



Cyfoeth Naturiol Cymru
Natural Resources Wales

Water Resources LICENCE TO

ABSTRACT

WATER

Environment Act 1995
Water Resources Act 1991 as amended
by the Water Act 2003
Water Resources (Abstraction and
Impounding) Regulations 2006
Natural Resources Body for Wales (Functions)
Order 2012

IMPORTANT NOTES

Need for safekeeping

This licence is an important document. The permission or right to abstract water may be valuable to your landholding. So -

- **Keep the licence safe, preferably with your deeds etc.**
- **Take careful note of the comments below about "transfer and apportionment" and "death and bankruptcy".**

This is to ensure that the permission and any rights granted by the licence continue if you need to pass it on to someone else.

If you want to:

- **revoke (cancel) the licence;**
- **vary (change/amend) the licence in any way or**
- **change your contact address (but you continue to hold the licence).**

Please write to us at your local Natural Resources Wales office.

Details of this licence are placed on a register, kept by Natural Resources Wales and open for inspection by the public. The public may also obtain further details about it by virtue of the Environmental Information Regulations 2004 (see also Disclosure of Information) except in special cases (for advice please contact us at the address shown on the front page of the licence).

Transfer and apportionment

If you need to pass this licence or any part of it to someone else, you must contact Natural Resources Wales and obtain the appropriate application forms. Temporary licences cannot be transferred or apportioned. The licence holder remains responsible for compliance with the terms of the licence and any charges payable until the licence has been transferred or apportioned.

Death or bankruptcy of the licence holder

If a licence has been 'vested' in you, as a result of the death or bankruptcy of the licence holder, please contact Natural Resources Wales in writing, telling us the licence number(s) and the date that the licence vested in you as a personal representative or trustee of the licence holder. This is necessary in order to enable you to subsequently transfer the licence.

'Vesting' is the transfer of responsibility and ownership of a licence when an existing licence holder is no longer able to hold the licence either through death or bankruptcy.

You do not have to complete a form, but you must notify us in writing within 15 months of the date of vesting, giving the full names of all personal representatives or trustees and a contact address.

Time limits

Your licence may be subject to a time limit (stated on the front of your licence). All new abstraction licences are legally required to include a time limit. For variations to licences, time limits are added in accordance with our policy.

The duration of a time limit is determined in accordance with our time limiting policy. The time limit is linked to the next or subsequent review of water resources within a Catchment Abstraction Management Strategy (CAMS).

There will be a presumption of renewal providing three tests are met: environmental sustainability is not in question; there is continued justification of need; and water is being used efficiently. Any application for renewal will still be subject to the normal statutory considerations.

If your licence is time limited and you wish to renew it when it expires, you will need to apply for a new licence to replace the existing one. You are advised to submit this application at least three months before it expires. To allow you to give early consideration to this, we will send you a reminder approximately 18 months before the expiry date.

If your licence cannot be renewed, we will endeavour to give at least six years notice. We will also endeavour to give at least six years notice where the licence is likely to be renewed on different terms and will significantly impact upon the use of the licence.

In exceptional circumstances, for example where there are other overriding statutory duties such as the Habitats Regulations, it may not be possible to provide six years notice.

Charges

Unless specifically exempted, we may levy an annual CHARGE for water AUTHORISED to be abstracted by this licence, in accordance with our abstraction charges scheme in force at the time.

The licence may be revoked if charges are not paid.

Quantity and quality of water

You must not abstract more than the quantity specified in the licence.

Natural Resources Wales does not, by issue of this licence or otherwise, in any way guarantee that the source of supply will produce the quantity of water authorised to be abstracted by this licence, nor that the water is fit for its intended use.

The quantity of water authorised for abstraction is given in cubic metres. One cubic metre is approximately 220 gallons.

(The precise conversion is 1 cubic metres = 219.969 gallons).

Source of supply and authorised point of abstraction

You may abstract from the point(s) specified in the licence and from no other points. If you want to add or change the authorised point(s) of abstraction, you must apply to us to vary the licence.

Land on which water is authorised to be used

Where this condition applies, you may only use the water you abstract on the area specified in the licence. You must apply to us to vary the licence if you wish to extend or alter this area or remove it.

Purpose for which water is authorised to be used

You may only use the water for the purpose(s) specified in the licence. You must apply to us to vary the licence if you wish to add to or change the purpose(s).

Offences

Under the Water Resources Act 1991 it is an offence:-

- to abstract water, or cause or permit any other person to abstract water, unless the abstraction is authorised by and in accordance with an abstraction licence, or is subject to an exemption;
- to do anything to enable abstraction, or to increase abstraction, except in accordance with an abstraction licence or exemption;
- to fail to comply with the conditions of an abstraction licence.
Note in particular that it may be a condition of the licence to maintain the meter or other measuring device etc. and failure to do so will be an offence;
- to interfere with a meter or other device which measures quantities of water abstracted so as to prevent it from measuring correctly;
- to fail to provide information which we have reasonably required for the purpose of carrying out any of the Natural Resources Wales water resources functions;
- to knowingly make false statements for the purpose of obtaining a licence or consent or in giving required information.

The requirement for a licence is subject to some exemptions, set out in the Water Resources Act 1991 as amended. If in any doubt as to whether you need a licence, contact us at the address shown at the bottom of the front page of the licence.

Right of appeal

If you are dissatisfied with our decision on your licence application, you may appeal.

If you are in England, you should write to the Secretary of State for the Environment, Food and Rural Affairs, care of The Planning Inspectorate at: Room 4/19 Eagle Wing, Temple Quay House, 2 The Square, Temple Quay, Bristol, BS1 6PN.

If you are in Wales, you should write to Welsh Government care of The Planning Inspectorate at: Crown Buildings, Cathays Park, Cardiff, CF10 3NQ.

You must serve notice of appeal within 28 days of the date of receipt of this licence (although the Secretary of State and The Welsh Government have power to allow a longer period for serving notice of appeal). See Water Resources Act 1991, section 43.

Disclosure of information

Information about this licence is available in the public Register held by Natural Resources Wales. Members of the public are also entitled to ask us for other "environmental information" it holds, including any activities likely to affect "the state of any water" or any "activities or other measures designed to protect it". That would include the information additional to the licence document e.g. any related agreement or abstraction returns. In certain restricted circumstances it is possible to claim that information should be kept confidential. If you require more information about keeping this information off the public register because it is confidential, please contact us by writing to the address shown on the front page of the licence within 28 days of receiving this licence.



**Cyfoeth
Naturiol
Cymru
Natural
Resources
Wales**

Licence serial number

WA/065/0001/0022

Please quote the serial number in all correspondence about this licence

FULL LICENCE TO ABSTRACT WATER

The Natural Resources Body for Wales (hereafter referred to as "NRW") grants this licence to:-

Dwr Cymru Cyfyngedig ("the Licence Holder")

Pentwyn Road
Nelson
Treharris
Mid Glamorgan
CF46 6LY

Company Registration Number: 02366777

This licence authorises the Licence Holder to abstract water from the source of supply described in the Schedule of Conditions to this licence and subject to the provisions of that Schedule. The licence commences from the effective date shown below and shall remain in force until the date of expiry shown below.

Signed:

Date of issue.....20 June 2019

Date effective.....20 June 2019

Date of expiry.....31 March 2037

Ashley Lansdown
Permitting Team Leader
Permitting Service
Natural Resources Wales
Cambria House
29 Newport Road
Cardiff
CF24 0TP

This licence should be kept safe and its existence disclosed on any sale of the property to which it relates. Please read the 'important notes' on the cover to this licence.

Note: References to "the map" are to the map which forms part of this licence.
References to "NRW" are to the Natural Resources Body for Wales or any successor body.

Environment Act 1995
Water Resources Act 1991 as amended by the Water Act 2003
Water Resources (Abstraction and Impounding) Regulations 2006
Article 3 of the Natural Resources Body for Wales (Establishment) Order 2012
The Natural Resources Body for Wales (Functions) Order 2013

SCHEDULE OF CONDITIONS

1. SOURCE OF SUPPLY

- 1.1 Inland water (river) known as Afon Cwmorthin at Cwmorthin, Blaenau Ffestiniog, Gwynedd.

2. POINT OF ABSTRACTION

- 2.1 At National Grid Reference SH 67910 45975 marked 'Point A' on the map.

3. MEANS OF ABSTRACTION

- 3.1 Intake works and a gravity feed pipe of an internal diameter not exceeding 500 millimetres controlled by a spear valve.

4. PURPOSE OF ABSTRACTION

- 4.1 Power production.

5. PERIOD OF ABSTRACTION

- 5.1 All Year.

6. MAXIMUM QUANTITIES OF WATER TO BE ABSTRACTED

- 6.1 36,288 cubic metres per day
6,800,000 cubic metres per year
At an instantaneous rate not exceeding 420 litres per second.

Note: A day means any period of 24 consecutive hours and a year means the 12 month period beginning on 1 April and ending on 31 March.

7. MEANS OF MEASUREMENT OF WATER ABSTRACTED

- 7.1 (i) No abstraction shall take place unless the Licence Holder has installed a meter to measure quantities of water abstracted.
- (ii) The Licence Holder shall position and install the meter in accordance with any written directions given by NRW.
- (iii) The Licence Holder shall maintain, repair or replace the meter to ensure that accurate measurements are recorded at all times.
- (iv) The Licence Holder shall keep all records of meter repair or replacement including evidence of current certification for a period of 6 years.

8. RECORDS

- 8.1 (i) The Licence Holder shall take and record readings of the meter specified in Condition 7 (i) at the same time each day during the whole of the period during which abstraction is authorised or as otherwise approved in writing by NRW.
- (ii) The Licence Holder shall send to NRW a copy of the records required by

Condition 8.1 (i) above or summary data to NRW within 28 days after 31 March in each year, and also within 28 days of being so requested in writing by NRW.

- (iii) The Licence Holder shall keep all records for at least 6 years, and shall allow NRW to inspect them during all reasonable hours.

9. FURTHER CONDITIONS

9.1 For the purpose of this licence, references to 'hydropower scheme' shall mean all works consisting of a modified concrete weir, coanda intake screen with 3 millimetre bar spacing, intake tank, a compensation flow notch, 500 millimetre internal diameter gravity feed penstock pipe controlled by a spear valve, a Pelton turbine with associated ancillary civil works and discharge outlet pipe with 10 millimetre bar spacing.

9.2 The Licence Holder shall construct, operate and maintain the hydropower scheme in accordance with the specifications and drawings:

"General Arrangement" dated 01/02/2011,
 "Proposed Sections (Sheet 1 of 2)" dated 07/02/2011 and
 "Proposed Sections (Sheet 2 of 2)" dated 07/02/2011

copies of which are appended to this licence, or such minor amendments to those documents that are accepted in writing by NRW prior to the date of commencement of construction.

9.3 The Licence Holder shall, as far as is reasonably practicable, ensure that no water flows through the turbine if the Licence Holder is unable to generate power.

9.4 The Licence Holder shall return all of the water abstracted in pursuance of this licence to the un-named tributary of the Tanygrisiau Reservoir at National Grid Reference SH 68095 44920 marked 'Point Q' on the map.

9.5 (i) **From Good Friday to August Bank Holiday Monday, 8am until 8pm, inclusive in each year:**

No abstraction of water shall take place unless the rate of flow in the Afon Cwmorthin immediately downstream of the authorised point of abstraction, marked as "Point A" as specified in condition 2.1 above is equal to or greater than 454 litres per second and the abstraction shall not cause the flow immediately downstream of the said abstraction point to fall below such rate.

(ii) **At all other times:**

No abstraction of water shall take place unless the rate of flow in the Afon Cwmorthin immediately downstream of the authorised point of abstraction, marked as "Point A" as specified in condition 2.1 above is equal to or greater than 34 litres per second and the abstraction shall not cause the flow immediately downstream of the said abstraction point to fall below such rate. Abstractions are not permitted when the river flow at the abstraction point is less than 94 litres per second.

9.6 (i) No abstraction shall take place unless the Licence Holder has installed a level measurement device, zeroed to the compensation flow notch spill level, in the Afon Cwmorthin at the point of abstraction specified in Condition 2.1.

- (ii) The Licence Holder shall monitor and maintain the level measurement device in such a condition, and if necessary replace it, so as to ensure that accurate measurements are recorded at all times.
- 9.7
- (i) The Licence Holder shall use a gauge board, zeroed to the compensation flow notch spill level, to measure the level of water in the Afon Cwmorthin behind the weir located at National Grid Reference SH 67910 45975.
 - (ii) No abstraction shall take place unless the Licence Holder has provided and installed a gauge board in accordance with the manufacturer's instructions and any written directions given by NRW.
 - (iii) The Licence Holder shall install and maintain the gauge board in such a condition, and if necessary replace it so as to ensure that accurate measurements of water level can be made at all times.
- 9.8 **From Good Friday to August Bank Holiday Monday, 8am until 8pm, inclusive in each year:**
- (i) The Licence Holder shall take and record readings of the level measurement device specified in condition 9.6 at 15 minute intervals or as otherwise approved in writing by NRW.
 - (ii) The Licence Holder shall connect the level measurement device specified in Condition 9.6 to a recording device which will accurately record the water level during each 15 minute interval.
 - (iii) The Licence Holder shall maintain, repair or replace the recording device to ensure that accurate measurements are recorded at all times.
 - (iv) The Licence Holder shall send to NRW a copy of the records required by Condition 9.8 (ii) above within 28 days after 31 August in each year and also within 28 days of being so requested in writing by NRW.
 - (v) Each record shall be kept and be made available during all reasonable hours for inspection by NRW for at least 6 years.
- 9.9
- (i) No abstraction shall take place from Good Friday to August Bank Holiday Monday, 8am until 8pm, inclusive in each year unless the Licence Holder has submitted to and had approved in writing by NRW, a calculated stage to residual flow relationship curve and corresponding data between the level of water behind the weir at National Grid Reference SH 67910 45975 and the residual flow over the weir.
 - (ii) The calculated stage to residual flow relationship curve specified in Condition 9.10 (i) above shall be amended accordingly, if requested in writing by NRW, following the submission of the data specified in Condition 9.8 above.
 - (iii) The amendment(s) shall be made within 28 days of written instruction by NRW.
- 9.10 The Licence Holder shall ensure that during construction works and any subsequent maintenance works to the hydropower scheme, the flow in the Afon Cwmorthin is allowed to pass downstream unchanged in quantity and quality at all times.

- 9.11 (i) No abstraction shall take place unless the Licence Holder has installed a Coanda intake screen with spacing no greater than 3 millimetres to prevent the entrapment, entrainment or impingement of fish at the point of abstraction.
- (ii) The Licence Holder shall maintain the fish screen in accordance with the manufacturer's specifications and keep records of such maintenance available for inspection
- 9.12 (i) No abstraction shall take place unless the Licence Holder has installed a screen with spacing no greater than 10 millimetres to the discharge structure to prevent the entrapment, entrainment or impingement of fish.
- (ii) The Licence Holder shall maintain the screen and keep records of such maintenance available for inspection

ADDITIONAL INFORMATION

Note: the following information is provided for information only. It does not form part of the licence.

REASONS FOR CONDITIONS

The licence is time-limited to a date to reflect the timing of a future review of the catchment resources availability.

Conditions 7 and 8: The abstraction is required to be metered to demonstrate compliance with the conditions of the licence and to provide information on actual water usage for water planning purposes.

Conditions 9.1 and 9.2: to ensure the hydropower scheme is constructed, operated and maintained in accordance with the drawings and specifications agreed by NRW during the determination of the licence.

Condition 9.3: to secure the proper and efficient use of water resources.

Condition 9.4: to ensure the abstraction can be classed as non-consumptive.

Conditions 9.5: to ensure a flow is maintained in the watercourse in order to maintain the riverine habitat for the conservation of the flora and fauna.

Conditions 9.6 9.7, 9.8 and 9.9: to ensure compliance with Condition 9.5.

Condition 9.10: to ensure that the water environment is not impacted during construction and subsequent maintenance.

Condition 9.11: to prevent the entrapment, entrainment and impingement of fish at the point of abstraction.

Condition 9.12: to prevent the entrapment, entrainment and impingement of fish at the point of discharge.

IMPORTANT NOTES

This licence replaces ceased licence serial number 23/35/1/0033.

Impoundment licence serial number WA/065/0001/0023 has been issued to facilitate the abstraction of water for the hydropower scheme authorised by this abstraction licence.

For the purpose of Condition 9.2 the Licence Holder shall contact:

Natural Resources Planning Officer
Natural Resources Planning
Natural Resources Wales
Maes y Ffynnon
Penrhosgarnedd
Bangor
Gwynedd
LL57 2DW

Tel: 0300 065 3000

Email: nrp.northmid@cyfoethnaturiolcymru.gov.uk

Water efficiency note

The Licence Holder should use water abstracted under the terms of this licence in an efficient manner. NRW may refer to its guidance on water efficiency (or equivalent guidance) in determining whether water is being used efficiently and may offer advice on any measures considered necessary to meet particular recommendations.

Metering

NRW will have regard to its Abstraction Metering Good Practice Manual (or equivalent guidance) in directing any of the following: where the meter should be located or how it should be installed; whether the meter measures accurately, and/or is properly maintained; whether it is necessary to require repair or replacement of the meter.

Screening

NRW will have regard to its Screening for Intakes and Outfalls: a Best Practice Guide (or equivalent guidance) in agreeing where, how and what type of fish screens should be installed and together with the results of any monitoring in determining whether the fish screens are properly effective and maintained, and in judging whether it is necessary to require repair or replacement of the fish screens.



British_National_Grid



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MAP ACCOMPANYING LICENCE NUMBER / MAP I GYFEILIO TRWYDDED RHIF
WA/065/0001/0022
Scale I Graddfa 1:10,000

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Hawlfraint y Goron a hawl cronfa ddata Arolwg Ordnans. Cyfoeth Naturiol Cymru, 100019741, 2015.



Note:

Compensation Flow
Notch 550mm x 105mm
to secure 34l/s.

REFERENCE DRAWINGS:-

- H27462/1/03 EXISTING SECTIONS SHEET 1 OF 2
- H27462/1/04 EXISTING SECTIONS SHEET 2 OF 2
- H27462/1/05 EXISTING SECTIONS SHEET 1 OF 2
- H27462/1/06 EXISTING SECTIONS SHEET 2 OF 2

DRAWING REVISED TO CONSTRUCTION ISSUE	04.01.2012	CR	A
Comments	Date	Initial	Rev

Client:

INFINIS PLC

Project:

CWMORTHIN HYDRO
REFURBISHMENT

Title:

GENERAL
ARRANGEMENT

Drawn by:	MW	Checked by:	NS
Scale:	1:50	Date:	01/02/11

Drawing Number:

H27462/1/02A

Issue Purpose:

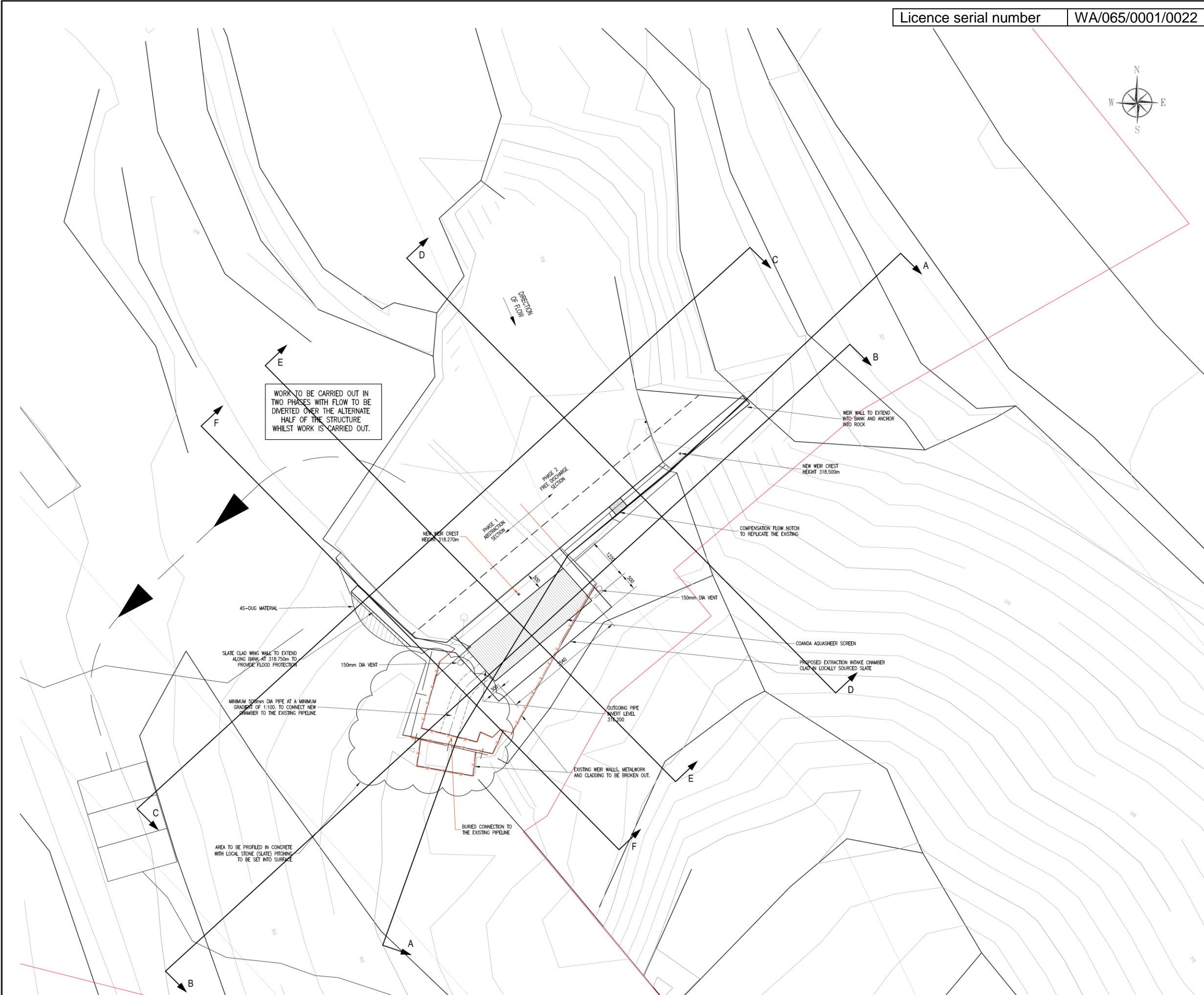
CONSTRUCTION

INTER
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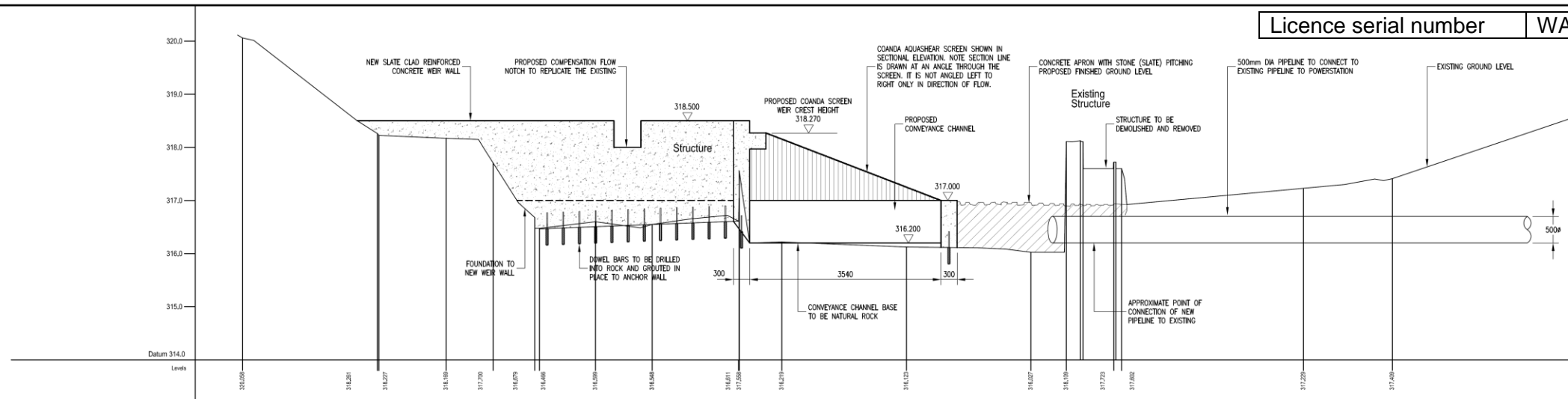
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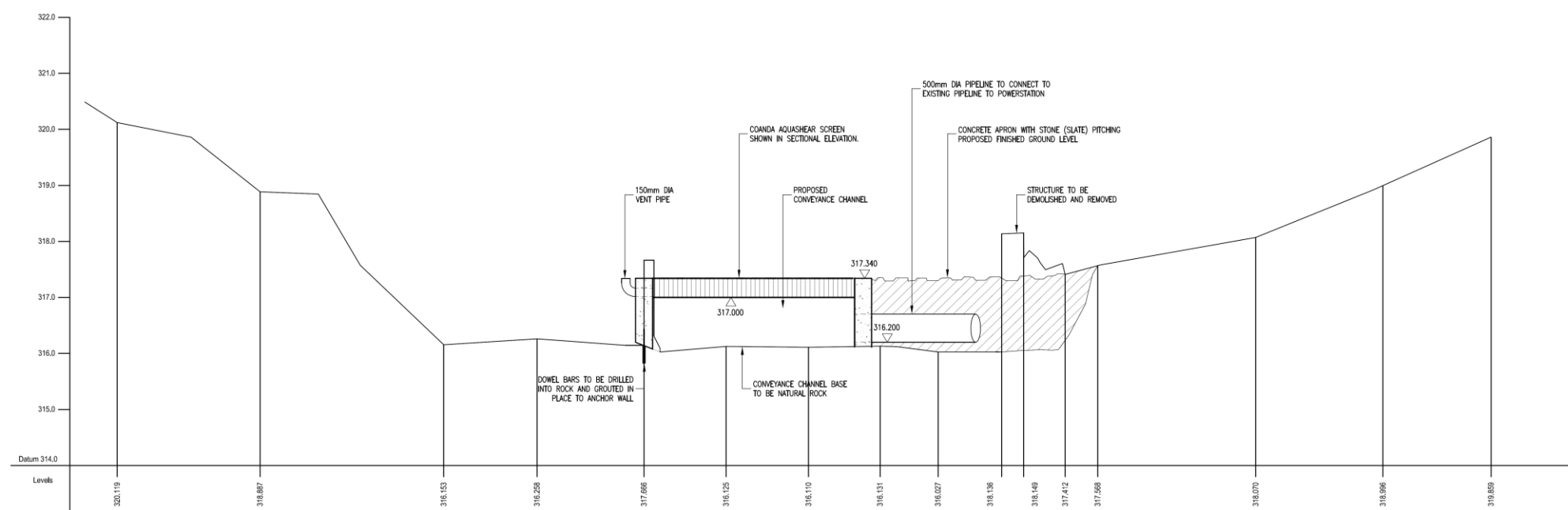
1. This drawing is not to be scaled, if in doubt ask!
2. This drawing is to be read in conjunction with all relevant Architects, services and Inter Hydro Technology drawings and specifications.

Note:

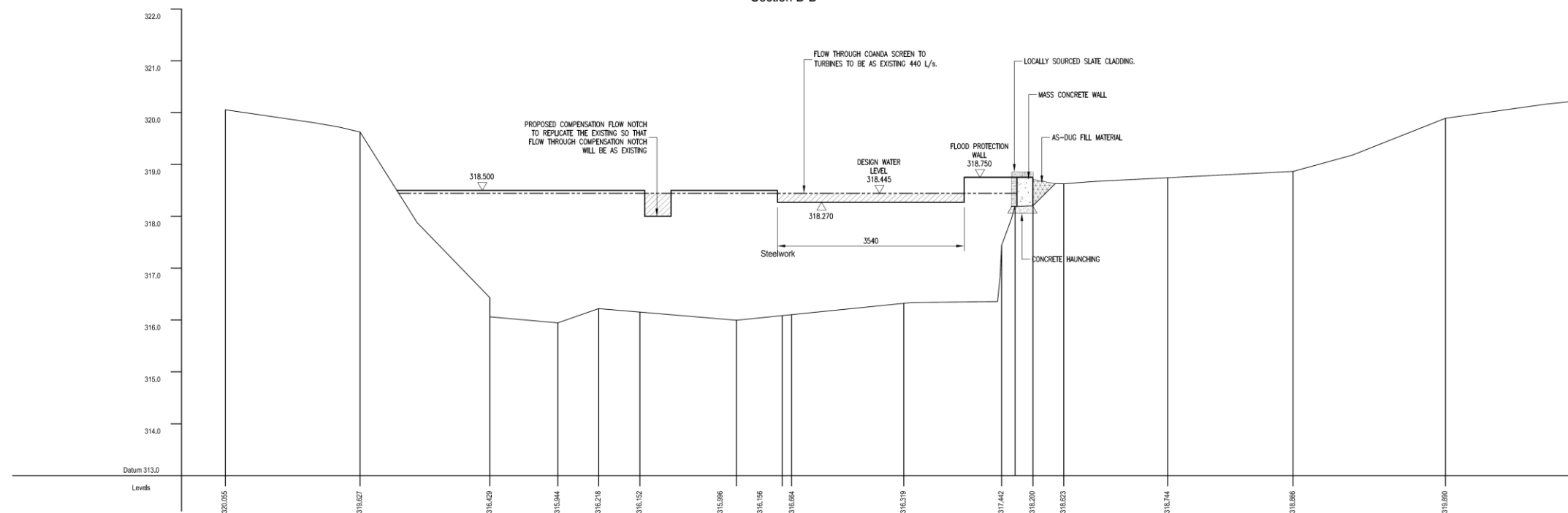
**Compensation Flow
Notch 550mm x 105mm
to secure 34l/s.**



Section A-A



Section B-B



Sectional Elevation C-C

REFERENCE DRAWINGS:-

H27462/1/02 - GENERAL ARRANGEMENT

DRAWING REVISED TO CONSTRUCTION ISSUE	04.01.2012	CR	A
Comments	Date	Initial	Rev

Client: INFINIS PLC

Project: CWMORTHIN HYDRO
REFURBISHMENTTitle: PROPOSED SECTIONS
(SHEET 1 OF 2)

Drawn by: MW	Checked by: NS
Scale: 1:50	Date: 07/02/11

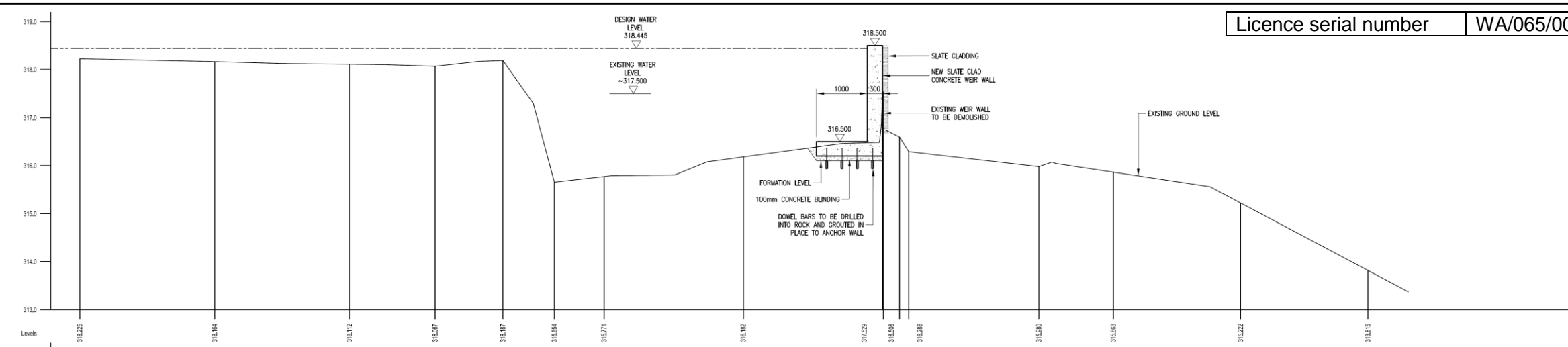
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Issue Purpose: CONSTRUCTION

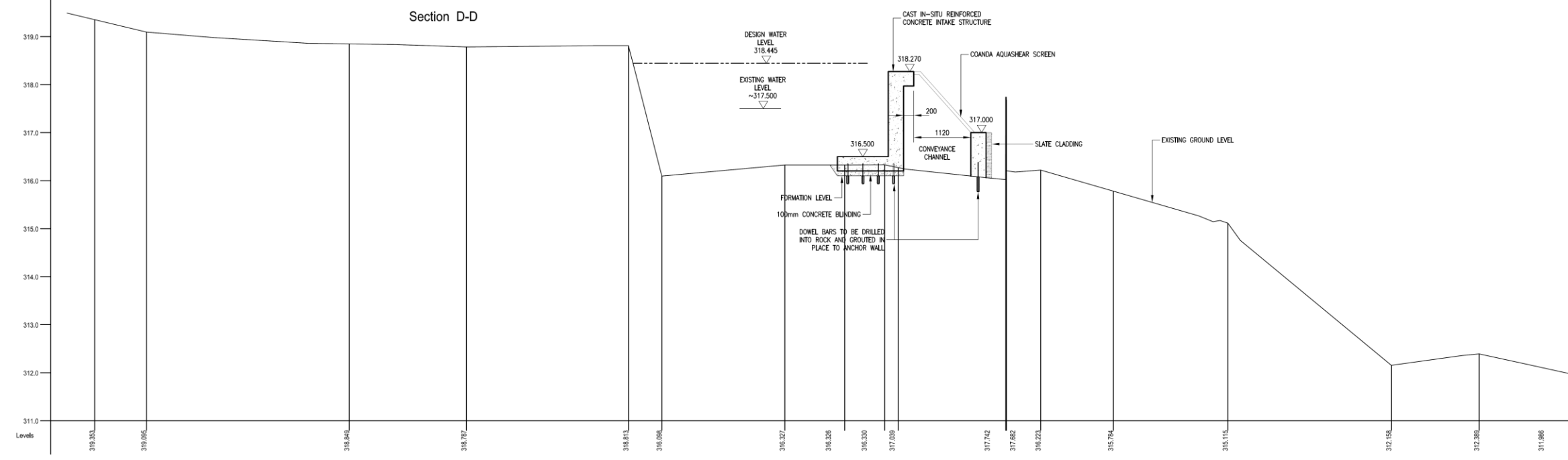
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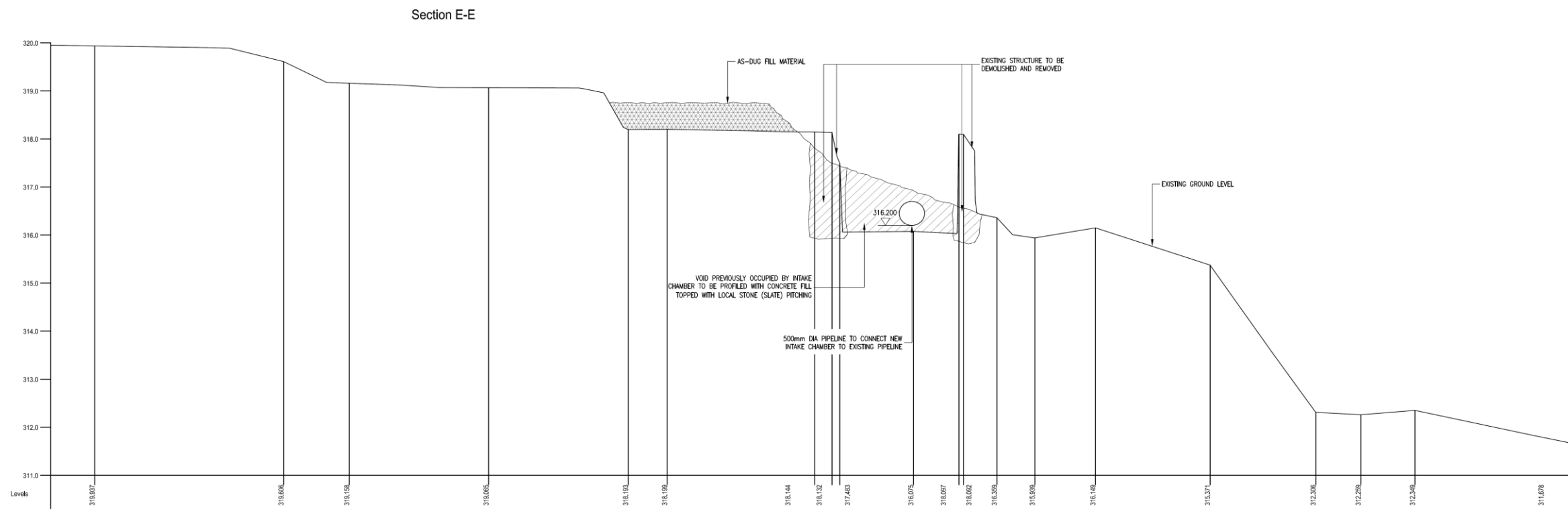
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Section D-D



Section E-E



Section F-F

Licence serial number WA/065/0001/0022

NOTES:-

1. This drawing is not to be scaled, if in doubt ask!

2. This drawing is to be read in conjunction with all relevant Architects, services and Inter Hydro Technology drawings and specifications.

Note:

Compensation Flow
Notch 550mm x 105mm
to secure 34l/s.

REFERENCE DRAWINGS:-

H27462/1/02 - GENERAL ARRANGEMENT

DRAWING REVISED TO CONSTRUCTION ISSUE	04.01.2012	CR	A
Comments	Date	Initial	Rev

Client: **INFINIS PLC**

Project: **CWMORTHIN HYDRO REFURBISHMENT**

Title: **PROPOSED SECTIONS (SHEET 2 OF 2)**

Drawn by: MW	Checked by: NS
Scale: 1:50	Date: 07/02/11

Drawing Number: **H27462/1/06A**

Issue Purpose: **CONSTRUCTION**

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