# **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



Managing flow & stage levels in river - Monitor flow levels & flood warnings. - Check adequacy of cut-off & stability of cofferdams.



Monitor seepage.

Risk of falls from height - Check depth of excavations.

Managing seepage flows

-Check stability of cut bank faces and assess permeability of formation material. - Check adequacy of cut-off & stability of cofferdams.



**Access Restrictions** 

provision. - Check access weight & size restrictions at bridge

-Check adequate edge protection and access





- Check for services. Stability of Excavations & Structures

crossings along access route to site.

Interface with public & other site operations - Check adequate warning signs and fencing in place.



- Carry out inspection pits to check weir construction & depth to footings. - Check temporary works & construction sequencing to maintaining structural integrity of weir and stability. - Contractor to monitor surcharge loads on top of weir

during construction. - Contractor to propose any necessary stabilisation methods.



ENVIRONMENTAL

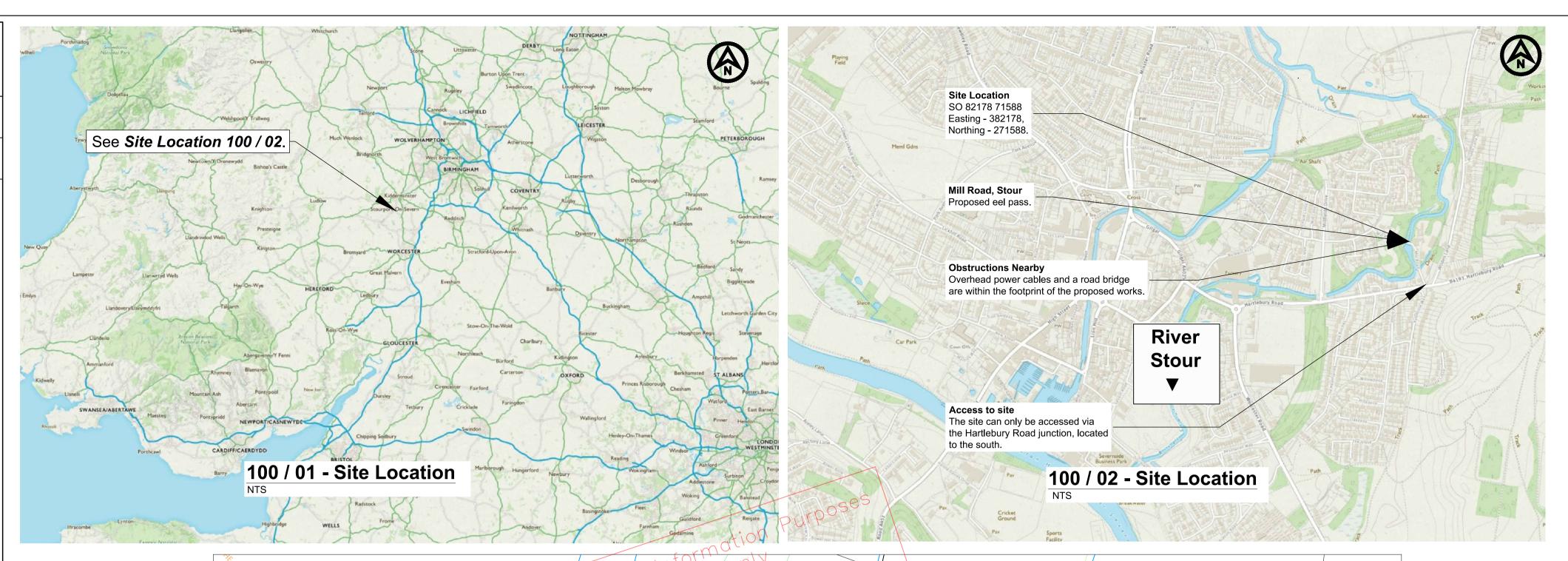
Vegetation Clearance - Contractor to check for nesting birds or bat roosts before clearance begins and to monitor throughout. - Contractor to check for invasive species. - Tree removal will be required. Any trees not being removed should be protected by physical barriers during vegetation clearance

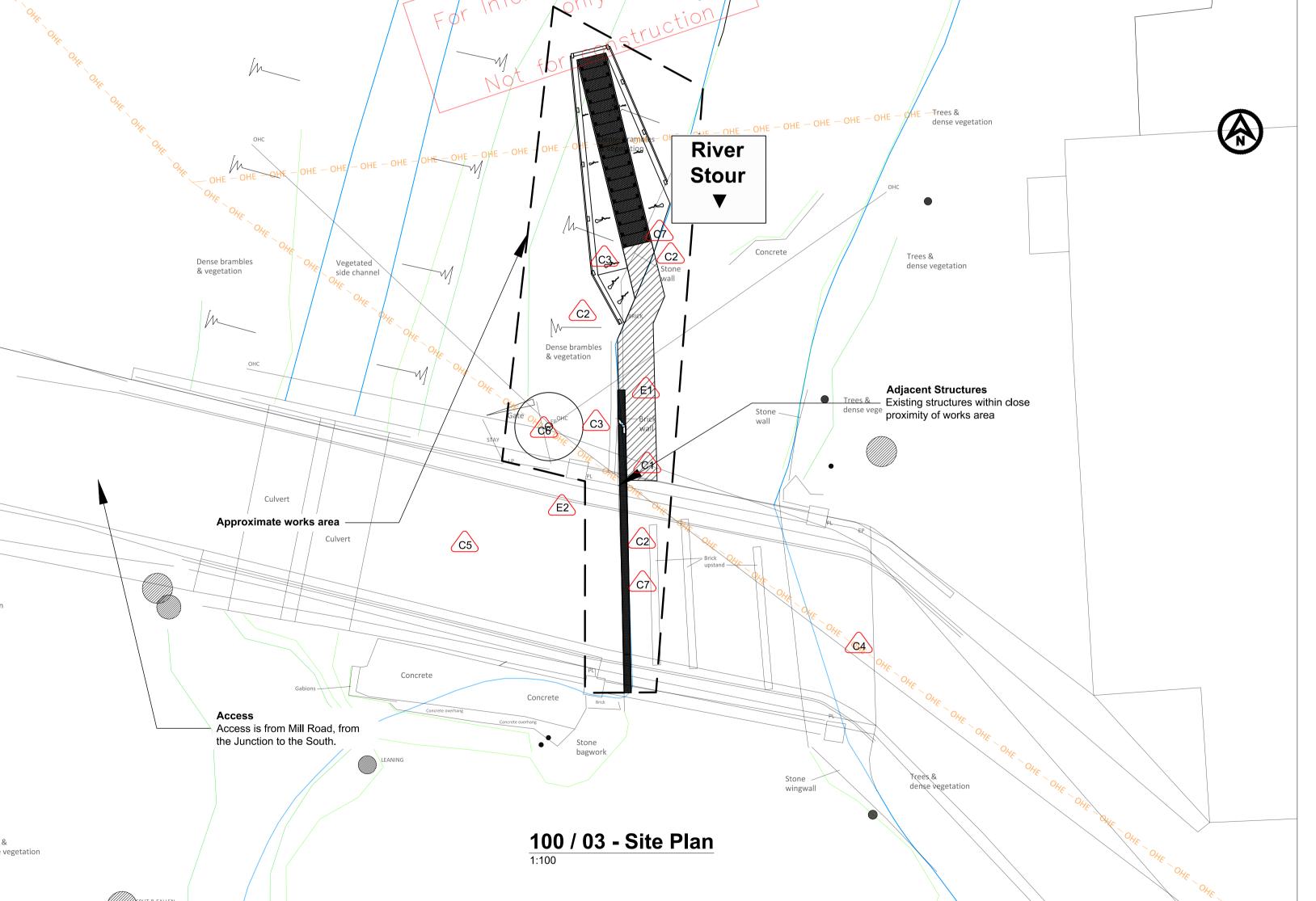


Invasive Species If encountered, these are to be removed as a controlled substance by a certified contractor.

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.





NOTES:

#### 1. DIMENSIONS:

Are in millimetres unless otherwise stated.

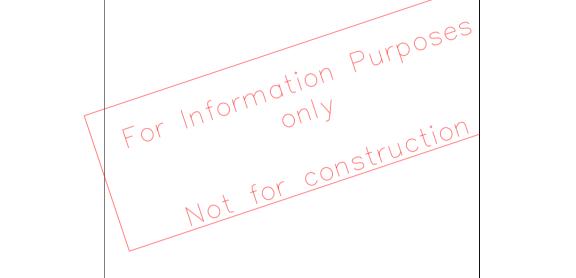
 Marked thus (\*) are approximate. All levels are in metres to Site Datum.

## 2. SPECIFICATION:

All works to be carried out in accordance with the Environment Agency Minimum Technical Requirements which shall be the Civil Engineering Specification for the Water Industry (CESWI).

#### 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.



P01	Detailed Design - For Comment	18/06/21
B03	Outline Design - Eel Pass - Width Update	16/04/21
B02	Outline Design - Eel Pass - For Comment	20/01/21
B01	Outline Design - Fish Pass Panel Approval	23/07/20
Issue	Description	Date

# **Detailed Design**

		_	
Scales	_	Current Issue Signatures	
	As shown	Author <b>A Frampton</b>	Philade
Original Size	Α1	Checker <b>M.Lakin</b>	M. L
Datum	N/A	Approver T.Coe	The
Grid	N/A	С Соруг	right reserved





Mill Road, Stour – Eel Pass

Site Location and Plan

Drawing No. Project No. Issue 100 -02811 - P01



# **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



Managing flow & stage levels in river - Monitor flow levels & flood warnings. - Check adequacy of cut-off & stability of cofferdams.



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.



- Check depth of excavations.

Risk of falls from height

-Check adequate edge protection and access



**Access Restrictions** - Check access weight & size restrictions at bridge

crossings along access route to site.

- Check adequate warning signs and fencing in place.

Interface with public & other site operations



<u>C6</u>

Check for services.

Stability of Excavations & Structures - Carry out inspection pits to check weir construction & depth to footings. - Check temporary works & construction sequencing to maintaining structural integrity of weir and stability.

- Contractor to monitor surcharge loads on top of weir during construction. - Contractor to propose any necessary stabilisation methods.

#### ENVIRONMENTAL

clearance



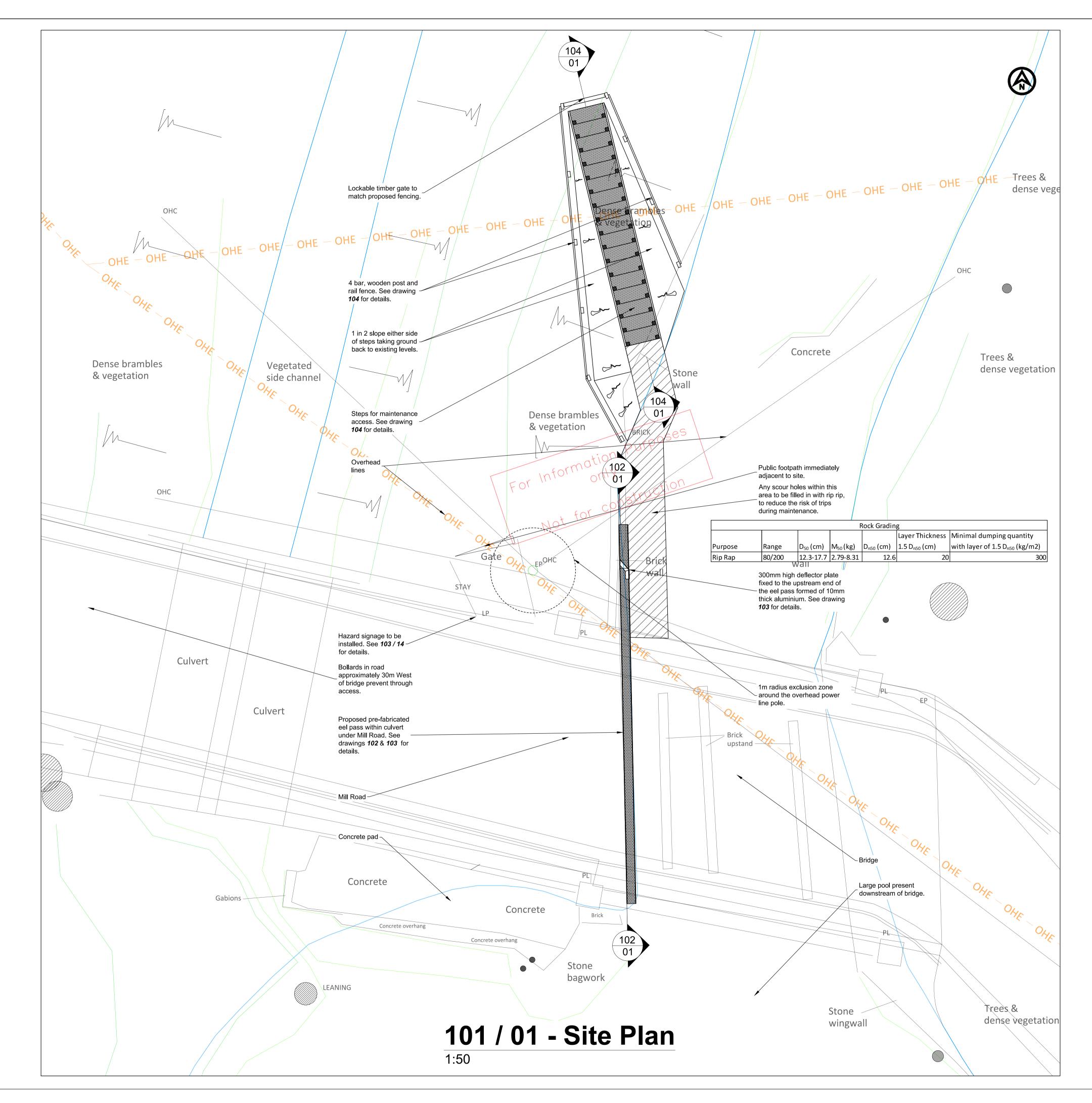
Vegetation Clearance - Contractor to check for nesting birds or bat roosts before clearance begins and to monitor throughout. - Contractor to check for invasive species. - Tree removal will be required. Any trees not being removed should be protected by physical barriers during vegetation



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.



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 Environment Agency Minimum Technical Requirements which shall be the Civil Engineering Specification for the Water Industry (CESWI).

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.

4. NATURAL STONE

Rip-rap scour protection to comprise of natural hard stone with nominal density 2700kg/m³.

P01 Detailed Design - For Comment 18/06/21 B03 Outline Design - Eel Pass - Width Update 16/04/21 B02 Outline Design - Eel Pass - For Comment 20/01/21 B01 Outline Design - Fish Pass Panel Approval 23/07/20 Issue Description Date

# **Detailed Design**

		1	
Scales	_	Current Issu	e Signatures
	As shown	Author <b>A Frampton</b>	Palledo
Original Size	Α1	Checker <b>M.Lakin</b>	M.L.
Datum	N/A	Approver <b>T.Coe</b>	135
Grid	N/A	С Соруг	right reserved

Status





Mill Road, Stour – Eel Pass

General Arrangement Plan

Drawing No. Project No. Issue 02811 - P01

# **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



Managing flow & stage levels in river - Monitor flow levels & flood warnings. - Check adequacy of cut-off & stability of cofferdams.



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.



Risk of falls from height - Check depth of excavations.

-Check adequate edge protection and access provision.



**Access Restrictions** - Check access weight & size restrictions at bridge

crossings along access route to site. Interface with public & other site operations

- Check adequate warning signs and fencing in place.



Check for services.



Stability of Excavations & Structures - Carry out inspection pits to check weir construction &

depth to footings. - Check temporary works & construction sequencing to maintaining structural integrity of weir and stability. - Contractor to monitor surcharge loads on top of weir during construction. - Contractor to propose any necessary stabilisation

methods. ENVIRONMENTAL

clearance



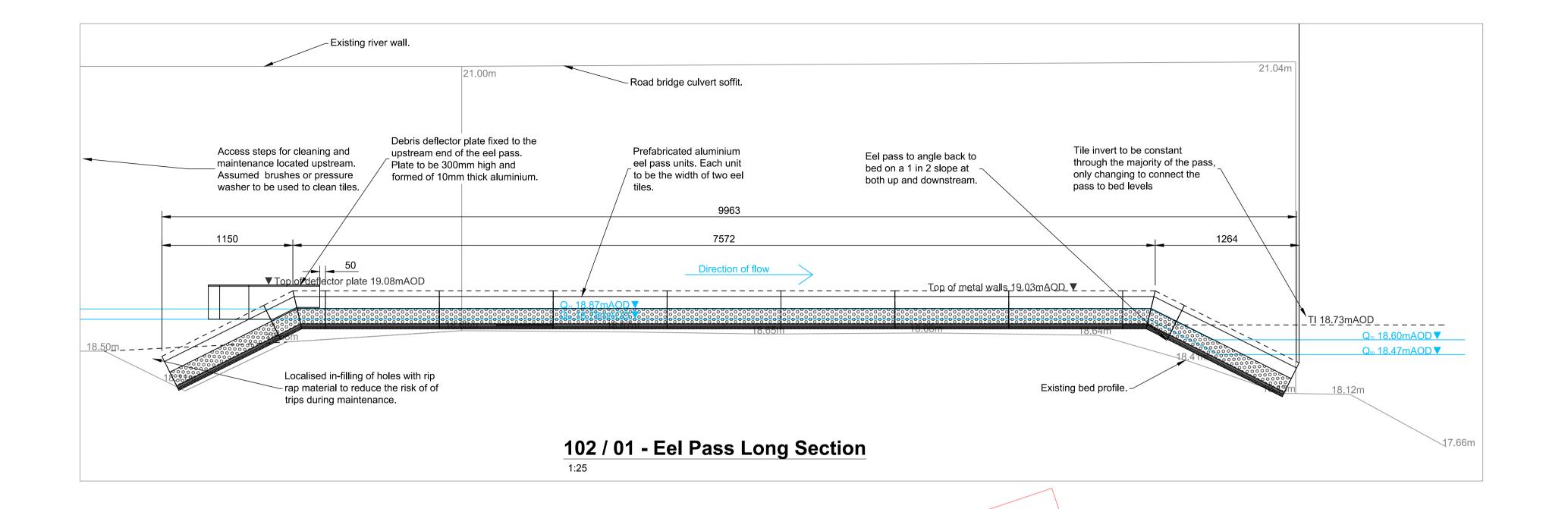
Vegetation Clearance - Contractor to check for nesting birds or bat roosts before clearance begins and to monitor throughout. - Contractor to check for invasive species. - Tree removal will be required. Any trees not being removed should be protected by physical barriers during vegetation

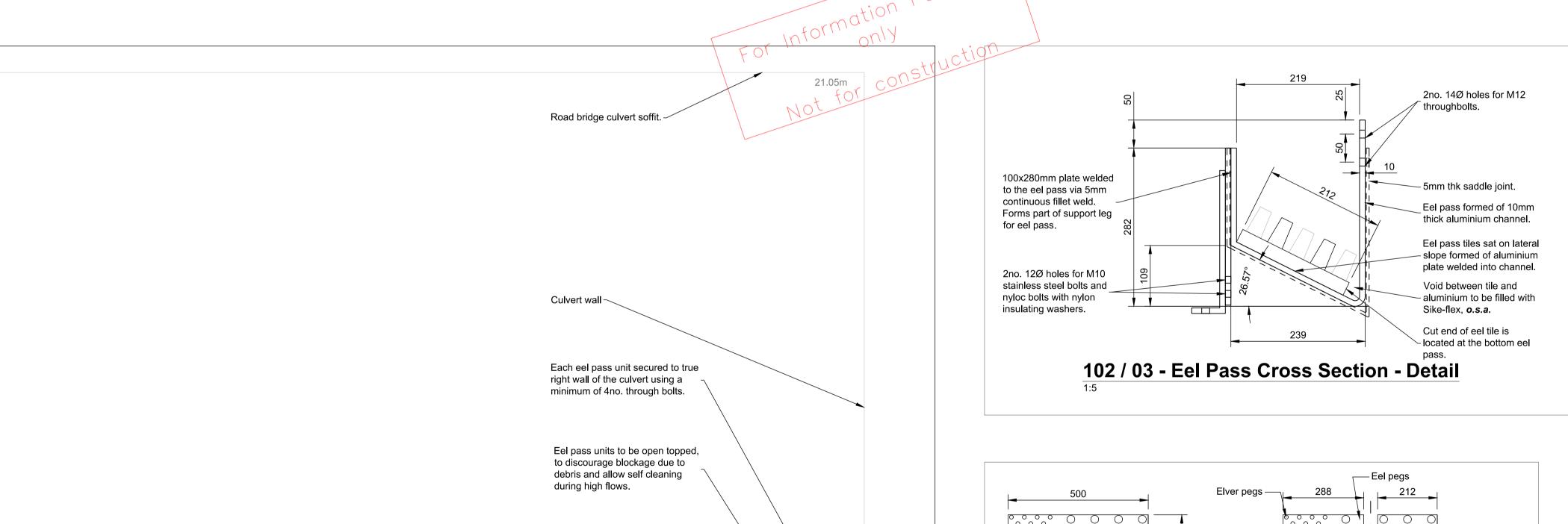


Invasive Species - If encountered, these are to be removed as a controlled substance by a certified contractor.

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.





18.66m

Existing structures/obstructions

18.61m

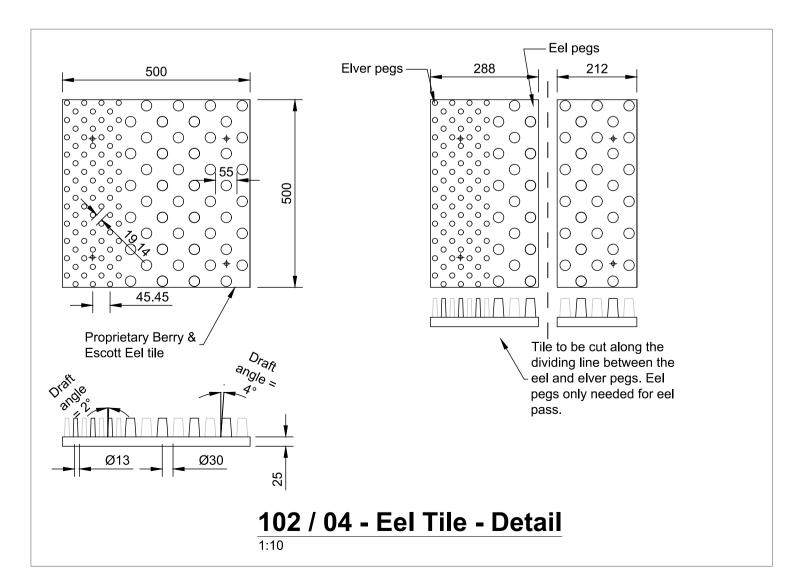
102 / 02 - Eel Pass - Typical Cross Section

near to the path of the eel pass.

Top of metal walls 18.97mAOD

Q<sub>70</sub> 18.87mAOD ▼

Tile Invert 18.73mAOD



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 Environment Agency Minimum Technical Requirements which shall be the Civil Engineering Specification for the Water Industry (CESWI).

# 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.

#### 4. ALUMINIUM:

All structural aluminium alloys to BS 8118. All aluminium components to be Alloy 6082T6, or similar approved.

# indicated.

All aluminium welds to be 10mm fillet unless otherwise indicated. All welds to be continuous unless otherwise

#### 5. BOLTS: \ All stainless steel to BS5950.

All fasteners to be stainless steel A2 (304) set screws, M12 unless otherwise indicated in 14mm dia holes. All fastness to have white nylon washers to isolate stainless steel fasteners from aluminium alloy extrusions & plates. Washers to be M12 21mm x 2mm unless otherwise indicated to suit set screw dia.

All nuts to be nyloc nuts. Supporting structure to avoid bottom connector plates (&

#### bolted fixings). Any dissimilar materials to be insulated using nylon washers.

#### 6. FABRICATION:

Fabrication drawings to be prepared by the fabricator. All fabricated structural steelwork & aluminium structures executed to conform to BS EN 1090-2. All structural material components, used within the fabricated and executed structure, to conform to BS EN 1090-2 including NSSS V5 CE Marking Version. Size of connection plates & bolt hole positions to suit fabrication tolerances and checked for fit prior to deliver to

Existing weir profile to be surveyed prior to commencement of fabrication.

## 7. ASSEMBLY:

All bolted connection plates to receive bead line of Sika-flex.

#### 8. NATURAL STONE

Rip-rap scour protection to comprise of natural hard stone with nominal density 2700kg/m<sup>3</sup>.

P01	Detailed Design - For Comment	18/06/21
B03	Outline Design - Eel Pass - Width Update	16/04/21
B02	Outline Design - Eel Pass - For Comment	20/01/21
B01	Outline Design - Fish Pass Panel Approval	23/07/20
Issue	Description	Date

# Detailed Design

_	Current Issue Signatures	
As shown	Author <b>A Frampton</b>	Man
Α1	Checker <b>M.Lakin</b>	M.L
N/A	Approver T.Coe	156
N/A	С Соруг	right reserved
		As shown  Author A Frampton  Checker M.Lakin  N/A  Approver T.Coe

Filename:

Status





Mill Road, Stour – Eel Pass

Long, cross sections and details

Drawing No. Project No. Issue 102 -- P01 02811



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.

Risk of falls from height

- Check for services.

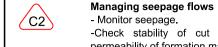
- Check depth of excavations.

crossings along access route to site.

## CONSTRUCTION



Managing flow & stage levels in river - Monitor flow levels & flood warnings. - Check adequacy of cut-off & stability of cofferdams.



- Monitor seepage. -Check stability of cut bank faces and assess permeability of formation material. - Check adequacy of cut-off & stability of cofferdams.



**Access Restrictions** - Check access weight & size restrictions at bridge



Interface with public & other site operations - Check adequate warning signs and fencing in place.



Stability of Excavations & Structures - Carry out inspection pits to check weir construction & depth to footings. - Check temporary works & construction sequencing

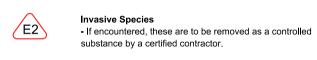
to maintaining structural integrity of weir and stability. - Contractor to monitor surcharge loads on top of weir during construction. - Contractor to propose any necessary stabilisation methods.

## ENVIRONMENTAL

see the Health and Safety File.

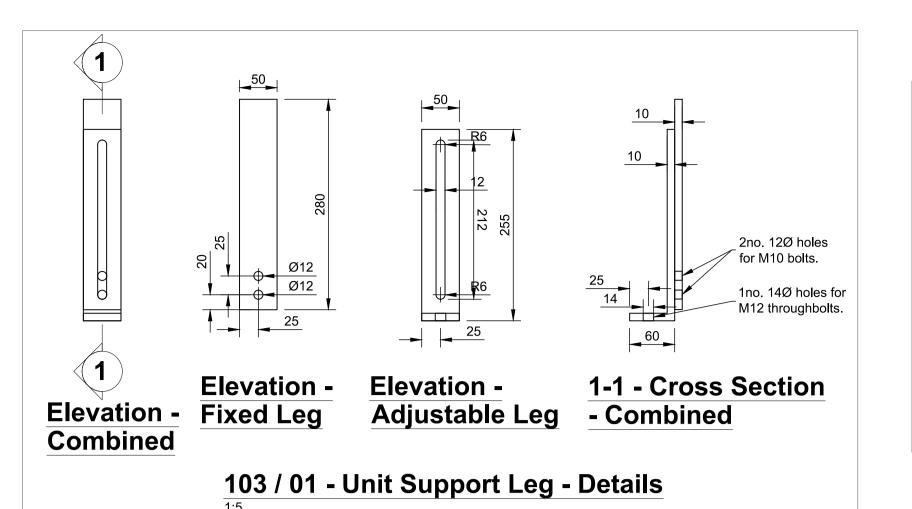


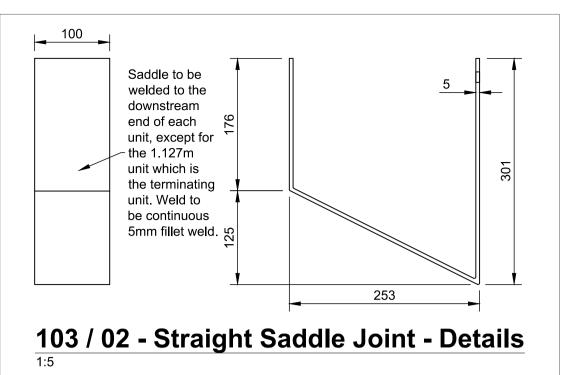
Contractor to check for nesting birds or bat roosts before clearance begins and to monitor throughout. - Contractor to check for invasive species. - Tree removal will be required. Any trees not being removed should be protected by physical barriers during vegetation clearance

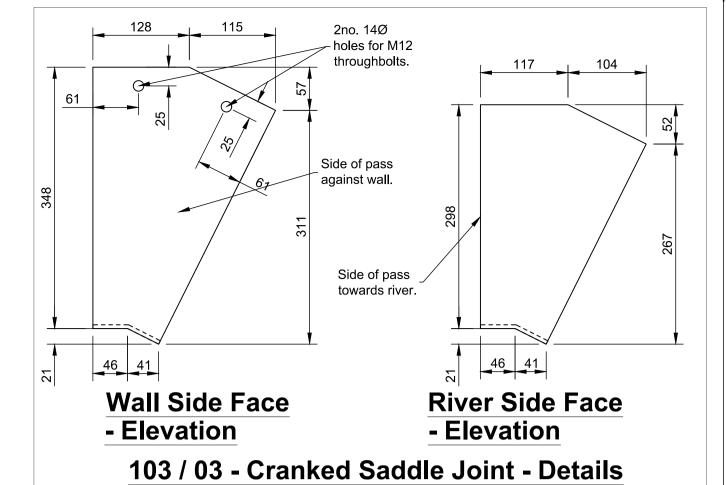


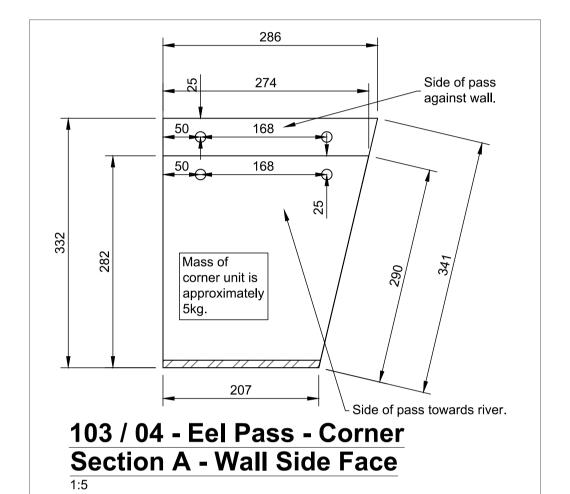
For information relating to Use, Cleaning and Maintenance

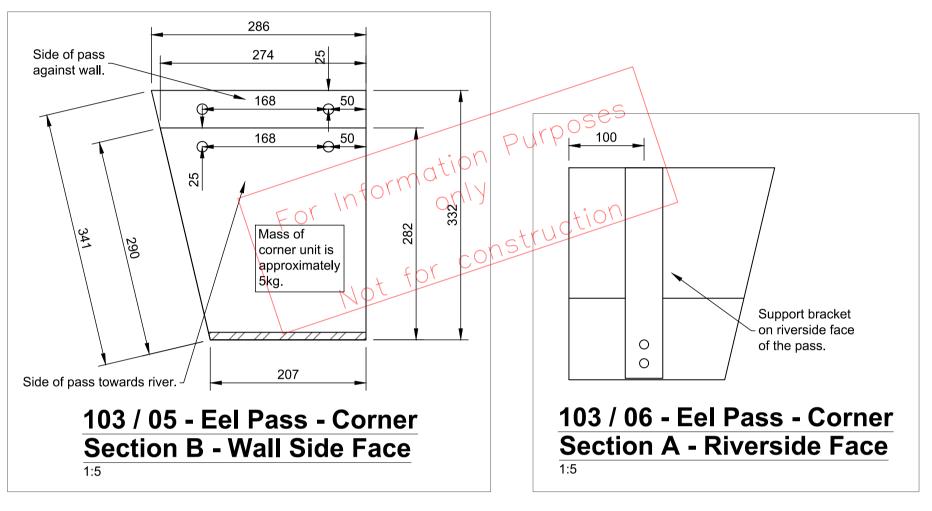
It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement.

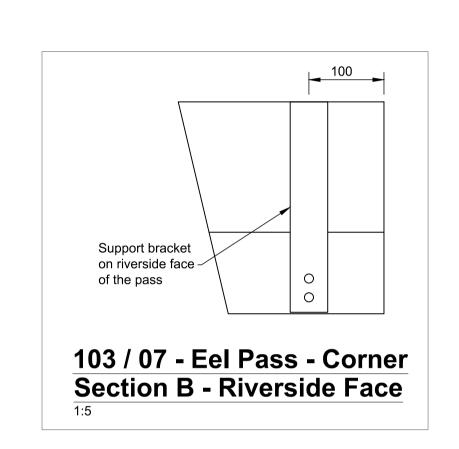


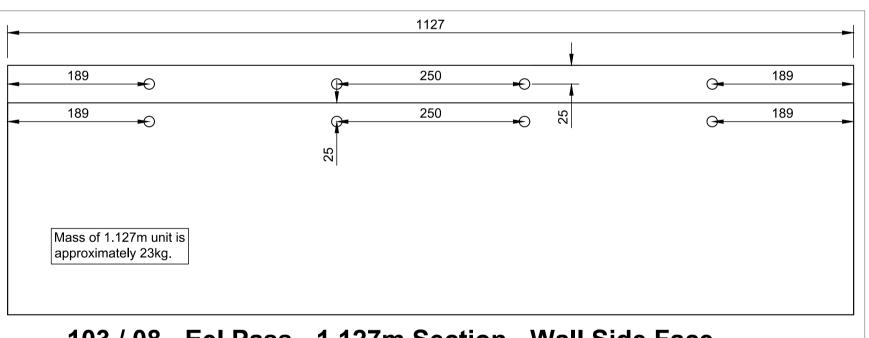




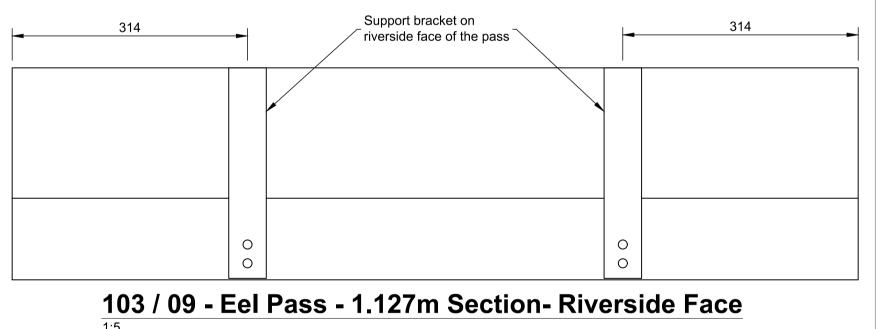


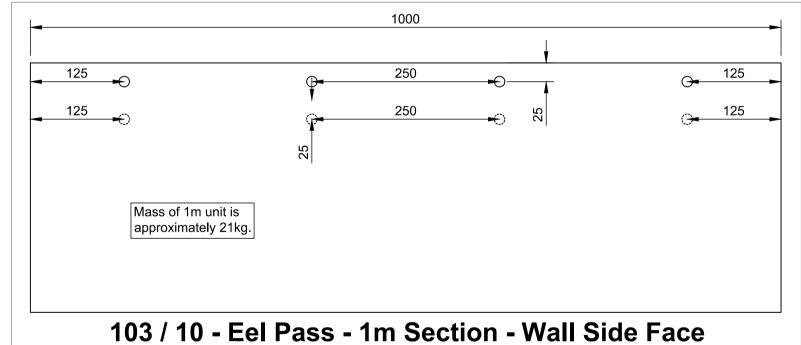


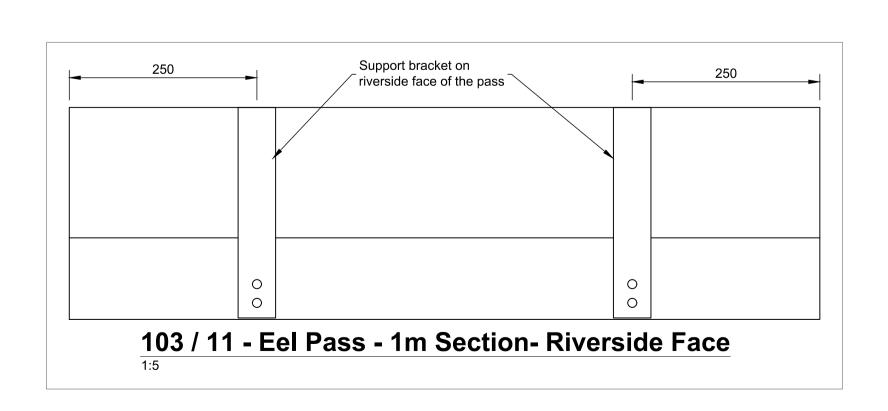


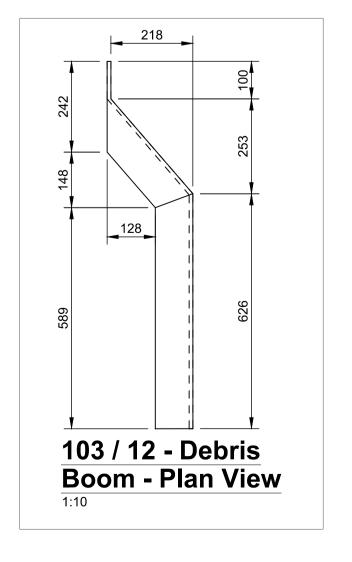


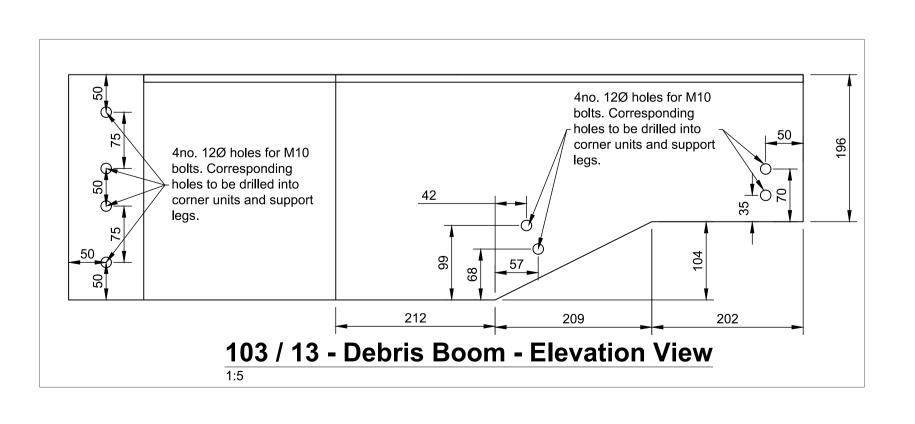


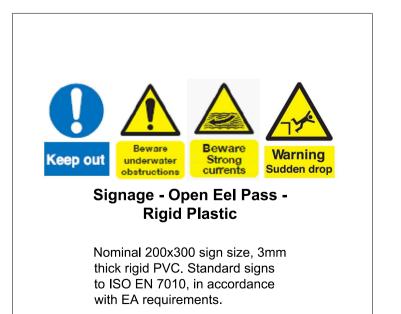












agreed on site. 103 / 14 - Hazard Signage

Fixings to suit location, to be

NOTES:

1. DIMENSIONS:

 Are in millimetres unless otherwise stated. Marked thus (\*) are approximate.

2. SPECIFICATION:

• All levels are in metres to Site Datum.

All works to be carried out in accordance with the Environment Agency Minimum Technical Requirements which shall be 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 EA WEM Contract Works Information documentation.

3. ALUMINIUM:

All structural aluminium alloys to BS 8118. All aluminium components to be Alloy 6082T6, or similar approved.

All aluminium welds to be 10mm fillet unless otherwise indicated. All welds to be continuous unless otherwise indicated.

4. BOLTS:

All stainless steel to BS5950.

All fasteners to be stainless steel A2 (304) set screws, M12 unless otherwise indicated in 14mm dia holes. All fastness to have white nylon washers to isolate stainless steel fasteners from aluminium alloy extrusions & plates. Washers to be M12 21mm x 2mm unless otherwise indicated

to suit set screw dia. All nuts to be nyloc nuts.

Supporting structure to avoid bottom connector plates (& bolted fixings).

Any dissimilar materials to be insulated using nylon washers.

5. FABRICATION:

Fabrication drawings to be prepared by the fabricator. All fabricated structural steelwork & aluminium structures executed to conform to BS EN 1090-2. All structural material components, used within the fabricated and executed structure, to conform to BS EN 1090-2 including NSSS V5 CE Marking Version. Size of connection plates & bolt hole positions to suit fabrication tolerances and checked for fit prior to deliver to

Existing weir profile to be surveyed prior to commencement

of fabrication.

6. ASSEMBLY:

All bolted connection plates to receive bead line of Sika-flex.

P01	Detailed Design - For Comment	18/06/21

Issue Description

Date

C Copyright reserved

**Detailed Design** Current Issue Signatures As shown A Frampton





Mill Road, Stour – Eel Pass

Eel Pass Fabrication Details

Drawing No. Project No. Issue 103 – - P01 02811

# 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



Managing flow & stage levels in river
- Monitor flow levels & flood warnings.
- Check adequacy of cut-off & stability of cofferdams.



- Monitor seepage.
-Check stability of cut bank faces and assess permeability of formation material.
- Check adequacy of cut-off & stability of cofferdams.

Managing seepage flows



Risk of falls from height
- Check depth of excavations.
-Check adequate edge protection and access provision.



- Check access weight & size restrictions at bridge crossings along access route to site.

Interface with public & other site operations
- Check adequate warning signs and fencing in place.



Services

Check for services.

**Access Restrictions** 



Stability of Excavations & Structures
- Carry out inspection pits to check weir construction & depth to footings.
- Check temporary works & construction sequencing to maintaining structural integrity of weir and stability.

to maintaining structural integrity of weir and stability.
Contractor to monitor surcharge loads on top of weir during construction.
Contractor to propose any necessary stabilisation methods.

## ENVIRONMENTAL



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 will be required. Any trees not being removed should be protected by physical barriers during vegetation clearance

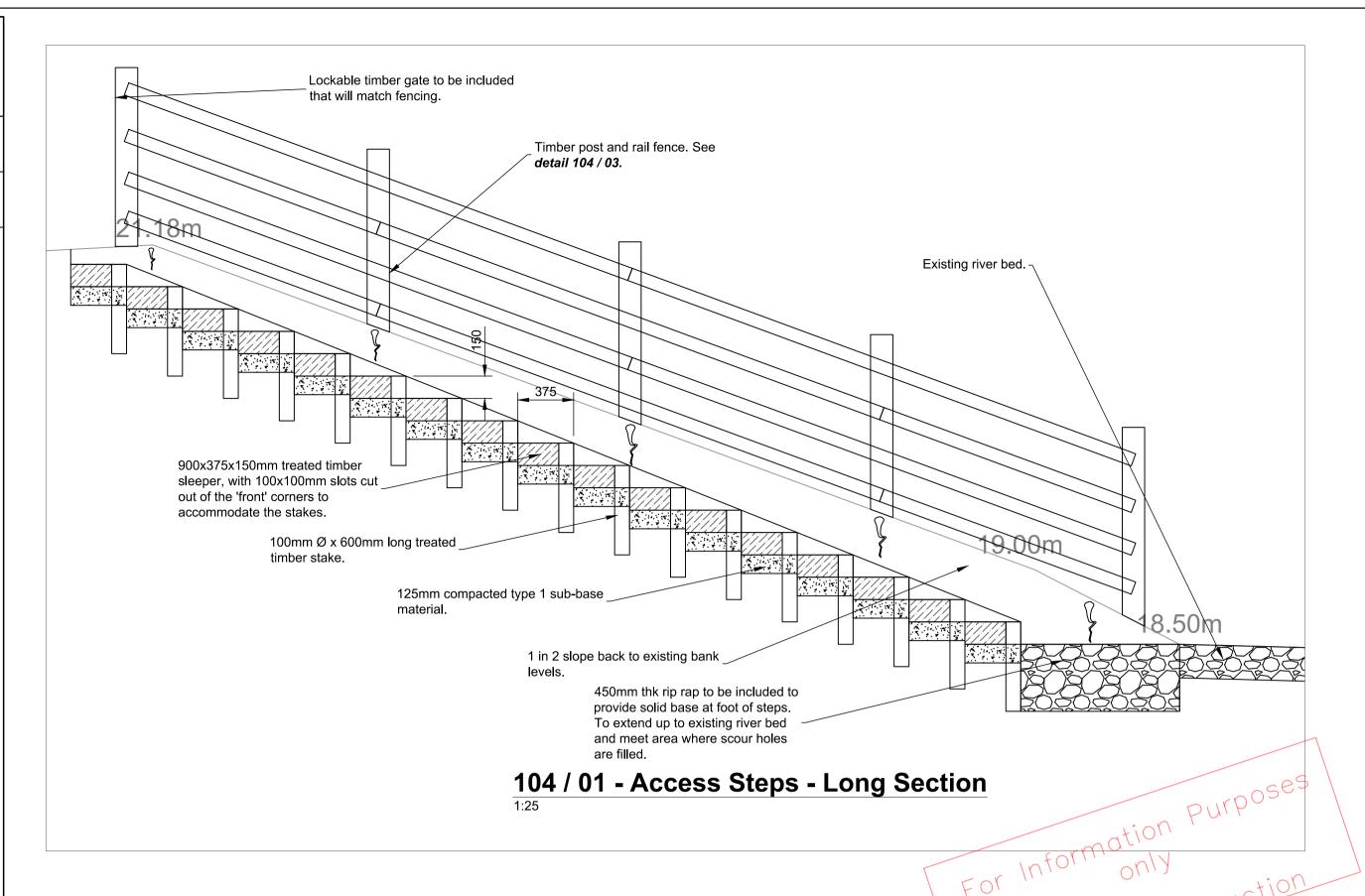


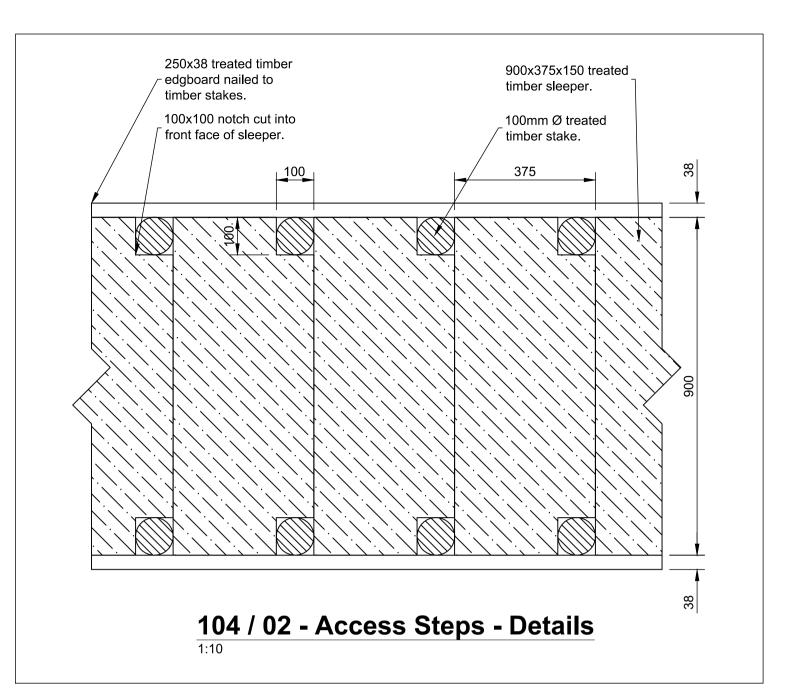
Invasive Species

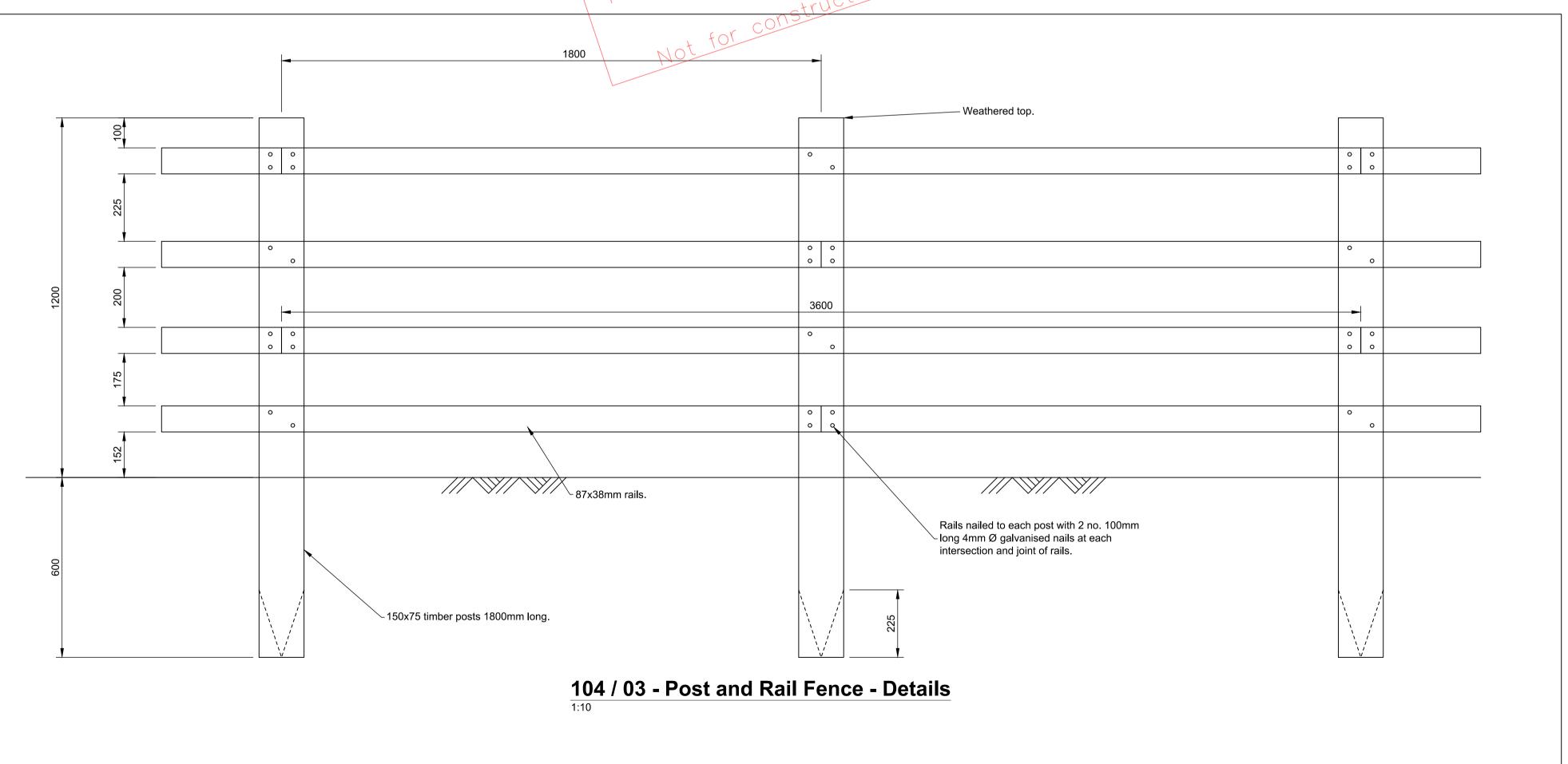
- If encountered, these are to be removed as a controlled substance by a certified contractor.

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.







#### NOTES:

#### 1. DIMENSIONS:

Are in millimetres unless otherwise stated.

Marked thus (\*) are approximate.
All levels are in metres to Site Datum.

## 2. SPECIFICATION:

All works to be carried out in accordance with the Environment Agency Minimum Technical Requirements which shall be 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 EA WEM Contract Works Information documentation.

## 3. Timber

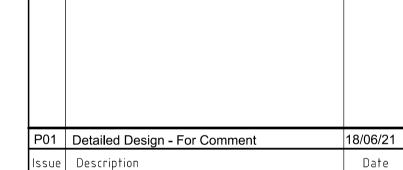
Timber fencing to conform to BS 1722-7:2006+A1:2018.
All timber to be from recycled or from FSC certified

# All timber to be from recycled or from FSC certifications.

 All timber for steps to be D30 grade oak, in order to withstand the riverine environment.

All timber for fences/hand railing to be minimum C24

strength grade and tanalised.



# Detailed Design

Scales		Current Issue Signatures	
	As shown	Author <b>A Frampton</b>	Marin
Original Size	Α1	Checker <b>M.Lakin</b>	M.L.
Datum	N/A	Approver <b>T.Coe</b>	16
Grid	N/A	C Copyright reserved	

# Filename

Client





DDO IEC

Mill Road, Stour – Eel Pass

TITLE

Access Steps - Details

Drawing No. | Project No. | Issue | 104 - | 02811 - P01