








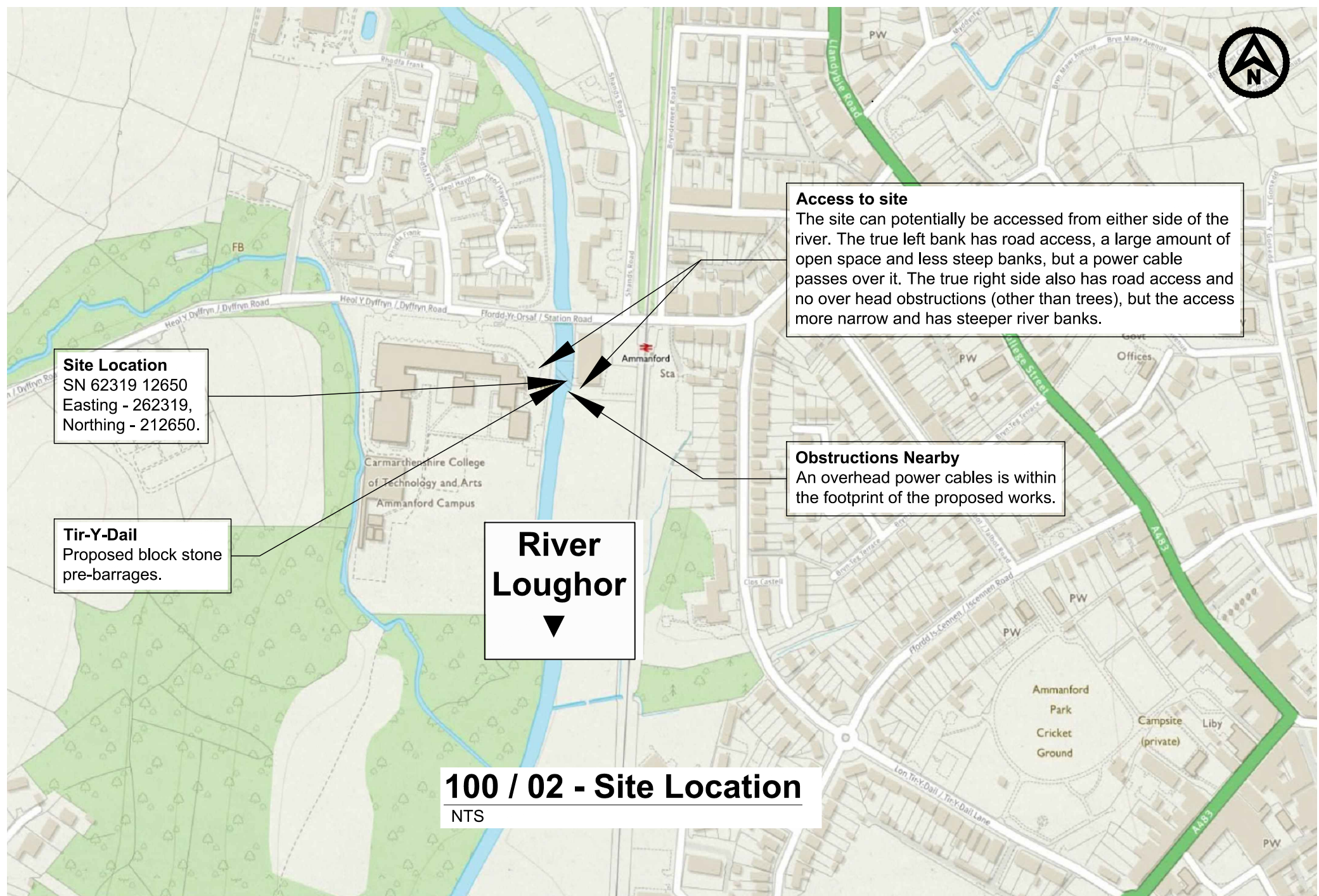


<h1 style="text-align: center;">SAFETY HEALTH & ENVIRONMENTAL INFORMATION</h1>	
<p>In addition to the hazards/risks normally associated with the type of work detailed on this drawing, note the following risks and information.</p>	
<p>Risks listed here are not exhaustive. Refer to Designer's Risk Assessment and pre-construction phase plan.</p>	
<h2>CONSTRUCTION</h2>	
<div></div>	<p>Managing flow & stage levels in river</p> <ul style="list-style-type: none">- Monitor flow levels & flood warnings.- Check adequacy of cut-off & stability of cofferdams.
<div></div>	<p>Managing seepage flows</p> <ul style="list-style-type: none">- Monitor seepage.- Check stability of cut bank faces and assess permeability of formation material.- Check adequacy of cut-off & stability of cofferdams.
<div></div>	<p>Risk of falls from height</p> <ul style="list-style-type: none">- Check depth of excavations.- Check adequate edge protection and access provision.
<div></div>	<p>Lifting</p> <ul style="list-style-type: none">- Check crane lifting facilities & constraints.- Check access weight & size restrictions for craneage at bridge crossings along access route to site.
<div></div>	<p>Interface with public & other site operations</p> <ul style="list-style-type: none">- Check adequate warning signs and fencing in place.
<div></div>	<p>Services</p> <ul style="list-style-type: none">- Check for services.
<div></div>	<p>Stability of Excavations & Structures</p> <ul style="list-style-type: none">- Check temporary works & construction sequencing to maintaining structural integrity of weir and river banks.- Contractor to monitor surcharge loads during construction.- Contractor to propose any necessary stabilisation methods.
<h2>ENVIRONMENTAL</h2>	
<div></div>	<p>Vegetation Clearance</p> <ul style="list-style-type: none">- Contractor to check for nesting birds or bat roosts before clearance begins and to monitor throughout.- Contractor to check for invasive species.- Tree removal may be required. Any trees not being removed should be protected by physical barriers during vegetation clearance
<div></div>	<p>Invasive Species</p> <ul style="list-style-type: none">- If encountered, these are to be removed as a controlled substance by a certified contractor.
<p>For information relating to Use, Cleaning and Maintenance see the Health and Safety File.</p>	
<p>It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement.</p>	



Drawing No.	Project No.	Issue
100 -	02815	- 02

SAFETY HEALTH & ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the type of work detailed on this drawing, note the following risks and information.

Risks listed here are not exhaustive. Refer to Designer's Risk Assessment and pre-construction phase plan.

CONSTRUCTION

- C1** Managing flow & stage levels in river
- Monitor flow levels & flood warnings.
 - Check adequacy of cut-off & stability of cofferdams.
- C2** Managing seepage flows
- Monitor seepage.
 - Check stability of cut bank faces and assess permeability of formation material.
 - Check adequacy of cut-off & stability of cofferdams.
- C3** Risk of falls from height
- Check depth of excavations.
 - Check adequate edge protection and access provision.
- C4** Lifting
- Check crane lifting facilities & constraints.
 - Check access weight & size restrictions for crane at bridge crossings along access route to site.
- C5** Interface with public & other site operations
- Check adequate warning signs and fencing in place.
- C6** Services
- Check for services.
- C7** Stability of Excavations & Structures
- Check temporary works & construction sequencing to maintaining structural integrity of weir and river banks.
 - Contractor to monitor surcharge loads during construction.
 - Contractor to propose any necessary stabilisation methods.

ENVIRONMENTAL

- E1** Vegetation Clearance
- Contractor to check for nesting birds or bat roosts before clearance begins and to monitor throughout.
 - Contractor to check for invasive species.
 - Tree removal may be required. Any trees not being removed should be protected by physical barriers during vegetation clearance.
- E2** Invasive Species
- If encountered, these are to be removed as a controlled substance by a certified contractor.

For information relating to Use, Cleaning and Maintenance see the Health and Safety File.

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement.

Welsh Water sewer passing under the entire length of the weir. Approximate alignment shown and must be confirmed before any works begin.

Existing, undercut weir structure.

Existing notch in weir, to be in filled with material to further reduce undercutting.

Nominal 3m wide of rip rap and/or block stone placed to reinforce and secure undercut areas of weir. To follow approximate line/curve of weir profile.

Cardiff University College of Technology and Arts Campus on true right bank. Plant may access river via car park roads, but bank is much steeper on this side and has more tree cover.

500 wide block stone forms notch, by lowering and sloping it relative to adjacent blocks.

1m minimum offset between each notch to ensure there can be no direct flush through the entire barrage arrangement.

Level of pre-barrage crests to gradually rise up towards the river banks. Level at interface to be 200mm higher than pre-barrage crests at respective notch levels.

River Loughor Flow

101 / 01 - General Arrangement - Plan

1:100

NOTES:

1. DIMENSIONS:

- Are in millimetres unless otherwise stated.
- Marked thus (*) are approximate.
- All levels are in metres to Ordnance Datum.

2. SPECIFICATION:

All works to be carried out in accordance with the Civil Engineering Specification for the Water Industry (CESWI). All technical requirements clauses apply unless stated as deleted, amended or augmented in accordance with the Contract Works Information documentation.

3. DRAWING INFORMATION:

Site plans from topographical survey carried out by the Fishtek Consulting Ltd., June 2020. Contractor to check critical levels before setting out.

1.0	Outline Design	03/08/20
1.1	Outline Design	09/11/20

Issue	Description	Date
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Status	Outline Design
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Scales	As shown	Current Issue Signatures
Original Size	A1	Author A Frampton
Datum	N/A	Checker M Lakin
Grid	N/A	Approver G Blotta
Filename:	© Copyright reserved	



PROJECT
Tir-Y-Dail - Fish Easement

TITLE
General Arrangement Plan

Drawing No.	Project No.	Issue
101	02815	02

