Habitats Directive Project Screening Assessment

Table 1: Project Details

Development Consent Type	Planning and Development Regulations 2001 (As Amended) Part 8 Local Authority Development
Development Location	Mount Congreve, Co. Waterford
File Ref	
Description of the project	Alteration and refurbishment of part of the ground floor of Mount Congreve House, ground floor of the east wing and roofing of the east courtyard to provide visitor reception, cafe and associated facilities and services including car parking and integrated constructed wetland effluent treatment system.

Table 2: Identification of Natura 2000 Sites (SACs and SPAs) which may be Impacted by the proposed development

Please answer the following five questions in order to determine whether there are any Natura 2000 sites which could potentially be impacted by the proposed development.

Impacts on SACs		
1	**Impacts On Freshwater Habitats** *Is the development within a Special Area of Conservation whose qualifying interests include freshwater habitats, or in the catchment of same?* **Sites to consider: Blackwater River, Lower River Suir** **Habitats to consider:** Rivers, Lakes and Lagoons	Yes within the catchment of the River Suir SAC.
2	**Impacts On Wetland Habitats** *Is the development within a Special Area of Conservation whose qualifying interests include wetland habitats, or within 1 km of same?* **Sites to consider: Comeragh Mountains** **Habitats to consider:** Bogs, Fens, Marshes and Wet Heaths.	N
3	**Impacts on Intertidal and Marine Habitats** *Is the development located within a Special Area of Conservation whose qualifying interests include intertidal and/or marine habitats and species, or within the catchment of same.* **Sites to consider: Tramore Dunes and Backstrand, River Suir (Tidal Section), River Blackwater (Tidal Section), Waterford Estuary** **Habitats to consider:** Mudflats, Sandflats, Saltmarsh, Estuary; Shingle, Reefs, Sea Cliffs.	Yes within the catchment of the River Suir SAC.
4	**Impacts On Woodlands , Grasslands and Dry Heaths** *Is the development within a Special Area of Conservation whose qualifying habitats include woodlands or grasslands habitats, or within 200m of same.* **Sites to consider: Glendine Wood Nire Valley Woods, Ardmore Head, Helvick Head** **Habitats to consider:** Woodlands, Grasslands or Dunes.	N
5	**Impacts On Birds** *Is the development within a Special Protection Area, or within 1 km of same.* **Sites to consider: Tramore Backstrand, Dungarvan Bay, Blackwater Callows, Blackwater Estuary, Helvick Head –Ballyquin Coast, Mid Waterford Coast**	N

Conclusion Table 2:

If the answer to all of these questions is **No**, significant impacts can be ruled out for Natura 2000 sites. No further assessment is required, proceed to the Habitats Directive Conclusion Statement.

If the answer to any of these questions is **Yes** lease refer to tables 3 and 4 below.

Table 3: Determination of Possible Impacts On Natura 2000 Sites.
Where it has been identified that there is a Natura 2000 site within the potential impact zone of the proposed development, it is necessary to try to determine the nature of the possible impacts. Please answer the following questions as appropriate.

1	**Impacts on designated freshwater habitats (rivers, lakes streams and lagoons).** **Sites to consider: Blackwater River, Lower River Suir** *Please answer the following if the answer to question 1 in table 2 was yes.* *Does the development involve any of the following:*	
	Works inside the boundary of designated site	
1.1	All works within the boundary of any SAC whose qualifying features include freshwater habitats/species, excluding small extensions/alterations to existing buildings.	N
	Works outside the boundary of designated site	
1.2	Discharge to surfacewater or groundwater within the boundary of an SAC whose qualifying features include freshwater habitats/species.	The Canal and Ballymoat Stream hydrologically connect lands at Mount Congreve with the River Suir. However the ICW proposal is for zero discharge treatment.
1.3	Abstraction from surfacewater or groundwater within 1km of the boundary of an SAC whose qualifying features include freshwater habitats or species.	N
1.4	Removal of topsoil within 100m of the boundary of an SAC, whose qualifying features include freshwater habitats/species.	N
1.5	Infilling or raising of ground levels within 100m the boundary of any SAC whose qualifying features include freshwater habitats/species.	N
1.6	Construction of drainage ditches within 1km of the boundary of an SAC whose qualifying features include freshwater habitats/species.	Construction of wetland cells.
1.7	Installation of waste water treatment systems; percolation areas; septic tanks within 100 m of the boundary of an SAC site whose qualifying features include freshwater habitats/species.	N wetland cells will be located over

		100m from the boundary of River Suir SAC.
1.8	Construction within a floodplain of EU designated watercourse whose qualifying features include freshwater habitats/species.	N works are proposed outside of flood zone.
1.9	Crossing or culverting of rivers or streams within 1km of the boundary of any SAC whose qualifying features include freshwater habitats.	N
1.10	Storage of chemicals hydrocarbons or organic wastes within 100 m of the boundary of an SAC whose qualifying features include freshwater habitats/species.	N
1.11	Development of a large scale, within catchment of an EU designated watercourse or waterbody, which involves the production of an EIS.	N
1.12	Development or expansion of quarries within catchment of an EU designated watercourse or waterbody.	N
1.13	Development or expansion of windfarms within catchment of an EU designated watercourse or waterbody.	N
1.14	Development of pumped hydro electric stations within catchment of an EU designated watercourse or waterbody.	N
2	**Impacts On Wetland Habitats** *Is the development within a Special Area of Conservation whose qualifying interests include wetland habitats, or within 1 km of same?* **Sites to consider: Comeragh Mountains** **Habitats to consider:** Bogs, Fens, Marshes and Wet Heaths. *Please answer the following if the answer to question 2 in table 2 was yes.*	
	Works inside the boundary of designated site	
2.1	All works within the boundary of an SAC whose qualifying features include heath, marsh, fen or bog, excluding small extensions/alterations to existing buildings.	
	Works outside the boundary of designated site	
2.2	Construction of roads or other infrastructure on peat habitats within 1km of any SAC whose qualifying features include heath, marsh, fen or bog.	
2.3	Development of a large scale within 1km of any SAC, whose qualifying features include heath, marsh, fen or bog, which involves the production of an EIS.	
3	**Impacts on Intertidal and Marine Habitats** *Is the development located within a Special Area of Conservation whose qualifying interests include intertidal and/or marine habitats and species, or within the catchment of same.* **Sites to consider: Tramore Dunes and Backstrand, River Suir (Tidal Section), River Blackwater (Tidal Section), Waterford Estuary** *Please answer the following if the answer to question 1 in table 3 was yes.*	
	Works inside the boundary of designated site	
3.1	All works within the boundary of any SAC whose qualifying features include intertidal or marine habitats, excluding small extensions/alterations to existing buildings.	N
	Works outside the boundary of designated site	
3.2	Coastal protection works within 5km of any SAC whose qualifying features include intertidal or marine habitats.	N
3.3	Development of piers, slipways, marinas, pontoons or any other infrastructure within 5km of any SAC whose qualifying features include	Construction of ICW.

	intertidal or marine habitats.	
3.4	Dredging within 5km of any SAC whose qualifying features include intertidal or marine habitats.	N
3.5	Works within 1km of any SAC whose qualifying features include intertidal or marine habitats, which will result in discharges to rivers or streams directly connected to the designated site.	N The Canal and Ballymoat Stream hydrologically connect lands at Mount Congreve with the River Suir. However the ICW proposal is for zero discharge treatment.
3.6	Infilling of coastal habitats within 500m of any SAC whose qualifying features include intertidal or marine habitats.	N
3.7	Removal of topsoil or infilling of terrestrial habitats within 100m of any SAC whose qualifying features include intertidal or marine habitats.	N
3.8	Development of a large scale within 1km of any SAC whose qualifying features include intertidal or marine habitats, which involves the production of an EIS.	N
4	**Impacts on other designated woodlands and grasslands** (woodland, upland grassland, lowland grassland, coastal grassland including dunes). **Sites to consider:** Glendine Wood Nire Valley Woods, Ardmore Head, Helvick Head *Please answer the following if the answer to question 4 in table 2 was yes.* *Does the development involve any of the following:*	
	Works inside the boundary of designated site	
4.1	All works within the boundary of any SAC whose qualifying interests include woodland or grassland habitat types excluding small extensions/alterations to existing buildings.	
	Works outside the boundary of designated site	
4.2	Development within 200m of any SAC whose qualifying interests include woodland or grassland habitat types.	
4.3	Development of a large scale within 1km of any SAC, whose qualifying interests include woodland or grassland habitat types, which involves the production of an EIS.	
5	**Impacts on birds in SPAs** **Sites to consider: Tramore Backstrand, Dungarvan Bay, Blackwater Callows, Blackwater Estuary, Helvick Head –Ballyquin Coast, Mid Waterford Coast** *Please answer the following if the answer to question 5 in table 2 was yes.* *Does the development involve any of the following:*	
	Works inside the boundary of designated site	

5.1	All works within the boundary of any SPA excluding small extensions/alterations to existing buildings.	
	Works outside the boundary of designated site	
5.2	Erection of wind turbines within 1km of any SPA.	
5.3	All construction works within 100m of any SPA.	
5.4	Infilling of coastal habitats within 500m of intertidal SPA.	
5.5	Works within 1km of coastal/wetland SPAs which will result in discharges to rivers or streams that are directly connected to designated sites.	
5.6	Development of cycleways or walking routes within 100m of SPAs.	
5.7	Construction works on feeding areas adjacent to SPAs	

Conclusion Table 3: If the answer to all of the above is no or n/a, significant impacts on Natura 2000 sites can be ruled out. No further assessment is required, proceed to the Screening Conclusion Statement. If the answer to any question in table 3 is yes, you may require further information, unless you are satisfied that the project proponents have incorporated adequate mitigation into their design to avoid impacts on the Natura 2000 site (e.g. water pollution protection measures). Such information should be provided in the form of a Natura Impact Statement which should address the particular issues of concern as identified through the above.

Table 4:Consideration of Potential Impacts on Protected Species

Many of our Special Areas of Conservation are designated for species as well as for habitats. These are listed below, alongside the sites for which they are designated. Included is a short list of the types of activities which could have an impact on these species. Please tick if you are concerned that the proposed development could have an impact on these species.

Species	**Relevant Sites**	**Activites which could have impacts on species**	**Possible Impacts Identified? Y/N**
Otter	Lower River Suir River Blackwater Waterford Estuary	Activities that interfere with river banks.	No works will not affect banks of the River Suir
Bats (all species outside designated sites)	Blackwater River, Lower River Suir, Waterford Estuary Glendine Wood, Lismore Woods Nire Valley Woods Along with above, in general **all sites** with any of the following; woods, mature treelines and hedgerows, old buildings and bridges	Activities that result in loss of woodland or hedgerow habitat or causes disturbance to roost sites. Renovations of old buildings; Repointing of old bridges.	N Bat Survey will be carried out prior to proposed removal of ,mature trees or building structures.
Salmon	Lower River Suir River Blackwater Waterford Estuary	Activities that interfere with water quality, levels or the river bed;	N
River Lamprey	Lower River Suir River Blackwater Waterford Estuary	Activities that interfere with water quality, levels or the river bed;	N
Brook Lamprey	Lower River Suir River Blackwater Waterford Estuary	Activities that interfere with water quality, levels or the river bed;	N
Sea Lamprey	Lower River Suir River Blackwater Waterford Estuary	Activities that interfere with water quality or the river bed – estuarine areas;	N
Twaite Shad Allis Shad	Lower River Suir River Blackwater Waterford Estuary	Activities that interfere with water quality or the river bed – estuarine areas;	N
White-clawed	Lower River Suir	Activities that interfere with water	N

Species	Relevant Sites	Activites which could have impacts on species	Possible Impacts Identified? Y/N
Crayfish	River Blackwater Waterford Estuary	quality or the river bed;	
Freshwater Pearl Mussel	Lower River Suir River Clodiagh River Lickey River Blackwater	Activities that interfere with water quality, levels or the river bed ;	N
Whorled Snail *Vertigo moulinsiana*	River Blackwater	Activities that result in loss of fen, marsh or wet grassland habitat within or close to the SAC.	N
Killarney Fern	Glendine Wood Lismore Woods (River Blackwater)	Woodland clearance or other activities resulting in loss or disturbance to woodland habitat within the relevant SACs.	N

Species	Relevant Sites	Activites which could have impacts on species	Possible Impacts Identified? Y/N
Chough	Mid-Waterford Coast(Fenr-Ballyvoyle) Ballyquin- Helvick Head Coast	Activities that result in loss of grassland habitat within or close to the SPA. Activities that have potential to cause disturbance to nesting areas.	
Peregrine Falcon	Mid-Waterford Coast(Fenor-Ballyvoyle) Ballyquin- Helvick Head Coast	Activities that have potential to cause disturbance to nesting areas.	
Herring Gull	Mid-Waterford Coast(Fenor-Ballyvoyle) Ballyquin- Helvick Head Coast	Activities that interfere with water quality. Activities that have potential to cause disturbance to nesting areas.	
Cormorant	Mid-Waterford Coast(Fenr-Ballyvoyle) Ballyquin- Helvick Head Coast	Activities that cause reduction in water quality. Activities that have potential to cause disturbance to nesting areas.	
Kittiwake	Ballyquin- Helvick Head Coast	Activities that have potential to cause disturbance to nesting areas .	
Whooper Swan	Blackwater Callows	Activities that result in loss of grassland habitat within or close to the SPA. Activities that cause disturbance to roosting or foraging areas. Activities that increase collision risk.	
Light-bellied Brent Goose	Dungarvan Harbour Tramore Back Strand	Activities that cause reduction in water quality. Activities that cause disturbance to roosting or foraging areas. Activities that result in loss of grassland habitat within or close to the SPA. Activities that increase collision risk.	
Wigeon	Blackwater Callows Blackwater Estuary	Activities that cause reduction in water quality. Activities that cause disturbance to roosting or foraging areas.	
Teal	Blackwater Callows	Activities that cause reduction in water quality. Activities that cause disturbance to roosting or foraging areas.	
Black-tailed Godwit	Blackwater Callows Blackwater Estuary Dungarvan Harbour Tramore Back Strand	Activities that cause reduction in water quality. Activities that cause disturbance to roosting or foraging areas.	
Bar-tailed Godwit	Blackwater Estuary Dungarvan Harbour Tramore Back Strand	Activities that cause reduction in water quality. Activities that cause disturbance to roosting or foraging areas.	
Golden Plover	Blackwater Estuary Dungarvan	Activities that cause reduction in water quality. Activities that cause disturbance to roosting or foraging areas.	

Species	Relevant Sites	Activites which could have impacts on species	Possible Impacts Identified? Y/N
	Harbour Tramore Back Strand		
Grey Plover	Dungarvan Harbour Tramore Back Strand	Activities that cause reduction in water quality. Activities that cause disturbance to roosting or foraging areas.	
Oystercatcher	Dungarvan Harbour	Activities that cause reduction in water quality. Activities that cause disturbance to roosting or foraging areas.	
Lapwing	Blackwater Estuary Dungarvan Harbour Tramore Back Strand	Activities that cause reduction in water quality. Activities that cause disturbance to roosting or foraging areas.	
Dunlin	Blackwater Estuary Dungarvan Harbour Tramore Back Strand	Activities that cause reduction in water quality. Activities that cause disturbance to roosting or foraging areas.	
Knot	Dungarvan Harbour	Activities that cause reduction in water quality. Activities that cause disturbance to roosting or foraging areas.	
Turnstone	Dungarvan Harbour	Activities that cause reduction in water quality. Activities that cause disturbance to roosting or foraging areas.	
Curlew	Blackwater Estuary Dungarvan Harbour Tramore Back Strand	Activities that cause reduction in water quality. Activities that cause disturbance to roosting or foraging areas.	
Redshank	Blackwater Estuary Dungarvan Harbour	Activities that cause reduction in water quality. Activities that cause disturbance to roosting or foraging areas.	
Great Crested Grebe	Dungarvan Harbour	Activities that cause reduction in water quality. Activities that cause disturbance to roosting or foraging areas.	
Shelduck	Dungarvan Harbour	Activities that cause reduction in water quality. Activities that cause disturbance to roosting or foraging areas.	
Red-breasted Merganser	Dungarvan Harbour	Activities that cause reduction in water quality. Activities that cause disturbance to roosting or foraging areas.	

Conclusion Table 4: If the answer to all of the above is no, significant impacts on species can be ruled out. If the answer to any of the above is yes, then further information is likely to be required in relation to potential for impact on that particular species. Where potential impacts on the above listed species are within designated sites, then further information should be sought in the form of a Natura Impact Statement. Where impacts are outside designated sites, then a species specific survey should be requested.

Habitats Directive Screening Conclusion Statement

Development Type	Part 8 Local Authority Development
Development Location	Mount Congreve, Co. Waterford
Natura 2000 sites within impact zone	River Suir SAC 002137
Planning File Ref	

Description of the project

Alteration and refurbishment of part of the ground floor of Mount Congreve House, ground floor of the east wing and roofing of the east courtyard to provide visitor reception, cafe and associated facilities and services including car parking and integrated constructed wetland effluent treatment system.

Establishment of an Integrated Constructed Wetland shall comprise 3 wetland treatment cells connected sequentially by interconnecting pipes to serve the Mount Congreve visitor attraction based on 150,000 visitors per year and catering for potential future development of the visitor attraction. The treatment area will involve an area of 8,570m^2 providing capacity for up to 214 P.E The ICW will operate with zero discharge facilitating 100% treatment of wastewaters. The ICW design includes for wastewater and stormwater management that is designed to ensure effective treatment of all wastewaters whilst also catering for seasonal weather and visitor fluctuations. The ICW will receive overflows from the new and existing courtyard septic tanks via a distribution chamber to provide treatment prior to discharge to the Monveen Stream. Wetland cells will be planted with appropriate emergent wetland species found in areas within the estate e.g. *Carex riparia, Glyceria maxima, Typha latifolia, Scirpus lacustris* and *Iris pseudacorus*.

The wastewater will enter Cell 1 via 160mm uPVC piping and flow by gravity through the remaining cells 2 and 3. The ICW is designed to cater for an initially loading of 8.655m^3/day while also providing additional robustness and capacity for future development.

The cascading waters flow through the series of treatment cells will be achieved by gravity. Outflow if any from the ICWs will be to the Monveen Stream (EPA Ref 16M58) located north of the site, flowing north and joining the Ballymoat River (200m north east) before entering the River Suir a further 200m north.

There will be no flow from the ICW at least during the summer months and likely in the short to medium term year round. No storm waters will enter the ICW system. Storm waters will be collected separate from the ICW in the proposed stormwater pond on the left of the main entrance, This stormwater collection area is fed via the existing drainage channel along the existing road to the main house.

Describe how the project or plan (alone or in combination) could affect Natura 2000 site(s)

The River Suir is a Special Area of Conservation (SAC) selected for seven habitats and eight species listed on Annex I / II of the E.U. Habitats Directive ;

91E0 Alluvial Wet Woodland
9J10 Yew Wood

3260 Floating River Vegetation
1330 Atlantic Salt Meadows
1410 Mediterranean Salt Meadows
91A0 Old Oak Wood
6430 Eutrophic Tall Herbs

Conservation Objectives for these habitats are ;

To restore the favourable conservation condition of Alluvial Woodland
To restore the favourable conservation condition of Yew Woods
To maintain the favourable conservation condition of Floating River Vegetation
To restore the favourable conservation condition of Atlantic Salt Meadows
To restore the favourable conservation condition of Mediterranean Salt Meadows
To restore the favourable conservation condition of Old Oak Woodland
To maintain the favourable conservation condition of Eutrophic Tall Herbs

None of the qualifying interest habitats for which the River Suir SAC is designated occur at the Mount Congreve Section of the River Suir Reedswamp fringes the River Suir along this section

Areas subject to development comprise existing built land, amenity grassland and wet grassland. The nearest occurrence of Annex 1 habitats (sat marsh) is circa 9km downstream of the proposal in Waterford City near Sally park and another 6km downstream at King's Channel and Ballinakill. Given the distance between the project site and the Annex 1 Saltmarsh there will be no reduction in the area of these habitats or any change in the distribution of these habitat types in the River Suir SAC.

Species listed as qualifying interests for the River Suir SAC are
1029 Freshwater Pearl Mussel (*Margaritifera margaritifera*)
1092 White-clawed Crayfish (*Austropotamobius pallipes*)
1095 Sea Lamprey (*Petromyzon marinus*)
1096 Brook Lamprey (*Lampetra planeri*)
1099 River Lamprey (*Lampetra fluviatilis*)
1103 Twaite Shad (*Alosa fallax*)
1106 Atlantic Salmon (*Salmo salar*)
1355 Otter (*Lutra lutra*)

Freshwater Pearl Mussel and Crayfish do not occur in this section of the SAC and thus the proposal will not cause significant effects on the conservation objectives for these species.

Conservation objectives for the above species set out the following targets in order to maintain or restore their favourable conservation status.
Sea Lamprey , River Lamprey, Brook Lamprey

To maintain river accessibility (no artificial barriers); healthy population structure;
healthy density of juveniles; no decline in extent or distribution of spawning beds; >50% of sampling sites positive.

Salmon
To maintain river accessibility (no artificial barriers) to upstream migration and spawning grounds.

Twaite Shad
Greater than 75% of main stem length of rivers accessible from the estuary; more than one age class present; no decline in extent and distribution of spawning habitat; water quality - oxygen levels no lower than 5mg/l; maintain stable gravel substrate with very little fine material, free from filamentous (microalgae) growth and macrophyte (rooted higher plants) growth.

Otter
No significant decline in distribution; no significant decline in terrestrial/estuarine/freshwater/lake habitat; no significant decline in couching sites or holts; no decline in available fish biomass;

The proposed development will not cause potential for significant effects i.e. effects that cause loss, fragmentation, disruption or disturbance to the habitat of these species.

The design of the ICW is based on an estimated 150,000 visitors each year. This number would give rise to a loading of 8.655m^3 per day. The proposed ICW optimises the available lands to provide treatment for current, planned and future loading. The ICW operating with the current and proposed loading will operate

with zero discharge from the ICW, giving 100% treatment of wastewaters. This scaling provides high treatment whilst optimising the amenity and habitat values of the entire site available for the ICW. Potential further development of the estate can be catered for within the proposed ICW. The ICW design includes a treatment area of 8570m^2 providing capacity for up to 214 P.E. with no/reduced discharges.

The ICW will consist of a series of three treatment cells through which inflowing water will be reduced of its various dissolved and particulate constituents. The final discharge if arising from the ICW will be of high water quality prior to discharging to the Monveen Stream and Ballymoat River respectively.
Final effluent quality shall be of the following standard;

pH 6-8
Suspended Solids <2mg/l
BOD_5 <10mg/lO_2
Ammonia <2mg/l NH_3-N
Ortho-phosphate <1mg/l P

If there are potential negative impacts, explain whether you consider if these are likely to be significant, and if not, why not.
None of the qualifying interest habitats for which the River Suir SAC is designated occur at the Mount Congreve Section of the River Suir. Reedswamp fringes the River Suir along this section The proposed ICW is located approximately 300m south of the SAC and will not incur any loss of habitat from the ecological footprint of the SAC. Given the distance between the project site and the Annex 1 Saltmarsh occurring 9km and 14km downstream there will be no reduction in the area of these habitats or any change in the distribution of these habitat types in the River Suir SAC. The works will not incur significant effects on the conservation objectives for any of the qualifying interest species of the SAC. The ICW design proposes zero discharge and therefore shall not incur significant effects on the receiving waters of the River Suir and associated freshwater species and habitats that occur in this section and downstream in the SAC. There are no other current planning proposals in townlands immediately adjacent to Mount Congreve that in combination with this proposal could give rise to potential for significant effects on the Conservation Objectives for the River Sur SAC. Further downstream in Waterford City a number of significant infrastructure projects associated with the North Quays and the Waterford Greenway have been subject to AA with a finding of no potential for adverse effects on the integrity of the River Suir SAC.
Conclusion of assessment Potential for significant effects can be ruled out , Stage 2 Appropriate Assessment is not required.
Documentation reviewed for making of this statement.
WCCC Internal GIS

Completed By	Bernadette Guest
Date	20th April 2021


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RIVER SUIR SAC
PROPOSED TO INSTALL 3 NO. 600MM DIAMETER CONCRETE PIPES (NON CIRCULAR) AS MAMMAL PASSES. THE PROPOSED WILL CONNECT HIGH WATER LEVELS FROM THE ESTUARY SIDE TO THE LAND SIDE (SOUTH OF THE ROAD).
HOUSE SEPTIC TANK
EXISTING POND
MANHOLE
EXISTING LAKE
BALLYMOAT STREAM
MOONVEEN STREAM
EXISTING BUILDINGS
YARD SEPTIC TANK
EXISTING CARPARK
OCCASIONAL DISCHARGE VIA NON RETURN VALVE
MANHOLE AT OUTLET TO ALLOW FOR FLOW & QUALITY MONITORING
EXISTING OPEN DRAIN
CELL 3
SPAWNING AREAS FOR FROGS AND NEWTS (OPEN SHALLOW WATER WITH SOME LIGHT VEGETATION & OCCASIONAL STONE.
DISTRIBUTION CHAMBER
SEPTIC TANK
STORM WATER MANHOLE
CELL 1
CELL 2
INTERCONNECTING PIPEWORK
STORM WATER WETLAND
RIVER EMBANKMENT CLEARING & ENHANCEMENT - NO IN STREAM WORKS
ENTRANCE
LEGEND:
SITE BOUNDARY
PIPEWORK
MANHOLE
CONTOURS
TREATMENT AREA
SLOPING EMBANKMENTS
ROAD / PATHWAY FOR MAINTENANCE & PUBLIC USE
SURFACE WATER SYSTEMS (EPA)
ICW CELL AREAS:
CELL 1 = 1,800m²
CELL 2 = 4,200m²
CELL 3 = 2,770m²
TOTAL AREA = 8,570m²
NOTES:
1. DRAWING TO BE READ IN CONJUNCTION WITH ASSOCIATED PLANNING DOCUMENTS.
2. NOT FOR CONSTRUCTION.
A ISSUED FOR PLANNING JC 16/04/2021
REV DESCRIPTION BY DATE
CONSULTANT:
VESI Environmental Ltd.
15D EURO BUSINESS PARK, LITTLE ISLAND, CORK, IRELAND.
T: +353 21 452 4632
E: INFO@VESIENVIRO.COM
W: WWW.VESIENVIRO.COM
CLIENT:
WATERFORD & CITY COUNTY COUNCIL
THE MALL,
CO. WATERFORD.
SITE:
INTEGRATED CONTRUCTED WETLAND
PROJECT:
MOUNT CONGREVE
DRAWING TITLE:
POTENTIAL SITE LAYOUT
SCALE AT A1: 1:1,000
DATE: APR 2021
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