ecological Impact Assessment (EclA) of the proposed development has been carried out by RPS. In regard to invasive alien plant species (IAPS), these have been found at a number of locations as documented in the EclA which also outlines measures to mitigate the spread of IAPS. Where any new record of IAPS is noted and confirmed during pre-construction or construction surveys, they should be, with South Dublin County Council approval, notified to National Biodiversity Data Centre for inclusion on its database.

A Screening for Appropriate Assessment Report has been completed to consider whether the proposed development, individually or in combination with other plans or projects, and in view of best scientific knowledge, is likely to have a significant effect on any European site(s). This AA Screening recommended that in adopting the precautionary approach in accordance with current guidance, the assessment progressed to Stage 2 Appropriate Assessment and production of the Natura Impact Statement, which allows for the inclusion of mitigation measures.

A Natura Impact Statement (NIS) in support of Appropriate Assessment has been carried out to determine the potential for likely significant effects as a result of the proposed development. It has been concluded in the NIS, *'the proposed development, either individually or in combination with other plans or projects, will not have an adverse effect on the integrity of any European site(s), given the implementation of mitigation measures outlined'*.

4.2.5 The Production of Waste

A preliminary CEMP has been prepared by the OPW as part of the Preliminary Design Report. A detailed CEMP will be developed in Stage IIb (Detailed Design) of the project. In relation to waste and materials reuse management, only approved waste collection permit holders will be contracted for the collection of waste from the site during the construction phase of the Whitechurch Stream FAS.

Materials used to build the proposed flood relief structures will be sourced from operators with the appropriate permissions/licences. Exact quantities of material required have not been determined at this point, however, it is considered that there will be no significant effects on the environment given the scale and nature of the work proposed. In addition, the preliminary CEMP also includes waste minimisation measures to be adopted including reducing waste or surplus materials on site by avoiding over-estimation of purchasing requirements, establishing a 'take back' system with suppliers, etc.

A quantity of material will require excavation for the infrastructure outlined in **Section 2**. Any excavated material will be reused on site for backfilling, regrading and landscape purposes where possible. Waste arisings from the potential demolition works may be reused as outlined in **Section 4.2.3**. If low levels of contamination are encountered during the construction works, soil testing and a risk assessment of material shall be undertaken to assess its potential for use.

Any material requiring disposal offsite will be disposed of at an appropriate permitted or licensed facility based on Waste Management Acts 1996 as amended. In the event that disposal offsite is required, the material shall be tested for disposal at an appropriate waste management facility in accordance with the Waste management Act 1996 as amended.

In relation to waste and materials reuse management, only approved waste collection permit holders will be contracted for the collection of waste from the site during the construction phase of the scheme. The control of waste will be carried out in accordance with best practice measures for waste minimisation, waste storage/segregation, reuse/recycling and waste removal/disposal as outlined in the OPW preliminary CEMP for the project.

The control of waste will be carried out in accordance with best practice methods for disposal and will follow a waste management plan to be set out in the contractor's Construction Environmental Management Plan (CEMP) for the project. A detailed CEMP will be finalised and developed in Stage IIb (Detailed Design) of the project by the contractor.

4.2.6 Pollution and Nuisances

The main pollution and nuisances relating to the proposed development are considered to be air quality (dust), noise and traffic management arising from the construction phase of the development. The main receptors will be local residents and recreational visitors to St Enda's Park located adjacent and east of the southern section of the study area. Other receptors include road users along Whitechurch Road.

Construction activity will lead to temporary increases in road traffic along Whitechurch Road and along Sarah Curran Avenue where the works compound, to be located in a corner of the existing car park at the north of St. Enda's Park, off Sarah Curran Road will be accessed. This is estimated to last approximately 12 months. Temporary haul roads are unlikely to be needed due to the restricted nature of the works, however some improvement works may be required within St. Enda's Park where existing walking tracks are required to accommodate construction traffic. The Principal Contractor shall prepare a Traffic Management Plan for approval by the OPW and South Dublin County Council once detailed project designs are available and in advance of any construction works commencing.

The preliminary CEMP for the project includes noise and vibration control measures to minimise the impact of noise on the immediate environs due to construction activities associated with the scheme. These measures include restricted operating hours by limiting the construction work to the daytime period between 07:30 and 16:30 hours, Monday to Friday. No work shall be planned for outside these hours including weekends or Public Holidays. Furthermore, the OPW and the contractors will be required to comply with the requirements on noise control detailed in European Communities (Construction Plant and Equipment) (Permissible Noise Levels) Regulations 1996 and the Safety, Health and Welfare at Work (Control of Noise at Work) Regulations 2006. Reference will be made to BS 5228: Part 1: 2009 (Noise Control on Construction and Open Sites - Part 1. Code of Practice for Basic Information and Procedures for Noise Control).

Similarly, the preliminary CEMP includes measures for the management of dust during construction. Where appropriate, dust monitoring is recommended near site boundaries/sensitive receptors. The TA Luft/VDI 2119/Bergerhoff Method of dust emission monitoring will be employed. The TA Luft total dust deposition limit value (soluble and insoluble) of 350 milligram per square metre per day will be adopted. If dust levels are found to be higher than 350mg/m²/day, further mitigation measures will be required.

Trucks leaving the site will be adequately cleaned to ensure soil, mud and other site debris is prevented from spilling onto adjoining roads and footpaths. Roads and footpaths will be cleaned on a regular basis as required.

The control of pollution and nuisances will generally be exercised with reference to best practice construction methodology and adherence to a detailed CEMP which will be developed in Stage IIb (Detailed Design) of the project by the appointer contractor following agreement on suitable construction methodologies and sequencing of works for the project.

4.2.7 The Risk of Major Accidents and/ or Disasters including those caused by Climate Change

The proposed development will be designed, constructed and operated in accordance with the following health and safety regulations and guidelines (or as updated):

- Safety, Health & Welfare at Work (Construction) Regulations 2006 to 2013;
- Safety, Health and Welfare at Work (Construction) (Amendment) Regulations 2019 (S.I. No. 129 of 2019);
- Safety, Health & Welfare at Work Act 2005; and
- Safety, Health & Welfare at Work (General Application) Regulations 2007 to 2016.

A high level overview of the preliminary construction methodology is outlined in the OPW preliminary CEMP. The construction method would be considered standard, with no novel construction methodologies and not

particularly complex. Therefore, the risk of accidents occurring during construction are considered to be low. A detailed CEMP which will be developed in Stage IIb (Detailed Design) of the project by the appointer contractor following agreement on suitable construction methodologies and sequencing of works for the project.

There is potential, albeit low, for accidental release of pollutants, e.g. spillage of fuel or cement or release of sediment from excavations, into the surrounding environment including the surface and groundwater environment. This will be managed by the appointed contractor by adherence to the final CEMP.

From a natural disaster perspective, the most likely risk for the proposed development would be associated with extreme flood events. The OPW preliminary CEMP details measures to follow during such events. The river in-channel works will be carried out during dry weather and halted during heavy rainfall events to reduce suspended solids in the river. Equally, works will not be carried out on submerged haul roads during times of elevated river levels/flows.

The preliminary CEMP includes for an Emergency Plan to be activated in the event of flood events, fire, chemical spillage, cement spillage, collapse of structures, failure of equipment etc. This will need to be prepared by the appointed contractor as part of the final CEMP.

4.2.8 Risks to Human Health

Overall the proposed development will have a positive impact on human beings in the wider area in terms of alleviating the risk of flooding in the future. During construction there is potential for pollution and nuisance as outlined in **Section 4.2.6**; however, such impacts will be minor temporary and will be subject to control through best practice control measures and the implementation of the CEMP.

During operation, it is considered extremely unlikely that a pollution event would occur of a magnitude that would have any significant negative impact on water quality and therefore it is considered that there are little or no risks to human health as a result of the proposed scheme.

The preliminary CEMP outlines the requirement for a Health and Safety Plan. Implementation of a Health and Safety Plan will ensure no risks to human beings working on the site or living/working adjacent to the site during construction. As noted in **Section 4.2.6**, a traffic management plan will be produced by the appointed contractor, this will mitigate risk associated with construction traffic.

4.3 Location of the Proposed Development

4.3.1 Existing and Approved Land Use

The proposed site is located along Whitechurch Road in a predominantly residential area, in South Dublin between Willbrook and St Enda's Park. According to the South Dublin County Council Development Plan 2016 - 2022, the site is located within lands zoned in accordance with Objective RES - To protect and/or improve residential amenity. The zoning Objective OS - To preserve and provide for open space applies to open space areas adjacent to the site including St Enda's Park.

4.3.2 Relative Abundance, Availability, Quality and Regenerative Capacity of the Natural Resources (including soil, land, water and biodiversity) in the Area and its Underground

Soil - According to GSI Bedrock Geology mapping, the southern end of the proposed development, at St Enda's Park comprises a combination of alluvium associated with Whitechurch Stream located within poorly drained mineral. The remainder of the proposed development is located on made ground. Any soil excavated during construction, will be used for backfilling, regrading and landscaping purposes on site where possible. Any material requiring disposal offsite will be disposed of at an appropriate permitted or licensed facility based on Waste Management Acts 1996 as amended.

Water - The proposed site lies within Hydrometric Area (HA) 09 (Liffey and Dublin Bay). The Whitechurch Stream is located within the site and is the subject of the flood alleviation works. It is part of the Owendoher River Waterbody, the source of which lies south in the Dublin Mountains (Cruagh Mountain). The Whitechurch Stream flows into the Owendoher River, which itself is a tributary of the Dodder River. The Dodder discharges into the tidal parts of the River Liffey near the Eastlink bridge.

The Whitechurch Flood Alleviation Scheme is a tributary of the Owendoher River. Analysis of the EPA online mapper⁹ identified the bulk of the Whitechurch Stream (including that within the footprint of the proposed development) as a 2nd order stream whilst the Owendoher is a 4th order and the Dodder as a 5th order and the tidal parts of the River Liffey as a 6th order watercourse.

Aquifer Classification - The GSI aquifer classification for the study area is Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones. The southern part of St Enda's Park falls within the Poor Aquifer classification comprising Bedrock which is Generally Unproductive except for Local Zones. The GSI Groundwater Vulnerability map is recorded as having low aquifer vulnerability.

Groundwater Status - The majority of the site lies within the Dublin Groundwater Body (Code: IE_EA_G_008). St Enda's Park lies within the Kilcullen Groundwater Body (Code: IE_EA_G_003). Neither of these are at risk according to the EPA dataset relating to WFD Ground Waterbody Approved Risk attributed to ground waterbody features. The Dublin Groundwater body whose status for the period 2013-2018 is ranked as 'Good' whilst for the Kilcullen Ground water body whose status for the same period is ranked as 'Good'.

Biodiversity - There are no European sites within or adjacent to the proposed development. The closest European site is Wicklow Mountains SAC, which is located c.4.75 km due south of (and upstream of) of the proposed development. The nearest downstream European sites are those in Dublin Bay including South Dublin Bay SAC and South Dublin Bay and River Tolka Estuary SPA and North Bull Island SAC. Dublin Bay is a coastal wetland complex of considerable nature conservation value in a European and international context and the UNESCO designated Dublin Bay Biosphere.

A Screening for Appropriate Assessment Report has been completed to consider whether the proposed development, individually or in combination with other plans or projects, and in view of best scientific knowledge, is likely to have a significant effect on any European site(s). This AA Screening recommended that in *'adopting the precautionary approach in accordance with current guidance, the assessment progressed to Stage 2 Appropriate Assessment and production of the Natura Impact Statement, which allows for the inclusion of mitigation measures'*. The NIS prepared for the proposed development concluded that in view of best scientific knowledge and applying the precautionary principle, and in light of the conservation objectives of the relevant European sites, the proposed development, either individually or in combination with other plans or projects, will not have an adverse effect on the integrity of any European site(s), given the implementation of mitigation measures outlined.

As outlined in **Section 2**, there will be vegetation losses in the form of existing bankside vegetation to accommodate the proposed measures. Initially, two potential areas for replanting of trees had been identified with South Dublin County Council, but these have been increased with vegetation to be reinstated in four areas alongside the watercourse following completion of the project as outlined in **Section 2.2.2.8**. Specifying the nursery stock for the areas proposed for replanting is provided in the Landscape and Visual Assessment report and the locations of the replanting shown on accompanying drawings appended to that report. As part of the finalised CEMP, a management specification for the proposed planting will be developed.

4.3.3 Absorptive Capacity of the Natural Environment

(i) wetlands, riparian areas, river mouths

⁹ <https://gis.epa.ie/EPAMaps/>

An Ecological Impact Assessment Report (EclA) of the proposed development has been prepared by RPS. The EclA report describes The Whitechurch stream as being highly modified albeit provides *'an ecological corridor or stepping stone within a highly urbanised area. No specific conservation designation pertaining to Local Authority designations were identified, although a 2012 community biodiversity project report¹⁰ noted the local importance of the watercourse (referred to in that report as the River Glynn) as it flowed through St Enda's Park and connected to the Owendoher and Dodder Rivers. Inland Fisheries Ireland confirmed also during a consultative meeting of the aquatic sensitivity of the Whitechurch stream owing to its direct connectivity to the Owendoher River and Dodder River.'*

As search of the Wetlands Surveys Ireland database¹¹ ranked the artificial pond (WMI_DU146) at St. Enda's Park of local conservation value (moderate value) but this pond is upstream of the proposed development.

(i) coastal zones and the marine environment

The site features the Whitechurch Stream which is the subject of the flood alleviation works. This drains into the Dodder River and thereafter into Dublin Bay at Ringsend.

(ii) mountain and forest areas

The site is located approximately 6.8 km north of the Dublin Mountains (Cruagh and Tibbradden Area) but these areas are upstream of the proposed development with no potential for adverse impact.

(iii) nature reserves and parks

The closest public park is St Enda's Park, located at the southern end of the site. The Ecological Impact Assessment Report (EclA) does not refer to any Nature Reserves located within the EclA study area for the proposed development.

(iv) areas classified or protected under legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive

The closest European site is Wicklow Mountains SAC c. 4.75 km due south of (and upstream of) of the proposed development. The nearest downstream European sites are those in Dublin Bay including South Dublin Bay SAC and South Dublin Bay and River Tolka Estuary SPA, both of which are approximately 6 km (as the crow flies) and North Bull Island SAC.

A Screening for Appropriate Assessment Report has been completed to consider whether the proposed development, individually or in combination with other plans or projects, and in view of best scientific knowledge, is likely to have a significant effect on any European site(s). This AA Screening recommended that in *'adopting the precautionary approach in accordance with current guidance, the assessment progressed to Stage 2 Appropriate Assessment and production of the Natura Impact Statement, which allows for the inclusion of mitigation measures'*. It has been concluded in the NIS, *'the proposed development, either individually or in combination with other plans or projects, will not have an adverse effect on the integrity of any European site(s), given the implementation of mitigation measures outlined'*.

(v) areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure;

A Screening for Appropriate Assessment Report has been completed. The Screening Report states *'There is direct connectivity to European sites within Dublin Bay (Section 4.2). The Owenadoher_010 waterbody incorporates both the Whitechurch Stream and Owendoher River. The Owenadoher_010 has been at Moderate WFD Status for the last two monitoring cycles (2010-2012 and 2010-2015) which represents an improvement from its previous Poor WFD status in 2007-2009. Both waterbodies are 'At Risk' of not achieving WFD objectives and the Owendoher_010 is part of the Dodder Area for Action, which is a*

¹⁰ Tubridy & Associates (2012). The Owendoher and River Glynn Community Biodiversity Project: Progress Report. Report E03166 prepared for Glendoher & District Residents Association.

¹¹ <http://www.wetlandsurveysireland.com/>

prioritised water body within the current River Basin Management Plan 2018-2021. One of the reasons it has been prioritised is that the Dodder is an important trout fishery and recruitment area, with salmon in the lower reaches and ongoing work for removal of weirs to allow salmon to pass. The Whitechurch Stream flows into the Owendoher River, which itself a tributary of the Dodder River. The Dodder discharges into the tidal parts of the River Liffey near the Eastlink bridge'.

(vi) densely populated areas

The site is located in a built-up residential area of South Dublin. The Central Statistics Office (CSO) reports that the Dublin area has a population density of 1,458 persons/km² which is the highest density within the State. The proposed development will not result in a loss of land for residential purposes or otherwise and will not materially alter the existing population density within the area.

(vii) landscapes and sites of historical, cultural or archaeological significance.

An Archaeological Impact Assessment has been completed for the scheme which considered the river channel and riverbank area as it flows north from Taylor's Lane, through St Enda's Park and along Whitechurch Road until it merges onto Willbrook Road where the Glynn River empties into the Owendoher River. The assessment concluded that there are no recorded archaeological monuments within the study area which is today a residential suburban area with St Enda's Park to the south. There are two features recorded in the National Inventory of Architectural Heritage within the river area and both are part of the same folly feature (NIAH 11216066) in St Enda's Park.

4.4 Type and Characteristics of the Potential Impacts

The proposed development is considered in the context of potential impacts. The topic areas which may potentially be impacted upon are outlined below with reference to Section 171A of the Act (as amended by the EIA Regulations).

4.4.1 Population and Human Health

There will be limited employment opportunities as a result of the construction of the proposed development which will result in some slight beneficial impact in relation to population through the enhanced protection of property and amenity offered by the flood alleviation scheme.

Impacts associated with the construction of the proposed flood relief structures will require intermittent traffic management measures as outlined in **Section 4.2.6** in order to facilitate the construction related traffic on the public roadway which may result in temporary impacts on local residents. Construction works may result in nuisance impacts relating to the generation of noise, vibration and dust.

A preliminary CEMP has been prepared by the OPW as part of the Preliminary Design Report. A detailed CEMP which will be developed in Stage IIb (Detailed Design) of the project by the appointer contractor following agreement on suitable construction methodologies and sequencing of works for the project. The preliminary CEMP outlines the requirement for a Health and Safety Plan. Implementation of a Health and Safety Plan will ensure no risks to human beings working on the site or living/working adjacent to the site during construction. As noted in **Section 4.2.6**, a traffic management plan will be produced by the appointed contractor, this will mitigate risk associated with construction traffic. These measures will avoid and minimise impacts of noise and dust on human health and the local population during the construction stage.

4.4.2 Biodiversity

The proposed development will involve the construction of water service-related infrastructure along a section of the Whitechurch Stream. Overall, the proposed development is relatively discrete in terms of area of land required for development (some additional temporary work areas during construction in the corner of the existing car park at the front of St. Enda's Park, off Sarah Curran Road).

An Ecological Impact Assessment Report (EclA) of the proposed development has been prepared by RPS. The EclA report states that *'There will be changes in vegetation composition, notable through loss of, and or*

pruning of tree and scrub vegetation but no appreciable loss of other habitat as the bulk of the works are linear in nature. Works will occur in close proximity to, and at times within sections of the watercourse, but there should be no long-term alteration of instream habitat. Most of the habitats, by virtue of their location, are considered of local (Lower) importance'.

'There will be a requirement to remove trees and bankside screening vegetation and sections of hedgerow and scrub to facilitate access and permit installation of the proposed flood measures. In the absence of mitigation, the alteration of the riparian zone and the loss of trees could result in a permanent, irreversible, negative impact significant at the local level. Furthermore, the loss of hedgerow and mature trees could result in a permanent, irreversible, negative impact significant at the local level'.

The EclA has described a number of mitigation measures which have been developed to minimise negative impacts where they are likely to arise on the identified ecology of the Whitechurch Stream as a result of the proposed development. The intent of the measures has been reproduced in the preliminary Construction Environmental Management Plan. The appointed contractor will be obliged to include all measures included in the outline document into a final CEMP, for the approval of the Local Authority and IFI (where required).

It is not considered likely that during operation of the proposed development that there would be any significant adverse impact on habitats, particularly aquatic habitats within the footprint of the development or downstream habitats.

Over time the loss of wooded vegetation alongside the Whitechurch Stream will be balanced a) for as new planting becomes established, and b) other vegetation, particularly in privately-owned gardens matures and overhangs the watercourse.

A separate Natura Impact Statement (NIS) in support of Appropriate Assessment has been carried out to determine the potential for likely significant effects as a result of the proposed development. It has been concluded in the NIS, *'the proposed development, either individually or in combination with other plans or projects, will not have an adverse effect on the integrity of any European site(s), given the implementation of mitigation measures outlined'.*

Regarding invasive alien plant species (IAPS) and as previously mentioned, they have been found at a number of locations within the area of the proposed development as documented in the EclA. Although the appointed contractor is obliged to address measures regarding IAPS into a final CEMP, it should be highlighted that this CEMP be cognisant of development at Capri, whereby IAPS are also present and that at present no final detail of the final management regime for such species are yet made definitive.

Best practice construction methodology for the proposed development will be employed for the proposed development (including CTMP and CEMP), therefore it is considered unlikely that there will be any residual impacts on Biodiversity as a result of the proposed development.

4.4.3 Land, Soil, Water, Air and Climate

Land – The proposed site is located along Whitechurch Road in a predominantly residential area, in South Dublin between Willbrook and St Enda's Park. The lands are zoned *'To protect and/or improve residential amenity.'* The zoning Objective OS – *'To preserve and provide for open space'* applies to open space areas adjacent to the site including St Enda's Park. Land use zoning in the area would remain unchanged during construction and operation and would not be impacted by the proposed development.

The proposed development has been designed to avoid impacting services (and no disruption to services is envisaged during the construction of the proposed development. From a 'land' perspective there is not considered to be a significant impact on land.

Soil - The proposed development will include an excavation programme during construction works, which will be designed to take cognisance of the ground conditions existing within parts of the site. Construction of the proposed scheme will also require engineering fill for concrete for retaining walls. Exact quantities of material required have not been determined at this point, however, it is considered that there will be no significant effects on the environment given the scale and nature of the work proposed.

Material will be reused as far as possible. Excavated material is to be incorporated into the embankments and final landscaping of the works area or spread locally. This will depend however on the suitability of the excavated material, and unsuitable material will be removed off site for disposal in permitted facilities. If low levels of contamination are encountered during the construction works, soil testing and a risk assessment of material shall be undertaken to assess its potential for use.

Any material requiring disposal offsite will be disposed of at an appropriate permitted or licensed facility based on Waste Management Acts 1996 as amended. In the event that disposal offsite is required, the material shall be tested for disposal at an appropriate waste management facility in accordance with the Waste management Act 1996 as amended. Therefore, it is considered that there will be no significant impact on soils.

Water and Groundwater - There are no European sites within or adjacent to the proposed development. The closest European site is Wicklow Mountains SAC c.4.7 km to the south (and upstream of) of the proposed development. The nearest downstream European sites are those in Dublin Bay including South Dublin Bay SAC and South Dublin Bay and River Tolka Estuary SPA and North Bull Island SAC.

An aquatic survey was completed as part of the EclA. Water quality results (Q-values) at the sampled locations indicate Moderate ecological quality within the Owendoher River and Good (Q4) to High (Q4-5) ecological quality in parts of the Whitechurch Stream. The Q-value score improved as one travelled upstream from the Owendoher and up the Whitechurch Stream. Owing to the identified sensitivity of the Whitechurch Stream and its connection to the Owendoher and ultimately Dodder River, the design and operation for instream (or proximal works) shall be seasonally dependant as per IFI consultative discussions. In-stream works will be limited to the period July to September this will include for the installation/removal of all temporary crossings, watercourse re-alignments, etc.

Best practice construction methodology has been prepared for the proposed development that includes the necessary measures to ensure protection of water quality and pollution control for sensitive habitats, including measures to control the release of silt laden run-off, and which must be adhered to. It also requires development of a detailed construction methodology for bankside or in-stream works required for construction of flood relief measures or temporary crossing structures that may be required in consultation with IFI, to input into the development of the methodology and highlight any requirements, which may include specific designs, surveys in advance of works or requirement for licences.

Air Quality - During construction there may be adverse effects on air quality, including generation of dust, as a result of construction activity. Effects are anticipated to be localised, slight and temporary in nature. If appropriate, dust monitoring will be carried out if it is found to exceed thresholds in the vicinity of the site. There will be no resultant emissions to air from the operation of the proposed development. A CEMP will be put in place for the control of emissions from construction activities.

Climate – In relation to climate adaption the proposed development is devised to specifically address the climate adaption requirements of the flood impacts in the area. As such, the proposed development is positive in relation to climate adaption. With respect to climate mitigation the materials required for construction, the transport of same and the use of mobile plant will all act as sources of greenhouse gas emissions for the proposed development. The employment of materials with low embodied carbon (such as recycled aggregates, low carbon cement, recycled steel, etc.) that are sourced locally can effectively reduce these emissions and these factors will be applied by the OPW in procurement for the project.

Noise & Vibration – In terms of noise, the construction phase may lead to a temporary increase in background noise levels through operation of plant machinery. A CEMP will be put in place for the control of noise from construction activities to ensure no significant adverse impact.

In terms of vibration, the construction phase may lead to temporary increase in vibration levels due to plant machinery, sheet piling under certain retaining walls and general construction works. Heightened vibration has the potential to cause human disturbance and cause disturbance to surrounding biodiversity, particularly birds. However, due to the temporary nature of the works and the requirement of piling to be carried out outside the bird nesting season (July- September), vibration issues associated with the development are minimal and therefore do not pose any significant impacts to local biodiversity, the local residents,

recreational visitors or road-users in the vicinity of the proposed development. Vibration will also be further monitored by using equipment (Vibrocock vibration monitor) capable of yielding a permanent visual record of vibrations.

4.4.4 Material Assets, Cultural Heritage

Material Assets (Traffic & Transportation): The main impact in respect of Material Assets is in relation to traffic generated during the construction phase. The construction phase will give rise to construction related traffic along the local roads, mainly along Whitechurch Road and along Sarah Curran Avenue where the temporary site compound will be accessed.

Temporary haul roads are unlikely to be needed due to the restricted nature of the works however some improvement works may be required within St. Enda's Park where existing walking tracks are required to accommodate construction traffic. In addition, access improvement works may be required in the Capri Site to enable access to the left bank of the river along the site. The Principal Contractor shall prepare a Traffic Management Plan for approval by the OPW and South Dublin County Council once detailed project designs are available and in advance of any construction works commencing.

Archaeology and Cultural Heritage: An Archaeological Impact Assessment has been completed for the scheme. The archaeological impact assessment report concludes that there is no archaeological reason why the proposed flood alleviation works should not proceed. A series of mitigation measures are recommended including:

- A pre-construction phase detailed archaeological survey to ensure a detailed record is made of the existing features before they are impacted upon; and
- Archaeological monitoring during the construction phase to ensure that ground disturbance works/activities associated with the scheme, with the proviso to resolve fully any material observed at that point.

4.4.5 Landscape and Visual

A Landscape and Visual Impact Assessment has been completed by RPS, which documents the landscape and visual effects of the proposed development.

The site for the proposed development is located within South Dublin. The South Dublin County Development Plan 2016-2022 is the statutory plan which documents the policies and objectives of relevance to landscape and visual amenity. In this regard, the site is located within an area zoned as Objective RES – *'To protect and/or improve residential amenity'*. Areas of public open space associated with St Enda's Park and smaller areas on Whitechurch Road adjacent to Willbrook Lawn are zoned as Objective OS – *'To preserve and provide for open space and recreational amenities'*.

The site is located within the Urban Landscape Character Area according to the county landscape character assessment. This is described as *'This urban landscape character area includes suburban south Dublin which is described as an area which 'extends east from Tallaght/Oldbawn to Rathfarnham, and north/ north-west along the county boundary to Clondalkin. The LCA retains little of historical significance and the setting of its primary settlements have been radically altered by built developments, notably through the 20th Century.'*

There are no designated landscapes or protected views within the immediate vicinity of the site. Views south to the Dublin Mountains are available from the southern end of the study area. Wider more open views of this mountain skyline are available from within St Enda's Park.

The immediate study area and subject of the assessment of effects of the proposed Whitechurch Stream FAS comprises two distinct areas which differ in terms of landscape character. These include the public open space associated with St Enda's Park and the built-up area of Whitechurch Road extending north from St Enda's Park to the junction of Ballyboden Road.

The proposed development will result in direct changes to the landscape of the north western corner of St Enda's Park including loss of wooded vegetation and the introduction of proposed structures (debris trap and slipway). The proposed development will also result in direct changes to the landscape of Whitechurch Road due to the loss of mature trees and the introduction of the proposed structures including flood defence walls.

Replacement planting is recommended for trees and vegetation lost as a result of the proposed scheme. Replacement soft landscaping, comprising small areas of shrub planting and trees, will be located within St Enda's Park and at locations along Whitechurch Road to mitigate landscape and visual effects. Planting is proposed in four locations as outlined in **Section 2.2.2.8**. Furthermore, the tree survey (Arborist Associates Ltd) identifies few trees that are characterised as high quality and those removed will be replaced for at a range of locations yet to be determined as directed by SDCC and having regard to the extent removed to facilitate the Flood Alleviation Scheme. Management measures to protect retained trees, their roots and their vegetation will also be put in place.

4.4.6 Vulnerability of the Proposed Development to the Risk of Major Accidents and Disasters

The proposed development is designed to reduce the risk of flooding. The proposed development site is not located near any upper or lower tier Seveso sites. Significant risk of major accidents are therefore not anticipated.

4.4.7 Cumulative Impacts

Refer to **Section 4.2.2** for details of cumulative impacts.

4.4.8 Transboundary Impacts

No transboundary impacts are likely as a result of the proposed development.

4.4.9 Available Results from other Environmental Assessments

This Environmental Impact Assessment Screening process has been carried out in conjunction with the Appropriate Assessment Screening, Ecological Impact Assessment, Archaeological Impact Assessment, Arboricultural Assessment of the Tree Vegetation and Landscape and Visual Impact Assessment. This allows for an early indication of the potential environmental effects likely to occur as a result of the implementation of the proposed development.

4.4.10 Mitigation Measures

In order to minimise excessive disturbance to the Whitechurch Stream and to reduce the potential for significant impacts on the environment, all works shall be in the first instance be cognisant of the mitigation measures listed in the Preliminary CEMP prepared for the project. The CEMP will be developed in Stage IIb (Detailed Design) of the project by the appointed contractor and will include a Construction Traffic Management Plan, Project Emergency Response Plan and all mitigation measures identified in both the EclA and NIS.

The intent of the measures has been reproduced in the Preliminary Construction Environmental Management Plan. The appointed contractor will be obliged to include all measures included in the preliminary document into a final CEMP, for the approval of the Local Authority and Inland Fisheries Ireland (where required).

Furthermore, the contractor will appoint a suitably qualified person, or persons, to the role of Environmental Clerk of Works (EnCoW) to monitor the construction works. The EnCoW will work closely with the contractor's site supervisors to monitor activities and ensure that all relevant environmental legislation is complied with and that the requirements of the finalised CEMP are implemented.

A list of potential trees has been developed, for which the landscape and visual impact assessment has taken cognisance in developing the replanting measures. Replacement soft landscaping, comprising small areas of shrub planting and trees, will be located in four locations. Specifying the nursery stock for the areas proposed for replanting is provided in the landscape and Visual Assessment report and the locations of the replanting shown on accompanying drawings appended to that report. As part of the finalised CEMP, a management specification for the proposed planting will be developed.

5 CONCLUSION

This EIA Screening Report has considered the proposed development in terms of (i) *Characteristics of Proposed Development*, (ii) *Location of Proposed Development* and (iii) *Characteristics of Potential Impacts*, in accordance with the DEHLG Guidance Document¹², Schedule 7 of the EIA Regulations in determining whether the development would or would not be likely to have significant effects on the environment.

The overall determination of this EIA Screening Report is that the proposed development individually and cumulatively with associated existing and approved development will not result in the potential for significant impacts to arise on the environmental receptors as a result of the proposed development. As such it is concluded that an EIAR is not required.

¹² Department of Environment, Heritage and Local Government (August 2003). 'Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-threshold Development'

Appendix A
Project Drawings



Comhairle Contae
Átha Cliath Theas
South Dublin County Council



OPW

Oifig na
nOibreacha Poiblí
Office of Public Works

(i) Hard copies, dwf and pdf will form a controlled issue of the drawing. All other formats (dwg etc.) are deemed to be an uncontrolled issue and any work carried out based on these files is at the recipients own risk. RPS will not accept any responsibility for any errors from the use of these files, either by human error by the recipient, listing of the un-dimensioned measurements, compatibility with the recipients software, and any errors arising when these files are used to aid the recipients drawing production, or setting out on site.

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(iv) Information including topographical survey, geotechnical investigation and utility detail used in the design have been provided by others.

(v) All Levels refer to Ordnance Survey Datum, Malin Head.

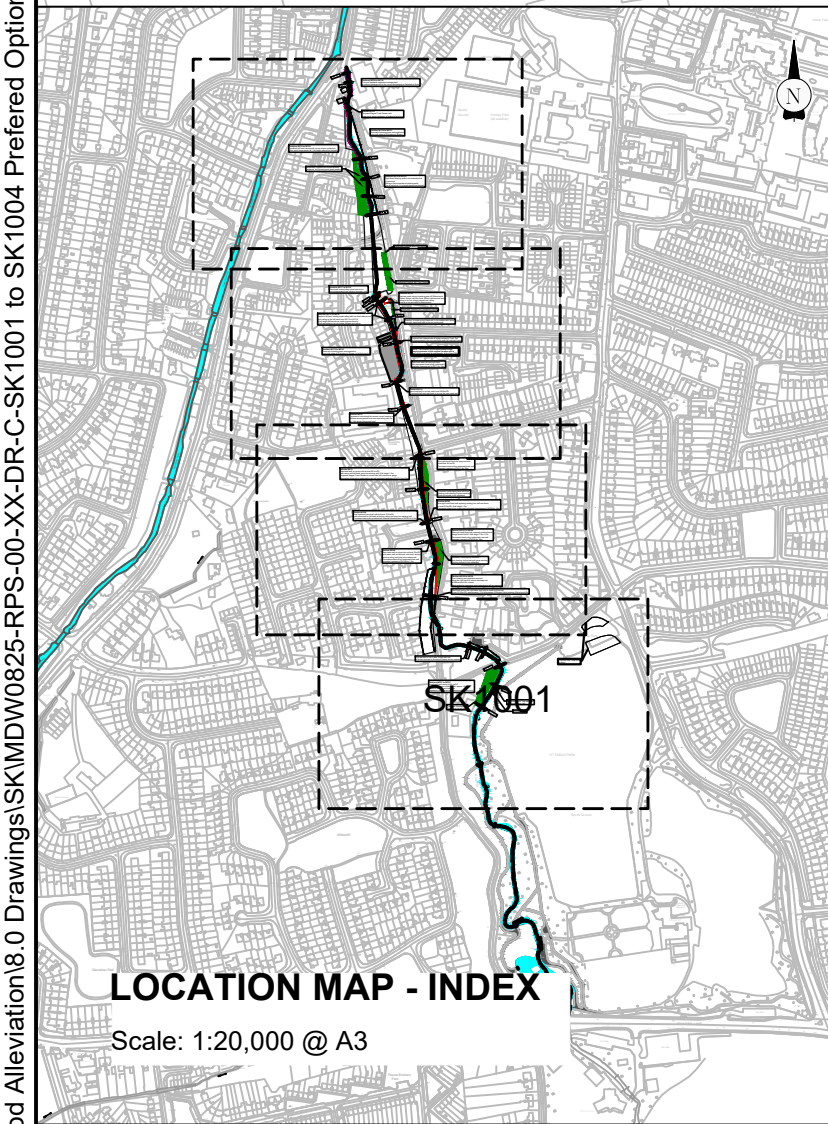
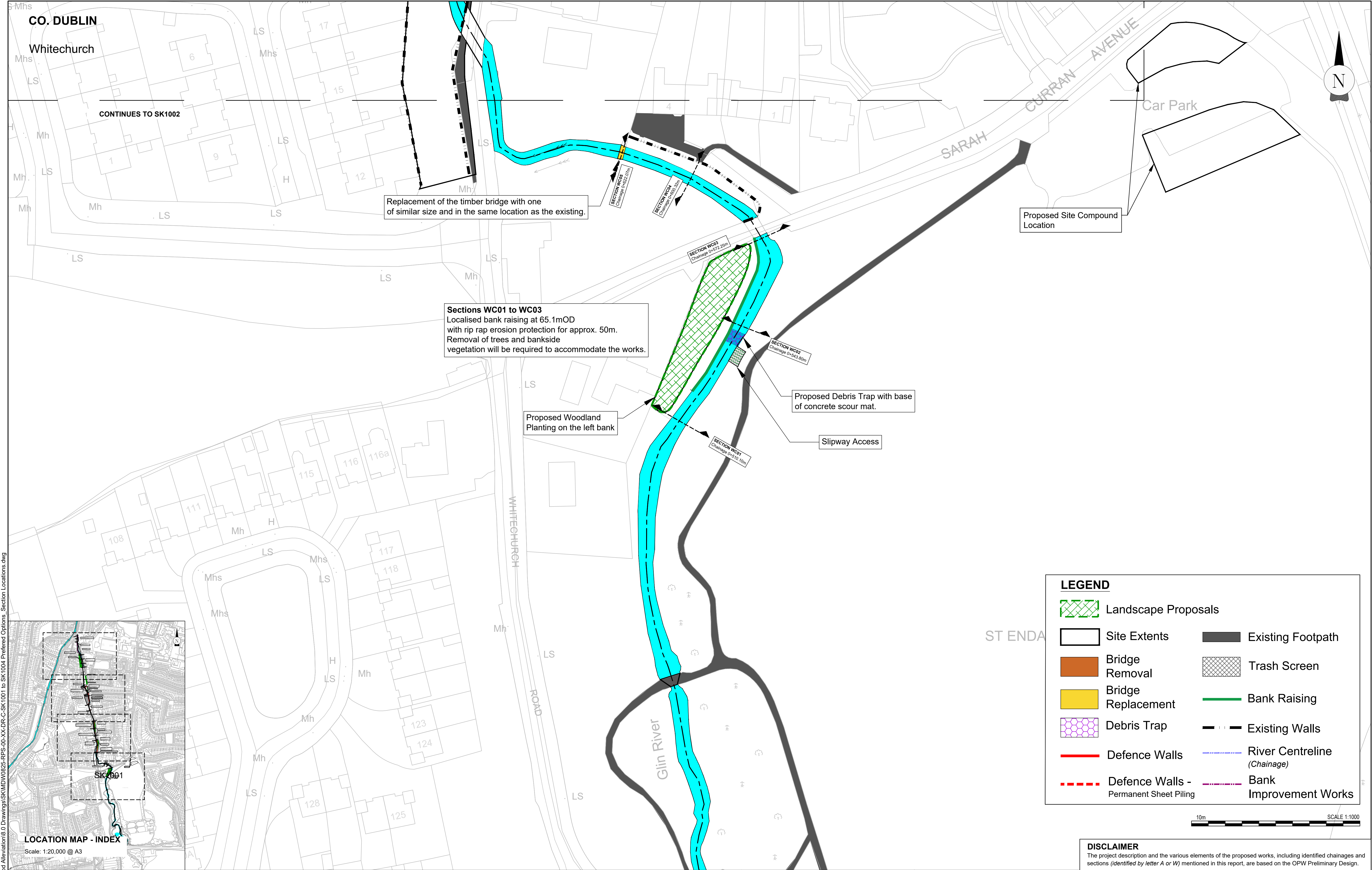
rps MAKING
COMPLEX
EASY

West Pier
Business Campus
Dun Laoghaire
Co. Dublin A96 N6T7

T +353 (0)1 4882900
W www.rpsgroup.com/ireland
E ireland@rpsgroup.com

Model File Identifier

Scale	1:500 @ A1 1:1,000 @ A3	Project WHITECHURCH STREAM FLOOD ALLEVIATION SCHEME			
Created on	11/10/19	Title Preferred Option - Full Location			
Sheets	01 of 01				
File Identifier	MDW0825-RPS-00-XX-DR-C-SK1000 Preferred Option Full Location		Drawing No.	Status	Rev
			SK1000	S2	P02



LEGEND

Landscape Proposals

Site Extents

Bridge Removal

Bridge Replacement

Debris Trap

Defence Walls

Defence Walls - Permanent Sheet Piling

Existing Footpath

Trash Screen

Bank Raising

Existing Walls

River Centreline (Chainage)

Bank Improvement Works

10m SCALE 1:1000

DISCLAIMER
The project description and the various elements of the proposed works, including identified chainages and sections (identified by letter A or W) mentioned in this report, are based on the OPW Preliminary Design.

Scale 1:500 @ A1 1:1,000 @ A3	Project WHITECHURCH STREAM FLOOD ALLEVIATION SCHEME		
Created on 04/09/19	Title PREFERRED OPTION - Measures: WC01 to WC05		
Sheets 01 of 04			
File Identifier MDW0825-RPS-00-XX-DR-C-SK1001 to SK1004	Drawing No. SK1001	Status S2	Rev P02

South Dublin County Council

OPW
Oifig na nOibreacha Poiblí
Office of Public Works

General Notes
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(iv) Information including topographical survey, geotechnical investigation and utility detail used in the design have been provided by others.
(v) All Levels refer to Ordnance Survey Datum, Malin Head.

P02	06/07/20	DB	PT	Issued for Information	MD
P01	26/06/20	DB	PT	Issued for Informaton	MD
Rev	Date	Dwg	Chk	Amendment / Issue	App

MAKING COMPLEX EASY
West Pier
Business Campus
Dun Laoghaire
Co. Dublin A96 N6T7
T +353 (0)1 4882900
W www.rpsgroup.com/ireland
E ireland@rpsgroup.com

Model File Identifier

CO. DUBLIN

Whitechurch

CONTINUES TO SK1003

Section WC11
New head wall at culvert inlet at level 60.4 mOD
with return wall left bank tying into existing wall; Wall height 1.9m.
Proposed Staged Trash Screen to culvert inlet with water level gauge.
Permanent sheet piling underneath new wall extended upstream of WC11 for 4.6m.

SECTION WC10
Chainage 0+872.57m

Sections WC10 to WC11
New right bank flood wall tying into new head level 60.4mOD.
Permanent sheet piling underneath new wall extended upstream of WC11 for 30m.

Proposed Landscaping Area with tree planting, bulb planting & grass seeding.
Existing footpath to be reinstated.

Section WC09
New right bank flood wall replacing existing low wall and fence.
at level 61.8mOD. Wall height 1.2m.
Permanent sheet piling underneath extended downstream of WC09 for 30m.

Section WC09
New head wall at culvert outlet at level 61.8mOD,
with return wall on left bank replacing railing and tying into existing wall.
Permanent sheet piling underneath extended downstream of WC09 for 5.5m.

SECTION WC09
Chainage 0+828.07m

Sections WC07 to WC08
New right bank flood wall replacing existing fence;
design level 62mOD. Wall height 1.2m-1.3m.
Permanent sheet piling underneath new wall extended upstream of WC08 for 30m.

Section WC08
New head wall at culvert inlet at level 62mOD,
with return wall on left bank, which will replace existing railing and tying into existing wall.
Permanent sheet piling underneath new wall extended upstream of WC08 for 7.5m.

SECTION WC08
Chainage 0+803.03m





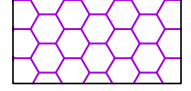



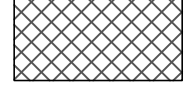


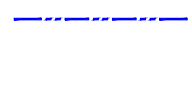

Proposed Landscaping Area with tree planting, bulb planting & grass seeding.
Existing footpath to be reinstated.

Sections WC03 to WC08
Tree clearing and vegetation removal along the right bank to reduce blockage risk at Whitechurch Rd. culvert.
Bank protection measures and underpinning will be required.

New flood wall on the right bank side tying to existing stone wall (Level 62.95mOD) approximately 27m downstream of Bridge Outlet crossing Whitechurch Rd.

SECTION WC08
Chainage 0+728.07m

LEGEND

-  Landscape Proposals
-  Site Extents
-  Bridge Removal
-  Bridge Replacement
-  Debris Trap
-  Defence Walls
-  Defence Walls - Permanent Sheet Piling
-  Existing Footpath
-  Trash Screen
-  Bank Raising
-  Existing Walls
-  River Centreline (Chainage)
-  Bank Improvement Works

LOCATION MAP - INDEX

Scale: 1:20,000 @ A3

CONTINUES TO SK1001

10m SCALE 1:1000

DISCLAIMER

The project description and the various elements of the proposed works, including identified chainages and sections (identified by letter A or W) mentioned in this report, are based on the OPW Preliminary Design.

Scale 1:500 @ A1 1:1,000 @ A3	Project WHITECHURCH STREAM FLOOD ALLEVIATION SCHEME
Created on 04/09/19	Title PREFERRED OPTION - Measures: WC06 to WC11
Sheets 02 of 04	
File Identifier MDW0825-RPS-00-XX-DR-C-SK1001 to SK1004	Drawing No. SK1002
Status S2	Rev P02

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P02	06/07/20	DB	PT	Issued for Information	MD
P01	26/06/20	DB	PT	Issued for Information	MD
Rev	Date	Dn	Cnk	Amendment / Issue	App



West Pier
Business Campus
Dun Laoghaire
Co. Dublin A96 N6T7

T +353 (0)1 4882900
W www.rpsgroup.com/ireland
E ireland@rpsgroup.com

Model File Identifier

Comhairle Contae
Átha Cliath Theas
South Dublin County Council

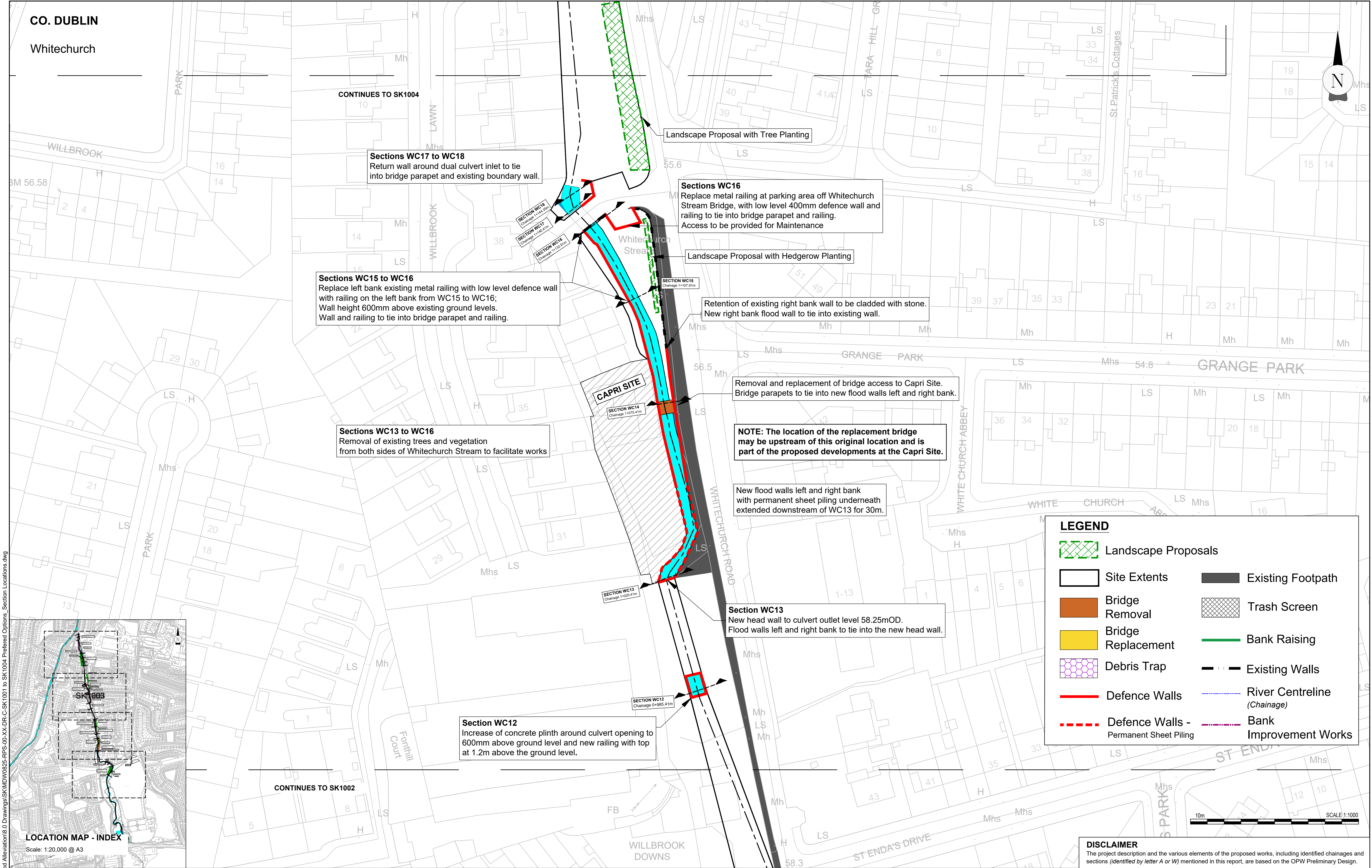


OPW

Oifig na
nOibreacha Poiblí
Office of Public Works

CO. DUBLIN

Whitechurch



LEGEND

- Landscape Proposals
- Site Extents
- Bridge Removal
- Bridge Replacement
- Debris Trap
- Defence Walls
- Defence Walls - Permanent Sheet Piling
- Existing Footpath
- Trash Screen
- Bank Raising
- Existing Walls
- River Centreline (Chainage)
- Bank Improvement Works

DISCLAIMER

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Client

Comhairle Contae Átha Cliath Theas
South Dublin County Council

OPW Oifig na nOibreacha Poiblí
Office of Public Works

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Rev	Date	Drawn By	Amendment / Issue	App
P02	06/07/20	DB	Issued for Information	MD
P01	26/06/20	DB	Issued for Information	MD

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West Pier
Business Campus
Dun Laoghaire
Co. Dublin A96 N6T7

T +353 (0)1 4882900
W www.rpsgroup.com/ireland
E ireland@rpsgroup.com

Model File Identifier

Scale	1:500 @ A1 1:1,000 @ A3	Project	WHITECHURCH STREAM FLOOD ALLEVIATION SCHEME			
Created on	04/09/19	Title	PREFERRED OPTION - Measures: WC12 to WC18			
Sheets	03 of 04					
File Identifier			Drawing No.	Status	Rev	

R:\MDW0825 - Whitechurch Flood Alleviation\B.0 Drawings\SK1004-DR-C-SK1001 to SK1004 Preferred Options_Section Locations.dwg

CO. DUBLIN

Whitechurch

LEGEND

- Landscape Proposals
- Site Extents
- Bridge Removal
- Bridge Replacement
- Debris Trap
- Defence Walls
- Defence Walls - Permanent Sheet Piling
- Existing Footpath
- Trash Screen
- Bank Raising
- Existing Walls
- River Centreline (Chainage)
- Bank Improvement Works

Sections WC19 to WC23
Localised left bank raising with rip rap erosion protection.
Wire mesh fence panels at 1.2m height above the footpath.

Landscape Proposal with mixed species
hedgerow, bulb planting and grass seeding

Sections WC24 to WC26
Tree and bankside vegetation management
to reduce blockage risk to the culvert discharging to Owendoher River.

Section WC23
Proposed Staged Trash Screen with
water level gauge upstream of bridge/culvert face.

Sections WC19 to WC23
Removal of existing trees and vegetation
from both sides of Whitechurch Stream.

Sections WC19 to WC23
Right Bank Existing walls to be maintained at
current level;
Railing to be placed above existing walls.
Top of railing at 1.2 m height above the footpath.

Landscape Proposal with Tree Planting

LOCATION MAP - INDEX

Scale: 1:20,000 @ A3

CONTINUES TO SK1003

General Notes

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P02	06/07/20	DB	PT	Issued for Information	MD
P01	26/06/20	DB	PT	Issued for Information	MD
Rev	Date	Dwg	Chk	Amendment / Issue	App



West Pier
Business Campus
Dun Laoghaire
Co. Dublin A96 N6T7

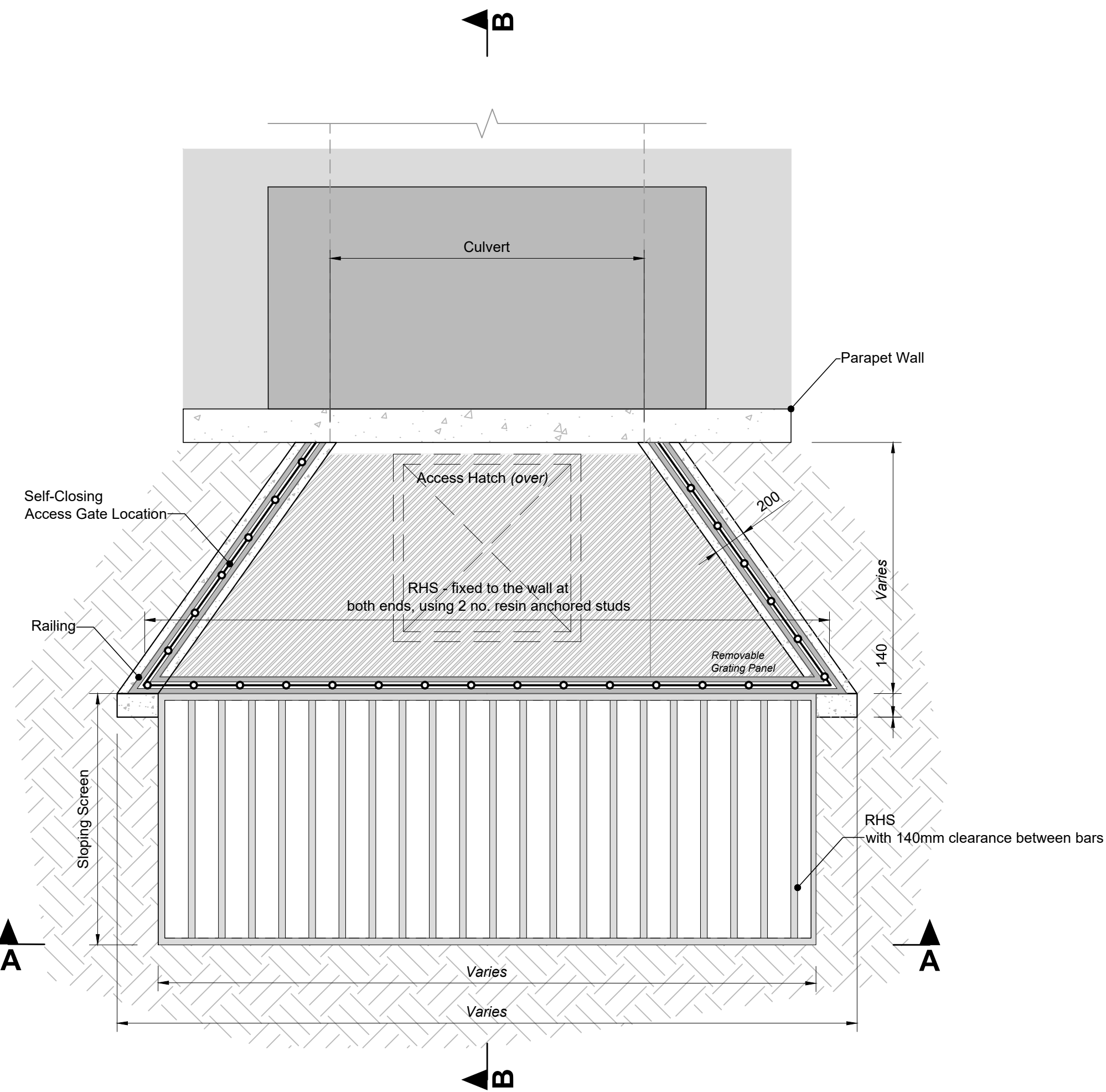
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Model File Identifier

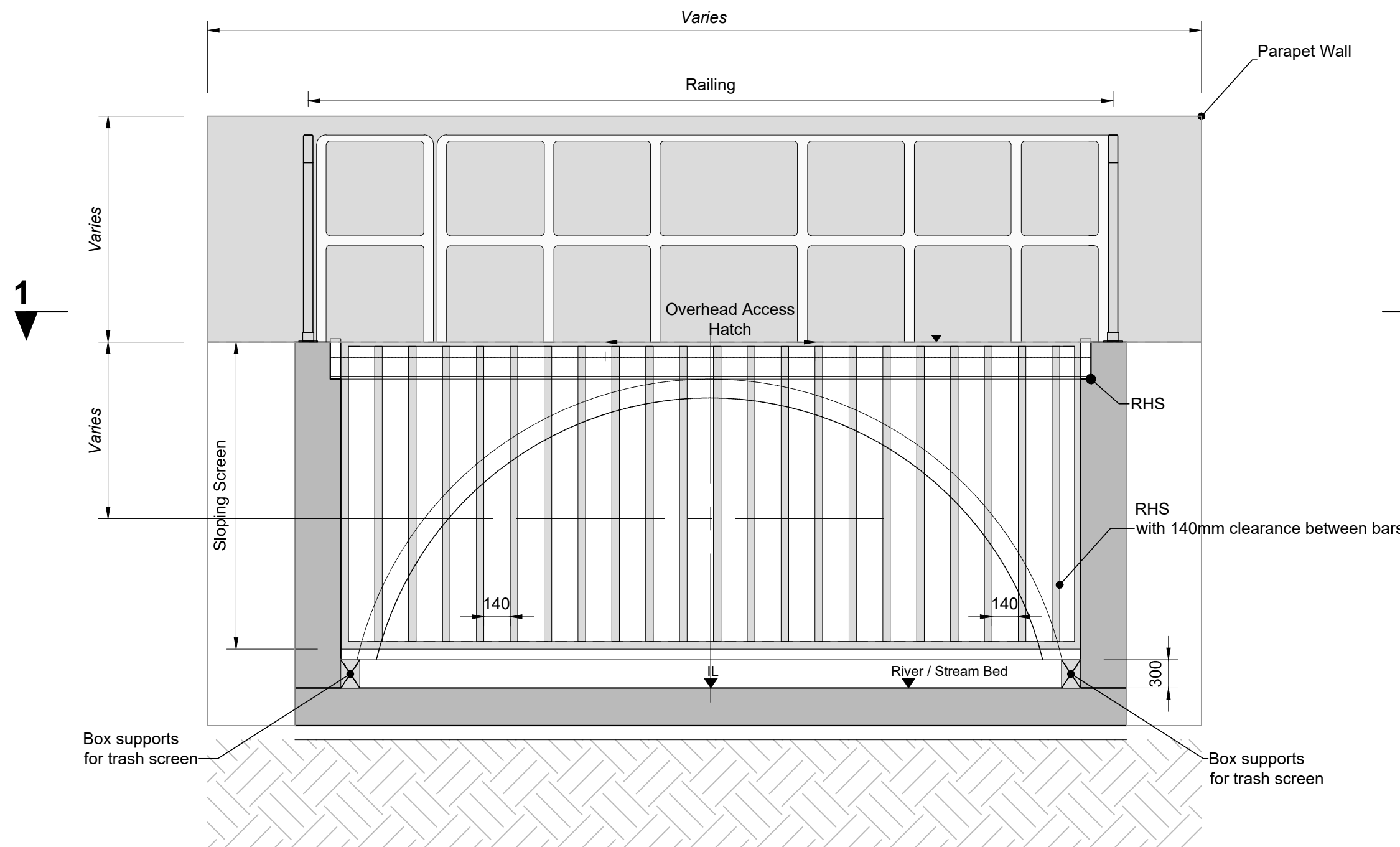
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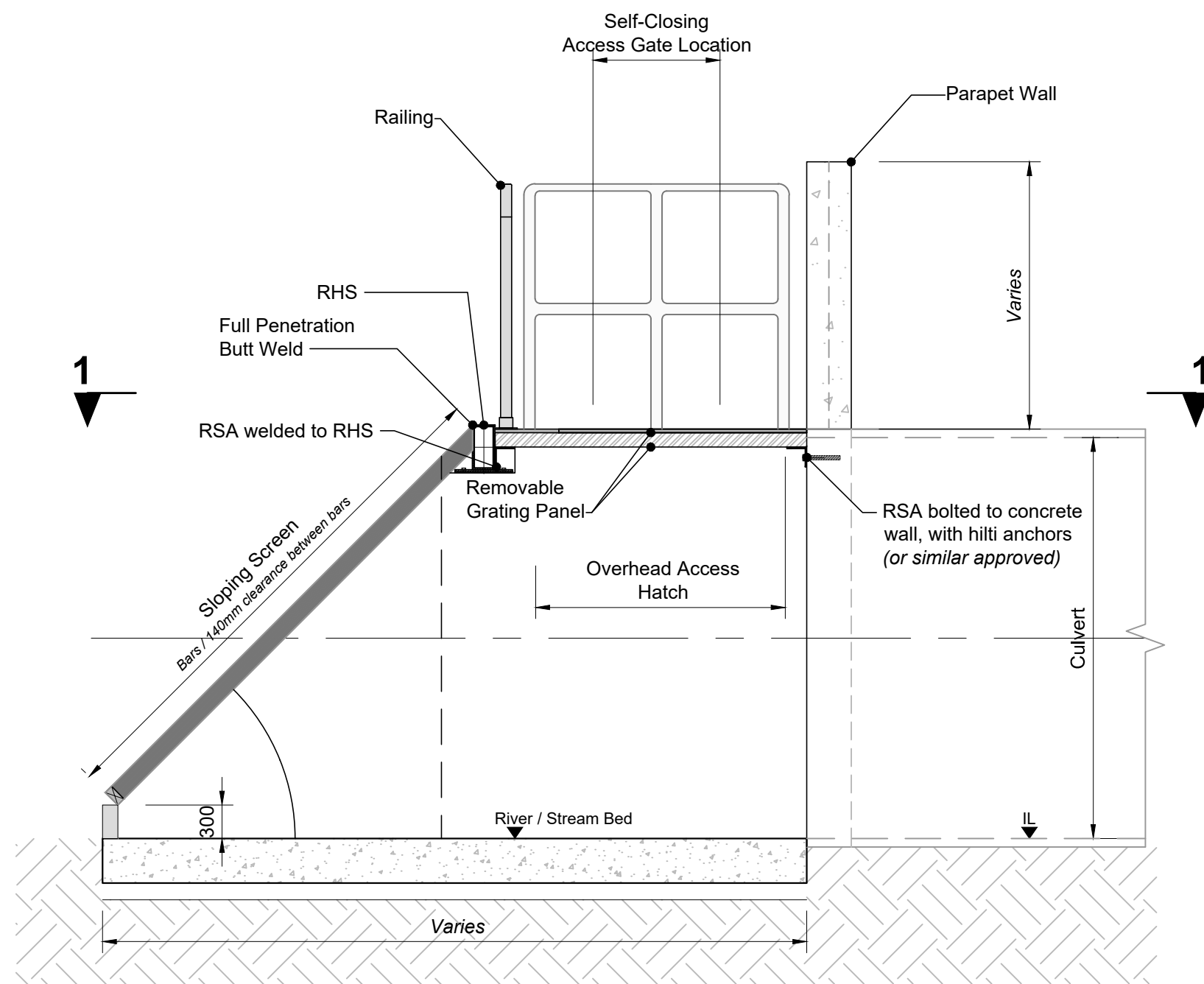
Scale 1:500 @ A1 1:1,000 @ A3	Project WHITECHURCH STREAM FLOOD ALLEVIATION SCHEME
Created on 04/09/19	Title PREFERRED OPTION - Measures: WC19 to WC26
Sheets 04 of 04	File Identifier MDW0825-RPS-00-XX-DR-C-SK1001 to SK1004
Drawing No. SK1004	Status S2
Rev P02	



PLAN 1-1



SECTION AT A-A



SECTIONAL DETAIL B-B

1m SCALE 1:50

Client



OPW Oifig na nOibreacha Poiblí
Office of Public Works

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Rev	Date	Dwg Cncl	Amendment / Issue	App
P01.02	21/04/20	DB PT	Issue for Stage Approval	MD
P01.01	09/04/20	DB PT	Issue for Stage Approval	MD



West Pier
Business Campus
Dun Laoghaire
Co. Dublin A96 N6T7

T +353 (0)1 4882900
W www.rpsgroup.com/ireland
E ireland@rpsgroup.com

Model File Identifier

Scale 1:25 @ A1
1:50 @ A3

Created on 04/09/19
Sheets 01 of 01

Project WHITECHURCH FLOOD ALLEVIATION SCHEME
Section 177AE of the Planning & Development Act 2000 (as amended)

Title PLANNING APPLICATION DRAWINGS

Trash Screen Detail

File Identifier MDW0825-RPS-00-XX-DR-C-DR4002

Drawing No. DR4002

Status S4

Rev P01.02