

TCP/11/16(562) – 18/00726/FLL – Change of use and alterations to agricultural steading to form 2 dwellinghouses, alterations to existing vehicular access and associated works (in part retrospect) vehicular access and associated works (in part retrospect) at Hosh Farm Steading, The Hosh, Crieff, PH7 4HA

INDEX

- (a) Papers submitted by the Applicant (***Pages 441-474***)
- (b) Decision Notice (***Pages 477-478***)
 - Report of Handling (***Pages 479-490***)
 - Reference Documents (***Pages 491-540***)
- (c) Representations (***Pages 541-566***)

TCP/11/16(562) – 18/00726/FLL – Change of use and alterations to agricultural steading to form 2 dwellinghouses, alterations to existing vehicular access and associated works (in part retrospect) vehicular access and associated works (in part retrospect) at Hosh Farm Steading, The Hosh, Crieff, PH7 4HA

**PAPERS SUBMITTED
BY THE
APPLICANT**

NOTICE OF REVIEW

UNDER SECTION 43A(8) OF THE TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997 (AS AMENDED) IN
RESPECT OF DECISIONS ON LOCAL DEVELOPMENTS

THE TOWN AND COUNTRY PLANNING (SCHEMES OF DELEGATION AND LOCAL REVIEW PROCEDURE)
(SCOTLAND) REGULATIONS 2013

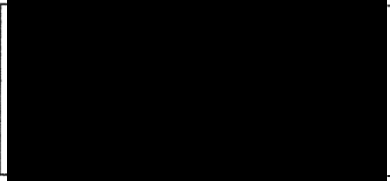
THE TOWN AND COUNTRY PLANNING (APPEALS) (SCOTLAND) REGULATIONS 2008


IMPORTANT: Please read and follow the guidance notes provided when completing this form.
Failure to supply all the relevant information could invalidate your notice of review.


Use BLOCK CAPITALS if completing in manuscript

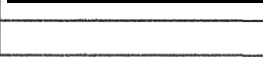
Applicant(s)


Name MR ROD FINDLAY,


Address 

Postcode 

Contact Telephone 1 

Contact Telephone 2 

Fax No 

E-mail* 

Agent (if any)

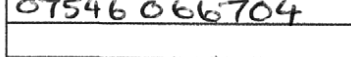
Name ARUM RESOURCES LTD

Address UNIT 9
GLENRUTHEN MILL
BUSINESS CENTRE, ABBEY
ROAD, AUCHTERARDER
PH3 1DP

Postcode PH3 1DP

Contact Telephone 1 01764 664632

Contact Telephone 2 07546 066704

Fax No 

E-mail* admin@arumresources.co.uk

Mark this box to confirm all contact should be
through this representative: ☒ Yes ☐ No

* Do you agree to correspondence regarding your review being sent by e-mail?

Yes ☒ No ☐

Planning authority

PERTH AND KINROSS

Planning authority's application reference number

18/00726/FLL

Site address

HOSH FARM STEADING, THE HOSH, CRIEFF
PH7 4HA.

Description of proposed
development

CHANGE OF USE AND ALTERATIONS TO AGRICULTURAL
STEADING TO FORM 2 NO. DWELLING HOUSES, ALTERATIONS TO
EXISTING VEHICULAR ACCESS AND ASSOCIATED WORKS (IN PART
RETROSPECT) VEHICULAR ACCESS AND ASSOCIATED WORKS
(IN PART RETROSPECT)

Date of application

03/05/2018

Date of decision (if any)

24/08/2018

Note. This notice must be served on the planning authority within three months of the date of the decision
notice or from the date of expiry of the period allowed for determining the application.

Nature of application

1. Application for planning permission (including householder application) ☒
2. Application for planning permission in principle ☐
3. Further application (including development that has not yet commenced and where a time limit has been imposed; renewal of planning permission; and/or modification, variation or removal of a planning condition) ☐
4. Application for approval of matters specified in conditions ☐

Reasons for seeking review

1. Refusal of application by appointed officer ☒
2. Failure by appointed officer to determine the application within the period allowed for determination of the application ☐
3. Conditions imposed on consent by appointed officer ☐

Review procedure

The Local Review Body will decide on the procedure to be used to determine your review and may at any time during the review process require that further information or representations be made to enable them to determine the review. Further information may be required by one or a combination of procedures, such as: written submissions; the holding of one or more hearing sessions and/or inspecting the land which is the subject of the review case.

Please indicate what procedure (or combination of procedures) you think is most appropriate for the handling of your review. You may tick more than one box if you wish the review to be conducted by a combination of procedures.

1. Further written submissions ☒
2. One or more hearing sessions ☒
3. Site inspection ☒
4. Assessment of review documents only, with no further procedure ☐

If you have marked box 1 or 2, please explain here which of the matters (as set out in your statement below) you believe ought to be subject of that procedure, and why you consider further submissions or a hearing are necessary:

WE BELIEVE THAT THE SUMMARY TO PERTH + KINROSS' REPORT OF HANDLING HIGHLIGHTS THAT THE AUTHORITY EXCEEDED ITS POWERS (ACCORDING TO LEGISLATION + GUIDANCE) IN REFUSING APPLICATION DUE TO FLOODING RISK

Site inspection

In the event that the Local Review Body decides to inspect the review site, in your opinion:

- | | Yes | No |
|--|-------------------------------------|--------------------------|
| 1. Can the site be viewed entirely from public land? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Is it possible for the site to be accessed safely, and without barriers to entry? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

If there are reasons why you think the Local Review Body would be unable to undertake an unaccompanied site inspection, please explain here:

Statement

You must state, in full, why you are seeking a review on your application. Your statement must set out all matters you consider require to be taken into account in determining your review. Note: you may not have a further opportunity to add to your statement of review at a later date. It is therefore essential that you submit with your notice of review, all necessary information and evidence that you rely on and wish the Local Review Body to consider as part of your review.

If the Local Review Body issues a notice requesting further information from any other person or body, you will have a period of 14 days in which to comment on any additional matter which has been raised by that person or body.

State here the reasons for your notice of review and all matters you wish to raise. If necessary, this can be continued or provided in full in a separate document. You may also submit additional documentation with this form.

PLEASE REFER TO ATTACHED LOCAL REVIEW BODY STATEMENT

430/LRB/001

AND

SUPPORTING STATEMENTS BY NEIGHBOURS.

THE REASON FOR REVIEW IS THAT THE PLANNING AUTHORITY ACTED OUTWITH PLANNING GUIDELINES, NATIONAL AND LOCAL POLICY AND LEGISLATION WITH REGARD TO CONSULTATION WITH SEPA. THIS RESULTED IN A DEMAND FOR AN INAPPROPRIATE ENHANCED FLOOD RISK ASSESSMENT, LIKEY TO COST IN THE REGION OF £5000. THIS IS NOT JUSTIFIED THROUGH LOCAL PLANNING POLICY OR LAW.

Have you raised any matters which were not before the appointed officer at the time the determination on your application was made?

Yes No
☐ ☒

If yes, you should explain in the box below, why you are raising new material, why it was not raised with the appointed officer before your application was determined and why you consider it should now be considered in your review.

List of documents and evidence

Please provide a list of all supporting documents, materials and evidence which you wish to submit with your notice of review and intend to rely on in support of your review.

430/LRB/001 - LOCAL REVIEW BODY STATEMENT
 BAXTER STATEMENT
 COUGHIN STATEMENT
 MACKINTOSH STATEMENT
 NELSON STATEMENT
 SOUTHERN + ELLIN STATEMENT

} NEIGHBOUR SUPPORTING STATEMENTS

FINDLAY STATEMENT — APPLICANT STATEMENT.

Note. The planning authority will make a copy of the notice of review, the review documents and any notice of the procedure of the review available for inspection at an office of the planning authority until such time as the review is determined. It may also be available on the planning authority website.

Checklist

Please mark the appropriate boxes to confirm you have provided all supporting documents and evidence relevant to your review:

- ☒ Full completion of all parts of this form
- ☒ Statement of your reasons for requiring a review
- ☒ All documents, materials and evidence which you intend to rely on (e.g. plans and drawings or other documents) which are now the subject of this review.

Note. Where the review relates to a further application e.g. renewal of planning permission or modification, variation or removal of a planning condition or where it relates to an application for approval of matters specified in conditions, it is advisable to provide the application reference number, approved plans and decision notice from that earlier consent.

Declaration

I the ~~applicant~~/agent [delete as appropriate] hereby serve notice on the planning authority to review the application as set out on this form and in the supporting documents.

Signed



Date

16 / 10 / 2018.

Dear Sirs

LOCAL REVIEW BODY STATEMENT

RE: CHANGE OF USE AND ALTERATIONS TO AGRICULTURAL STEADING TO FORM 2 NO. DWELLING-HOUSES, ALTERATIONS TO EXISTING VEHICULAR ACCESS AND ASSOCIATED WORKS (IN PART RETROSPECT) VEHICULAR ACCESS AND ASSOCIATED WORKS (IN PART RETROSPECT)

PLANNING REF 18/00726/FLL

We are moved to appeal to the local review body regarding the decision given by Perth and Kinross Planning Department on the above application. We will not bring any new information to the board's attention, however we do feel there is a need to clarify a number of points which have been noted in the delegated report which are misleading and inaccurate. It is unfortunate that this appeal is required, as had the planning authority not acted outwith their guidelines then the sole issue of refusal – namely the demand for a full flood risk assessment by SEPA., would have been resolved to the satisfaction of all parties.

We also wish to highlight the onerous cost attributed to Developer Contributions for this site.



River Turret at 8th April 2018 after period of snow and rain

SUMMARY

The summary states that the “*This report recommends **refusal** of the application as the development is considered to be contrary to the relevant provisions of the Development Plan and there are no material considerations apparent which justify setting aside the Development Plan.*”

The sole reason for the refusal of this application is that SEPA requires a higher level of flood analysis (policy EP2, development and flooding) than that previously demanded on existing applications for that site, or elsewhere in the Hosh settlement area.

To summarise for the Local Review Body, the Flood Risk Assessment should not have been required as.

1. This is not **new development** but refurbishment of existing farm steadings.
2. The policy EP2 relates to buildings – **no new buildings** are proposed on site.
3. The policy EP2 relates to a functional flood plain – Scottish Planning Policy SPP 7 defines a functional flood plain as –
16. Functional flood plains are the unobstructed areas of land adjacent to watercourses or on the coast where water regularly flows in times of flood and which therefore store flood water which would otherwise flow elsewhere. No record of the River Turret flooding in this area is known. There is a record of the old bridge over the River Turret being damaged – but this is not evidence of a flood that would cause risk to the inhabitants of the building. It may be evidence of a bridge in poor state of repair in the first place. **Therefore, this is not a functional flood plain.**
4. Policy EP2 requires an incorporation of a 600mm freeboard – **this is provided under the previous approved application.**
5. The 5 criteria that Policy EP2 requires should not occur – will not be affected by this proposal. Namely, surface water increase, reduction of river naturalness, require mitigation works elsewhere, affect existing flood attenuation and compromise future mitigation works. – **Because it is not new development.**
6. Scottish Planning Policy SPP 7 15. states that this policy **should not be used for small scale alterations and extensions** – obviously this is the case here.
7. **If risk exists – it is already in place.** Nothing that is proposed will increase the risk of flooding the site.
8. Planning authorities are required to consult the SEPA before granting planning permission “where it appears to the planning authority that the development is **likely to result in a material increase in the number of buildings at risk of being damaged by flooding**”. (The Town and Country Planning (General Development Procedure) (Scotland) Order 1992 Article 15 (SI 1992/224 as amended by SI 1996 No. 467 (S.36)) (The GDPO). – Again there is no **material increase** in the number of buildings. There is not even an increase in building footprint.
9. It is outwith SEPA's remit to object based on a **perceived increase in population** rather than building footprint. Any increase will be negligible. As noted above, risk is already there. This is a misinterpretation of their responsibility.

10. Any flooding is shown to overspill at a level 600mm below the proposed floor level of the proposal. **As already agreed on the previous application.**
11. Flooding can only occur if a blockage, highly unlikely, to the bridge takes place. The bridge is an adopted structure of Perth and Kinross Council. Perth and Kinross Council and SEPA are required to have a plan in place if they feel there is a risk of flooding in this area, under the Civil Contingencies Act 2004. Should flooding to such an extent occur at this location, the Council are responsible for alleviating the issue. This is required whether the proposal is approved or not. The approval of the proposal will not make any difference to the statutory responsibilities of the Council or other agencies. **This is because there is no increase to the approval already enacted.**

BACKGROUND AND DESCRIPTION OF PROPOSAL

This proposal seeks planning consent for alterations to the steading to form 2no. dwelling-houses, alterations to existing vehicular access and associated works as well as the formation of vehicular access (in part retrospect) as advised by the planning authority.

Unit 2 has been effectively occupied since 2017 and this application had been submitted to rectify the initial approvals which related to the same building footprint. It is also submitted to gain permission for changes related to Unit 1

As noted in the planning officers report, there is some planning history related to this application.

05/02058/FUL - Planning was granted for the steading conversion and erection of three holiday cottages. This was approved 23rd March 2006. Please note that no requirement for a flood risk assessment was requested by SEPA, for what would have been a larger development than that proposed in the current application.

10/00583/FLL – Planning was granted for a single unit within the steading conversion. This was a modification of 05/02058/FUL. This involved a reduction in total floor area from the previous application. This application was approved in 9th August 2010.

While objections were received from Perth and Kinross Council Flood Authority on the basis of the development being within the 1:200 functional flood plain, and a flood risk assessment was requested. SEPA offered no objection and only noted that the finished floor level of the steading should be set at 73.8m (600mm freeboard from the surrounding ground level). A decision was made by the Development Quality Manager that, ***“in this instance, it would be unreasonable to insist on the increased floor levels at this stage, due to the previous planning permission having been granted without any such restriction.”***

As a result the floor levels of the steading conversion would be maintained at 73.6m (200mm lower than that requested by SEPA) and the application approved.

The steading was split into two units with a subsequent reduction of floor area. An application 17/01121/FLL was submitted to cover this but withdrawn in favour of the current application 18/00726/FLL

SITE HISTORY – ACCEPTED.

PRE-APPLICATION CONSULTATION

Conversations by phone and email were had on numerous occasions regarding the exact wording of that the application should take as part of the works were in retrospect. The planning authority are well aware of the site and of the keenness of the applicant to resolve the application. The titling of the application was confirmed by Christine Brien within an email 15th May 2018

NATIONAL POLICY AND GUIDANCE

We believe that national policy and guidance permits approval of the application without the need of a full flood risk assessment.

DEVELOPMENT PLAN - ACCEPTED

TAY plan STRATEGIC DEVELOPMENT PLAN 2012-2032-APPROVED JUNE 2012 – ACCEPTED.

**PERTH AND KINROSS LOCAL DEVELOPMENT PLAN 2014- ADOPTED FEBRUARY 2014.
(ACCEPTED IN PART)**

EP2 (abridged from SPP 7 – planning and flooding) states

“There will be a general presumption against proposals for built development or land raising on a functional flood plain and in areas where there is a significant probability of flooding from any source, or where the proposal would increase the probability of flooding elsewhere.

In addition, built development should avoid areas at significant risk from landslip, coastal erosion and storm surges.

Where a risk of flooding is known or suspected the Council will use the flood risk framework shown in the diagram overleaf and considers that areas of:

- (i) medium to high flood risk are not suitable for essential civil infrastructure;*
- (ii) (ii) low to medium flood risk are suitable for most forms of development; and*
- (iii) (iii) little or no flood risk shown present no flood related constraints on development.*

All development within areas of medium to high flood risk must incorporate a ‘freeboard’ allowance and the use of water resistant materials and forms of construction appropriate to its function, location, and planned lifetime relative to the anticipated changes in flood risk arising from climate change.

To allow for adaption to increased flood risk associated with climate change, development should not:

- (a) Increase the rate of surface water run-off from any site;*
- (b) Reduce the naturalness of the river;*
- (c) Add to the area of land requiring flood protection measures;*
- (d) Affect the flood attenuation capability of the functional flood plain; nor*
- (e) Compromise major options for future shoreline or river management.”*

NOTE – The general principles of SPP7 (15.) state

“Alterations and small scale extensions to buildings are generally outwith the scope of this SPP provided they would not have a significant effect on the storage capacity of the

functional flood plain or affect local flooding problems."

The proposal obviously has no effect on storage capacity or affect local flooding problems

The policy EP2 identifies the site as being within functional flood plain by use of the mapping tool provided by SEPA.

However its appropriate use in this application is disputed. For the following reasons.

1. SEPA themselves accept that the maps are indicative in nature, within the Technical Flood Risk Guidance For Stakeholders. SEPA state in 2.0 – ***It is inappropriate for these flood maps to be used to assess flood risk to an individual property.***
2. A simple Flood Risk Assessment (in line with SEPAs Technical Flood Risk Guidance For Stakeholders) was submitted in support of the application.

This report (in line with 4.3.3 of the Technical Flood Risk Guidance For Stakeholders 2015 available at time of application) is based on basic topographical information gained from the site.

This shows that the proposed level of the existing steading (set at 73.6m by approval 10/00583/FFL.) would not flood as the Turret Burn would surcharge on the south side of the Turret Bridge. From a site survey of the site, it is self evident that flooding on the site would not affect the proposed steading conversions.
No reasons have been given for SEPAs request for a detailed flood risk assessment.

3. Flooding can only occur on the site if the bridge is blocked by storm debris, and it has been shown to surcharge to the south side of the Turret bridge in any case. This bridge is a single span of 13.8m width x 2.79m to top of existing watercourse. This results in a cross sectional area of 38.5m². It is extremely unlikely that any flood event in this area would block this opening.

Should such an unlikely event occur as the Turret Bridge is a highway structure adopted by Perth and Kinross Council, it is their responsibility to maintain the structure and ensure that it is kept clear. In this case it would be a simple operation to undertake, particularly as the bridge is overlooked by the proposed properties.



Turret Bridge as viewed from the west.

4. It is unreasonable of SEPA to request a detailed Flood Risk Assessment of a likely cost in the region of £5000 as against the actual cost of providing a dividing wall within the building which was in the region of £300.
5. A freeboard has already been agreed under approval 10/00583/FFL
6. No records of historic flooding have been known to affect the existing steading complex. What is known was the previous bridge was badly damaged in a flood and replaced by the present structure. This does not mean that there was a flood to the extent envisaged by SEPA's mapping tool.
7. Given that the site is developed from a redundant steading the site meets the 5 criteria outlined above that will meet the requirements of policy EP2, namely

It will not increase the rate of surface water run-off from any site;

It will not reduce the naturalness of the river;

It will not add to the area of land requiring flood protection measures;

It will not affect the flood attenuation capability of the functional flood plain;

It will not compromise major options for future shoreline or river management.

OTHER POLICIES

DEVELOPMENT CONTRIBUTIONS - SEE BELOW

HOUSING IN THE COUNTRYSIDE GUIDE - AGREED

FLOOD RISK AND FLOOD RISK ASSESSMENTS – ADDRESSED ABOVE UNDER POLICY EP2

CONSULTATION RESPONSES

SEPA – Object. In the first response they advised the submitted information was inadequate to demonstrate that the proposed development is outwith the 0.5% AP (1:200) floodplain. SEPA strongly recommend that a satisfactory FRA be undertaken that includes both a hydrological assessment and hydraulic modelling to establish design flood levels at the site.

However

The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013 require that planning authorities must, before determining an application for planning permission for development, consult with SEPA where the development is likely to result in a material increase in the number of buildings at risk of being damaged by flooding (Schedule 5.1 (1)). Planning authorities must take SEPA's advice into account alongside the development plan and other material considerations in the determination of planning applications involving flood risk.

The proposals do not show an increase in buildings, indeed the proposed footprint is reduced from the approved 10/00583/FFL.

Further the Local Plan of 2001 specifically identifies the site (H53) as having the potential of 6 dwellings. 3 dwellings are built / proposed in the field north of the steading. A further 1 has been built from part of the steading. And the steading itself under the application

submitted is proposed to split the single dwelling in to 2. Thus the development proposes outlined in 2001 has been met and the site has not been overdeveloped.

There is no extra development to justify an enhanced flood risk assessment.



Extract from 2001 Strathearn Local Plan

Precedent

As highlighted to the planning officer, at no point, until this application, has SEPA requested an enhanced Flood Risk Assessment, for this application site or others within the Hosh Settlement Boundary.

The most recent case of a nearby application was for

16/00352/FLL Erection of a dwellinghouse and detached garage (revised layout) Plot 2A
The Hosh Crieff

For example – please refer to this email below from planning officer David Niven to James Denholm Partnership regarding finished floor levels for the above application.

David Niven

From: David Niven
Sent: 03 November 2016 15:26
To: 'bob@james-denholm.co.uk'
Subject: RE: Proposed New House at Crieff for Ian & Helen Wilson.

Dear Bob

I can confirm that the plans are acceptable and the file has been updated to incorporate the updated plans. Your client is therefore free to develop the proposed house provided the FFL is set at 73.80 as per the submitted plans.

Regards

David Niven
Planning Officer
Development Management
Planning & Development
Perth & Kinross Council
Pullar House
35 Kinnoull Street
Perth
PH1 5GD

T: 01738 475345
F: 01738 475310
E: dniven@pkc.gov.uk

If this level was acceptable, which we believe is simply based on having a 600mm freeboard, rather than any formal flood risk assessment or any consultation with SEPA. Why is a higher proof required for our clients application. It should be noted that this site is within the 1:200 year flood event area.

This is simply the latest example identified of this approach within the Hosh Settlement Area. We believe that this is actually an appropriate method of dealing with the site. The applicant went through the same process in application 10/00583/FFL. Where that floor level of 73.8m was reduced to an agreed 73.6m – while maintaining a freeboard of 600mm as above.

Therefore there no reason why the objection from SEPA on the lack of an enhanced Flood Risk Assessment is valid, and can be used to refuse this application. Indeed, as noted above, they should not even have been approached as a consultee on this matter.

DEVELOPER CONTRIBUTIONS –

Rod and Karen Findlay, the owners of the Hosh Steading as was, are not typical developers looking to profit from the splitting of the steading into two units. They are self builders, forced by financial constraints to sub divide the property.

In doing this care was taken to develop a dwelling that appealed to an older generation of buyer, buyers that would not have children of a school age. At present within the Hosh there is no children of Primary School age, and to the best of our knowledge has not been for many years. The Hosh settlement simply is not one that attracts the young family demographic, being remote from services such as doctors, schools and shops.

The demand of a contribution of £6460 to maintain Crieff Primary School is unreasonable given that the facility was erected only a couple of years ago and capacity should have been allowed for at that stage.

We would ask that this contribution request is withdrawn by the Council.

ECONOMIC IMPACT - AGREED

CONCLUSION

As indicated above we believe;

- a) It is in line with the aims of the relevant policies and plans.
- b) Is a continuation of an existing approval that has been enacted.
- c) Is not of a scale that requires consultation with SEPA
- d) The works are of a scale that do not merit the expense that an enhanced flood risk assessment would entail.
- e) A flood risk assessment was undertaken showing, at a fundamental level, that the river, if ever in flood, would overtop on the southern end of the bridge at 73.00m
- f) Therefore the proposed finished floor level of 73.60m would provide a freeboard of 600mm. This is as recommended within CIRIA Guidance (CIRIA C624 Development and Flood Risk – Guidance for the Construction Industry 2004
- g) The application is being assessed to a different standard to other applications within the immediate vicinity.

Letters of support from neighbours are attached within Appendix A

APPLICATION PROCESSING TIME - AGREED

LEGAL AGREEMENTS - AGREED

DIRECTION BY SCOTTISH MINISTERS - AGREED

RECOMMENDATION – AS DISPUTED ABOVE

JUSTIFICATION – AS DISPUTED ABOVE

INFORMATIVES - AGREED

**PROCEDURAL NOTES PLANS AND DOCUMENTATIONS RELATING TO THIS DECISION
- AGREED**

CONCLUDING NOTES - AGREED

Statements in support of the application.

Although representations of support were not sought at the time of application, there is support for the applicants from within the local area. We attach the following.

Letter from applicant Rod and Karen Findlay

Letter of support from Robert Southern and Lisa Eglin – North Barn, The Hosh, Crieff

Letter of support from Michael MacKintosh - Torran House, The Hosh, Crieff.

Letter of support from Robin Baxter – Aberturret House, The Hosh, Crieff.

Letter of support from Paul and Johanna Loughlin – Nether Turret, The Hosh, Crieff.

Letter of support from Iain Neilson – Hosh Farmhouse, The Hosh, Crieff.

Yours faithfully

Grant Simpson
Director
Arum Resources Ltd.

ABERTURRET HOUSE
THE HOSH
CRIEFF
PERTHSHIRE
PH7 4HA

Tel: 01764 656590

Perth & Kinross Council
Planning Department
Pullar House
35 Kinnoull Street
Perth
PH1 5GD

October 6th 2018

Ref: 18/00726/FLL. Hosh Farm Steadings

Dear Sir/Madam

I would like to submit comment regarding the Hosh Farm Steadings development. This site is immediately opposite my home.

I am hugely concerned to see that a recent planning application has been refused. I note a previous one [10/02058/FLL] was approved.

I note the refusal was on the grounds that *a satisfactory flood risk assessment has not been provided to confirm the increase in residential dwelling units on the site can be accommodated.*

As far as I understand the footprint of the development has not changed so it seems extraordinary, given a previous flood risk assessment was done and approved, that the planning authorities have effectively reversed their previous position.

From a neighbours perspective, we have lived with this ongoing development since we moved here five years ago. Most of our neighbours have lived with it far longer. The Findlays are as keen to see the development completed as we are as neighbours who every day look out on a building site!

As owners of a holiday cottage within our grounds we are attuned to comments from our visitors from both the UK and overseas and I have run out of fingers and toes to count the number of times our visitors have commented on the building site. As with any

building project there are ongoing issues with noise and disruption. These impact on our holiday cottage rentals where our guest come for peace and tranquillity.

As you will be aware the Glenturret Distillery attracts over 100,000 visitors a year. Many choose to walk locally and thus have to pass the Hosh Farm Steading development.

Completion of this development can only be of benefit to the local community, visitors as well as the Findlay family.

Reading the associated paperwork, this latest refusal appears to be on no more than a technicality and I would thus plead with the Planning Department to reverse its refusal, allow the development to be completed and for the residents of The Hosh to return to peace and tranquillity.

Yours sincerely,

Robin E E Baxter

Hosh Farm Steadings
The Hosh
Crieff
Perthshire. PH7 4HA

Local Review Body
Perth & Kinross Council
Perth

12 October 2018

Dear sirs

Ref 18/00726/FLL Hosh Farm Steadings

We purchased the steadings in 2002 as a range of stone-built farm buildings with a bothy and some 'loose' additional structure constructed in a variety of materials and varying condition. The property had been on the market for a significant length of time without any purchasers prepared to tackle what was clearly going to be a massive undertaking. For this project to be viable we have recycled as much building material as is humanly possible with an eye to costs and quality.

Whilst it can be said that we have 'developed' this site, it would be misleading to describe us as 'Developers'. Our aim has been to create a family home from the dereliction we purchased. Over the intervening years, we have applied for differing planning consents as our own ideas were refined and as economic circumstances shifted. This latest application was to subdivide the west wing from the remainder of the main building. The application was in retrospect as we had been professionally advised incorrectly that planning approval was not required.

The works involved with the subdivision were minimal and involved the re-instatement of an earlier wall at ground floor level where a doorway linking two rooms had been formed under earlier approvals. Similar attention was required at first floor and roof space. No new bedrooms or bed spaces were added in the proposal and the original footprint of the building was not increased. An earlier approved plan for an extension housing a swimming pool was shelved with this application.

Earlier approvals had set the floor levels following flood risk assessments and topographical studies which showed that flood risk attached to this site is not a significant factor.

We were then more than slightly surprised when PKC Planning referred the application to SEPA for consultation as this appears to fly in the face of Scottish Government Guidance and enactments¹. We were even more surprised when SEPA responded not by the expected 'no comment' but demanded an enhanced flood risk assessment. Initial quotes for the demanded enhanced Flood Risk Assessment range from £5000 upwards without any upper limit. This demand for such open-ended expenditure seems to us to be wholly inappropriate and entirely disproportionate bearing in mind that construction costs are less than £300 and taking account of the very limited nature of the works involved. Subsequent discussion revealed that SEPA's concerns are surrounding a hypothetical scenario of complete closure of Bridge of Hosh which would cause the backing up and eventual overflowing of Turret Burn. Bridge of Hosh lies astride the Turret Burn at the southern tip of our site. It is a publicly maintained structure with Perth & Kinross Council not just responsible for its maintenance but also legally responsible for ensuring that any obstructions likely to cause flooding are cleared². Further research revealed quickly that SEPA are actually legally responsible for ensuring that the local authority act³.

Perth & Kinross Council, as local authority, are also obliged to maintain Flood Risk Management Plans⁴ for any area which is at significant risk of flooding. No such plan exists for The Hosh, or even Turret Burn.

Hosh Farm Steadings was built upon an historic flood plain in 1872 and despite the passing of 146 years there is no record of any flooding on this site and certainly not since the construction during the 1930s of Bridge of Hosh following the underscoring and subsequent collapse of the ancient humped back bridge which preceded it. Hosh Farm Steadings is not built upon a functional flood plain⁵ so the criteria referred to in Scottish Government Guidance⁶ is not met. Referral to SEPA should not occur.

The separated west wing now known as Nether Turret, was designed with a specific demographic in mind and whilst it is not impossible that a family might wish to purchase the property at some time, should the present owners wish to sell, it is highly unlikely. On this basis we feel that the Developers'

Contribution towards the very new Crieff Primary School should be waived as we are not “Developers’ as such and we have deliberately designed the property to be unattractive to young families, (less than 90sqm.) Other primary education choices are also available within this catchment without adding to the burden of Crieff Primary School.

We would be most grateful to Councillors were the application for review result in approval for us to continue our long-held aim to provide our family with a great family home in Hosh Farm Steadings. Our neighbours have been more than accommodating but they deserve for this project to move quickly to completion.

Yours faithfully

Rod and Karen Findlay

¹ Town and Country Planning (Development Management Procedure) (Scotland) Regulation 25, Schedule 5.

‘Consultation with SEPA’. “... where development is likely to result in material increase in number of buildings at risk of damage by flooding.”

² Flood Risk Management (Scotland) Act 2009, Section 17, Section 18.

³ Flood Risk Management (Scotland) Act 2009, Section 59.

⁴ Civil Contingencies Act 2004, Part 4.

⁵ PPG25 defines a Functional Flood Plain as “... the unobstructed or acted areas where water regularly flows in times of flood.” (Def. ‘regularly’. ‘more or less annually’.)

⁶ Scottish Government Policy EP2

There is a general presumption against proposals for built development or land raising on a functional flood plain and in areas where there is significant probability of flooding from any source or where the proposal would increase the risk of flooding elsewhere.

Local Review Body

Perth and Kinross Council

Hosh Farm Steadings - Matters to Consider

Paul and Johanna Loughlin

October 2018

Background

This short document has been prepared by Paul and Johanna Loughlin who are the owners of the property formerly known as the 'West Wing' of Hosh Farm Steadings and is now known as Nether Turret Cottage.

In January 2017, Paul and Johanna Loughlin completed the purchase of the Nether Turret Cottage (formerly 'West Wing'), buying the property from Mr and Mrs Findlay of Hosh Farm Steadings.

We are absolutely delighted with our new home and very pleased to be able to return to Scotland as proud home owners and to continue to make plans for our retirement.

Purpose

The purpose of this short document is to briefly outline what we believe are the key matters that should be considered by the Local Review Body when hearing the appeal against the refusal to grant a Change of Use and subdivision application that affects our property.

Key Considerations

Below are what we strongly believe to be a series of the key considerations that should play a central part of an appeal to be heard by the Local Review Body.

1. What has actually changed at Hosh Farm Steadings?

It is vital that all parties retain clarity on what is actually being requested at the Hosh Farm Steadings site. It is important to be clear and note that: -

- **No** new buildings have been built
- **No** new rooms have been built – neither bedrooms, bathrooms or living rooms
- **No** extensions to existing buildings or rooms have been built

Instead, all that has happened is that an already self-contained part of Hosh Farm Steadings has been partitioned or sub-divided. All that was required was the 'blocking off' of existing connections to the rest of the site in accordance with the relevant Building Control Regulations.

2. Why has it been necessary to seek formal input from the Scottish Environment Protection Agency (SEPA)?

This is a relevant question given the facts outlined above and since it is our

understanding that Planning Permission has already been approved for the development of a dwelling on the site known as Hosh Farm Steadings and that SEPA were fully involved in that process.

As already outlined above, given that this is not a 'new' development and does not involve any new or additional buildings and therefore the 'foot-print' has been unchanged, the formal input from SEPA should have been viewed as unnecessary and disproportionate.

Even if the formal input from SEPA was considered as a procedural necessity, then the input should have been viewed in the proper context – as outlined above – and the 'weight' and significance attached to this advice should have been appropriately reduced.

3. What is the risk that is of interest?

The identified risk that appears to be of interest, is a risk of the river flooding and the river in question is the Turret Burn. This river has as its key source the Loch Turret Reservoir managed by Scottish Water. As a direct consequence, this implies that the main source of water for the Turret Burn is a carefully managed supply operated and controlled by Scottish Water.

According to SEPA's webpage, a sub-division of Scottish Water, the risk of river flooding in and around the HOSH is categorised as a Medium Likelihood event. This can be regarded as a statistically rare event and one that may, **on average**, occur **once every 200 years**. This is not an event that is likely to occur with regularity given that it has a probability of it happening in any one year, of 0.005 or 0.5%.

4. Has the risk of flooding changed?

Given that the Planning Authority has felt it necessary to consult SEPA about the change of use and subdivision of Hosh Farm Steadings in spite of there being no change in the footprint, it was to be expected that SEPA would focus on the risk of flooding caused by the Turret Burn and suggest that a flood risk assessment be carried out.

It should be reiterated that the flood risk assessment was previously addressed by SEPA during the original planning request process and the risk was clearly considered to be acceptable and thus planning approval was granted.

So this raises the question, has the risk changed?

Some questions are addressed below to help answer this query.

Have environmental factors changed?

It has been suggested that our climate is changing in such a way that we can expect more extreme weather and as a result of this suggestion, the risk of flooding has increased. As we all know, climate change still remains a hotly debated scientific topic

that, as yet, has not reached a universally accepted viewpoint.

It is also important to note that even if there has been a climatic change for The Hosh, it is a matter of scientific fact that such a change would be very small and virtually unmeasurable in the period that has elapsed since that last SEPA assessment. Thus any possible change would be immeasurable and thus could not affect the original viewpoint that the risk was acceptable.

As a consequence of the above points, it would be unsafe to use climate change as a rationale for concluding that the risk of flooding has changed and as a result the answer to the question above is that it cannot be concluded with any certainty that environmental factors have changed since the previous risk was deemed acceptable.

Has anything else changed?

Yes. As the flow and volume of water in the river is substantially controlled and managed by the outflow from the Loch Turret Reservoir, it is relevant to note that since the last risk assessment Scottish Water have spent millions of pounds (in excess of £30m) significantly increasing the capability of pumping water out of the reservoir to other parts of Scotland (e.g. Perth, Stirling and Grangemouth).

As a direct result, the need to divert water to the river has significantly been reduced and thus the risk of flooding has also been reduced.

Has there been any evidence of flooding in the area?

Although the past is not always a reliable predictor of the future, in these circumstances the past is a relevant factor in the overall understanding of the risk of flooding. If there had been an established history of flooding then that would be considered relevant and so similarly, the absence of flooding cannot be ignored.

The position in the Hosh area is that there have been **no** incidents of residential flooding either since the original risk assessment or indeed as far as Council records exist.

So, what can we conclude?

It is clear that since the last risk assessment: -

- There have been **no** incidents of residential or road flooding
- The increased supply of water to other parts of Scotland from the Loch Turret Reservoir has reduced the outflow of water to the river and hence **reduced** the risk of flooding from the river.
- The theory of climatic change remains scientifically controversial and is therefore an unsafe basis to make conclusions about changes of risk, particularly over such a short-elapsd period since the last risk assessment when the risk was considered acceptable.

Overall, there is evidence to suggest that the risk to residential flooding has reduced since the last risk assessment was conducted. Given that at that time the risk was considered acceptable, it is reasonable to conclude that the level of risk

of flooding today remains acceptable.

5. What is the view of the PKC Flood Team?

PKC has a flood risk team that create, manage and implement Flood Risk Management Plans in areas of high flood risk. A local example is the plan for Comrie.

When the PKC flood team were contacted by us about flooding in the Hosh area we were duly informed, after the flood team consulted with the relevant residential and road flood records, that no such plan was in place or needed.

The view of the flood team was that as the risk of flooding was not considered to be unacceptably high **and** there were no incidents on record of either residential or road flooding in the Hosh area, there was no need for a Flood Risk Management Plan. It was further confirmed that although the risk of flooding was not zero, it was not high either and therefore the risk of flooding was considered acceptable.

6. Are more people impacted by the change of use and subdivision of Hosh Farm Steadings?

It has been commented to us that the risk of flooding is directly affected by the number of people living at Hosh Farm Steadings and by changing the use and subdividing Hosh Farm Steadings, this has therefore increased the risk of flooding.

Commenting as a professionally qualified Chartered Statistician and Fellow of the Royal Statistical Society, I am happy to reassure the Local Review Body that the number of people living at Hosh Farm Steadings will have absolutely no impact on the risk of flooding from the river. The number of people living there and the risk of the river flooding are statistically and logically independent and have no bearing on each other whatsoever.

In addition, it is critical to recognise that there has been **no** increase in the living capacity at Hosh Farm Steadings as a result of changing its use and subdividing the site as there have been no new buildings, no new bedrooms and no extensions to existing buildings.

Thus the clear answer to the above question is: -

- There is no statistical dependency between the number of people residing at Hosh Farm Steadings and the risk of the river flooding.
- The living capacity at Hosh Farm Steadings has not been increased as a result of a change of use and subdivision.

As a result, no more people are either impacted or at risk as a consequence of the change of use and subdivision of Hosh Farm Steadings.

Overall Conclusion

We ask that the Local Review Body seriously consider the points raised in this short document and would encourage it to reach the same pragmatic, reasonable, logical and statistically sound conclusions as presented here.

We do not believe that in the context of a change of use and subdivision that does not alter the existing footprint, it was appropriate to formally consult with SEPA. Even if that was procedurally required, given the context, the 'weight' and significance attached to that input should have been significantly and suitably reduced.

It has been carefully explained that the risk of residential flooding has not increased since the previous risk assessment was deemed to be acceptable. Indeed, there are facts to prove that this risk has reduced over this period of time given the fact that Scottish Water now have greater capacity to pump water to supply other parts of Scotland.

We also ask the Local Review Body to take due cognisance of the fact that Council records show that there has been no incidents of either residential or road flooding in the Hosh area, to date.

As a result of the change of use and subdivision, it has been carefully explained that no more people are at risk or impacted if the statistically rare event of a river flooding were to happen.

For these reasons, we support the appeal that is before the Local Review Body and ask that the Body grant the appeal.

Paul R Loughlin (Chartered Statistician) & **Johanna M Loughlin**

Date: 4th October 2018

Torran House
The Hosh
Crieff
PH7 4HA
3rd Oct 2018

Perth and Kinross Council
Planning and Development
Pullar House
35 Kinnoull Street
Perth
PH1 5GD

Dear Sir/Madam,

Change of Use and Alteration of Hosh Farm Steading The Hosh Crieff PH7 4HA

I refer to the development of the steadings at the Hosh Crieff.

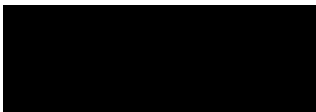
I understand from Mr Findlay that the recent application for development of the Hosh Farm Steadings has been refused and that he is considering an appeal.

The primary views from Torran House are towards the Bridge of Hosh but it includes the eastern part of the steadings adjacent to the public road.

I do not wish to comment on the planning process which led to rejection of the application. However, I express my concern that building works associated with this development have continued over many years and have inevitably impacted on the visual amenity of the area. The steadings are in full view of the public road which is used not just for local access but by visitors to the Famous Grouse Distillery. Furthermore, various public walks are routed past location.

The timescale for completion of the building work now seems at large. I trust some way forward can be found to bring the building works to a satisfactory conclusion and thereby enhance the visual amenity and rural ambiance which are key assets of this hamlet.

Yours faithfully



Michael MacKintosh

cc. Mr & Mrs R Findlay

On Sunday, 7 October 2018, 11:49, IAIN NEILSON115 [REDACTED] wrote:

-----Original message-----

From : [REDACTED]
Date : 07/10/2018 - 11:47 (GMTDT)
To : planninglr@pkc.gov.uk
Subject : Hosh Farm Steadings Planning Application

Dear Sirs

Hosh Farm Steadings - PH7 4HA
Planning Application for Sub Division
Applicant Name - R. Findlay

I reside at The Hosh Farmhouse PH7 4HA with my wife and have lived at this address since October 1999. We are neighbours of Mr and Mrs Findlay.

I understand that consent to the above Planning Application has been refused and the matter is now to be referred to the Local Review Body.

I am registered with Perth & Kinross Planning and Regeneration in my capacity as Chairman of the Hosh Residents Association.

I am aware from your records that Planning Permission was originally given as per your letter of 21/03/2006, subject to conditions and would be valid for 5 years.

I am also aware, again from your records, that as a result of changes made by the applicant a new Planning Application would be required - your letter of 05/11/2008 refers.

I further understand that the latest planning application has resulted in SEPA requesting an enhanced Flood Risk Assessment on the basis of the Bridge of Hosh becoming 100% blocked. Such an occurrence concerns me considerably - as it would affect other Hosh residents in the area - and if that occurrence adversely impacts the decision on granting planning consent then surely there should be in place and maintained, a Flood Management Plan.

I understand that prior to the 2017 Application a Flood Risk Assessment had been submitted and approved.

Hosh residents have been supportive, over the years, of the Findlay's plan to develop the old Hosh Farm Steadings, on its existing site, from what were derelict buildings, into a family home.

I sincerely hope that an acceptable solution to all parties can be found and Planning Consent given which enables the development to be completed and the Findlay family able to take residence in a home they have spent years in working towards.

Yours faithfully
Iain M.B. Neilson

North Barn
The Hosh
Crieff
Perthshire
PH7 4HA
02/10/2018

To Whom it may concern,

I have been asked by my neighbour to make comment in relation to a recent planning application to complete Hosh Farm Steadings, which I am happy to do so. I have not previously left comments on application via P&K Planning Portal as I have never had any objections to any proposals for Hosh Farm Steadings.

I note from research via Perth and Kinross Council planning portal that Planning Permission was previously granted in application 10/02058/FLL for this site.

On viewing comments in relation to the most recent planning application 18/00726/FLL, I note the reason for refusal of the application was :-

a satisfactory flood risk assessment has not been provided to confirm that the increase in residential dwelling units on the site can be accommodated.

I am surprised with the decision to refuse to grant planning permission on an application for a property that has previously been granted permission for, with the only major difference in layout from the last application is the removal of a swimming pool building.

The current building which is a large agricultural barn, has been in place since the late 1800s. The footprint of this building is the same as that proposed in the 18/00726/FLL. The completion of Hosh Farm Steadings as a finished project would have no further impact any building already in place within the Hosh as it will not change the flood plain layout.

I note in a document dated 08/06/2010 (Environmental –flood section; on the 2010 application) that the flood authority in 2010 objected to the development and P&K went on to grant the planning permission at that time. Now the new application has been refused on a similar objection to the 2010 application. Am I correct that local authorities are not bound by consultees comments and you could grant the application as you did in 2010?

Mr Findlay and family have been working towards finishing the barn for many years and have invested a great deal of their lives and money into the project and I see it as a real blow not only for the Findlay family but for the local community in the Hosh that this project is not able to go ahead due to a technicality.

The area has a substantive footfall of visitors who choose to holiday in the local area with the local Glenturret Distillery having over 250k people attend in 2017. The completion of this building could only have a positive outcome for the Findlay's and the local community/businesses and tourism.

I ask Perth and Kinross Council Planning committee to re-consider the Findlay's right to a family life and grant them permission to finish what they have started.

Regards


Robert Southern and Lisa Eglin

North Barn The Hosh Crieff.

TCP/11/16(562) – 18/00726/FLL – Change of use and alterations to agricultural steading to form 2 dwellinghouses, alterations to existing vehicular access and associated works (in part retrospect) vehicular access and associated works (in part retrospect) at Hosh Farm Steading, The Hosh, Crieff, PH7 4HA

PLANNING DECISION NOTICE

REPORT OF HANDLING

REFERENCE DOCUMENTS

PERTH AND KINROSS COUNCIL

Mr Rod Findlay
c/o Arum Resources Ltd
Grant Simpson
56 Monteath Street
Crieff
PH7 3BL

Pullar House
35 Kinnoull Street
PERTH
PH1 5GD

Date 24th August 2018

TOWN AND COUNTRY PLANNING (SCOTLAND) ACT

Application Number: **18/00726/FLL**

I am directed by the Planning Authority under the Town and Country Planning (Scotland) Acts currently in force, to refuse your application registered on 3rd May 2018 for permission for **Change of use and alterations to agricultural steading to form 2no. dwelling-houses, alterations to existing vehicular access and associated works (in part retrospect) vehicular access and associated works (in part retrospect) Hosh Farm Steading The Hosh Crieff PH7 4HA** for the reasons undernoted.

Interim Development Quality Manager

Reasons for Refusal

1. The proposal is contrary to Policy EP2 New Development and Flooding of the Perth and Kinross Local Development Plan 2014, as the proposed development is located in an area where there is a significant probability of flooding and a satisfactory flood risk assessment has not been provided to confirm that the increase in residential dwelling units on the site can be accommodated.

Justification

The proposal is not in accordance with the Development Plan and there are no material reasons which justify departing from the Development Plan.

The plans relating to this decision are listed below and are displayed on Perth and Kinross Council's website at www.pkc.gov.uk "Online Planning Applications" page

Plan Reference

18/00726/11

18/00726/2

18/00726/3

18/00726/4

18/00726/5

18/00726/6

18/00726/7

18/00726/8

18/00726/9

18/00726/10

REPORT OF HANDLING

DELEGATED REPORT

Ref No	18/00726/FLL	
Ward No	P6- Strathearn	
Due Determination Date	02.07.2018	
Case Officer	John Russell	
Report Issued by		Date
Countersigned by		Date

PROPOSAL: Change of use and alterations to agricultural steading to form 2no. dwelling-houses, alterations to existing vehicular access and associated works (in part retrospect)
vehicular access and associated works (in part retrospect)

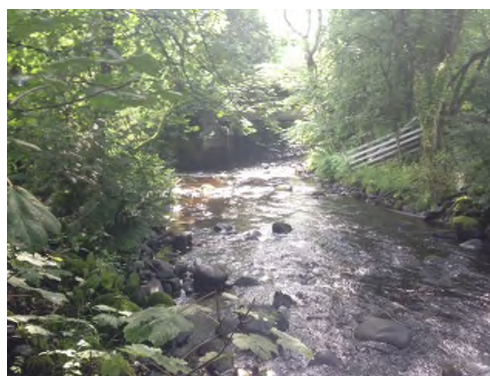
LOCATION: Hosh Farm Steading The Hosh Crieff PH7 4HA

SUMMARY:

This report recommends **refusal** of the application as the development is considered to be contrary to the relevant provisions of the Development Plan and there are no material considerations apparent which justify setting aside the Development Plan.

DATE OF SITE VISIT: 15 August 2018

SITE PHOTOGRAPHS



BACKGROUND AND DESCRIPTION OF PROPOSAL

This application relates to Hosh Steading. The River Turret is to the west of the site and the public road to the east. On the opposite bank of the site there is the Ochertyre Historic Garden Design Landscape and downstream of the site is the Hosh Bridge.

The site is located to the north-west of Crieff and I note that historically this as well as surrounding land and property was included in a settlement boundary in the Strathearn 2001 Adopted Local Plan. However, this settlement boundary is no longer in the adopted Perth and Kinross Local Development Plan 2014.

There is a considerable amount of history associated with the site. Planning was granted for the steadings conversion and refurbishment under application 05/02058/FUL. This included the demolition of remaining outbuildings and erection of three holiday cottages to the north of the steading building.

A further application was sought as works being undertaken at the site were not in compliance with the earlier permission. As a consequence application 10/00583/FLL for a single unit was submitted and subsequently approved. This was a smaller site area than the 2005 consent and did not include the area where the three holiday units were proposed.

Following the 2010 approval a number of other applications were submitted to split the steading into 2 units in 2017 but these were either returned or subsequently withdrawn.

This application seeks planning consent for alterations to the steading to form 2no. dwelling-houses, alterations to existing vehicular access and associated works as well as the formation of vehicular access (in part retrospect). From the site inspection it appears that unit 2 is largely complete with outstanding works relating to unit 1.

SITE HISTORY

05/02058/FUL Alterations and conversion of farm steading building into a house and swimming pool, demolition of remaining outbuildings and erection of three holiday cottages and garage block 23 March 2006, application permitted.

10/00583/FLL Conversion of steading to dwellinghouse, swimming pool and garage (modification to 05/02058/FUL) 9 August 2010, application permitted.

17/00621/FLL Splitting of "Bridge of Hosh Steading" to make a semi detached dwelling from the west most part 26 April 2017, application returned.

17/00622/FLL Removal of Westernmost leg from approved steading conversion 10/00583/FLL to create semi detached dwelling 25 April 2017, application returned.

17/01114/FLL Change of use and alterations to agricultural steading to form 2no dwellinghouses, formation of vehicular access and associated works (in part retrospect) 2 July 2017, application returned.

17/01121/FLL Change of use and alterations to agricultural steading to form 2no. dwellinghouses, formation of additional vehicular access and associated works (in part retrospect) 21 August 2017, application withdrawn

PRE-APPLICATION CONSULTATION

Pre application Reference: None.

NATIONAL POLICY AND GUIDANCE

The Scottish Government expresses its planning policies through The National Planning Framework, the Scottish Planning Policy (SPP), Planning Advice Notes (PAN), Creating Places, Designing Streets, National Roads Development Guide and a series of Circulars.

DEVELOPMENT PLAN

The Development Plan for the area comprises the TAYplan Strategic Development Plan 2016-2036 and the Perth and Kinross Local Development Plan 2014.

TAYplan Strategic Development Plan 2016 – 2036 - Approved October 2017

Whilst there are no specific policies or strategies directly relevant to this proposal the overall vision of the TAYplan should be noted. The vision states *“By 2036 the TAYplan area will be sustainable, more attractive, competitive and vibrant without creating an unacceptable burden on our planet. The quality of life will make it a place of first choice where more people choose to live, work, study and visit, and where businesses choose to invest and create jobs.”*

Perth and Kinross Local Development Plan 2014 – Adopted February 2014

The Local Development Plan is the most recent statement of Council policy and is augmented by Supplementary Guidance.

The principal policies are, in summary:

Policy PM1A - Placemaking

Development must contribute positively to the quality of the surrounding built and natural environment, respecting the character and amenity of the place. All development should be planned and designed with reference to climate change mitigation and adaption.

Policy PM1B - Placemaking

All proposals should meet all eight of the placemaking criteria.

Policy PM3 - Infrastructure Contributions

Where new developments (either alone or cumulatively) exacerbate a current or generate a need for additional infrastructure provision or community facilities, planning permission will only be granted where contributions which are reasonably related to the scale and nature of the proposed development are secured.

Policy PM4 - Settlement Boundaries

For settlements which are defined by a settlement boundary in the Plan, development will not be permitted, except within the defined settlement boundary.

Policy RD3 - Housing in the Countryside

The development of single houses or groups of houses which fall within the six identified categories will be supported. This policy does not apply in the Green Belt and is limited within the Lunan Valley Catchment Area.

Policy TA1B - Transport Standards and Accessibility Requirements

Development proposals that involve significant travel generation should be well served by all modes of transport (in particular walking, cycling and public transport), provide safe access and appropriate car parking. Supplementary Guidance will set out when a travel plan and transport assessment is required.

Policy NE3 - Biodiversity

All wildlife and wildlife habitats, whether formally designated or not should be protected and enhanced in accordance with the criteria set out. Planning permission will not be granted for development likely to have an adverse effect on protected species.

Policy ER6 - Managing Future Landscape - Change to Conserve and Enhance the Diversity and Quality of the Area's Landscapes

Development proposals will be supported where they do not conflict with the aim of maintaining and enhancing the landscape qualities of Perth and Kinross and they meet the tests set out in the 7 criteria.

Policy EP2 - New Development and Flooding

There is a general presumption against proposals for built development or land raising on a functional flood plain and in areas where there is a significant probability of flooding from any source, or where the proposal would increase the probability of flooding elsewhere. Built development should avoid areas at significant risk from landslip, coastal erosion and storm surges. Development should comply with the criteria set out in the policy.

Policy EP3B - Water, Environment and Drainage

Foul drainage from all developments within and close to settlement envelopes that have public sewerage systems will require connection to the public sewer. A private system will only be considered as a temporary measure or where there is little or no public sewerage system and it does not have an adverse effect on the natural and built environment, surrounding uses and the amenity of the area.

Policy EP3C - Water, Environment and Drainage
All new developments will be required to employ Sustainable Urban Drainage Systems (SUDS) measures.

OTHER POLICIES

Development Contributions

Sets out the Council's Policy for securing contributions from developers of new homes towards the cost of meeting appropriate infrastructure improvements necessary as a consequence of development.

Housing in the Countryside Guide

A revised Housing in the Countryside Policy was adopted by the Council in October 2014. The policy applies over the whole local authority area of Perth and Kinross except where a more relaxed policy applies at present. In practice this means that the revised policy applies to areas with other Local Plan policies and it should be borne in mind that the specific policies relating to these designations will also require to be complied with. The policy aims to:

- Safeguard the character of the countryside;
- Support the viability of communities;
- Meet development needs in appropriate locations;
- Ensure that high standards of siting and design are achieved.

The Council's "Guidance on the Siting and Design of Houses in Rural Areas" contains advice on the siting and design of new housing in rural areas.

Flood risk and flood risk assessments

This Guidance assists developers, their consultants and all stakeholders involved in the planning process in relation to flooding and drainage about the requirements of Perth & Kinross Council; including when a flood risk assessment will be required, and what that assessment should contain.

This Guidance is intended as supplementary guidance for the area of Perth and Kinross in respect of existing national legislation and guidance regarding flooding and drainage. It also aims to encourage an increased awareness, understanding and knowledge in flooding and drainage issues of everyone involved in the development process and thus make Perth and Kinross a safer place to live, work and visit.

This Guidance relates to the Local Development Plan Policy EP2: New Development and Flooding. It was adopted in October 2014.

CONSULTATION RESPONSES

Historic Environment Scotland - Have considered the information received and do not have any comments to make on the proposals relationship with Ochertyre HGDL.

Scottish Environment Protection Agency – Object. In the first response they advised the submitted information was inadequate to demonstrate that the proposed development is outwith the 0.5% AP (1:200) floodplain. SEPA strongly recommend that a satisfactory FRA be undertaken that includes both a hydrological assessment and hydraulic modelling to establish design flood levels at the site.

The agent responded to the SEPA objection but did not provide a detailed FRA. SEPA's second response confirms they still remain of the opinion that a detailed FRA is required in order to understand the risk of flooding to the development. It is SEPA's view that the proposal to create two dwellinghouses from this one building may potentially increase in the number of people at risk of flooding, which is contrary to the principles of Scottish Planning Policy.

In the event that the planning authority proposes to grant planning permission contrary to this advice on flood risk, the Town and Country Planning (Notification of Applications) (Scotland) Direction 2009 provides criteria for the referral to the Scottish Ministers of such cases.

Structures and Flooding - Agree with SEPA's request that there are issues with the supplied FRA and that a further detailed FRA should be submitted as part of the application.

Transport Planning – No objection received.

Contributions Officer – Contribution required.

Scottish Water – No objection.

Environmental Health – No objection.

Perth and Kinross Area Archaeologist – The proposed development does not raise any significant archaeological issues. No archaeological mitigation is required in this instance.

REPRESENTATIONS

None.

ADDITIONAL INFORMATION RECEIVED:

Environmental Impact Assessment (EIA)	Not Required
Screening Opinion	Not Required
EIA Report	Not Required
Appropriate Assessment	Not Required
Design Statement or Design and Access Statement	Submitted
Report on Impact or Potential Impact eg Flood Risk Assessment	Submitted

APPRAISAL

Sections 25 and 37 (2) of the Town and Country Planning (Scotland) Act 1997 require that planning decisions be made in accordance with the development plan unless material considerations indicate otherwise. The Development Plan for the area comprises the approved TAYplan 2016 and the adopted Perth and Kinross Local Development Plan 2014.

The determining issues in this case are whether; the proposal complies with development plan policy; or if there are any other material considerations which justify a departure from policy.

Policy Appraisal

The local plan through Policy PM4 - Settlement Boundaries specifies that development will not be permitted, except within the defined settlement boundaries which are defined by a settlement boundary in the Plan.

However, through Policy RD3 - Housing in the Countryside it is acknowledged that opportunities do exist for housing in rural areas to support the viability of communities, meet development needs in appropriate locations while safeguarding the character of the countryside as well as ensuring that a high standard of siting and design is achieved. Thus the development of single houses or groups of houses which fall within the six identified categories will be supported.

The Hosh is no longer a settlement in the current adopted LDP. However, having had the opportunity to undertake a site visit and assess the plans I consider the application relates to (e) Conversion or replacement of redundant non-domestic buildings.

Within the Housing and Countryside SPG under section 5 it confirms that Consent will be granted for the conversion of redundant non-domestic buildings to form houses subject to compliance with detailed criterion.

In this case the building is of traditional form and construction, is of architectural merit and it does make a positive contribution to the landscape and contributes to local character. The proposed alterations to the proposal are in harmony with the existing building form and materials.

Taking the above into account I consider the principle of the proposal to comply with Policy RD3. However, there is a conflict with Policy EP2: Flooding which means the application cannot be supported. This is discussed in greater detail below under the Flooding Heading below.

Design and Layout

Policy PM1A and PM1B confirms that development must contribute positively, to the quality of the surrounding built and natural environment. All development should be planned and designed with reference to climate change, mitigation and adaptation.

The agent has submitted a design statement which explains the project ethos. I am content with the deletion of the swimming pool extension and I am generally content with the way the conversion takes account of the existing buildings form. I note that there are no details of the new ramp feature that is proposed to be installed. I cannot fully ascertain or assess this element of the development and this could also have implication for flood risk at the site.

Landscape

Policy ER6 of the local plan seeks to ensure that local distinctiveness, diversity and quality of the landscape character area, the historic and cultural dimension of the area's landscapes, visual and scenic qualities of the landscape, or the quality of the landscape experience is not eroded.

I do not consider that the proposed development will conflict with landscape aims within Policy ER6.

Residential Amenity

There are neighbouring residential units to the north of the site, properties across the public road to the east as well as properties on the opposite side of the riverbank to the west.

Taking account of the building orientation, distances and relationship with the public road as well as the approved fenestration with the earlier approved application 10/00583/FLL I do not consider this proposal will result in any significant adverse impact on neighbouring residential amenity. In addition I do not consider there will be a conflict between the two proposed units. There is also a sufficient amount of amenity space for the proposed plots.

Roads and Access

The proposal if made subject to conditional control would not adversely impact on road or pedestrian safety. Accordingly, it would not conflict with Policy TA1B.

Drainage and Flooding

Disposal of surface water requires to be dealt with via a sustainable urban drainage system to comply with policy EP3C. The proposal seeks to utilise a septic tank for foul drainage as there is no connection to the public sewerage network.

With regards to flooding the latest SEPA Flood Risk Mapping (2018 version 1.3) were reviewed these maps show areas which are likely to flood from rivers, the sea and surface water. This identified that the site is at potential risk from flooding and SEPA were consulted along with the Council's Flood Team.

SEPA responded and confirmed they objected to the proposed development on the grounds that it may place buildings and persons at flood risk contrary to Scottish Planning Policy.

They noted that the Level 1 FRA in support of the current application is inadequate. A more detailed FRA is required to demonstrate that the proposed development is outwith the 0.5% AP (1:200) floodplain. A satisfactory FRA should include both a hydrological assessment and hydraulic modelling to establish design flood levels at the site. The FRA should take account of the impact of climate change and potential bridge blockage. Development levels should include an appropriate freeboard allowance in addition to an allowance for climate change impacts.

The agent was contacted and made aware of the SEPA consultation response. The agent responded and noted the following:-

- *The levels have already been set at the proposed levels shown, due to existing planning permissions.*
- *The proposals are fundamentally an internal subdivision and have no effect or impact on what any flood level reaches in the future.*
- *There is no additional flood risk from these proposals. Indeed with the removal of the swimming pool this increases the area available in event of a flood.*
- *There is an inconsistent approach from consultees on flooding in the area around this development (Precedent).*

They contend that the scenarios outlined in their Flood Risk Assessment are valid and robust, and in line with other assessments carried out in the immediate vicinity.

The agent's response was forwarded to SEPA for comment. Their stance remains unchanged. They still consider that the FRA should consider the impact of climate change, blockage scenarios, freeboard allowance and any appropriate mitigation. It is SEPA's view that the proposal to create two dwellinghouses from this one building may potentially increase in the number of people at risk of flooding, which is contrary to the principles of Scottish Planning Policy.

The Council's Flood Team also object to the application.

SEPA have confirmed that in the event that the planning authority proposes to grant planning permission contrary to this advice on flood risk, the Town and Country Planning (Notification of Applications) (Scotland) Direction 2009 provides criteria for the referral to the Scottish Ministers of such cases.

The agent has raised precedent creation of nearby planning decisions and this is an important matter for the Planning Authority to take into account as if ignored it may leave the Planning Authority open to claims of inconsistency.

A common scenario is a situation where a previous permission has been granted in the same area that may not have been entirely consistent with policy or was simply a bad decision. However, every site presents different characteristics and policies do change.

My assessment of precedent creation needs to take account of whether there is sufficient similarity of conditions and if there is a precedent it will be important consideration in the planning decision.

The agent has referred to a number of planning applications surrounding the site. These sites like the Hosh have historic consents in place predominantly dating back to when the Hosh was a settlement in the Local Development Plan and before the inception of the SEPA Flood Risk Maps and the Flood Risk Management (Scotland) Act 2009.

From reviewing the planning cases the Planning Authority has had to manage the assessment of these applications taking account of flood risk and the fact there were historic consents that could be built out. While admittedly this is not a great situation to be in, it has occurred and it has to be managed.

What sets the Hosh apart from these applications is the proposed increase of number of dwellings on the site. Taking the above into account I do not consider a precedent creation has occurred as the Hosh application increases the numbers of units at the site.

Furthermore, from my site inspection the site characteristics at the Hosh are different to the other applications being located closer to the bridge and potentially more vulnerable to flooding from blockages.

Overall I place weight on the SEPA consultation response and consider there is not sufficient information to ascertain the acceptability of the proposed

development at the Hosh based on the information submitted to date. In light of this there is a conflict with Policy EP2.

Developer Contributions

The Council Developer Contributions Supplementary Guidance requires a financial contribution towards increased primary school capacity in areas where a primary school capacity constraint has been identified. A capacity constraint is defined as where a primary school is operating, or likely to be operating following completion of the proposed development and extant planning permissions, at or above 80% of total capacity. This proposal is within the catchment of Crieff Primary School where there is a primary school capacity constraint.

The site has extant planning consent under 10/00583/FLL for the conversion of the steading into a single dwellinghouse. This proposal seeks to sub-divide the steading to create an additional dwelling. This additional dwelling will be required to pay a £6460 contribution towards primary education.

Economic Impact

The economic impact of the proposal is likely to be minimal and limited to the construction phase of the development.

Conclusion

In conclusion, the application must be determined in accordance with the adopted Development Plan unless material considerations indicate otherwise. In this respect, the proposal is not considered to comply with the approved TAYplan 2016 and the adopted Local Development Plan 2014. I have taken account of material considerations and find none that would justify overriding the adopted Development Plan. On that basis the application is recommended for refusal.

APPLICATION PROCESSING TIME

The recommendation for this application has not been made within the statutory determination period.

LEGAL AGREEMENTS

None required.

DIRECTION BY SCOTTISH MINISTERS

None applicable to this proposal.

RECOMMENDATION

Refuse the application

Reasons for Recommendation

- 1 The proposal is contrary to Policy EP2 New Development and Flooding of the Perth and Kinross Local Development Plan 2014, as the proposed development is located in an area where there is a significant probability of flooding and a satisfactory flood risk assessment has not been provided to confirm that the increase in residential dwelling units on the site can be accommodated.

Justification

The proposal is not in accordance with the Development Plan and there are no material reasons which justify departing from the Development Plan.

Informatives

None

Procedural Notes

Not Applicable.

PLANS AND DOCUMENTS RELATING TO THIS DECISION

18/00726/2

18/00726/3

18/00726/4

18/00726/5

18/00726/6

18/00726/7

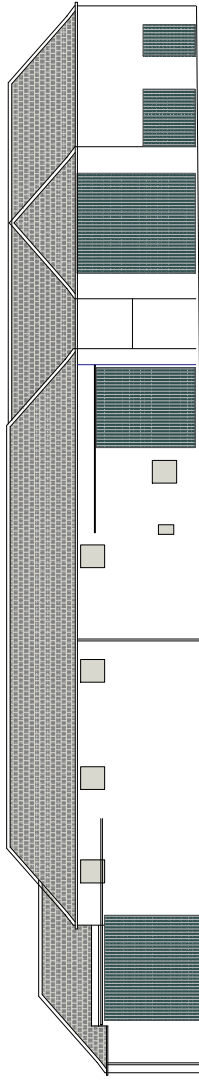
18/00726/8

18/00726/9

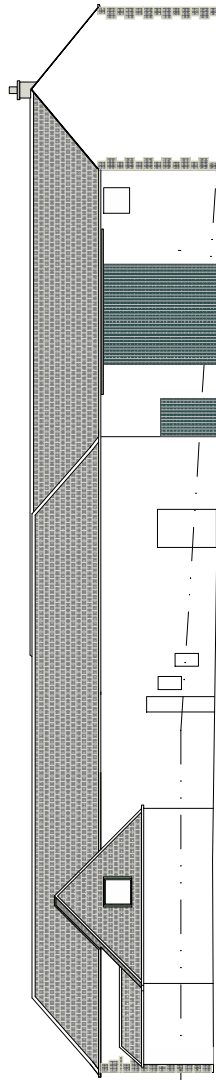
18/00726/10

18/00726/11

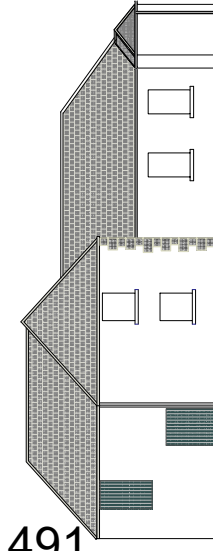
Date of Report 24.08.2018



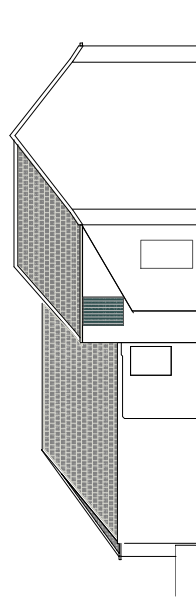
ELEVATION facing south 1:100



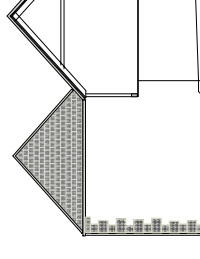
ELEVATION facing north 1:100



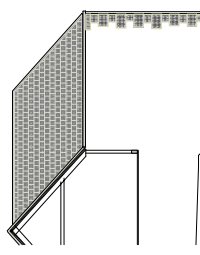
ELEVATION facing east (east leg) 1:100



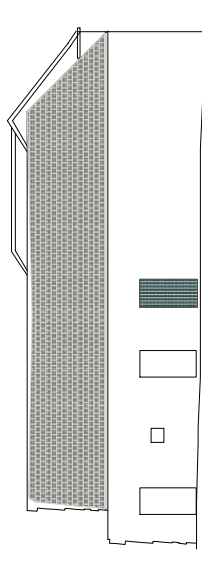
ELEVATION facing West (west leg) 1:100



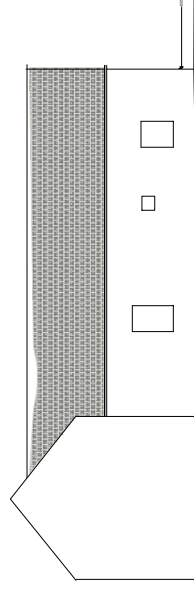
ELEVATION facing east (PORCH) 1:100



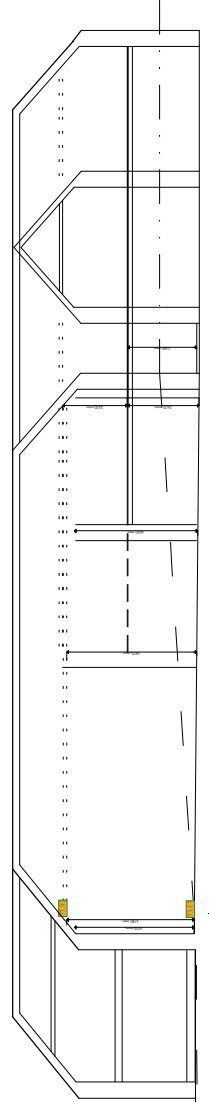
ELEVATION facing west (PORCH) 1:100



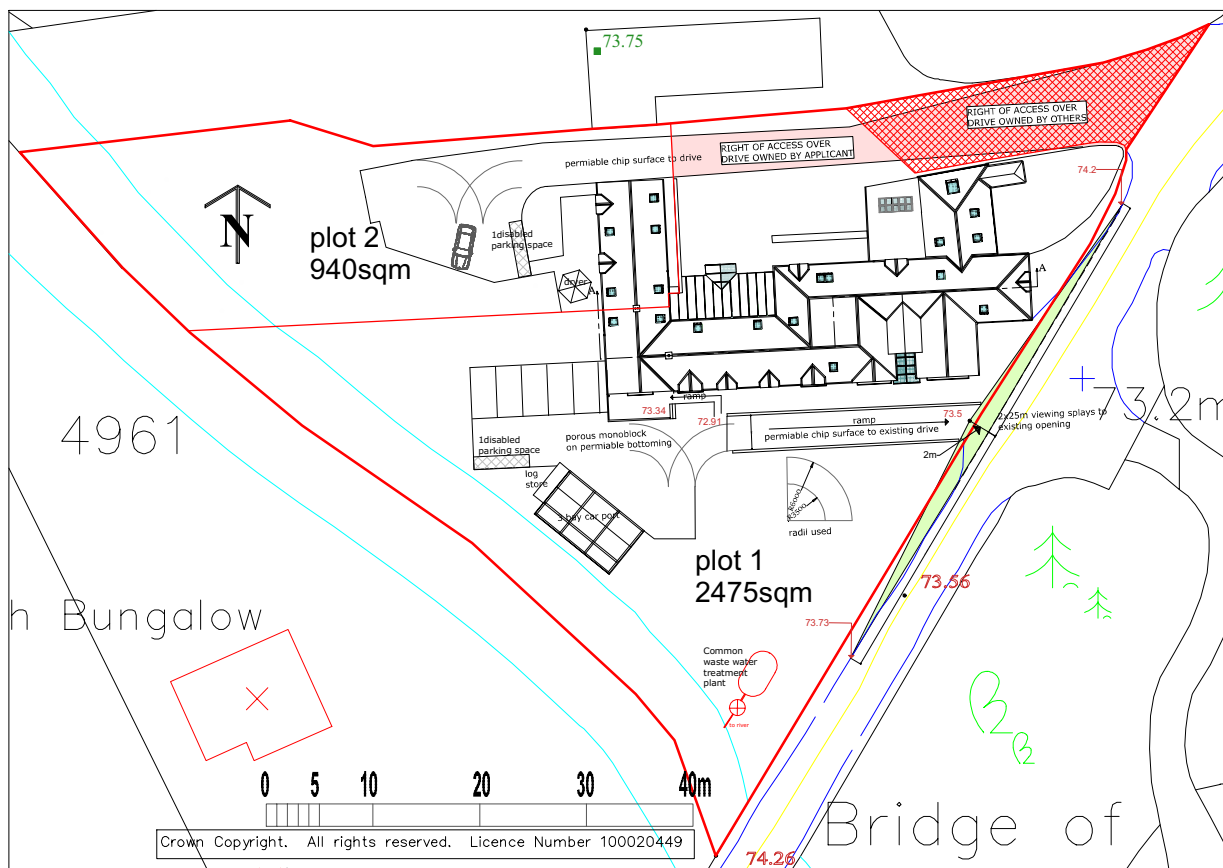
ELEVATION facing west (west leg) 1:100



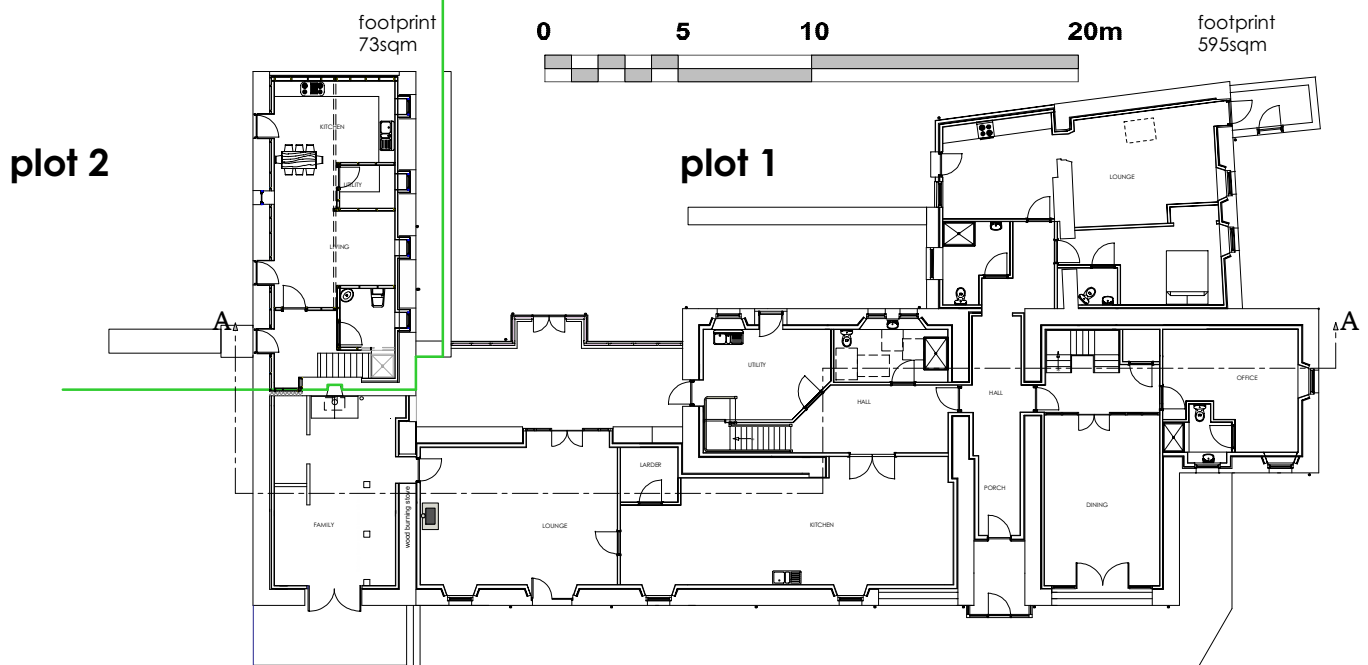
ELEVATION facing east (west leg) 1:100



TYPICAL SECTION THRO A_A? 1:100



SITE BOUNDARY PLAN 1:250



GROUND FLOOR PLAN 1:100

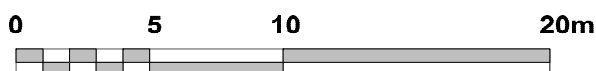
client:	Mr. & Mrs. R. Findlay		
project:	Redevelopment of steading to form 2 dwellings		
dwg title:	Site and ground floor plan	dwg no:	430-01-03
scales:	as noted	date:	24.04.2018



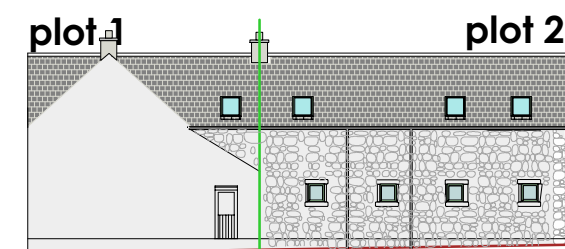
ELEVATION facing north 1:100



ELEVATION facing south 1:100



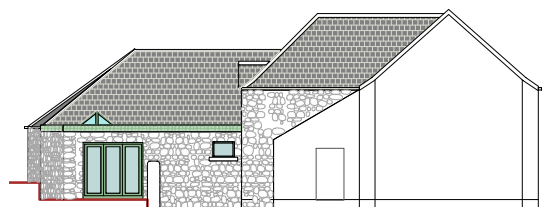
ELEVATION facing west (west leg) 1:100



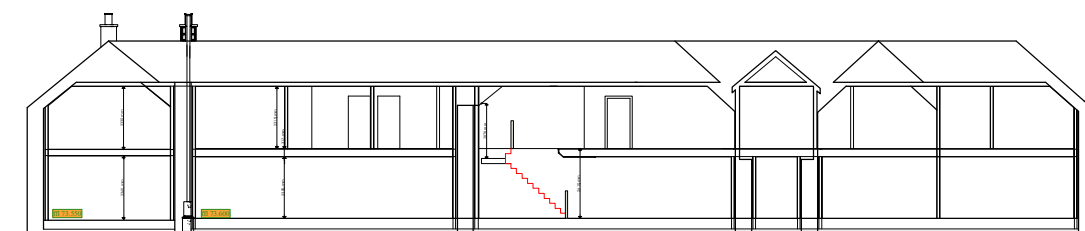
ELEVATION facing east (west leg) 1:100



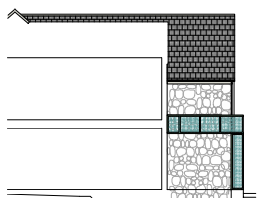
ELEVATION facing east (east leg) 1:100



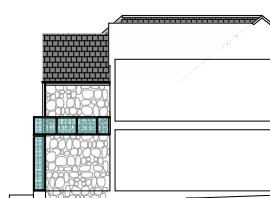
ELEVATION facing West (east leg) 1:100



TYPICAL SECTION THROUGH A_A 1:100



ELEVATION facing west (PORCH) 1:100

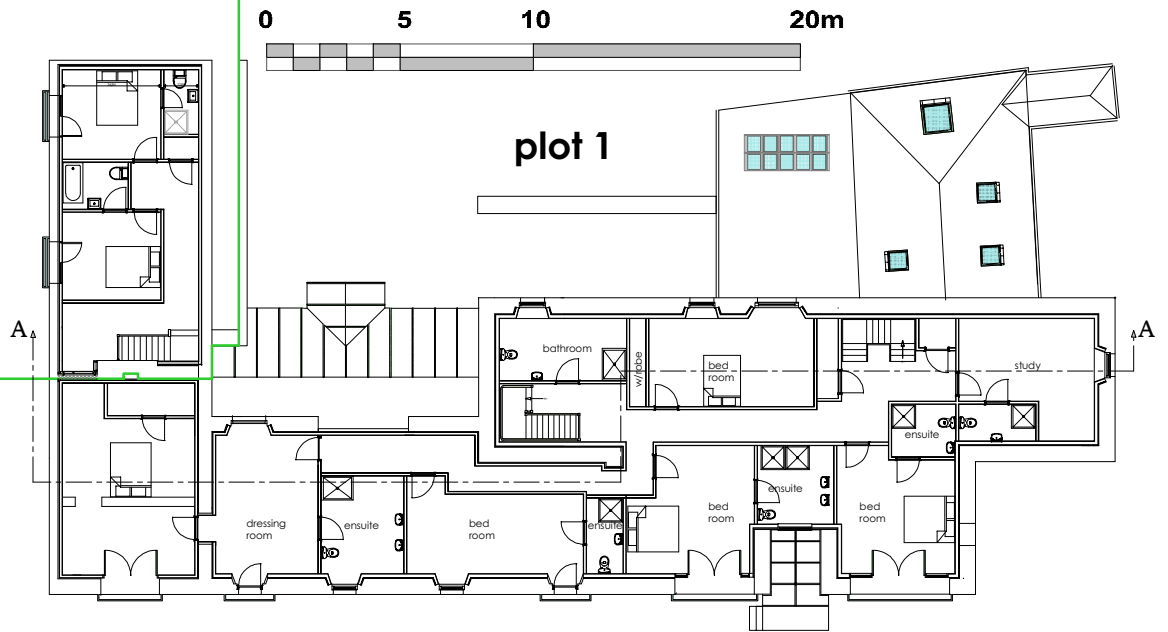


ELEVATION facing east (PORCH) 1:100

roofs : natural slate
gutters & downpipes : black cast iron/upvc
walls (existing) : natural stone
walls (new) : wet dash render
doors & windows : upvc
cills, garden walls, retaining walls : natural stone

plot 2

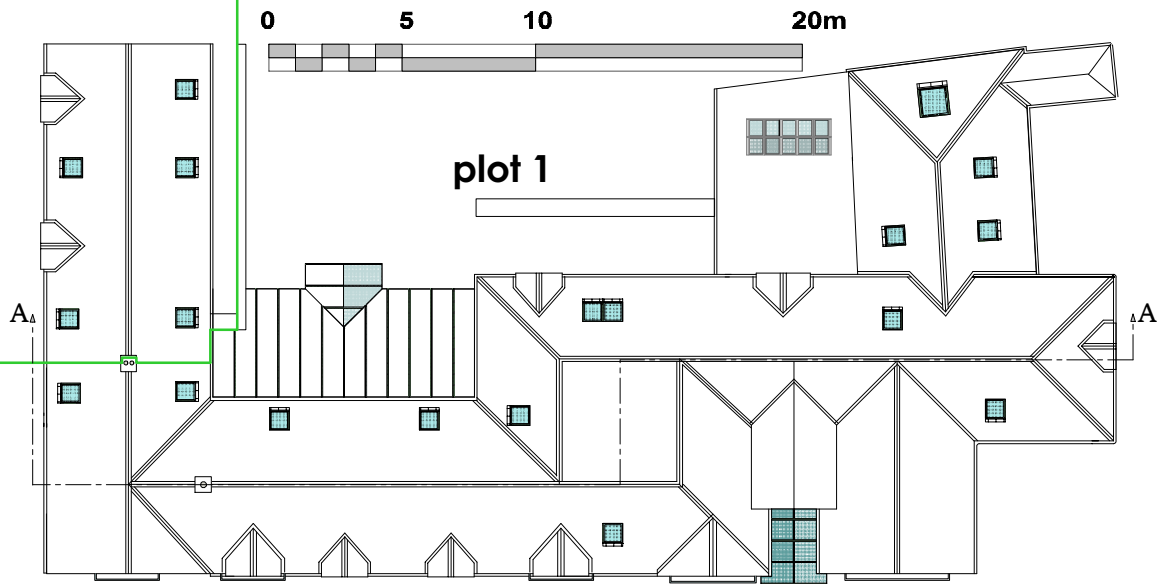
plot 1



FIRST FLOOR PLAN 1:100

plot 2

plot 1



ROOF PLAN 1:100

Design Statement

Introduction

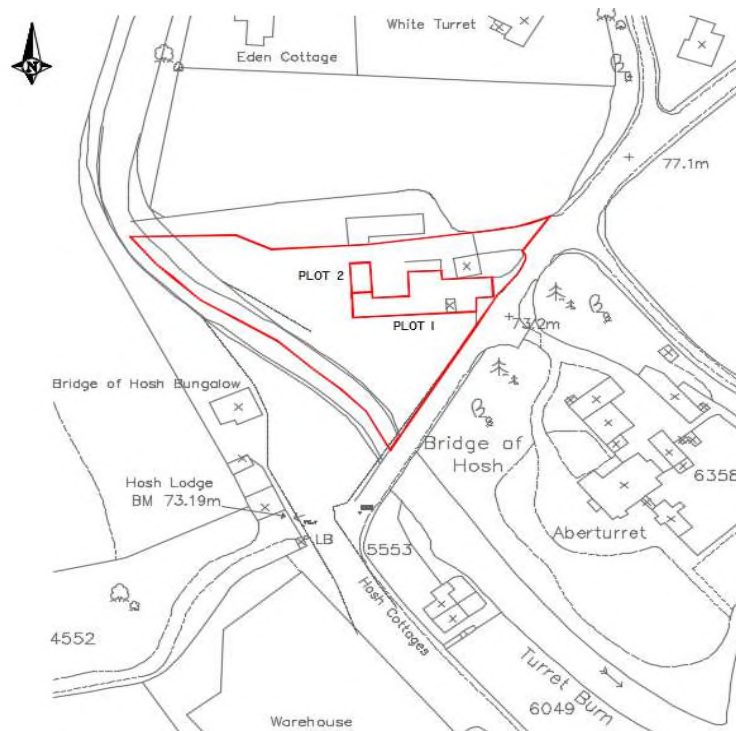
Arum Resources Ltd have been appointed to provide design solutions, by the clients, Mr + Mrs Finlay, to the refurbishment of the existing partially completed steading conversion of Hosh Farm Steadings, near Crieff.

Existing Condition

The site was formerly used as a farm steading before its refurbishment to a single dwelling house. Please refer to Perth and Kinross Council reference 05/02058/FUL and 10/00583/FFL. An application to split the steading into 2 units was applied for under 17/01121/FLL but was withdrawn, awaiting further information to clarify the situation on the ground. This new application similarly requests that planning approval is granted to split the original approved dwelling into 2 separate dwellings. At this stage, part of the dwelling is currently occupied and this area forms plot 2 as described on the submitted plans.

Defined Site

The site is situated off of the unclassified road from Crieff to Monzie, and this forms the eastern boundary. The site is broadly triangular in shape with the river Turret forming the south western boundary and the access road serving another dwelling in this hamlet forming the northern boundary.



Location plan n.t.s

Proposals

The proposed refurbishment of plot 1 is a continuation of the works carried out to plot 2. This will create a sympathetic conversion of the steading building including

- utilising the existing stonework walls
- reusing existing openings for windows and doorways
- maintaining existing roof pitches where possible
- the use of high quality, appropriate, alternative materials were required – such as timber cladding to dormers.

Size

The external dimensions of the building on Plot 1 varies but is generally 40m long x 11m wide. The external dimensions of the building on Plot 2 also varies but is generally 10m long x 6m wide.. The gross external footprint of both plots is 559 m². The site area of plot 1 is 2475m², and the site area of plot 2 is 940m² with a shared access to the north.



SIMPLE FLOOD RISK ASSESSMENT AT HOSH FARM STEADINGS, THE HOSH REPORT REF 430/01/01

Client

Mr + Mrs Findlay
Hosh Farm Steadings
The Hosh
By Crieff

Engineer

Grant Simpson
On Behalf of Arum Resources Ltd

1.1. Site description	2
1.2. Scope of works	2
2.1. Background Site Data	3
3.1. Methodology	4

Appendices

- A. Flood Risk Assessment Checklist.
- B. Topographic survey / overland flood route
- C. Existing bridge dimensions
- D. Location Map

1.1 Site description

The site has been earmarked for a split to an existing dwelling constructed under planning permission 10/00583/FLL. One of the dwellings proposed by this split has been constructed. The other section of steading (to which this report refers) is awaiting development. The site relevant to the application is approximately 0.34 hectares in area. The site is bounded to the east by an unclassified road from Crieff to Monzie. This road has a single span bridge to the south east of the site. This crosses the river Turret which bounds the site to the west / south west. To the north are further dwellings and access road into site.

The dominant features of the site are the existing buildings and river Turret. The existing ground of the site falls toward the river from the steading by approximately 2.2m or 1 in 7 at its steepest point.

This proposal is an amendment to the original approved application. 10/00583. This consists of the subdivision of the plot into 2 units, with the removal of the swimming pool annexe, which previously covered an area of circa 100m².

This amendment does not increase the flood risk from the original application, and with the removal of the swimming pool will reduce the flood risk danger considerably.



View from east bank to proposed dwelling

1.2 Scope of works

Arum Resources Ltd were commissioned by Mr + Mrs Findlay, as owners of the property, to undertake a simple flood risk assessment to confirm.

a) finished floor level of 73.60m as being suitable.

2.1 Background Site Data

The site is a brownfield site with no known issues of flooding in the past. It is noted to be within the high and medium likelihood of fluvial flooding from the adjacent watercourse as shown on SEPA flood risk management mapping. As such a Flood Risk Assessment is required. The flood risk management mapping shows an 0.5% annual probability of flooding in any given year. Also known as 1 in 200 year flood event.

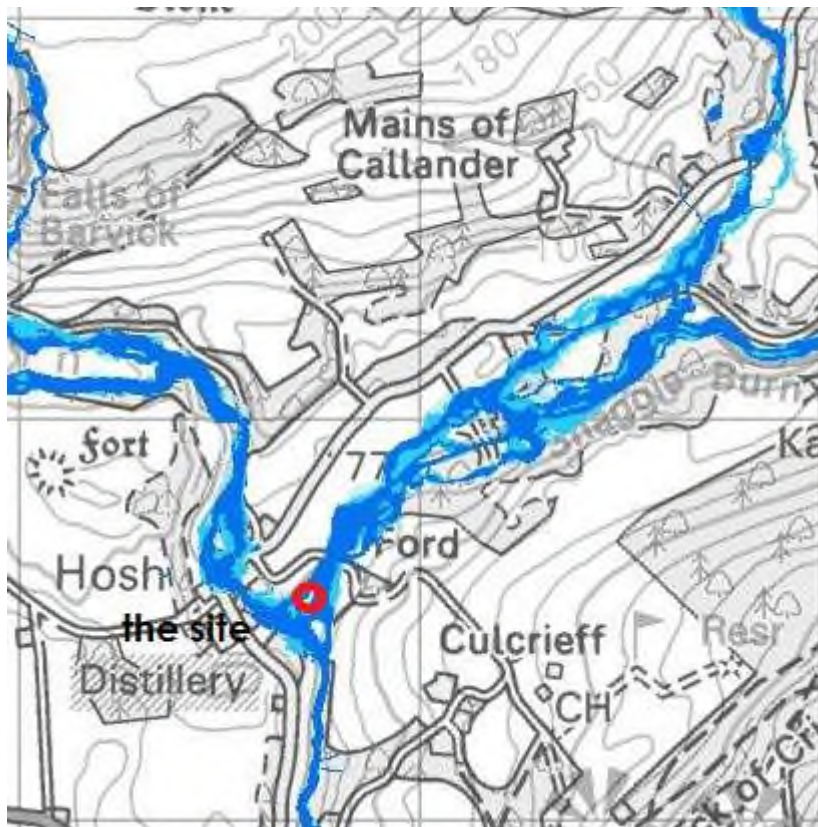


Fig 1.
extract from SEPA flood risk map

A level survey of the site was carried out in 2010, and at the time was sufficient to allow approval of the original proposal. This was due to the probability of flood water favouring the southern / western bank as it is significantly lower than the northern / eastern bank, where the proposal is located by some 300mm. Essentially the case for this amendment is improved considerably by the omission of the

swimming pool annexe in this application. (see appendix b.)

The watercourse is constrained by a single span road bridge (see appendix c). If in the event of blocking of the watercourse under the bridge, the flood water will overtop on the southern side of the bridge. The level of this overflow flow has been assessed as 73.00mm.

The river Turret is significantly controlled by the dam at Loch Turret Water Treatment Works some 4 miles upstream from this point.

3.1 Methodology

As this is conversion that has already received planning permission, and is a reduction to that previously approved, it is appropriate to assess this in a simplified manner.

The existing structure is roofed and no further hardstanding of any significance will be added that would contribute to further flooding downstream. Rainwater downpipes will be taken to soakaways on site.

To assess, the proposed finished floor level of 73.6m from the previous approved application is taken once more. To justify this, an allowance of + 600mm has been made to the level of the overland flowroute of 73.0mm (refer to appendix b)

It is considered that should a flood event ever occur to the point where the proposed dwelling is threatened, then floodwater will overtop in the first instance on the southern side of the bridge, and return to the watercourse. This assumes that flooding reaches this level in any case.



View to southern end of bridge (73.00m aod)

4.1 Conclusion

The proposed dwelling should have a finished floor level of 73.6m

The overland flow route is to the opposite bank of the watercourse, bounding the site. This level has been determined as being at 73.00mm.

The proposed development will not cause any worsening of flooding downstream of the site.

APPENDICES

APPENDIX A

Flood Risk Assessment (FRA) Checklist

(SS-NFR-F-001 - Version 1.3 - Last updated 15/04/2015)

This document should be attached within the front cover of any flood risk assessments issued to Local Planning Authorities (LPA) in support of a development proposal which may be at risk of flooding. The document will take only a few minutes to complete and will assist SEPA in reviewing FRAs, when consulted by LPAs. This document should not be a substitute for a FRA.

Development Proposal

Site Name	Glenturret Mill, The Hosh By Crieff		
Grid Reference	Eastings:	Northings:	
Local Authority	Perth and Kinross Council		
Planning Reference number (if known)			
Nature of the development	Residential		
Size of the development site	0.34	Ha	conversion of steading to residential building
Identified Flood Risk	Fluvial	Source name:	SEPA Flood risk map

Supporting Information

Have clear maps / plans been provided within the FRA (including topographic and flood inundation plans)

Has a historic flood search been undertaken?

Is a formal flood prevention scheme present?

Current / historical site use

Hydrology

Area of catchment	n/a	km ²
Qmed estimate	n/a	m ³ /s
Estimate of 200 year design flood flow	n/a	m ³ /s
Estimation method(s) used *	Other	
If other (please specify methodology used):		
If Pooled analysis have group details been included		
site specific topographic survey		
No		

Hydraulics

Hydraulic modelling method	n/a	Software used:	Other
If other please specify			
Modelled reach length	110	m	
Any structures within the modelled length?	Bridges	Specify, if combination	
Brief summary of sensitivity tests, and range:			
variation on flow (%)	n/a		
variation on channel roughness	n/a		
blockage of structure (range of % blocked)	100		
boundary conditions:			
(1) type	Upstream	Downstream	
Specify if other	Flow	Normal depth	
(2) does it influence water levels at the site?	No	Specify if other	No
Has model been calibrated (gauge data / flood records)?	No		
Is the hydraulic model available to SEPA?	No		
Design flood levels	200 year	refer to report	200 year plus climate change
			73 m AOD

Flood Risk Assessment (FRA) Checklist

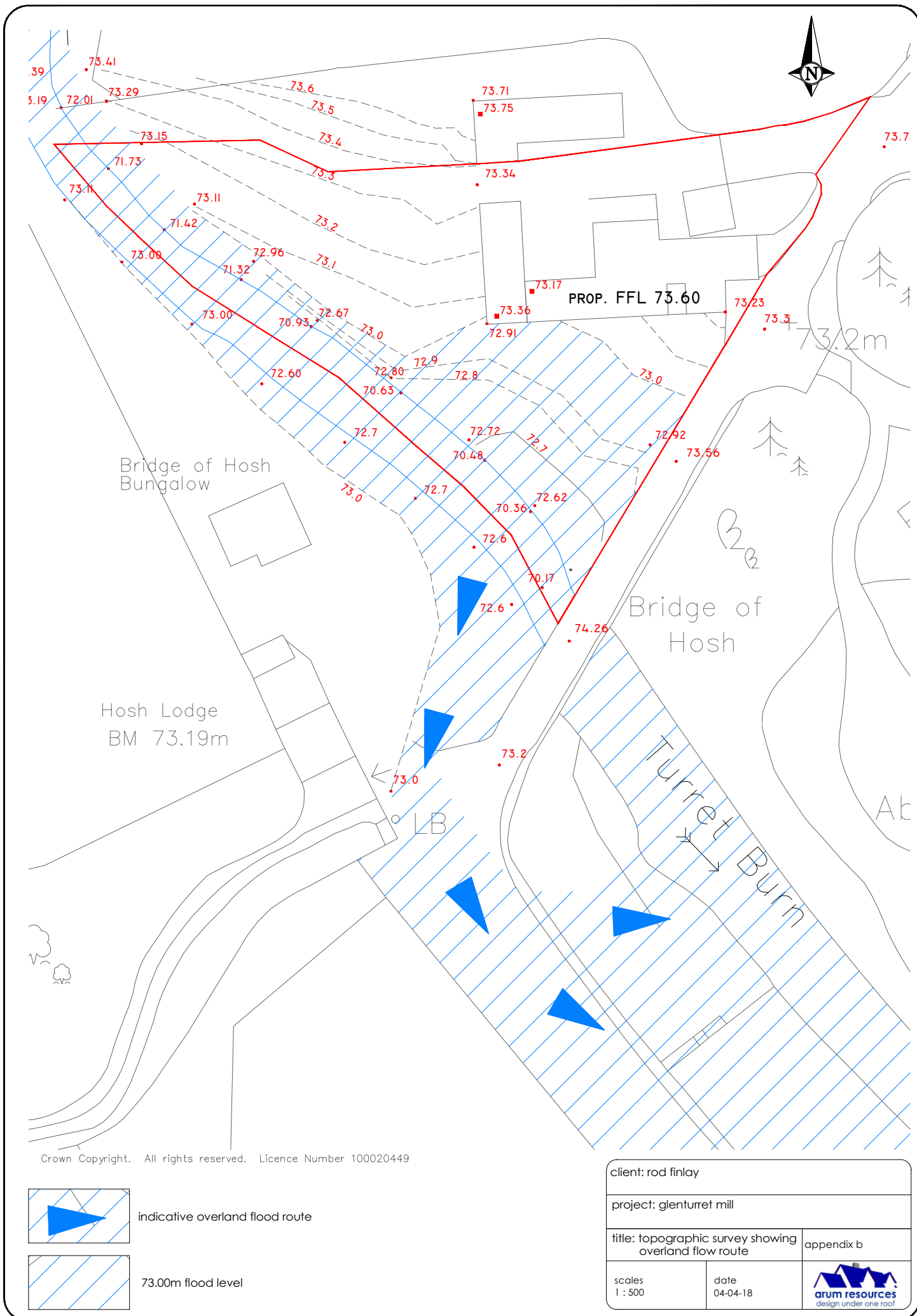
(SS-NFR-F-001 - Version 1.3 - Last updated 15/04/2015)

Coastal		m AOD		If other (please specify methodology used):		n/a	
Estimate of 200 year design flood level		n/a					
Estimation method(s) used		Other					
Allowance for climate change (m)		n/a		m			
Allowance for wave action etc (m)		n/a		m			
Overall design flood level		n/a		m AOD			
Development							
Is any of the site within the functional floodplain? (refer to SPP para 255)							
Is the site brownfield or greenfield		No		If yes, what is the net loss of storage		m ³	
Freeboard on design water level (m)		Brownfield					
Is the development for essential civil infrastructure or vulnerable groups?		0.6 m					
Is safe / dry access and egress available?		No		If yes, has consideration been given to 1000 year design flood?		No	
If there is no dry access, what return period is dry access available?		Vehicular and Pedestrian		Min access/egress level		73.60 m AOD	
If there is no dry access, what is the impact on the access routes?				years			
Design levels		Max Flood Depth @ 200 year event:		m		m/s	
		Ground level		73 m AOD		Min FFL: 73.6 m AOD	
Mitigation							
Can development be designed to avoid all areas at risk of flooding?							
Is mitigation proposed?		Yes					
If yes, is compensatory storage necessary?		No					
Demonstration of compensatory storage on a "like for like" basis?		No					
Should water resistant materials and forms of construction be used?		No					
Comments							
Any additional comments:							
Detailed analysis of watercourses not undertaken for this small scale development. An assumption has been made of a total blockage of bridge to SE of site. Should this happen flooding would occur up to a level of 73.00m. At this point it would discharge overland to the south end of the bridge and back into the watercourse. FFL of proposal shall be 73.60m							
Approved by:		Grant Simpson					
Organisation:		Arum Resources Ltd					
Date:						05/04/2018	

Note: Further details and guidance is provided in 'Technical Flood Risk Guidance for Stakeholders' which can be accessed here:- [CLICK HERE](#)


* ReFH2 is now accepted by SEPA for flow estimates in Scotland. Any use of this method should be compared with other accepted methods.

APPENDIX B

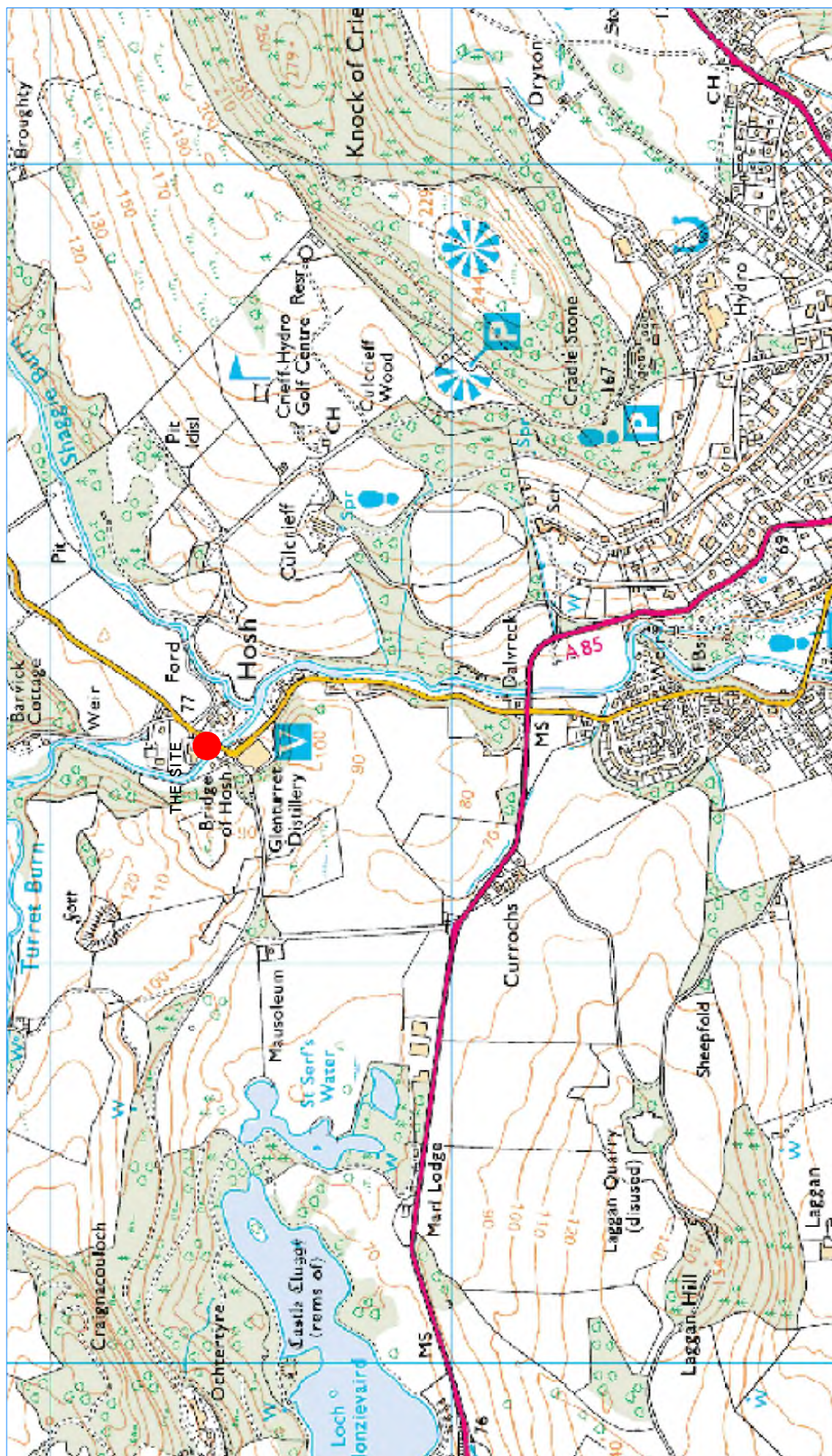


APPENDIX C



client: rod finlay		
project: glenturret mill		
title: dimensions for existing bridge - taken on upstream side		appendix c
scales n.t.s.	date 04-04-18	 design under one roof

APPENDIX D



client: rod finlay

project: glentworth mill

title: location plan

appendix d

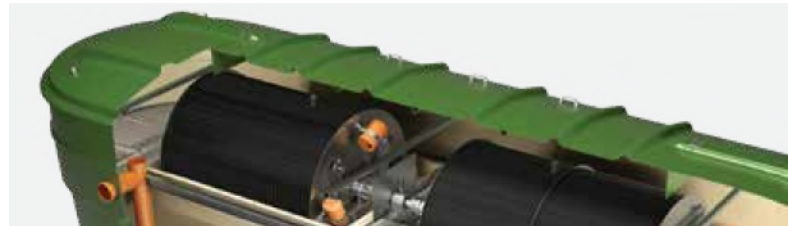
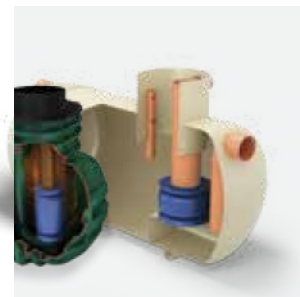
scales
n.t.s.

date
04-04-18



Klargester Product Guide

The Klargester range of fully integrated wastewater management, surface water and rainwater harvesting solutions



About Kingspan

Operating in over 85 countries worldwide, we offer a global distribution network backed by experienced local sales and technical teams.

Trusted Water Management Solutions

Kingspan, manufacturers of the Klargaster Product Range, are the water management experts with over 60 years of innovation and knowledge. We design and manufacture tried and tested water management solutions on a global scale for the leisure, public, hospitality, transport and domestic sectors whilst offering one of the largest and most technologically advanced wastewater ranges available.

Our technical support teams provide focused customer service from delivery scheduling to consultancy and installation guidance. We give you the confidence of support over the lifetime of the product and beyond, in your local area.

Global Reach



Locally Accessible

Nationwide Distribution

Expert Technical Support

Kingspan's support doesn't stop once you have purchased the product. Our expert team are here to help you with technical, sales and delivery enquiries. We are dedicated to our customers and pride ourselves on top class customer service.



We stand by the quality and performance of Kingspan water management solutions and our support doesn't stop once your tank is installed.

Our world class design consultancy is complemented by engineering expertise and advice as well as service throughout your commercial or industrial water management project.

We use the latest design technology to produce drawings of extremely high quality. Our project management process is a step-by-step one, to ensure the very best experience and results. It covers everything from system sizing, product selection and system design to calculations, manufacturing, installation and delivery.

Our advice also spans water management specification, design, product application and integration with building regulations, code compliance and site work installation practices to meet the most demanding effluent qualities, flow rates and discharge consents.

Contact our technical team today for expert advice and information on any of our water management solutions.

Email: water@kingspan.com



Regional Installations

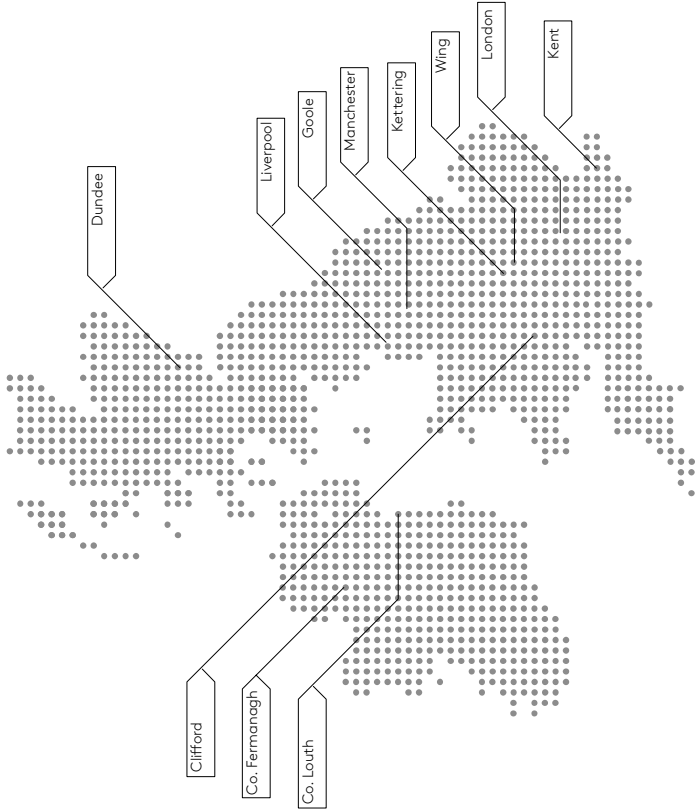
Manufactured in the UK and Ireland, the Klargester Product Range is supported by our nationwide network of dedicated external Area Sales Managers.

We offer free site visits to discuss project specific requirements and provide a detailed written report and specification to recommend the best water management solution for your project.

We also provide on-site installation assistance when required and help you with formal discussions with Building Control, Local Planning departments, The Environment Agency/SEPA, architects and consultants.

To arrange your free site survey contact us now on **01296 633033** or email **water@kingspan.com**

Kingspan operates in over 85 countries worldwide, with currently over 5 million water management system installations. Take a look at a selection of our case studies for the Klargester Product Range.



Thanet Earth
Kent, England

Four vertical pumping stations to aid water management for a complex green house development.



Manchester City FC
Manchester, England

Oil separators for its all-important surface water drainage system.



Barn Conversion
Wing, England

Domestic BioDisc sewage treatment plant, ensuring a safe, odour-free environment.



Social Housing Installation
Co. Louth, Ireland

Rainwater harvesting solution used to flush the WCs in each home. The system is fully integrated with the main plumbing, easing demand on the mains supply.



Elite Office Furniture
Goole, England

Surface water separators, foul, effluent and crude sewage pump stations, grease trap and BioFicient commercial system.



The Castlefields Inn
Clifford, England

BioDisc Commercial sewage treatment plant providing an efficient water management solution.



Supermarket Carpark
London, England

Bypass separator, NSBE50, to assist in decontamination of surface water drainage.



Marble Arch Caves
Co. Fermanagh, N. Ireland

Grease separator and BioDisc sewage treatment plant work together giving optimum performance and extremely low running costs.



Everton FC (Training Ground)
Liverpool, England

Modular BioFicient commercial system including fuel/oil separators for a complete waste water management solution.



Primark Distribution Centre
Kettering, England

Modular BioFicient commercial system for multi-million pound distribution centre.



Multi-Housing Development
Dundee, Scotland

A complex sewage treatment and surface pumping solution to meet the varying needs of multiple housing.

Klargester BioDisc® Domestic Sewage Treatment Plant



The Klargester Domestic BioDisc® is engineered to treat wastewater to the highest level of standards and offers one of the lowest lifetime costs compared to other treatment processes.

Product Benefits

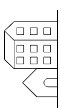
- Utilises Rotating Biological Contactor technology.
- Low running costs.
- Low level visibility with a lockable child-proof cover – safe for children and pets.
- Delivers better than 95% pollution removal.
- 10-year warranty options available when purchased with a service and maintenance plan.
- Supplied with a control panel and alarm.
- Managed Flow System.
- Totally silent in operation.
- The most stable process in the market.
- Controls the discharge volume.



Control Panel

5100 Applications:

The Klargester Domestic BioDisc® BA-BC range is suitable for a range of applications including:



Single & Multiple Homes



Barn Conversions



Small Offices



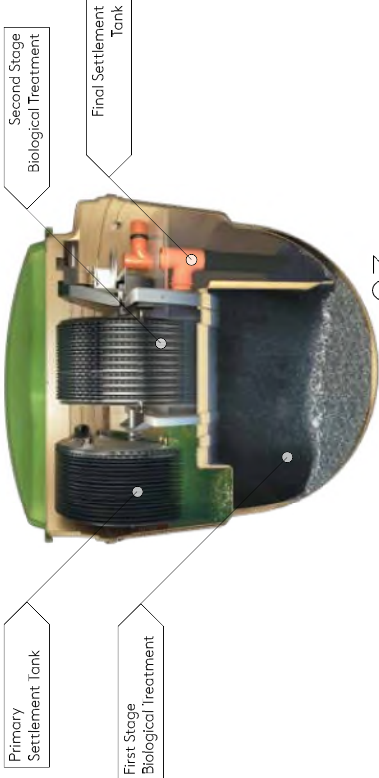
Light Industrial Premises



Farms

The Rotational Biological Contactor

The RBC is central to the operation of each Klargester BioDisc®. It supports a biologically active film or biomass onto which aerobic micro-organisms, naturally found in sewage, become established. Natural breakdown of sewage can then occur as described below.



Technical Specifications

Model Reference	BA	BA-X	BB	BC
Population Equivalent (Std Flow)	6	9	12	18
Maximum Daily BOD (kg)	0.36	0.54	0.72	1.08
Maximum Daily Flow (m³)	1.2	1.8	2.4	3.6
Ø/Width (mm)	Ø1995	Ø1995	Ø1995	Ø2450
Length (mm)	-	-	-	-
Inlet Invert depth (mm)	450/750/1250	450/750/1250	450/750/1250	600/1100
Depth Below Inlet Invert (mm)	1400	1400	1400	1820
Outlet Invert Depth (mm)	1315	1315	1315	1735
Overall Height (mm)	2160/2460/2960	2160/2460/2960	2160/2460/2960	2825/3325
Height to Rim of Cover (mm)	1945/2245/2745	1945/2245/2745	1945/2245/2745	2465/2965
Empty Weight (kg)	310/325/380	310/325/380	335/550/405	650/750
Standard Power Supply	1 phase	1 phase	1 phase	1 phase
Motor Rating - 1 Phase (Watts)	50	50	50	75
Full Load Current 1 Phase (amps)	0.51	0.51	0.51	1.1
Optional Power Supply	N/A	N/A	N/A	3 phase
Motor Rating - 3 Phase (Watts)	N/A	N/A	N/A	90
Full Load Current 3 Phase (amps)	N/A	N/A	N/A	0.38
Sludge Return Pump Rating (watts)	250	250	250	250

Pumped Outlet Available on BA, BA-X, BB models.

Performance and Compliance

- > Certified to European Standard BS EN 12566 Part 3.
- > Performance certified to achieve 10mg/l BOD, 15mg/l SS and 3.8mg/l ammonia.
- > Fully marked in line with the CPR 2013.

Noise Free



Primary Settlement Tank

Wastewater and sewage flows into the primary settlement tank where the large solids are retained for future removal.

First Stage Biological Treatment

The liquor and fine solids then flow into the Biological Treatment Zone 1 where the first stage of treatment occurs.

Second Stage Biological Treatment

The liquor is then fed forward at a controlled rate into Biological Treatment Zone 2 for further cleaning.

Final Settlement Tank

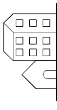


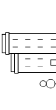

The clean liquid passes into the final settlement tank where it can be discharged to ground or water course.

Klargester BioFicient® Domestic Sewage Treatment Plant

The Klargester BioFicient® treatment plant provides a reliable and effective solution for domestic applications without access to mains drainage. Suitable for homes with up to 30 people, the BioFicient is manufactured from high quality materials and uses the latest treatment technology to deliver a high level of water discharge quality.

Applications

The Klargester Domestic BioFicient® 1-6 range is suitable for use across the following applications:

- Single & Multiple Homes
- Barn Conversions
- Light Industrial Premises
- Small Offices
- Farms

Product Benefits

- Shallow Dig.
- New low energy compressor.
- Low level visibility with a lockable child-proof cover – safe for children and pets.
- Suitable for installation in traffic areas (structural advice required).
- Supplied with a control panel and alarm.
- Easy to set up and operate.
- Integral pump option available for BioFicient 1-4.

Performance and Compliance

- BS EN 12566 Part 3 tested and approved.
- Industry leading NH₄ (ammonia) removal.
- Fully CE marked in line with the CPR 2013.



01

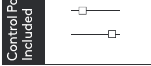
Primary Chamber

Raw sewage gravitates to the unit where it is received in the primary settlement zone. Here, gross solids and other social debris settle to the bottom of the tank where they remain until the tank requires desludging. Settled sewage is displaced from primary zone and enters the first of two sequential moving aerated media reactors.

Technical Specifications

Model Reference	BioFicient 1	BioFicient 2	BioFicient 2+	BioFicient 3	BioFicient 4	BioFicient 5	BioFicient 6
Population Equivalent	6	8	10	10	15	20	30
Overall Diameter (mm)	1,540	1,420	2,010	1,420	1,920	1,920	1,920
Length (mm)	2,500	3,760	3,189	3,760	3,230	4,390	6,220
Depth (mm)	1,794-2,104	1,830/2,330/2,850	2,785	1,830/2,330/2,850	2,300/2,800/3,300	2,300/2,800/3,300	2,300/2,800/3,300
Inlet Invert (mm)*	500-810/ 500-810*	500/1,000/ 1,500	700-1,500	500/1,000/ 1,500	500/1,000/ 1,500	500/1,000/ 1,500	5,007/1,000/ 1,500
Outlet Invert (mm)	600-910/ 555-865*	600/1,100/ 1,600*	800-1,600	600/1,100/ 1,600*	630/1,130/ 1,630*	630/1,130/ 1,630	630/1,130/ 1,630
Material	MDPE	GRP	MDPE	GRP	GRP	GRP	GRP
Blower Ratings	50W	75W	95W	75W	95W	115W	225W
Cover sizes	700	1,500/900	700	1,500/900	1,500/900+600**	1,500/900+600**	1,500/900+600**

Notes: Optional inlet depth down to 1800mm
*BioFicient IPS models only (Outlet Depth 320/4mm) | **BioFicient 4, 5, 6 has two shafts.



02

Biozone 1 & 2

Solids are broken down by air agitated media in the Biozone. Media and liquid circulation in the Biozone is achieved through the use of a compressor and diffuser, which introduces fresh air into each compartment. The liquor is constantly re-circulated and contacts the moving media and as it does so, it is purified by the micro organisms growing on the surface of the media and within the moving liquor. Excess growth of biomass is shed as solid particles into the liquor.

03

Final Settlement Tank

Where fine solids are settled out. The Final effluent is discharged via either gravity outlet or IPS (Integral Pump System) chamber. With regulatory approval, it is suitable for discharge to a watercourse or drainage field.

Klargester BioTec® Domestic Sewage Treatment Plant



The Klargester BioTec®

sewage treatment system is ideal for single/multiple houses and employs the well proven aerobic biological trickling filter process for the treatment of sewage.

Product Benefits

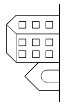
- No mechanical or electrical components within the plant – low running and maintenance costs.
- Low level visibility with a lockable child-proof duty cover – safe for children and pets.
- Easy to install and maintain with annual desludging.

Performance and Compliance

- > Certified to BS EN 12566 Part 3.
- > Assured performance of 20mg/l BOD, 30mg/l S.S., 20mg/l Ammonia.
- > Fully CEE marked in line with the CPR 2013.

Applications

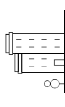
The Klargester Domestic BioTec® range is suitable for a range of applications, including:



Single & Multiple Homes



Barn Conversions



Small Offices



Light Industrial Premises



Farms

Incorporating the well-proven aerobic biological process, the BioTec® sewage treatment plant has a three-stage process.



01

02

Coarse solids are filtered and retained for gradual breakdown.

The resulting liquid is continuously distributed over a plastic suspended filter by an integral lift, powered by a remotely sited blower.

03

The solids are allowed to settle and under normal domestic conditions, effluent of 20mg/l BOD, 30mg/l S.S., 20mg/l Ammonia can be achieved.

Technical Specifications

Model Reference	BioTec® 1	BioTec® 1 IPS	BioTec® 2	BioTec® 2 IPS	BioTec® 3	BioTec® 3 IPS	BioTec® 4	BioTec® 4 IPS
Population Equivalent	6	6	12	12	18	18	25	25
Outside Diameter (m)	1.9	1.9	1.9	1.9	2.7	2.7	2.7	2.7
BOD Load (kg/day)	0.36	0.36	0.72	0.72	1.1	1.1	1.5	1.5
Weight Empty (kg)	195	220	217	260	445	471	470	495
Depth (m)	2.2	2.2	2.7	2.7	2.6	2.6	2.6	2.6
Inlet Invert (m)	1.0*	1.0*	1.0*	1.0*	1.0*	1.0*	1.0*	1.0*
Inlet Invert to Base (m)	1.2	1.2	1.7	1.7	1.6	1.6	1.6	1.6
Outlet Invert (m)	1.1	0.605	1.1	0.605	1.1	0.605	1.1	0.655
Motor Rating (watts)	60	60	60	60	150	150	150	150

* There are two depths of inlet in the range 1.0m and 1.5m.
IPS - Integral Pump System

Klargester Reed Beds



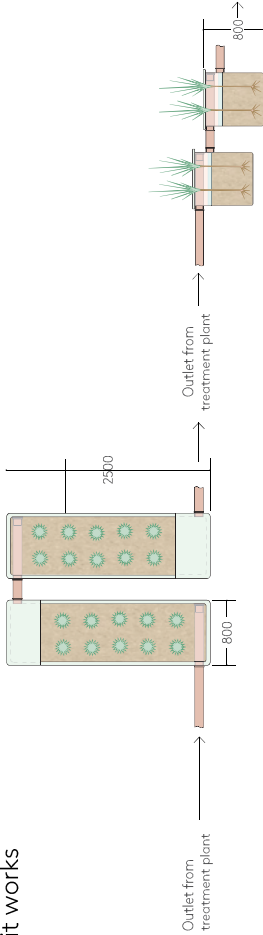
A reed bed is a filtration process used in conjunction with a Klargester sewage treatment system to further enhance the quality of the effluent migrating into a drainage field or surrounding watercourse.

Product Benefits

- Tertiary treatment for new applications with tight discharge consents.
- Satisfies new building regulations.
- Improved effluent quality for existing works.
- Very low maintenance.
- Aesthetically pleasing and environmentally friendly.
- Easy to install and maintain.
- Effluent discharge is typically improved by at least 50% providing reduced BOD and suspended solids.

521

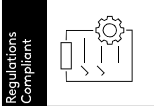
How it works



Technical Specifications

Model Reference	Population Equivalent	Length (mm)	Width (mm)	Depth (mm)	No. Required	Outlet Size (mm)
HRB006	6	2500	800	800	2	110
HRB012	12	2500	800	800	4	110

Selecting the Correct Solution



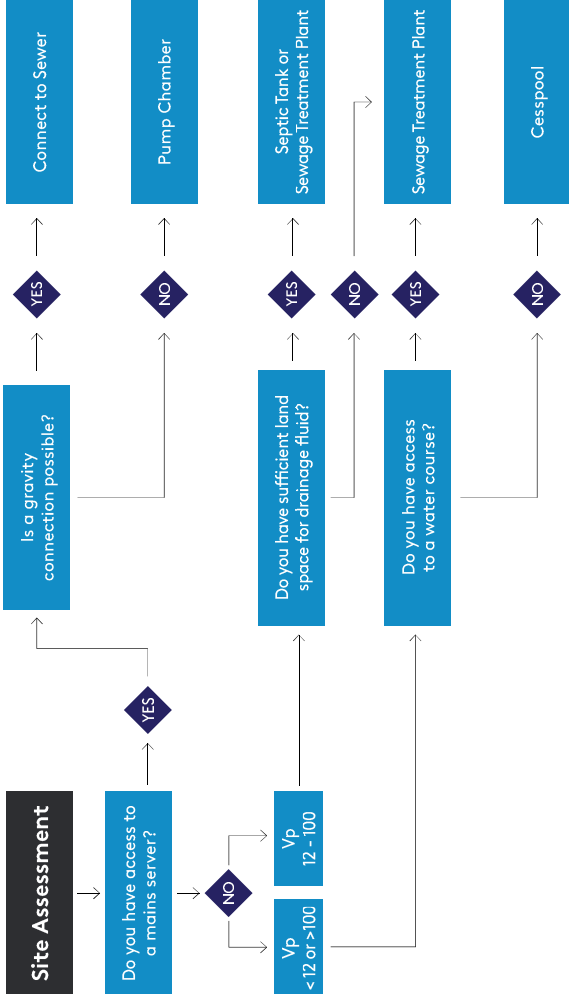
To ensure selection of the correct sewage treatment and disposal method to meet your requirements, expert advice should be sought. In all instances a sewage treatment plant should be considered as the first option.

Environmental Regulators and British Water have developed the system selection process below, to help in guiding you through the process to choose the correct system to meet your requirements.

Did you know?

If you have a septic tank that discharges directly to a surface water you will need to replace or upgrade your treatment system by 1 January 2020, or when you sell your property if before this date.

Environment Agency – General Binding Rules



Klargester Alpha Septic Tank



Klargester Alpha tanks provide a reliable and economic solution for homes not connected to mains drainage.

Basic septic tanks only retain solids and discharge effluent of low quality. The installation will not contaminate any ditch, stream or other watercourse. However, many authorities in the UK prohibit their use. In all instances a sewage treatment system should be considered as a first option.

Septic tanks may be installed, subject to consent, in applications where:

- Soil is of suitable porosity.
- Installation complies with Building Regulations (Approved Document H).
- The installation will not contaminate any ditch, stream or other watercourse.

Product Benefits

- Made from composite GRP - strong, light, and watertight.
- Press moulded shape provides wide, squat, form which makes the tank easy to install and handle.
- Stable base for storage.
- Lifting eyes are provided for lifting and positioning within the excavation.

Performance & Compliance

- > Performance tested to BS EN 12566 Part 1 requirements.
- > Fully CE marked in line with the CPR 2013.

Did you know?

If you have a septic tank that discharges directly to a surface water you will need to replace or upgrade your treatment system by 1 January 2020, or when you sell your property if before this date.

Environment Agency —
General Binding Rules

Klargester Gamma Septic Tank



The Klargester Gamma tank is an affordable solution for domestic applications with an efficiency rating of 99.97% – an industry benchmark.

Manufactured from tough polyethylene, the tank is robust and lightweight which makes it easy to handle and install.

Due to its design features, the Gamma tank is the perfect solution where a shallow dig installation is required, reducing installation time and costs.

Product Benefits

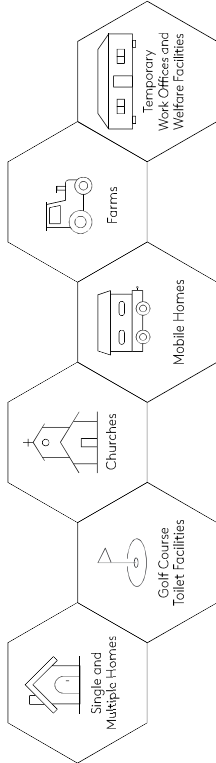
- Manufactured from robust, impact resistant, high quality polyethylene.
- Strong, easy to move and simple to install.
- Less excavation costs, less soil disposal and less backfill material.
- Wide neck for easy access for annual desludging.
- Trimmable neck to suit site.

Performance & Compliance

- > 99.97% efficiency rating.
- > BS EN 12566 Part 1 approved.
- > Fully CE marked in line with the CPR 2013.

Applications

The Klargester Alpha and Gamma septic tank ranges, each comprise three sizes and are typically suitable for applications not connected to mains drainage including:



Technical Specifications

Model Reference	Volume (L)	No. People (150 Ltrs/head/day)	Overall Diameter (mm)	Height (mm)	Standard Inlet Invert (mm)	Standard Outlet Invert (mm)
STS02810	2800	5	2075	2599/3099	1000/1500	1050/1550
STS03810	3800	12	2075	2810/3310	1000/1500	1050/1550
STS04610	4600	17	2084	2984/3484	1000/1500	1050/1550

Technical Specifications

Model Reference	Volume (L)	No. People (150 Ltrs/head/day)	Width (mm)	Length (mm)	Height (mm)	Standard Inlet Invert (mm)	Standard Outlet Invert (mm)	Depth (mm)
GST028	2800	5	1130	2460	1755 - 2255	550-1050	550-1050	2255
GST035	3500	10	1180	3000	1755 - 2255	550-1050	550-1050	2255
GST040	4000	13	1215	3360	1755 - 2255	550-1050	550-1050	2255

Klargester Sigma Septic Tank

The Klargester Sigma shallow dig septic tank is designed to reduce both installation time and cost. The range is available in various sizes suitable for properties with dig height restrictions.

Product Benefits

- Made from GRP - strong and durable for ultimate reliability.
- Robust and simple to install, reducing on site installation time.
- Less excavation costs, less soil disposal and less backfill material required.
- Light, watertight and chemically resistant.
- Robust, weather proof for guaranteed durability, giving you value for money.



Performance and Compliance

- > Certified to BS EN 12566 Part 1
- > Fully CE marked in line with the CPR 2013.

Klargester Below Ground Water Storage Tanks and Cesspools

The range of Klargester below ground storage tanks provide a reliable solution for the collection and retention of sewage (cesspool), surface water, veterinary / animal waste, firefighting reservoirs and rainwater harvesting reservoirs.

The advanced design of the Klargester below-ground storage tanks ensures consistent high performance, even in the toughest environmental conditions.

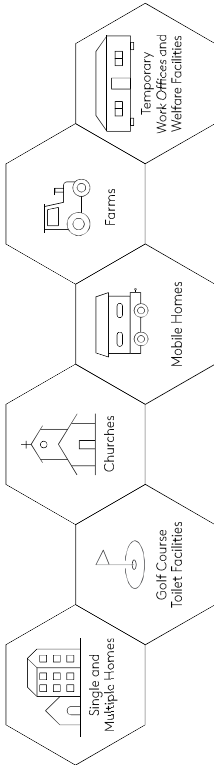
Product Benefits

- Easy to install with minimal on site installation time.
- Designed in accordance with BS6297, ensuring that you meet all building regulations.
- High level alarm available for complete peace of mind.
- Lockable manhole cover for ultimate security.



Applications

Klargester Sigma septic tanks and below ground water storage tanks and cesspools, offer a solution for applications not connected to mains drainage including:



Technical Specifications

Model Reference	Volume (L)	No. People (150 Ltrs/head/day)	Overall Diameter (mm)	Length (mm)	Standard Inlet Invert (mm)	Standard Outlet Invert (mm)	Depth (mm)
STH028	2800	5	1225	2955	500	530	1637/1587*
STH038	3800	12	1225	3895	500	530	1617/1577*
STH057	5700	24	1425	4275	500	530	1826/1786*
STH071	7150	34	1920	3225	500	550	2290
STH091	9150	47	1920	3960	500	550	2290

*10mm diameter pipework / 160mm diameter pipework

Technical Specifications

Nominal Litres	Capacity (Gallons)	Length (mm)	Diameter (mm)
18,000	3960	4317	2620
22,000	4889	5073	2620
26,000	5720	5837	2620
34,000	7480	7376	2620
46,000	10,120	9684	2620
54,000	11,880	11,222	2620
59,000	12,968	11,991	2620
63,000	13,860	12,760	2620
71,000	15,620	14,295	2620
79,000	17,380	15,833	2620

Klargester BioDisc® Commercial Sewage Treatment Plant

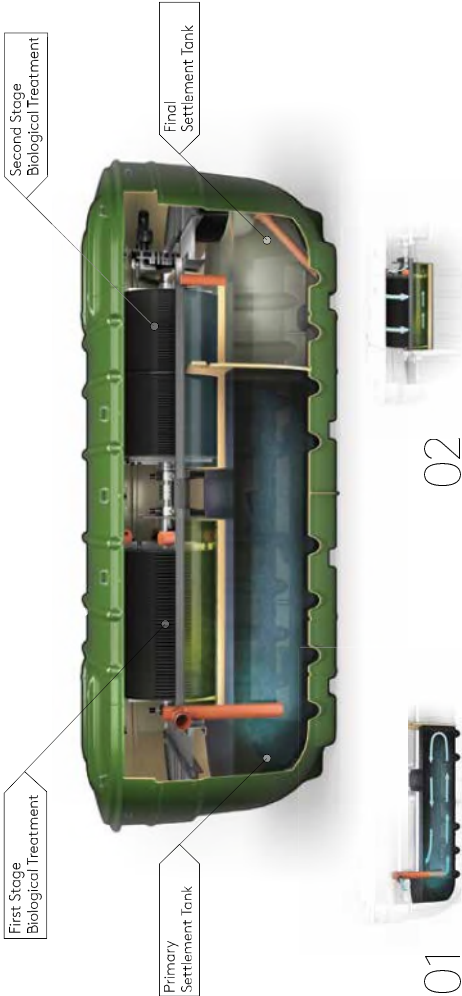
Delivered as a single, packaged system, the Klargester BioDisc® RBC range (up to 300PE), offers low running costs due to its unique design and operational efficiencies.

Product Benefits

- Unique RBC technology.
- Tried and tested technology, offers robust and efficient water management treatment.
- Low running costs.
- Noise free.
- Fully removable lid for easy desludging.
- Fully packaged system, delivered direct on site.
- Bespoke technical support offered from our in-house technical teams.

Performance & Compliance

- > Odour free - tested and fully approved in accordance with BS EN13725.
- > Designed for applications selected in compliance with British Water Code of Practice Flows and Loads.
- > 100% compliance with industry requirements across commercial sectors, including national and international regulations such as BS EN12255 and EN12566-3 (up to 50 PE).



01

Primary Settlement Tank

This is the initial stage of treatment and simply involves the retention of coarse solids present in raw sewage and wastewater for subsequent gradual breakdown. BioDisc® features one chamber to ensure efficient operation with a flow balancing facility.

02

First Stage Biological Treatment

The liquor and fine solids then flow into the first stage of Biological Treatment. A unique managed flow system ensures peak performance by smoothing variable loads.

03

Second Stage Biological Treatment

The liquor is then fed forward at a controlled rate into Biological Treatment stage 2 for further cleaning. This process ensures the whole media area available is utilised ensuring maximum efficiency.

04

Final Settlement Tank

The surplus micro-organisms continuously slough off the discs and are carried forward to the final settlement where they settle out as a humus sludge, leaving a clear treated effluent to be discharged to ground or water course. The settled humus sludge is returned to the Primary Settlement Tank by the sludge return pump under timer control. The sludge return pump also removes any floating scum which helps to keep the final settlement tank working efficiently.

Technical Specifications

Model Reference	BD	BE	BF	BG	BH	BJ	BK	BL	BM	BN
Maximum Daily BOD (kg)	1.5	2.1	3	4.2	4.5	6	7.5	9	13.5	18
Maximum Daily Flow (m³)	5	7	10	14	15	20	25	30	45	60
Ø/Width (mm)	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
Length (mm)	3340	3340	4345	5235	7755	7755	7755	7755	10420	13100
Inlet Invert depth (mm)	600/1100	600/1100	600/1100	600/1100	600/1000	600/1000	600/1000	600/1000	600/1000	600/1000
Depth Below Inlet Invert (mm)	1820	1820	1820	1820	1790	1790	1790	1790	1790	1790
Outlet Invert Depth (mm)	1735	1735	1720	1720	1640	1640	1640	1640	1640	1640
Overall Height (mm)	2825/3325	2825/3325	2825/3325	2825/3325	2830/3230	2830/3230	2830/3230	2830/3230	2830/3230	2830/3230
Height to Rim of Cover (mm)	2485/2985	2485/2985	2485/2985	2485/2985	2450/2890	2450/2890	2450/2890	2450/2890	2450/2890	2450/2890
Empty Weight (kg)	1100/1200	1200/1300	1315/1465	1660/1810	3000/3070	3100/3170	3200/3270	3300/3320	4200/4250	5500/5650
Standard Power Supply	1 phase	1 phase	1 phase	1 phase	1 phase	1 phase	1 phase	1 phase	1 phase	1 phase
Motor Rating - 1 Phase (Watts)	75	75	120	180	250	250	370	370	550	2 x 370
Full Load Current 1 Phase (amps)	1.1	1.1	1.3	1.6	1.5	1.5	2.35	2.35	2.8	2 x 2.35
Optional Power Supply	3 phase	3 phase	3 phase	3 phase	3 phase	3 phase	3 phase	3 phase	3 phase	3 phase
Motor Rating - 3 Phase (Watts)	90	90	120	180	250	250	370	370	550	2 x 370
Full Load Current 3 Phase (amps)	0.38	0.38	0.42	0.63	0.88	0.88	1.35	1.35	2.8	2 x 1.35
Sludge Return Pump Rating (watts)	250	250	250	250	250	250	250	250	250	250



Klargester BioDisc® Modular RBC Commercial Sewage Treatment Plant

The larger Klargester BioDisc® modular RBC system is designed for applications with higher populations, with each unit supplied as a 250PE unit.

Due
Spring
2018!

Brand
New
Solution

525

Total flexibility with a
unique modular RBC
system



The Klargester modular RBC system is designed for applications with higher populations.

The system comprises of a complete modular unit containing the RBC units along with primary and final settlement tanks.

Both RBC units and tanks can be increased in numbers or size to make a flexible system for an expanding or phased population growth.

Each unit is supplied as a 250PE unit and further units supplied depending on population requirements.

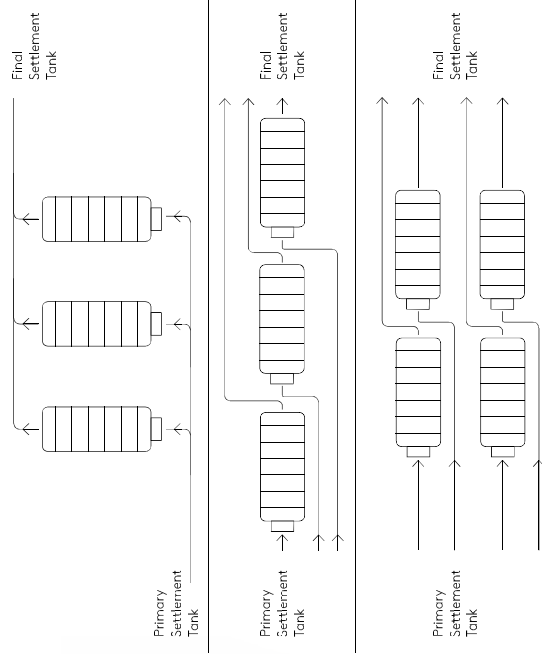
Primary and final settlement tanks can be sized for the intended end population or additional tanks can be supplied in the future and fed into the system.

Each of the units can be linked to create a complete sewage treatment system. The feed to each RBC can be controlled independently to give further flexibility.

The RBC unit measures 6.7 metres long x 2.2 metres wide x 2.4 metres high. The size of primary and final settlement tanks will vary with each customer application and site location.

Modular RBC System

The RBC comprises a complete modular system, supplied as 250PE modules. Their unique design is containerised for ease of transport. Flexible modular layouts available to suit even the toughest site conditions.



Technical Specifications

Model Reference	Daily Flow (l/day)	Daily Load (kg/BOD/day)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)	Motor Power
RBC250	50,000	15	6,700	2,210	2,400	5,000	1.1 Kw/40Dv

Max daily flow based on 200 L/Person/Day, system PE will vary by site flow rate per person.



Flow Management Process

The unique flow management process of the Klargester Commercial BioDisc® allows for complete flexibility of forward feed rate. Rotating buckets transfer untreated water through each of the BioZones, allowing for total forward feed control. These are independently driven and allow the buckets to run at a different speed to the rotor.

Sectional Media Modules

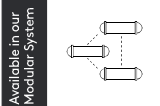
The Biozone media within the Klargester BioDisc® modular system, is built up in 'wedge' sections to make a two metre diameter rotor assembly. A complete wedge can be removed from the rotor for maintenance or inspection without compromising the overall rotor structure. This ensures the rotor assembly can stay in place, without the need for removal.

Rotor Support Bearings

The rotor assembly is supported by a pillow block bearing at each end of the rotor shaft. These are equipped with self lubricating grease cartridges to provide continual lubrication. Both of the bearings can be accessed by removing the individual covers for maintenance. It is not necessary to remove the larger main covers, allowing for easier maintenance.

Strapping/Lifting Options

The treatment plant can be lifted from the side by forklift truck. Forklift tubes are built into the steel construction frame. The unit can also be lifted at either end with the aid of extension forks. Alternatively, the unit can be lifted with slings. Four lifting brackets are attached to the frame and lifting shackles are provided with each unit.



Available in our
Modular System

Klargester BioFicient® Commercial Sewage Treatment Plant



The Klargester BioFicient commercial sewage treatment plant is designed with efficiency in mind. It offers reliable performance using tried and tested technology to ensure consistently high effluent quality.

Product Benefits


- Adaptable to specific consent requirements including 'Total Nitrogen'.
- Low head loss.
- Minimal footprint area and visual impact.
- Variable invert options (0.5 - 2.0 m).
- May be installed in trafficked areas (subject to loading).
- Low maintenance.
- Alarm protected.


Performance and Compliance


- > Compliant with EN-12255 and EN12566-3 (up to 50 PE).
- > Designed and sized in accordance with British Water Code of Practice Flows and Loads but can be sized to suit local site conditions.


526 Applications:


The BioFicient range is suitable for a range of applications including:


Public sector


Transport

Campsites

Multi-housing developments

Leisure

Hospitality

Offices

01

Primary Settlement Chamber

This is the initial stage of treatment and simply involves the retention of coarse solids present in raw sewage and wastewater for subsequent gradual breakdown. BioFicient features two chambers to ensure efficient operation with a flow balancing facility.

02

Biozone 1

The liquor enters the first stage of Biological treatment where the active bacteria within the fluidized bed begin to break down organic solids, majority of BOD removal occurs here.

2.6 diameter BioFicient is also available as an alternative model.



Technical Specifications

Model Reference	17H	23H	34H	38H	42H	47H	55H	67H	80H
A Overall Length (m)	7.4	9.3	7.4	8.1	8.9	9.7	11.2	13.5	15.8
B Overall Width (m)	1.9	1.9	1.9	1.9	1.9	2.8	2.8	2.8	2.8
C Height (m)									
560mm Inlet / 860mm Outlet Invert*	2.28	2.28	3.02	3.02	3.02	3.02	3.02	3.02	3.02
1060mm Inlet / 1360mm Outlet Invert*	2.78	2.78	3.52	3.52	3.52	3.52	3.52	3.52	3.52
1560mm Inlet / 1860mm Outlet Invert*	3.28	3.28	4.02	4.02	4.02	4.02	4.02	4.02	4.02
2060mm Inlet / 2360mm Outlet Invert*	3.78	3.78	4.52	4.52	4.52	4.52	4.52	4.52	4.52
D Diameter (m)	1.8	1.8	1.8	1.8	1.8	2.6	2.6	2.6	2.6
Volume (m3)	17	23	34	38	42	47	55	67	80
Weight Approx (kg)	1200	1450	3000	3200	3400	3800	4200	4700	5400
Inlet / Outlet Diameter (mm)	160	160	160	160	160	160	160	160	160
Maximum Flow (m3/day) Models	8	11	15	20	25	30	40	50	60
Retention Time (hrs)	76	66	51	43	39	35	31	31	30

03

Biozone 2

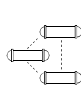
Within the second stage of Biological treatment the second fluidized bed continues to clean the liquor giving further BOD reduction along with removal of nitrogen.

04

Final Settlement Tank

A natural by-product of biological treatment is humus sludge and this is separated for further treatment. The treated effluent is discharged via the outlet or to disinfection stage.

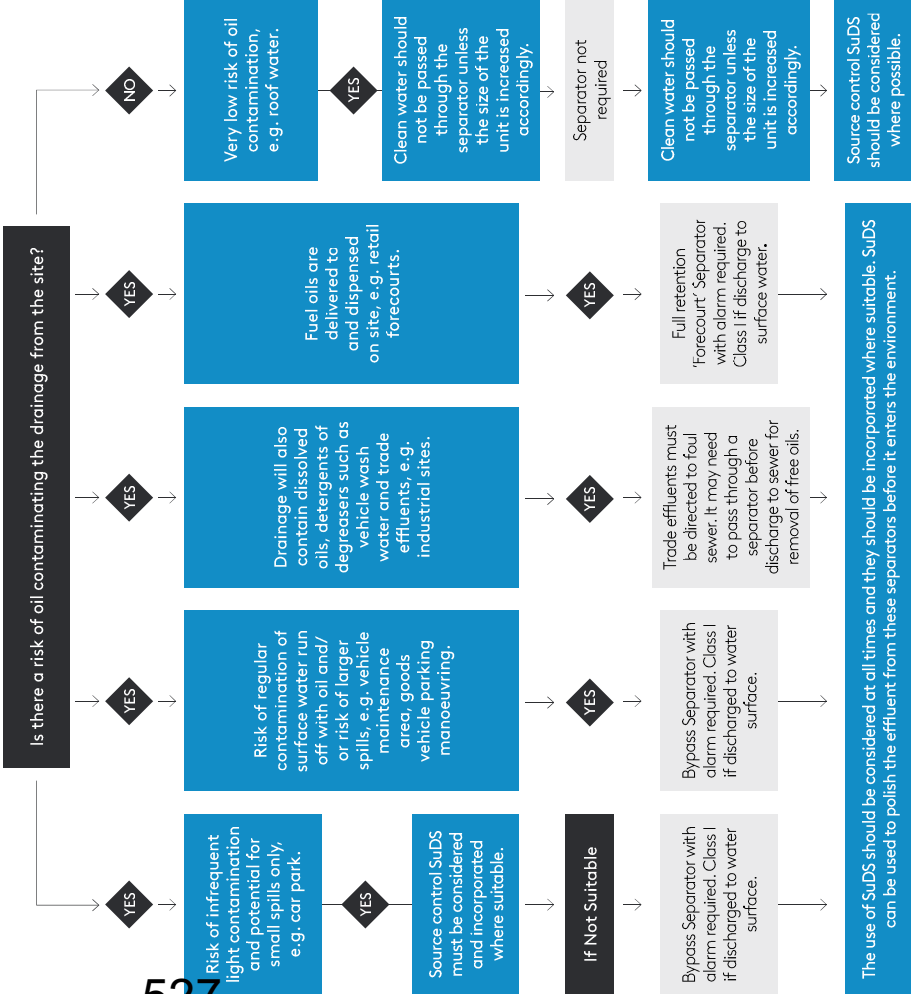
Available in our Modular System



Choosing the Right Separator

Kingspan has a specialist team who provide expert technical assistance in selecting the appropriate Klargester Separator for your application.

The chart below gives guidance to aid selection of the appropriate type of fuel/oil separator for use in surface water drainage systems which discharge into rivers and soakaways.



Klargester Full Retention Separators

NSF RANGE



Full retention separators are used in high risk spillage areas such as fuel distribution depots, vehicle workshops and scrap metal recycling yards.

Each full retention separator design includes the necessary volume requirements for:

- Oil separation capacity
- Oil storage volume
- Silt storage capacity
- Coalescer (Class 1 units only)
- Automatic closure device

Our full retention separators treat the whole of the specified flow.

Performance and Compliance

- > Kingspan were one of the first UK manufacturers to have the required range certified to EN 858-1 in the UK.
- > The NSF number denotes the flow at which the separator operates.
- > Approved by The British Standards Institute (BSI) in relation to flow and process performance, meeting effluent quality requirements of EN 858-1.

Technical Specifications

Model Reference	Flow (l/s)	Drainage Area (m ²) PG 3 (0.018)	Storage Capacity (Litrs)		Length (mm)	Diameter (mm)	Manhole Cover Dimensions (mm)	Base Inlet Invert (mm)	Base to Outlet Invert (mm)	Min Inlet Invert (mm)	Standard Pipe/Diagram (mm)
			Silt	Oil							
Polyethylene Chamber Construction											
NSFP003	3	170	300	30	1700	1350	600	1410	1335	550	160
NSFP006	6	335	600	60	1700	1350	600	1410	1335	550	160
GRP Chamber Construction											
NSFA010	10	555	1000	100	2610	1225	600	1050	1000	500	200
NSFA015	15	835	1500	150	3910	1225	600	1050	1000	1000	200
NSFA020	20	1115	2000	200	3200	2010	600	1810	1760	1000	315
NSFA030	30	1670	3000	300	3915	2010	600	1810	1760	1000	315
NSFA040	40	2225	4000	400	4640	2010	600	1810	1760	1000	315
NSFA050	50	2780	5000	500	5425	2010	600	1810	1760	1000	315
NSFA065	65	3160	6500	650	6850	2010	600	1810	1760	1000	315
NSFA080	80	4445	8000	800	5744	2820	600	2500	2450	1000	315
NSFA100	100	5560	10000	1000	6200	2820	600	2500	2450	1000	400
NSFA125	125	6945	12500	1250	7365	2820	600	2500	2450	1000	450
NSFA150	150	8335	15000	1500	8675	2820	600	2500	2450	1000	525
NSFA175	175	9725	17500	1750	9975	2820	600	2500	2450	1000	525
NSFA200	200	11110	20000	2000	11280	2820	600	2500	2450	1000	600

* Some units have more than one access shaft - diameter of largest shown.

Klargester Bypass Separators

NSB RANGE



Concentration Less Than

5 MG/L

Bypass separators are used when it is considered an acceptable risk to not provide full treatment for very high flows, such as, where the risk of a large spillage and heavy rainfall occurring at the same time is small. Typical applications include surface car parks, roadways and lightly contaminated commercial areas.

Product Benefits

- Light and easy to install.
- Inclusive of silt storage volume.
- Fitted inlet/outlet connectors.
- Vent points within necks.
- Oil alarm system available (required by EN 858-1 and PPG3).
- Extension access shafts for deep inverts.
- Maintenance from ground level.
- GRP or polyethylene construction (subject to model).

Performance & Compliance

- > Fully compliant and tested to EN 858-1.
- > Bypass separators are tested by British standards institute (BSI).
- > Certified flow and process performance assessing effluent qualities to the requirements of EN 858-1.
- > The unit is designed to treat the 'first flush' - 10% of peak flow. The calculated drainage areas served by each separator are indicated according to the formula given by PPG3 NSB = 0.0018A(m²).
- > Class I separators are designed to achieve a concentration of less than 5mg per litre.

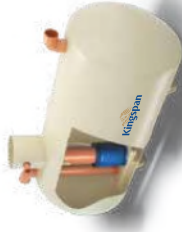
Technical Specifications

Model Reference	Flow Rate (l/s)	Peak Flow Rate (l/s)	Drainage Area (M2) Based on UK rainwater flow	Storage Capacity (litrs)		Length (mm)	Diameter (mm)	Access Shaft Diameter (mm)	Base Inlet Invert (mm)	Base to Outlet Invert (mm)	Standard Fall Across (mm)	Min Invert (mm)	Standard Pipework Diameter (mm)**
				Silt	Oil								
Polyethylene Chamber Construction													
NSBP003	3	30	1670	300	45	1700	1350	600	1420	1320	100	500	160
NSBP004	4.5	45	2500	450	60	1700	1350	600	1420	1320	100	500	160
NSBP006	6	60	3335	600	90	1700	1350	600	1420	1320	100	500	160
GRP Chamber Construction													
NSBE010	10	100	5560	1000	150	2069	1220	750	1450	1350	100	700	315
NSBE015	15	150	8335	1500	225	2947	1220	750	1450	1350	100	700	315
NSBE020	20	200	11111	2000	300	3893	1220	750	1450	1350	100	700	375
NSBE025	25	250	13890	2500	375	3575	1420	750	1680	1580	100	700	375
NSBE030	30	300	16670	3000	450	4265	1420	750	1680	1580	100	700	450
NSBE040	40	400	22222	4000	600	3230	1920	600	2185	2035	150	1000	500
NSBE050	50	500	27778	5000	750	3960	1920	600	2185	2035	150	1000	600
NSBE075	75	750	41667	7500	1125	5841	1920	600	2235	2035	200	950	675
NSBE100	100	1000	55556	10000	1500	7661	1920	600	2235	2035	200	950	750
NSBE125	125	1250	69444	12500	1875	9548	1920	600	2235	2035	200	950	750

* Some units have more than one access shaft - diameter of largest shown | ** Larger pipework available on request.

† Achieves concentration of less than 5MG/L

Klargester Forecourt Separators



Expert Technical Advice



Forecourt separators are used to intercept hydrocarbon pollutants such as petroleum and oil to prevent their entry to the drainage system. Typical applications include petrol filling station forecourts and car breaker yards.

Performance and Compliance

- Operation ensures that fuel cannot exit the unit without first passing through the coalescer assembly.
- In normal operation, the forecourt separator has sufficient capacity to provide storage for separated pollutants within the main chamber, but is also able to contain up to 7,600 litres of pollutant arising from the spillage of a fuel delivery tanker compartment on the petrol forecourt.
- The separator has been designed with an automatic closure device to ensure that oil cannot exit the separator in the event of a major spillage, subsequently the separator should be emptied immediately.

Installation

- The unit should be installed on a suitable concrete base slab and surrounded with concrete or pea gravel backfill.
- If the separator is to be installed within a trafficked area, then a suitable cover slab must be designed to ensure that loads are not transmitted to the unit.
- The separator should be installed and vented in accordance with Health and Safety Guidance Note HS(G)41 for filling stations.
- Subject to Local Authority requirements.

Technical Specifications

Separator Class	Backfill Type	Total Capacity (Litrs)	Drainage Area (m ²)	Peak Flow Rate (l/s)	Length (mm)	Diameter (mm)	Access Shaft Diameter (mm)	Base Inlet Invert (mm)	Base to Outlet Invert (mm)	Standard Fall Across (mm)	Min Inlet Invert (mm)	Standard Pipework Diameter (mm)	Empty Weight (kg)
I	Concrete	10000	720	15	3915	2020	600	2180	2130	50	600	160	620
I	Concrete	10000	115	20	3915	2020	600	2180	2130	50	600	200	620

Fuel & Oil Separator Alarms

British European Standard EN 858-1 and Environment Agency Pollution Prevention Guideline PPG3 requires that all separators are to be fitted with an oil level alarm system. It should be installed and calibrated by a suitably qualified technician so that it will respond to an alarm condition when the separator requires emptying.

Product Benefits

- Easily fitted to existing tanks.
- Excellent operational range.
- Visual and audible alarm.
- Additional telemetry option.



Klargester Grease Separators



Klargester Grease Separators

Separators are an effective and hygienic method of separating fat and grease from wastewater flow. Grease Separators are designed for restaurants, hotels, public houses, canteens and similar applications.

Key Standard Features

- Greatly reduces drain blockages, for maximum operational efficiency.
- Helps improve performance of septic tanks and field drains and achieve best results.
- Prevents contamination of small sewage treatment plants, reducing risk of breakdown.
- Protects mains drainage system from grease blockages.

How it works

Grease separators allow fats and grease to naturally separate out from water, allowing their removal prior to the wastewater reaching the drainage system. The separator should be installed close to the source of contamination before any foul waste can enter the drainage flow and to suit the expected liquid temperature.

Grease Range Sizing Table

Meals Per Day	Standard Meal	Fast Food	Fine Cuisine
40	NSG01	NSG01	NSG02
60	NSG02	NSG02	NSG02
80	NSG02	NSG02	NSG04
100	NSG02	NSG04	NSG04
200	NSG04	NSG06	NSG09
300	NSG06	NSG09	NSG14
500	NSG09	NSG14	NSG18
700	NSG14	NSG18	NSG24
900	NSG18	NSG24	—
1,300	NSG24	—	—

Technical Specifications

Model Reference	Dimensions (mm)		Flow Rates	Shipping Height (mm)	Capacity (L)	Approx Weight (kg)		Fall Across The Unit (mm)
	Length	Width				Empty	Full	
NSG01	1320	750	1LPS	1100	500	70	570	75
NSG02	1620	1100	2LPS	1175	1000	90	1090	75
NSG04	2072	1224	4LPS	1570	2000	120	1860	70
NSG06	3018	1224	6LPS	1570	3000	160	2820	70
NSG09	3895	1224	9LPS	1570	4000	190	3760	70
NSG14	4418	1422	14LPS	1745	6000	215	5535	70
NSG18	5231	1917	18LPS	2120	8000	300	7162	70
NSG24	4386	1917	24LPS	2120	11000	380	9885	70

Klargester Washdown and Silt Units



Klargester Washdown and Silt units can be used in areas such as car wash and other cleaning facilities that discharge directly into a foul drain, which feeds to a municipal treatment facility.

How it works

As contaminated water passes through the separation chamber, it is retained long enough to allow solids to sink to the bottom of the unit. Our design uses a maximum of 6 minutes hydraulic retention time, at the flow rate given. The separator water is then able to discharge safely.

The nature of the silt varies depending on either the ground or surface receiving the flow. These aspects should be considered when selecting the size of the unit in relation to the flow being treated.

If emulsifiers are present, the discharge must not be allowed to enter an NS unit.

Applications

These units can be used to serve vehicle wash down areas and car wash facilities, although it should be noted that the prime function of such separators is for the removal of silt. Typical locations using wash down separators are: car wash, tool hire depots, truck cleansing, construction compounds cleansing points.

Locations requiring silt separators are: highly silted sites where NS separators are used, i.e. works constructions sites and temporary work compounds.

Our Washdown and Silt Separators are manufactured from durable, rot and corrosion proof glass reinforced polyester combining lightweight with outstanding strength. The units are delivered complete with inlet and outlet pipework as well as factory fitted access shafts to ensure quick and easy installation on site.

Technical Specifications

Model Ref	Total Capacity (Ltrs)	Max.rec. Silt (Ltrs)	Max. Flow Rate (L/s)	Length (MM)	Diameter (MM)	Access Shaft D-iameter (MM)	Base Inlet Invert (MM)	Base To Outlet Invert (MM)	Stand-ard Fall Across (MM)	Min Inlet Invert (MM)	Standard Pipework Diameter (MM)	Approx. Empty (Kg)
W1/010	1000	500	3	1123	1225	460	1150	1100	50	500	160	60
W1/020	2000	1000	5	2074	1225	460	1150	1100	50	500	160	120
W1/030	3000	1500	8	2952	1225	460	1150	1100	50	500	160	150
W1/040	4000	2000	11	3898	1225	460	1150	1100	50	500	160	180
W1/060	6000	3000	16	4650	1440	600	1360	1310	50	500	160	320
W1/080	8000	4000	22	3200	2020	600	2005	1955	50	500	160	585
W1/100	10000	5000	27	3915	2020	600	2005	1955	50	500	160	680
W1/120	12000	6000	33	4640	2020	600	2005	1955	50	500	160	770
W1/150	15000	7500	41	5435	2075	600	1940	1890	50	500	160	965
W1/190	19000	9500	52	6865	2075	600	1940	1890	50	500	160	1200

Klargester Compact Pumping Stations



Our proven range of compact pump stations can be used for effluent or sewage and are easy to install.

Quick to install and easy to maintain, Klargester pump stations are the ideal solution for outbuildings and extensions, cellars, pool houses and external WCs. They can be used for effluent or sewage, depending on the pump, distance and height.

Product Benefits

- Non-return valves and outlet pipe compression coupling as standard.
- 3 pump options; effluent low head, effluent high head and sewage vortex.
- Service and maintenance plans available to prolong the life of the pump systems.
- Complete pre-fabricated solution ready for installation.
- Fully automatic.

530

Technical Specifications

Chamber Size (mm)	Capacity (Ltrs)	Tank Material	Control Panel	Alarm	Pump Type
610 x 700	200	GRP	N/A	Optional	Single
560 x 1,650	400	GRP	N/A	Optional	Single

Selecting the Correct Pumping Station System

All Klargester pumping stations are suitable for pumping waste water effluent and sewage in accordance with BS 756-2.

They are also designed in line with Building Regulations for Foul Drainage. Your system size will depend on the type of waste you need to manage, your distance from the sewer and the difference in levels.

For expert advice, to help you select the correct system, please contact our specialist team on **01296 633033**

The key factors to size your system are as follows:

- Application: domestic, residential or commercial.
- Material application: sewage, effluent or surface water.
- Inlet depth (below ground level).
- Pumping distance and lift.
- Electrical supply.

Klargester Domestic and Domestic+ Pumping Stations



Our domestic pumping stations are ideal for homes or properties with up to 13 people.

Quick and simple to install, they require minimal maintenance. They come with single or twin pumps, and are suitable for sewage, surface water and effluent. Appropriate for 24 Hour storage requirements.

Product Benefits

- Made with super-tough, low maintenance GRP and high quality polyethylene for guaranteed durability.
- Comes with options of remote monitoring systems.
- Designed with easy access features for maintenance.
- Choose from either 110mm or 160mm inlet connections.
- Lockable covers for optimum security.
- Quick connection outlet couplings.

Technical Specifications - Domestic

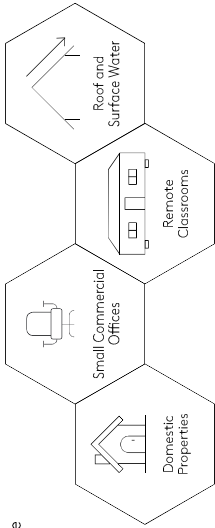
Chamber Size	Capacity (Ltrs)	Tank Material	Control Panel	Alarm	Pump Type
900 x 2080	1,600	GRP	Included	Optional	Single/Twin
560 x 1650	1,250	GRP	Included	Optional	Single/Twin

Technical Specifications - Domestic+

Chamber Size	Capacity (Ltrs)	Tank Material	Control Panel	Alarm	Pump Type
1000 x 2000	1450	Polyethylene	Included	Standard	Single/Twin
1000 x 2500	2200	Polyethylene	Included	Standard	Single/Twin

Applications

Suitable for a wide range of applications, the Compact and Domestic range of Klargester Pumping Stations are suitable for the following types of applications and many more:



Klargester Vertical Pumping Stations

Our Pumpstor Commercial pumping systems are ideal for developments and premises where drainage by gravity isn't an option.

Tanks and pumps come in a range of sizes and dimensions and have a 24-hour storage capacity for foul waste to comply with Building Regulations. A wide range of surface water pumps are available for such applications from small roof run offs, to large SUDS schemes, delivering up to 70 litres/second.

Pumpstor Commercial pumping stations are made from robust GRP. They are designed as a single-piece chamber, ready for installation with no man-entry required.

Product Benefits

- High-level alarm.
- Internal lifting chains and guide rails (as specified).
- Wide range of pump options including macerators/vortex.
- Range of emergency overflow tanks, if required.
- Inlet connection sizes to suit site.
- Various invert depths and positions.
- GRP chambers with internal pipework in plastic, galvanised or cast iron.
- Optional kiosks with warning beacons and optional telemetry systems.
- Service and maintenance plans available to prolong the life of the pump systems.

Klargester Horizontal Pumping Stations

If power supplies fail, Pumpstor Commercial responds instantly, separating liquids and solids into a separate chamber and storing waste for up to 24 hours. Once power is restored, the pumps will work normally again without further maintenance.

Product Benefits

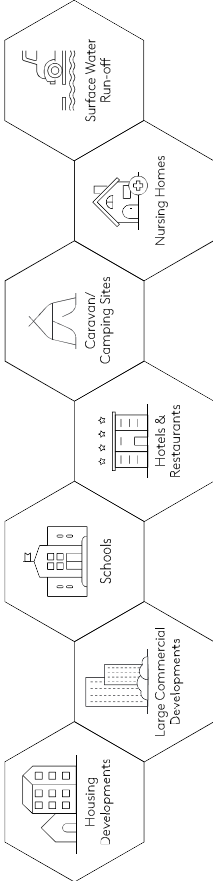
- Single-tank installation up to 79m³ (multiple tank systems available).
- Multiple valve chamber location and invert options.
- Weir screen features innovative removable filters, so there's no need to access the chamber during maintenance.
- High-level alarm.
- Totally sealed system.
- One-piece tank chamber for easy installation.
- Minimal on-site assembly.
- Less crange and shallower excavation than concrete pumping stations.
- On-site Health & Safety issues are minimised – no requirement for personnel to enter the tank.

Technical Specifications

Vertical Tank Size (mm)	Capacity (Ltrs)	Tank Material	Control Panel	Alarm	Pump Type
1250 Diameter	Up to 4,800	GRP	Included	Standard	Single/Twin
1800 Diameter	Up to 10,000	GRP	Included	Standard	Single/Twin
2400 Diameter	Up to 22,000	GRP	Included	Standard	Single/Twin

Applications

Designed for easy installation and available in many sizes to meet an extensive range of customer requirements, the Klargester range of Horizontal and Vertical Pumping Stations are typically used in applications including:



Commercial Pump Systems are made from GRP. It is designed as a single piece chamber with two separate sections, one for normal operation and one for emergency storage.

Technical Specifications

Tank Size (mm)	Capacity (Ltrs)	Tank Material	Control Panel	Alarm	Pump Type
2,600 Diameter	18000-79000	GRP	Included	Standard	Single/1win

Klargester Adoptable and High Specification Pump Systems

The adoptable and high specification pump stations are designed to meet the requirements of 'Sewers for Adoption 7th Edition' and the 'Water Industry Standard' (WIS).

Manufactured as a ready to install pre-fabricated unit for Type 1 and Type 2 installations for up to 20 dwellings.

Product Benefits

- GRP single piece wet well delivered to site ready to install.
- Pre-fitted internal pipework, pump guide rails and overflow filters.
- Approved control panel and kiosk.
- All necessary drawings supplied.

For expert advice, please contact our specialist team on **01296 633033**


Klargester Gamma

Fully Integrated Rainwater Harvesting System


The Klargester Gamma rainwater harvesting system is designed as an intelligent rainwater harvesting system, tailor made for your home.

With a technologically advanced finish, Gamma is suitable for both self build projects and residential developments. It works by taking the rain from your roof gutters, filtering out leaves and debris and storing the water in an underground tank. Manufactured from tough polyethylene, the tank is robust and lightweight, which makes it easy to handle and install. Its fuss free design offers high functionality, making it the perfect choice for your home or garden.


Typical Applications Include:




WC Flushing



Domestic Laundry

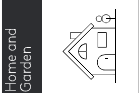


Garden and Landscape Watering



Vehicle Washing

532



1 Water main

2 Storage tank

3 Header tank (optional extra)

4 Pressure Vessel (not supplied)

5 In-line filter 120 microns

6 Internal rainwater filter

7 Grundfos Intelligent Pump—SBA 3-23M

8 Adjustable tank neck

9 External tap (not supplied)

10 Roof rainwater feed

11 Filtered rainwater feed

Reduces Water Consumption

Regulations Compliant

Offers Fast Payback

Advisory Consultants

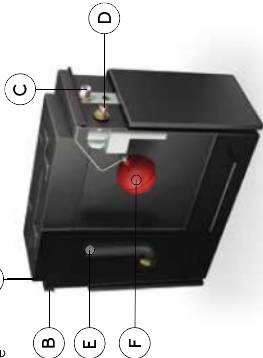
Features and Benefits

- Can reduce water consumption in domestic applications by up to 50%.
- Easy to install and simple to maintain.
- 'Fit and Forget' system, ensuring an automatic supply of harvested rainwater.
- Shallow Dig—the Gamma is designed with easy, affordable installation in mind.
- Pea shingle backfill available—no costly excavation and soil disposal necessary (dependent upon site conditions).
- Fully compliant—Gamma is tested in accordance with BS 8515:2009 standards.

Optional Extra - Header Tank

When ordering your system, to make the Gravity System complete you will require a header tank. Klargester offers a header tank with weir, ballcock and float valve which allows the switch over to mains, the weir provides the mandatory air gap.

- A Mains Input
- B Rainwater Input
- C Water Regulations Compliant Mandatory Air Gap
- D Overflow Point
- E Rainwater Level Control
- F Mains Level Control



01 The Gravity System



The Gravity System uses an elevated header tank to store filtered water after the main tank.

02 The Direct System



The Direct System pumps water from the main storage tank and is used where a header tank is impractical.

Model Reference	Tank Dimensions				Standard Inlet Invert*	Standard Outlet Invert*	Length	Width
	Capacity	Standard Overall Height						
Gravity System								
GRW080	2,350 Ltrs	1,770mm	720mm	750mm	750mm	750mm	3,000mm	1,180mm
GRW110	3,100 Ltrs	2,260mm	720mm	750mm	750mm	750mm	2,480mm	1,130mm
GRW160	4,600 Ltrs	2,260mm	720mm	750mm	750mm	750mm	3,360mm	1,215mm
Direct System								
GRW080	2,350 Ltrs	1,768mm	720mm	750mm	750mm	750mm	3,000mm	1,180mm
GRW110	3,100 Ltrs	2,260mm	720mm	750mm	750mm	750mm	2,480mm	1,130mm
GRW160	4,600 Ltrs	2,260mm	720mm	750mm	750mm	750mm	3,360mm	1,215mm

* Includes tank neck - adjustable to suit required invert.

Klargester Aquabank® Rainwater Harvesting Range

Overview

The Klargester Aquabank rainwater harvesting system is designed with simplicity in mind.

Applications:



Vehicle Washing



Garden Watering



WC Flushing



Domestic Laundry

Features and Benefits

- Easy to install.
- Simplified system designed for rapid installation.
- Quick start set up procedure.
- 'Kit in a box' set of key components.
- Easy conversion to gravity system with header tank.
- Minimal energy use in operation.
- Fully compliant - designed in accordance with BS EN8515.

How it works



01

Rainwater is stored in underground tank



02

Rainwater is pumped at a constant pressure to an elevated header tank



03

Water is pumped to a garden sprinkler or hose as required

Benefits of Installing Klargester Domestic Rainwater Systems

SAVE UP TO
50% ON WATER CONSUMPTION IN DOMESTIC APPLICATIONS WITH KLARGESTER RAINWATER HARVESTING SOLUTIONS

THE SYSTEM THAT PAYS FOR ITSELF – MONEY SAVED THROUGH REDUCED WATER BILLS MEANS AQUABANK CAN PAY BACK ITS PURCHASE COSTS



ASSISTS PLANNING APPLICATION – AUTHORITIES INCREASINGLY EXPECT APPLICATIONS TO DEMONSTRATE SUSTAINABLE DRAINAGE (SUDS)

Klargester RainTrap® Rainwater Storage and Delivery System

Overview

An economical rainwater harvesting system designed to make garden watering simple. The Klargester RainTrap system comprises of a filter, an underground storage tank and a pump. Rainwater runs down the roof and into the guttering and downpipes in the normal way before passing through the filter, which removes any leaves or debris. Rainwater is stored in the underground tank from which it is pumped at a constant pressure to an outside tap as required.

The RainTrap has many advantages over traditional garden waterbutts. In addition to being able to store far larger quantities of water, it removes the need to carry water around and does not flood when full, since the excess water exits via a soakaway or surface water drain.

Features and Benefits

- Easy to install.
- Inexpensive.
- Simple on/off operation.
- Suitable for existing and new homes.
- Available in sizes from 1,000 – 6,000 litres.
- Automatic rainwater diversion when tank reaches full capacity.
- Internal leaf filter.
- Designed and manufactured in the UK.

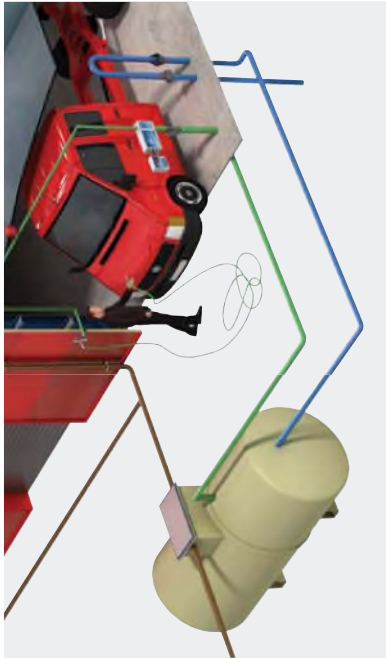
Technical Specifications – RainTrap

Model Reference	Capacity (Ltrs)	Diameter (mm)	Height Base to Outlet (mm)
RT2800	2,800	2,070	1,540
RT3800	3,800	2,070	1,780
RT4600	4,600	2,080	1,925



Klargester Commercial Below Ground Rainwater Harvesting System

The Klargester commercial range is a fully integrated, intelligent rainwater harvesting solution suitable for such applications as commercial vehicle washdown areas, garden centres and golf courses.



The commercial range provides a secure solution for any size of building project from 6,000 litres up to 79,000 litres of water in a single tank. For larger capacities, multiple tanks may be connected together to meet storage requirements.

It is available as either a gravity or direct system, depending on specific site requirements.

Large installations are carefully sized and selected, taking into consideration the following factors:

- Roof water yield.
- Projected water consumption.
- Groundwork criteria (prevailing water table, soil conditions, requirements or traffic access).
- Suitable filters and pumps to match system specifications, ensuring the water is kept at an optimum level of clarity and supply pressure).

Features

- Capacities from 6,000 to 79,000 litres within a single tank.
- Multiple tanks can be joined to cater for larger volumes.
- Can be installed under trafficked areas (with reinforced concrete support).
- Complete packaged units delivered directly to site.

Technical Specifications

Single Pump Model Reference	Twin Pump Model Reference	Capacity (ltrs)	Diameter(m)
ENV0200SKSW	ENV0200TKSW	6000	1.4
ENV0275SKSW	ENV0275TKSW	8000	1.8
ENV0350SKSW	ENV0350TKSW	10000	1.8
ENV0485SKSW	ENV0485TKSW	14000	1.8
ENV0625SKSW	ENV0625TKSW	18000	2.6
ENV0765SKSW	ENV0765TKSW	22000	2.6
ENV0900SKSW	ENV0900TKSW	26000	2.6
ENV1040SKSW	ENV1040TKSW	30000	2.6
ENV1320SKSW	ENV1320TKSW	38000	2.6
ENV1460SKSW	ENV1460TKSW	42000	2.6
ENV1735SKSW	ENV1735TKSW	50000	2.6
ENV2050SKSW	ENV2050TKSW	59000	2.6
ENV2325SKSW	ENV2325TKSW	67000	2.6
ENV2745SKSW	ENV2745TKSW	79000	2.6

After Sales Service and Support

We recognise the importance of after sales service and support and are proud of our nationwide Kingspan Service network, which comprises our Kingspan in-house Service team and Accredited Installer network in support of the Klargester Product Range.

Together we are working to provide first class service across a range of sectors, including domestic, commercial, industrial, leisure, hospitality and many more.

With expertise across the Klargester range of waste water and drainage solutions, pumping stations, separators and rainwater harvesting, our dedicated support network offers the following offers the after sales service and support you would expect from a global organisation.

- First class technical engineering expertise across a range of off-mains sewage and wastewater applications.
- Day to day technical support.
- 24 hour breakdown repair.
- Preventative maintenance plans.
- Installation and commissioning.
- Asset monitoring.
- Consultancy and advice.

To speak with us about any aspect of installation, commissioning or service simply contact:

GB:
Tel: **0333 240 6868**
Email: helpingyou@kingspan.com
www.kingspan.co.uk/water



UK

Kingspan Environmental Ltd

College Road North,
Aston Clinton, Aylesbury,
Buckinghamshire, HP22 5EW
T: +44 (0) 1296 633000
F: +44 (0) 1296 633001
E: water@kingspan.com
www.kingspan.co.uk/water

Ireland

Kingspan Environmental Ltd

Unit 1a, Derryboy Road
Carnbane Business Park
Newry, BT35 6QH
T: +44 (0) 28 3026 6799
E: water-IE@kingspan.com
www.kingspan.ie/water

Norway

Kingspan Miljø AS

Skiveien 42, 1410 Kolbotn,
Norway
T: +47 22 02 19 20
E: avlopslosninger@kingspan.com
www.kingspanklargest.com/no

Germany

Kingspan Environmental GmbH

Siemensstr. 12a, D-63263
Neu-Isenburg, Deutschland
T: +49 (0) 6102 3686700
E: wasser@kingspan.com
www.kingspan.de/wasser

Australia

Kingspan Environmental Pty Ltd

8 Bessemer St, Blacktown
Sydney, NSW 2148
T: +61 (0) 2 8889 5400
Toll Free: (within Australia)
1300 736 562
E: sales.au@kingspan.com
www.kingspan.com.au/water

Poland

Kingspan Environmental Sp. z o.o.

ul. Topolowa 5
62-090 Rokietnica
Polska
T: +48 61 660 94 71
E: woda@kingspan.com
www.kingspan.pl/woda

[Wood Burning, Multi-Fuel Stoves](#)
[Curved - Circular Stoves](#)
[Stoves With Back Boiler](#)
[Stoves With Direct Air Supply](#)
[3 Sided Stoves](#)
[Cooking Stoves](#)
[Range Cookers](#)
[Defra Approved Stoves](#)
[Pellet Burners](#)
[Thermal Store and Plumbing](#)
[Inset Stoves / Fires](#)
[Single Wall Vitreous Flue Pipe](#)
[Twin Wall Flue Pipe Black](#)
[Twin Wall Flue Pipe Stainless Steel](#)
[Glass Hearths](#)
[Stove Accessories](#)
[Stove Spare Parts](#)
[Fire Lighters Fire Up CO2 Neutral](#)

You have no items in your shopping basket.

Useful Links

[Wood Burning Stoves Info](#)
[About Us](#)
[Your Account](#)
[Links](#)
[Refunds and Replacements](#)
[Warranty](#)
[Privacy Policy](#)
[Wood Burning Stoves](#)


Double click on above image to view full picture

MORE VIEWS



Bordeaux 13kw Contemporary Multi Fuel Stove

[Email to a Friend](#)
[3 Review\(s\) | Add Your Review](#)

Availability: In stock

Regular Price: ~~£849.00~~

SPECIAL PRICE £599.00

Qty:

[ADD TO CART](#)

Quick Overview

Bordeaux 13kw... The Bordeaux is curved - modern in design and appearance, and offers a maximum of 13kw, with a nominal heat output of 8kw. Manufactured in Europe from high quality steel that unlike cast iron won't crack or melt, the Bordeaux is a very robust stove and is finished to the highest standards.

The Bordeaux offers contemporary sleek lines, and is finished in dark grey, (almost black) with Chrome controls and door handle. The contemporary design of this wood burning / multi fuel stove incorporates a large ceramic glass window in the door, large combustion chamber, concealed lower log storage shelf and a top warming shelf.

This stove also has an unusually deep fire grate to facilitate overnight burning and offers a superb efficiency rating of 80%, which makes it amongst some of the most efficient stoves on the market. Twin air controls provide optimum control over the burn rate and heat output to give the user optimum control of the appliance.

Additional features include an advanced pre-heat - air wash system that ensures the large glass window remains clean and thus provides a clear view of the fire within. The large combustion chamber is lined with firebricks to provide optimum heating efficiency and an extra deep solid fuel grate enables easy lighting. The Bordeaux is suitable for both wood and solid fuel.

Hand built from high quality materials, the Bordeaux is an impressive looking stove that makes a fantastic focal point.

In accordance with all the stoves that we offer, the Bordeaux carries a 2 year warranty and is CE Marked to EN13240 (latest standard) and manufactured to ISO 9001 Quality Standard... *please do not confuse this stove with other cheaper alternatives, it's build quality and finish compares to other stoves that are in excess of £1500. We are often asked how we can offer our stoves at such competitive prices?..We buy direct from the manufacturers, so there is no distributor middle man, we buy in bulk, which reduces the cost price, we handle our logistics to further reduce the "landed" cost of each stove, and we are an ecommerce company with low*

overheads..the result..You save money on your stove.
Our low prices do not reflect low quality.

Price Includes FREE delivery to mainland UK (3
Day delivery service from date of dispatch) **Some areas**
attract a small delivery charge, please click here to check
delivery to your area.

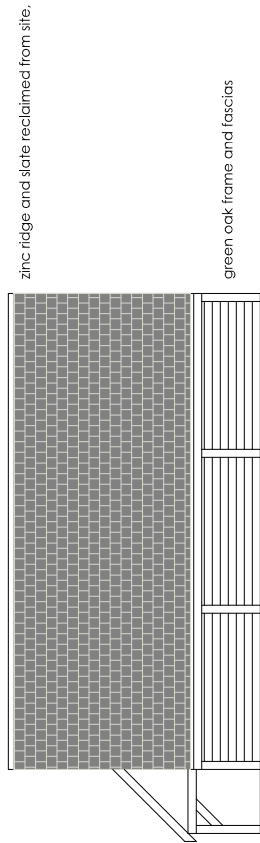
Product Description	We Also Recommend	Additional Information	Product Tags
-------------------------------------	-----------------------------------	--	------------------------------

Specifications:-

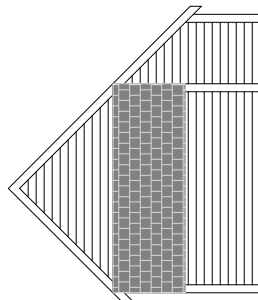
Maximum Space Heat Output: 13kw
Nominal Heating Output: 8kw
Dimensions: W492mm / D471mm / H1140mm
Weight: 110kg
Colour: Dark Grey, almost black (charcoal)
Flue Diameter: 150mm
Features:- Concealed Lower Log Storage Shelf Large, Large Ceramic Glass Window.
Airwash, Extra Deep Fire Grate for Over Night Burn
Flue Outlet: Top Only - **(Requires a Euro Adapter £26.00 please see flue and accessories page on our website)**
Efficiency: High efficiency 80%
Fuel: Wood Burning & Multi Fuel
Warranty: 2 years
Suitable for a non constuction 12mm hearth
Minimum distance to combustibles: 45cm

[My Account](#) [Site Map](#) [Advanced Search](#) [Orders and Returns](#) [Log In](#)

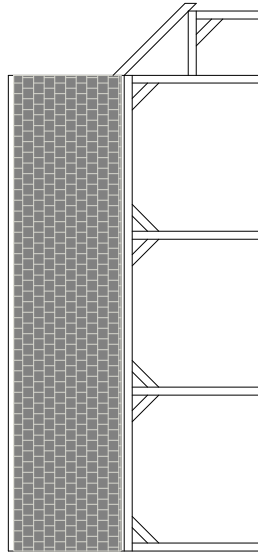
© 2017 Modern Stoves. Longfield Business Park, Stockport, Cheshire, SK7 1RB. | 0161 439 1400 | Wood Burning Stoves | Multi Fuel Stoves online. [SEO by Barton Media Web Design](#)



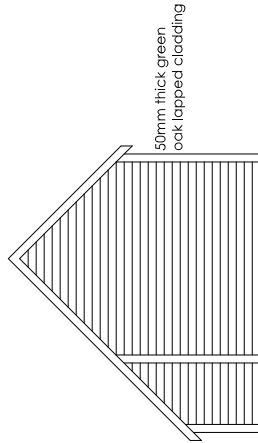
ELEVATION facing South West 1:50



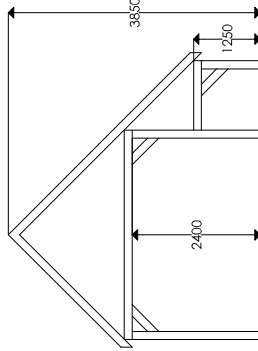
ELEVATION facing South East 1:50



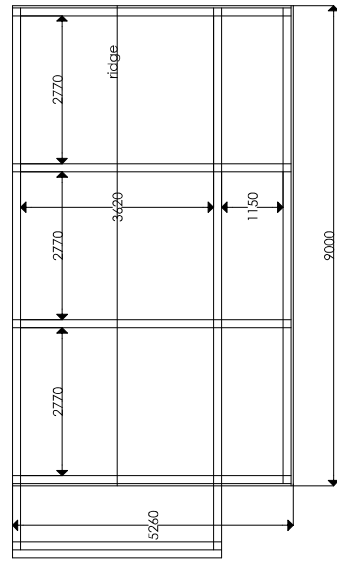
ELEVATION facing North East 1:50



ELEVATION facing North West 1:50

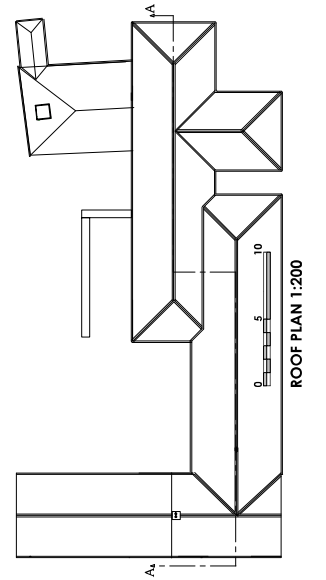
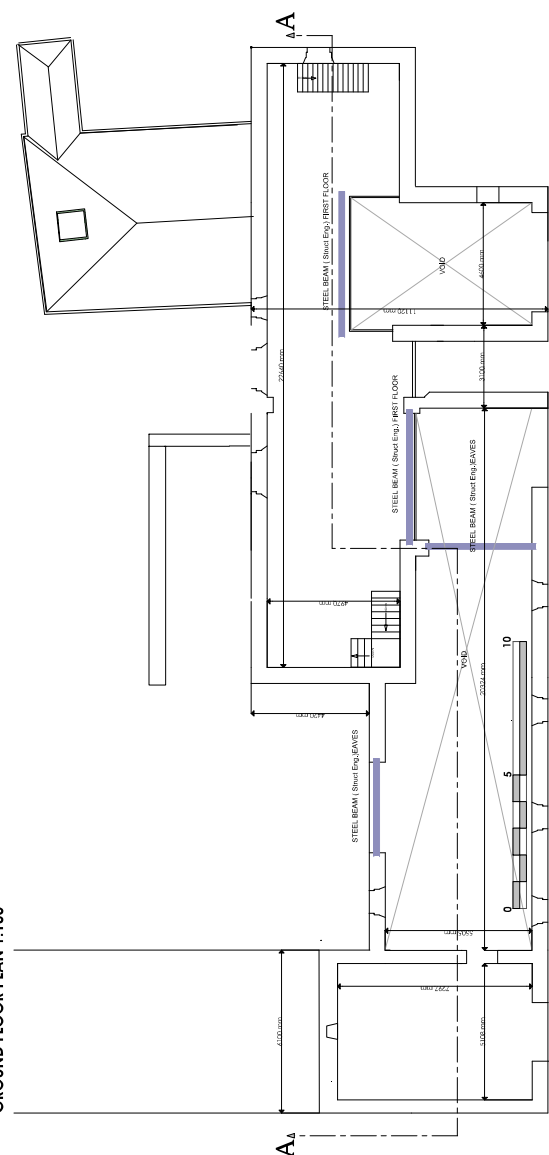
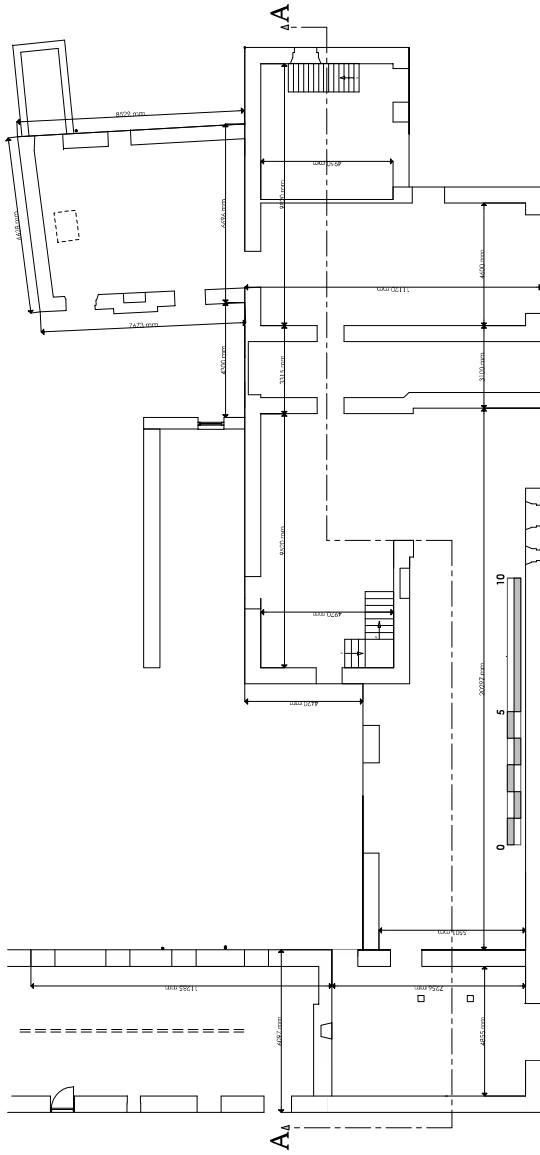
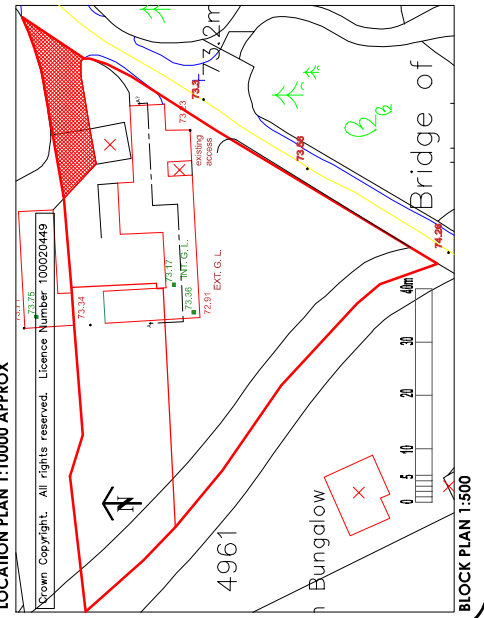
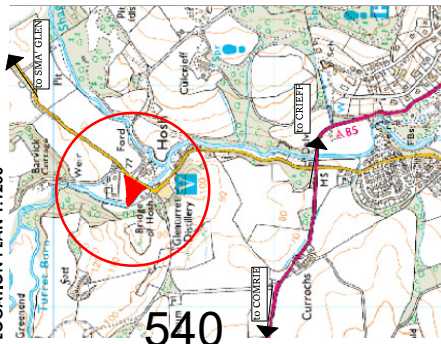
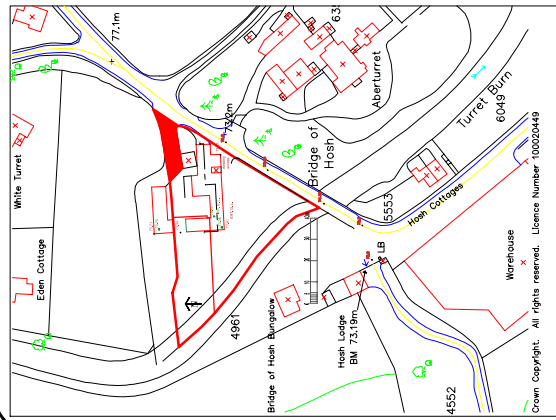


SECTION 1:50



General plan at post & beam level 1:50

Client:	Mr. & Mrs. R. Findlay
Project:	Redevelopment of existing 10 farm 2 dwelling
Drawn by:	Mr. & Mrs. R. Findlay
Checked by:	Mr. & Mrs. R. Findlay
Scale:	1:50
Date:	24.04.2018
Notes:	on rolled



TCP/11/16(562) – 18/00726/FLL – Change of use and alterations to agricultural steading to form 2 dwellinghouses, alterations to existing vehicular access and associated works (in part retrospect) vehicular access and associated works (in part retrospect) at Hosh Farm Steading, The Hosh, Crieff, PH7 4HA

REPRESENTATIONS

9th May 2018

Perth & Kinross Council
Pullar House 35 Kinnoull Street
Perth
PH1 5GD



Development Operations
The Bridge
Buchanan Gate Business Park
Cumbernauld Road
Stepps
Glasgow
G33 6FB

Development Operations
Freephone Number - 0800 3890379
E-Mail - DevelopmentOperations@scottishwater.co.uk
www.scottishwater.co.uk

Dear Local Planner

PH7 Crieff The Hosh Hosh Farm Steading
PLANNING APPLICATION NUMBER: 18/00726/FLL
OUR REFERENCE: 760784

PROPOSAL: Change of use and alterations to agricultural steading to form 2no. dwellinghouses, formation of additional vehicular access and associated works (in part retrospect)

Please quote our reference in all future correspondence

Scottish Water has no objection to this planning application; however, the applicant should be aware that this does not confirm that the proposed development can currently be serviced and would advise the following:

Water

- There is currently sufficient capacity in the Turret Water Treatment Works. However, please note that further investigations may be required to be carried out once a formal application has been submitted to us.

Foul

- Unfortunately, according to our records there is no public Scottish Water, Waste Water infrastructure within the vicinity of this proposed development therefore we would advise applicant to investigate private treatment options.

The applicant should be aware that we are unable to reserve capacity at our water and/or waste water treatment works for their proposed development. Once a formal connection application is submitted to Scottish Water after full planning permission has been granted, we will review the availability of capacity at that time and advise the applicant accordingly.

Surface Water

For reasons of sustainability and to protect our customers from potential future sewer flooding, Scottish Water will not normally accept any surface water connections into our combined sewer system.

There may be limited exceptional circumstances where we would allow such a connection for brownfield sites only, however this will require significant justification from the customer taking account of various factors including legal, physical, and technical challenges.

In order to avoid costs and delays where a surface water discharge to our combined sewer system is anticipated, the developer should contact Scottish Water at the earliest opportunity with strong evidence to support the intended drainage plan prior to making a connection request. We will assess this evidence in a robust manner and provide a decision that reflects the best option from environmental and customer perspectives.

General notes:

- **Scottish Water asset plans can be obtained from our appointed asset plan providers:**

Site Investigation Services (UK) Ltd

Tel: 0333 123 1223

Email: sw@sisplan.co.uk

www.sisplan.co.uk

- Scottish Water's current minimum level of service for water pressure is 1.0 bar or 10m head at the customer's boundary internal outlet. Any property which cannot be adequately serviced from the available pressure may require private pumping arrangements to be installed, subject to compliance with Water Byelaws. If the developer wishes to enquire about Scottish Water's procedure for checking the water pressure in the area then they should write to the Customer Connections department at the above address.
- If the connection to the public sewer and/or water main requires to be laid through land out-with public ownership, the developer must provide evidence of formal approval from the affected landowner(s) by way of a deed of servitude.
- Scottish Water may only vest new water or waste water infrastructure which is to be laid through land out with public ownership where a Deed of Servitude has been obtained in our favour by the developer.
- The developer should also be aware that Scottish Water requires land title to the area of land where a pumping station and/or SUDS proposed to vest in Scottish Water is constructed.
- **Please find all of our application forms on our website at the following link <https://www.scottishwater.co.uk/business/connections/connecting-your-property/new-development-process-and-applications-forms>**

Next Steps:

- **Single Property/Less than 10 dwellings**

For developments of less than 10 domestic dwellings (or non-domestic equivalent) we will require a formal technical application to be submitted directly to Scottish Water or via the chosen Licensed Provider if non domestic, once full planning permission has been granted. Please note in some instances we will require a Pre-Development Enquiry Form to be submitted (for example rural location which are deemed to have a significant impact on our infrastructure) however we will make you aware of this if required.

- **10 or more domestic dwellings:**

For developments of 10 or more domestic dwellings (or non-domestic equivalent) we require a Pre-Development Enquiry (PDE) Form to be submitted directly to Scottish Water prior to any formal Technical Application being submitted. This will allow us to fully appraise the proposals.

Where it is confirmed through the PDE process that mitigation works are necessary to support a development, the cost of these works is to be met by the developer, which Scottish Water can contribute towards through Reasonable Cost Contribution regulations.

- **Non Domestic/Commercial Property:**

Since the introduction of the Water Services (Scotland) Act 2005 in April 2008 the water industry in Scotland has opened up to market competition for non-domestic customers. All Non-domestic Household customers now require a Licensed Provider to act on their behalf for new water and waste water connections. Further details can be obtained at www.scotlandontap.gov.uk

- **Trade Effluent Discharge from Non Dom Property:**

Certain discharges from non-domestic premises may constitute a trade effluent in terms of the Sewerage (Scotland) Act 1968. Trade effluent arises from activities including; manufacturing, production and engineering; vehicle, plant and equipment washing, waste and leachate management. It covers both large and small premises, including activities such as car washing and launderettes. Activities not covered include hotels, caravan sites or restaurants.

If you are in any doubt as to whether or not the discharge from your premises is likely to be considered to be trade effluent, please contact us on 0800 778 0778 or email TEQ@scottishwater.co.uk using the subject "Is this Trade Effluent?". Discharges that are deemed to be trade effluent need to apply separately for permission to discharge to the sewerage system. The forms and application guidance notes can be found using the following link <https://www.scottishwater.co.uk/business/our-services/compliance/trade-effluent/trade-effluent-documents/trade-effluent-notice-form-h>

Trade effluent must never be discharged into surface water drainage systems as these are solely for draining rainfall run off.

For food services establishments, Scottish Water recommends a suitably sized grease trap is fitted within the food preparation areas so the development complies with Standard 3.7 a) of the Building Standards Technical Handbook and for best management and housekeeping practices to be followed which prevent food waste, fat oil and grease from being disposed into sinks and drains.

The Waste (Scotland) Regulations which require all non-rural food businesses, producing more than 50kg of food waste per week, to segregate that waste for separate collection. The regulations also ban the use of food waste disposal units that dispose of food waste to the public sewer. Further information can be found at www.resourceefficientscotland.com

If the applicant requires any further assistance or information, please contact our Development Operations Central Support Team on 0800 389 0379 or at planningconsultations@scottishwater.co.uk.

Yours sincerely

Hannah Ashby

Development Operations

Hannah.Ashby2@scottishwater.co.uk



By email to:
Developmentmanagement@pkc.gov.uk

Perth and Kinross Council
Pullar House
35 Kinnoull Street
Perth
PH1 5GD

Longmore House
Salisbury Place
Edinburgh
EH9 1SH

Enquiry Line: 0131-668-8716
HMConsultations@hes.scot

Our ref: HGP/D/TC/5
Our case ID: 300022662
Your ref: 18/00726/FLL
10 May 2018

Dear Sir/Madam

Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013

Hosh Farm Steading The Hosh Crieff PH7 4HA - Change of use and alterations to agricultural steading to form 2no. dwellinghouses, formation of additional vehicular access and associated works (in part retrospect)

Thank you for your consultation which we received on 07 May 2018. We have assessed it for our historic environment interests and consider that the proposals have the potential to affect the following:

Ref	Name	Designation Type
GDL00304	OCHTERTYRE	Garden and Designed Landscape

You should also seek advice from your archaeology and conservation service for matters including unscheduled archaeology and category B and C-listed buildings.

Our Advice

We have considered the information received and do not have any comments to make on the proposals. Our decision not to provide comments should not be taken as our support for the proposals. This application should be determined in accordance with national and local policy on development affecting the historic environment, together with related policy guidance.

Further Information



This response applies to the application currently proposed. An amended scheme may require another consultation with us.

Guidance about national policy can be found in our 'Managing Change in the Historic Environment' series available online at www.historicenvironment.scot/advice-and-support/planning-and-guidance/legislation-and-guidance/managing-change-in-the-historic-environment-guidance-notes/. Technical advice is available through our Technical Conservation website at www.engineshed.org.

Yours faithfully

Historic Environment Scotland



To:	John Russell, Planning Officer
From:	Sophie Nicol, Historic Environment Manager
Tel:	
Email:	
Date:	11th May 2018

18/00726/FLL Change of use and alterations to agricultural steading to form 2no. dwellinghouses, formation of additional vehicular access and associated works (in part retrospect) Hosh Farm Steading The Hosh Crieff PH7 4HA

Thank you for consulting PKHT on the above application.

In respect to archaeology and the planning process, as outlined by Scottish Planning Policy, the proposed development does not raise any significant issues. No archaeological mitigation is required in this instance.

Comments to the Development Quality Manager on a Planning Application

Planning Application ref.	18/00726/FLL	Comments provided by	Euan McLaughlin
Service/Section	Strategy & Policy	Contact Details	Development Negotiations Officer: Euan McLaughlin
Description of Proposal	Change of use and alterations to agricultural steading to form 2no. dwelling-houses, alterations to existing vehicular access and associated works (in part retrospect)		
Address of site	Hosh Farm Steading, The Hosh, Crieff		
Comments on the proposal	<p>NB: Should the planning application be successful and such permission not be implemented within the time scale allowed and the applicant subsequently requests to renew the original permission a reassessment may be carried out in relation to the Council's policies and mitigation rates pertaining at the time.</p> <p>THE FOLLOWING REPORT, SHOULD THE APPLICATION BE SUCCESSFUL IN GAINING PLANNING APPROVAL, <u>MAY</u> FORM THE BASIS OF A SECTION 75 PLANNING AGREEMENT WHICH MUST BE AGREED AND SIGNED PRIOR TO THE COUNCIL ISSUING A PLANNING CONSENT NOTICE.</p> <p>Primary Education</p> <p>With reference to the above planning application the Council Developer Contributions Supplementary Guidance requires a financial contribution towards increased primary school capacity in areas where a primary school capacity constraint has been identified. A capacity constraint is defined as where a primary school is operating, or likely to be operating following completion of the proposed development and extant planning permissions, at or above 80% of total capacity.</p> <p>This proposal is within the catchment of Crieff Primary School.</p> <p>The site has extant planning consent under 10/00583/FLL for the conversion of the steading into a single dwellinghouse. This proposal seeks to sub-divide the steading to create an additional dwelling. This additional dwelling will be required to contribute towards primary education.</p>		
Recommended planning condition(s)	<p>Summary of Requirements</p> <p>Education: £6,460 (1 x £6,460)</p> <p><u>Total: £6,460</u></p> <p>Phasing</p> <p>It is advised that payment of the contribution should be made up front of release of planning permission. The additional costs to the applicants and time for processing legal agreements for single dwelling applications is not considered to be cost effective to either the Council or applicant.</p>		

	<p>The contribution may be secured by way of a Section 75 Agreement. Please be aware the applicant is liable for the Council's legal expense in addition to their own legal agreement option and the process may take months to complete.</p> <p>If a Section 75 Agreement is entered into the full contribution should be received 10 days prior to occupation.</p>
Recommended informative(s) for applicant	<p>Payment</p> <p>Before remitting funds the applicant should satisfy themselves that the payment of the Development Contributions is the only outstanding matter relating to the issuing of the Planning Decision Notice.</p> <p>Methods of Payment</p> <p>On no account should cash be remitted.</p> <p>Scheduled within a legal agreement</p> <p>This will normally take the course of a Section 75 Agreement where either there is a requirement for Affordable Housing on site which will necessitate a Section 75 Agreement being put in place and into which a Development Contribution payment schedule can be incorporated, and/or the amount of Development Contribution is such that an upfront payment may be considered prohibitive. The signed Agreement must be in place prior to the issuing of the Planning Decision Notice.</p> <p>NB: The applicant is cautioned that the costs of preparing a Section 75 agreement from the applicant's own Legal Agents may in some instances be in excess of the total amount of contributions required. As well as their own legal agents fees, Applicants will be liable for payment of the Council's legal fees and outlays in connection with the preparation of the Section 75 Agreement. The applicant is therefore encouraged to contact their own Legal Agent who will liaise with the Council's Legal Service to advise on this issue.</p> <p>Other methods of payment</p> <p>Providing that there is no requirement to enter into a Section 75 Legal Agreement, eg: for the provision of Affordable Housing on or off site and or other Planning matters, as advised by the Planning Service the developer/applicant may opt to contribute the full amount prior to the release of the Planning Decision Notice.</p> <p>Remittance by Cheque</p> <p>The Planning Officer will be informed that payment has been made when a cheque is received. However this may require a period of 14 days from date of receipt before the Planning Officer will be informed that the Planning Decision Notice may be issued.</p> <p>Cheques should be addressed to 'Perth and Kinross Council' and forwarded with a covering letter to the following: Perth and Kinross Council Pullar House 35 Kinnoull Street</p>

	<p>Perth PH15GD</p> <p>Bank Transfers All Bank Transfers should use the following account details; Sort Code: 834700 Account Number: 11571138</p> <p>Please quote the planning application reference.</p> <p>Direct Debit The Council operate an electronic direct debit system whereby payments may be made over the phone. To make such a payment please call 01738 475300 in the first instance. When calling please remember to have to hand:</p> <ul style="list-style-type: none"> a) Your card details. b) Whether it is a Debit or Credit card. c) The full amount due. d) The planning application to which the payment relates. e) If you are the applicant or paying on behalf of the applicant. f) Your e-mail address so that a receipt may be issued directly. <p>Education Contributions For Education contributions please quote the following ledger code: 1-30-0060-0001-859136</p> <p>Indexation</p> <p>All contributions agreed through a Section 75 Legal Agreement will be linked to the RICS Building Cost Information Service building Index.</p> <p>Accounting Procedures</p> <p>Contributions from individual sites will be accountable through separate accounts and a public record will be kept to identify how each contribution is spent. Contributions will be recorded by the applicant's name, the site address and planning application reference number to ensure the individual commuted sums can be accounted for.</p>
Date comments returned	24 May 2018

Memorandum

To Development Quality Manager

From Regulatory Services Manager

Your ref 18/00726/FLL

Our ref LRE

Date 25 May 2018

Tel No [REDACTED]

The Environment Service

Pullar House, 35 Kinnoull Street, Perth PH1 5GD

Consultation on an Application for Planning Permission

PK18/00726/FLL RE: Change of use and alterations to agricultural steading to form 2no. dwelling houses, formation of additional vehicular access and associated works (in part retrospect) Hosh Farm Steading The Hosh Crieff PH7 4HA for Rod Finlay

I refer to your letter dated 7 May 2018 in connection with the above application and have the following comments to make.

Environmental Health (assessment date – 25/05/18)

Recommendation

I have no objection in principle to the application but recommend the under noted condition be included on any given consent.

Comments

This Service made comment with regards to odour from wood burning stove in memorandum dated 8 August 2018 for previously withdrawn application 17/01121/FLL

The applicant proposes to install a Bordeaux 13Kw multi Fuel Stove within the lounge area of dwelling house plot 1.

There are several existing residential properties within close proximity to the application site the closest is The North Barn which is adjacent to Plot 2 of the development.

Air Quality

The Environment Act 1995 places a duty on local authorities to review and assess air quality within their area. Technical Guidance LAQM.TG (16) which accompanies this act advises that biomass boilers within the range of 50kW to 20MW should be assessed in terms of nitrogen dioxide and particulate matter. The pollution emissions of concern from biomass are particulate matter (PM₁₀/PM_{2.5}) and nitrogen oxides (NO_x).

As the proposed stove to be installed is a small domestic stove it is well below the range to be assessed, therefore I have no adverse comments to make with regards to local air quality.

Nuisance

This Service has seen an increase in nuisance complaints with regards to smoke and smoke odour due to the installation of biomass appliances. Nuisance conditions can come about due to poor installation and maintenance of the appliance and also inadequate dispersion of

emissions due to the inappropriate location and height of flue with regards to surrounding buildings.

The flue exhaust for the stove is to be through a chimney at roof level of the dwelling house (Plot 1) and therefore the emissions should disperse adequately.

However I recommend the undernoted condition be included on any given consent to protect residential amenity from nuisance from smoke/ smoke odour.

Condition

EH50 The stove shall be installed operated and maintained in full accordance with the manufacturer's instructions and shall not be used to burn fuel other than that approved for use by the manufacturer of the appliance as detailed in the information supporting this permission.

Our ref: PCS/158959
Your ref: 18/00726/FLL

If telephoning ask for:
Alasdair Milne

6 June 2018

Perth and Kinross Council
Pullar House
35 Kinnoull Street
Perth
PH1 5GD

By email only to: DevelopmentManagement@pkc.gov.uk

Dear Sir

Planning application: 18/00726/FLL

**Change of use and alterations to agricultural steading to form 2no. dwellinghouses, formation of additional vehicular access and associated works (in part retrospect)
Hosh Farm Steading, The Hosh, Crieff, PH7 4HA**

Thank you for your consultation email which SEPA received on 7 May 2018.

Advice for the planning authority

We **object** to this planning application on the grounds of a lack of information relating to flood risk. We will review this objection if the issues detailed in Section 1 below are adequately addressed.

1. Flood Risk

- 1.1 We **object** to the proposed development on the grounds that it may place buildings and persons at flood risk contrary to Scottish Planning Policy.
- 1.2 In the event that the planning authority proposes to grant planning permission contrary to this advice on flood risk, the Town and Country Planning (Notification of Applications) (Scotland) Direction 2009 provides criteria for the referral to the Scottish Ministers of such cases. You may therefore wish to consider if this proposal falls within the scope of this Direction.

Technical Report

- 1.3 We previously objected to an earlier application (17/01121/FLL) for this site by way of our letter dated 9 August 2017. We objected due to lack of information and requested a satisfactory Flood Risk Assessment (FRA) that identifies the extent and water level of a 0.5%AP (1:200) flood. The FRA should consider the impact of climate change, freeboard allowance and any appropriate flood mitigation. If there are any proposals to mitigate the risk of flooding to the proposed development then the assessment should also consider the

impact of this on the risk of flooding elsewhere.

- 1.4 The applicant has submitted a Level 1 FRA in support of the current application. Within the FRA it is stated that *“the overland flow route is to the opposite bank of the watercourse, bounding the site. This level has been determined as being at 73.00mm.”* We assume that this means 73.00mAOD and not millimetres. From the drawing entitled topographic survey showing overland flow route, 73.0mAOD is on the edge of the flood extent, which is shown to extend further east to higher ground, therefore showing that the level of the proposed flooding is higher than 73.0mAOD. This is assumed to be based on a 100% full blockage of the downstream bridge. We would note that during a blockage scenario water levels upstream will increase above the overland flow route level as stated above. It is unclear what return period this flood extent refers to.
- 1.5 We advise that the submitted information to date is inadequate to demonstrate that the proposed development is outwith the 0.5% AP (1:200) floodplain. We therefore strongly recommend that a satisfactory FRA be undertaken that includes both a hydrological assessment and hydraulic modelling to establish design flood levels at the site. The FRA should take account of the impact of climate change and potential bridge blockage. Development levels should include an appropriate freeboard allowance in addition to an allowance for climate change impacts. We will provide additional comments upon completion and submission of a satisfactory FRA and will advise if we are in a position to withdraw our objection.

Summary of Technical Points

- 1.6 In summary we wish to receive clarification on the following points before we would consider removing our objection to the proposed development:
 - A detailed FRA, including hydraulic modelling, which identifies the extent and water level of a 0.5% AP (1:200) flood. The FRA should consider the impact of climate change, blockage scenarios, freeboard allowance and any appropriate mitigation. If there are any proposals to mitigate the risk of flooding to the proposed development then the assessment should also consider the impact of this on the risk of flooding elsewhere.

Caveats & Additional Information for Applicant

- 1.7 The SEPA Flood Maps have been produced following a consistent, nationally-applied methodology for catchment areas equal to or greater than 3km² using a Digital Terrain Model (DTM) to define river corridors and low-lying coastal land. The maps are indicative and designed to be used as a strategic tool to assess flood risk at the community level and to support planning policy and flood risk management in Scotland. For further information please visit <http://www.sepa.org.uk/environment/water/flooding/flood-maps/>
- 1.8 We refer the applicant to the document entitled: *“Technical Flood Risk Guidance for Stakeholders”*. This document provides generic requirements for undertaking Flood Risk Assessments and can be downloaded from <http://www.sepa.org.uk/environment/land/planning/guidance-and-advice-notes/>.

Please note that this document should be read in conjunction Policy 41 (Part 2).



Chairman
Bob Downes

Chief Executive
Terry A'Hearn

Perth Strathearn House

Broxden Business Park,
Lamberkine Drive, Perth, PH1 1RX
tel 01738 627989 fax 01738 630997
www.sepa.org.uk • customer enquiries 03000 99 66 99

- 1.9 Our Flood Risk Assessment checklist should be completed and attached within the front cover of any flood risk assessments issued in support of a development proposal which may be at risk of flooding. The document will take only a few minutes to complete and will assist our review process. It can be downloaded from <http://www.sepa.org.uk/media/159170/flood-risk-assessment-checklist.xls>.
- 1.10 Please note that we are reliant on the accuracy and completeness of any information supplied by the applicant in undertaking our review, and can take no responsibility for incorrect data or interpretation made by the authors.
- 1.11 The advice contained in this letter is supplied to you by SEPA in terms of Section 72 (1) of the Flood Risk Management (Scotland) Act 2009 on the basis of information held by SEPA as at the date hereof. It is intended as advice solely to Perth & Kinross Council as Planning Authority in terms of the said Section 72 (1). Our briefing note entitled: "*Flood Risk Management (Scotland) Act 2009: Flood risk advice to planning authorities*" outlines the transitional changes to the basis of our advice in line with the phases of this legislation and can be downloaded from <http://www.sepa.org.uk/environment/land/planning/guidance-and-advice-notes/>

Regulatory advice for the applicant

2. Regulatory requirements

- 2.1 Authorisation is required under The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR) to carry out engineering works in or in the vicinity of inland surface waters (other than groundwater) or wetlands. Inland water means all standing or flowing water on the surface of the land (e.g. rivers, lochs, canals, reservoirs).
- 2.2 Details of regulatory requirements and good practice advice for the applicant can be found on the [Regulations section](#) of our website. If you are unable to find the advice you need for a specific regulatory matter, please contact a member of the regulatory team in your local SEPA office at:

SEPA, Strathearn House, Broxden Business Park, Lamberkine Drive, Perth, PH1 1RX,
tel 01738 627989

If you have any queries relating to this letter, please contact me by telephone on 01786 452537 or e-mail at planning.se@sepa.org.uk

Yours faithfully

Alasdair Milne
Senior Planning Officer
Planning Service

ECopy to: arumresources@talktalkbusiness.net



Chairman
Bob Downes
Chief Executive
Terry A'Hearn

559

Perth Strathearn House

Broxden Business Park,
Lamberkine Drive, Perth, PH1 1RX
tel 01738 627989 fax 01738 630997
www.sepa.org.uk • customer enquiries 03000 99 66 99

Disclaimer

This advice is given without prejudice to any decision made on elements of the proposal regulated by us, as such a decision may take into account factors not considered at this time. We prefer all the technical information required for any SEPA consents to be submitted at the same time as the planning or similar application. However, we consider it to be at the applicant's commercial risk if any significant changes required during the regulatory stage necessitate a further planning application or similar application and/or neighbour notification or advertising. We have relied on the accuracy and completeness of the information supplied to us in providing the above advice and can take no responsibility for incorrect data or interpretation, or omissions, in such information. If we have not referred to a particular issue in our response, it should not be assumed that there is no impact associated with that issue. For planning applications, if you did not specifically request advice on flood risk, then advice will not have been provided on this issue. Further information on our consultation arrangements generally can be found on our [website planning pages](#).



Chairman
Bob Downes

Chief Executive
Terry A'Hearn

560

Perth Strathearn House

Broxden Business Park,
Lamberkine Drive, Perth, PH1 1RX
tel 01738 627989 fax 01738 630997

www.sepa.org.uk • customer enquiries 03000 99 66 99

Our ref: PCS/159797
Your ref: 18/00726/FLL

If telephoning ask for:
Alasdair Milne

9 July 2018

John Russell
Perth and Kinross Council
Pullar House
35 Kinnoull Street
Perth
PH1 5GD

By email only to: JRussell@pkc.gov.uk

Dear Sir

Planning application: 18/00726/FLL

**Change of use and alterations to agricultural steading to form 2no. dwellinghouses,
formation of additional vehicular access and associated works (in part retrospect)
Hosh Farm Steading, The Hosh, Crieff, PH7 4HA**

Thank you for your consultation email which SEPA received on 22 June 2018.

Advice for the planning authority

We **maintain our objection** to the proposed development on the grounds that it may place buildings and persons at flood risk contrary to Scottish Planning Policy.

In the event that the planning authority proposes to grant planning permission contrary to this advice on flood risk, the Town and Country Planning (Notification of Applications) (Scotland) Direction 2009 provides criteria for the referral to the Scottish Ministers of such cases. You may therefore wish to consider if this proposal falls within the scope of this Direction.

1. Flood Risk

- 1.1 We previously responded to this application on the 6 June 2018. We objected due to lack of information and requested a detailed Flood Risk Assessment (FRA), including hydraulic modelling, to identify the extent and water level of a 0.5% AP (1:200) flood at the application site. The FRA should consider the impact of climate change, blockage scenarios, freeboard allowance and any appropriate mitigation.
- 1.2 Arum Resources have since submitted a response to our objection. The applicant states that there is an inconsistent approach from consultees on flooding in the area around this development. In response we would advise that we hold no records of being formally consulted by the planning authority on flood risk at Clochaigh, The Hosh. We are therefore unable to comment on this application associated with that development. During the consultation on the proposed site in 2010, SEPA stated that “our Flood Risk Assessment

checklist should be completed and attached within the front cover of any flood risk assessment issued in support of a development proposal which may be at risk of flooding.” It was also stated within Arum’s correspondence that Perth & Kinross flooding section required a FRA to be undertaken at this site but was overruled by the Development Quality Manager.

- 1.3 We remain of the opinion that a detailed FRA is required in order to understand the risk of flooding to the development. It is currently our view that the proposal to create two dwellinghouses from this one building may potentially increase in the number of people at risk of flooding, which is contrary to the principles of Scottish Planning Policy.

Summary of Technical Points

- 1.4 In summary we wish to receive clarification on the following points before we would consider removing our objection to the proposed development:
- A detailed Flood Risk Assessment, including hydraulic modelling, which identifies the extent and water level of a 0.5% AP (1:200) flood. The FRA should consider the impact of climate change, blockage scenarios, freeboard allowance and any appropriate mitigation and the impact of the proposals on the risk of flooding elsewhere.

Caveats & Additional Information for Applicant

- 1.5 The SEPA Flood Maps have been produced following a consistent, nationally-applied methodology for catchment areas equal to or greater than 3km² using a Digital Terrain Model (DTM) to define river corridors and low-lying coastal land. The maps are indicative and designed to be used as a strategic tool to assess flood risk at the community level and to support planning policy and flood risk management in Scotland. For further information please visit <http://www.sepa.org.uk/environment/water/flooding/flood-maps/>
- 1.6 We refer the applicant to the document entitled: “*Technical Flood Risk Guidance for Stakeholders*”. This document provides generic requirements for undertaking Flood Risk Assessments and can be downloaded from <http://www.sepa.org.uk/environment/land/planning/guidance-and-advice-notes/>.

Please note that this document should be read in conjunction Policy 41 (Part 2).

- 1.7 Our Flood Risk Assessment checklist should be completed and attached within the front cover of any flood risk assessments issued in support of a development proposal which may be at risk of flooding. The document will take only a few minutes to complete and will assist our review process. It can be downloaded from <http://www.sepa.org.uk/media/159170/flood-risk-assessment-checklist.xls>.
- 1.8 Please note that we are reliant on the accuracy and completeness of any information supplied by the applicant in undertaking our review, and can take no responsibility for incorrect data or interpretation made by the authors.
- 1.9 The advice contained in this letter is supplied to you by SEPA in terms of Section 72 (1) of the Flood Risk Management (Scotland) Act 2009 on the basis of information held by SEPA as at the date hereof. It is intended as advice solely to Perth & Kinross Council as Planning Authority in terms of the said Section 72 (1). Our briefing note entitled: “*Flood Risk*



Chairman
Bob Downes

Chief Executive
Terry A'Hearn

Perth Strathearn House

Broxden Business Park,
Lamberkine Drive, Perth, PH1 1RX
tel 01738 627989 fax 01738 630997

www.sepa.org.uk • customer enquiries 03000 99 66 99

Management (Scotland) Act 2009: Flood risk advice to planning authorities outlines the transitional changes to the basis of our advice in line with the phases of this legislation and can be downloaded from <http://www.sepa.org.uk/environment/land/planning/guidance-and-advice-notes/>

Regulatory advice for the applicant

2. Regulatory requirements

- 2.1 Details of regulatory requirements and good practice advice for the applicant can be found on the [Regulations section](#) of our website. If you are unable to find the advice you need for a specific regulatory matter, please contact a member of the regulatory team in your local SEPA office at:

Strathearn House, Lamberkine Drive, Perth, PH1 1RX, tel 01738 627989

If you have any queries relating to this letter, please contact me by telephone on 01786 452537 or e-mail at planning.se@sepa.org.uk

Yours faithfully

Alasdair Milne
Senior Planning Officer
Planning Service

ECopy to: arumresources@talktalkbusiness.net

Disclaimer

This advice is given without prejudice to any decision made on elements of the proposal regulated by us, as such a decision may take into account factors not considered at this time. We prefer all the technical information required for any SEPA consents to be submitted at the same time as the planning or similar application. However, we consider it to be at the applicant's commercial risk if any significant changes required during the regulatory stage necessitate a further planning application or similar application and/or neighbour notification or advertising. We have relied on the accuracy and completeness of the information supplied to us in providing the above advice and can take no responsibility for incorrect data or interpretation, or omissions, in such information. If we have not referred to a particular issue in our response, it should not be assumed that there is no impact associated with that issue. For planning applications, if you did not specifically request advice on flood risk, then advice will not have been provided on this issue. Further information on our consultation arrangements generally can be found on our [website planning pages](#).



Chairman
Bob Downes

Chief Executive
Terry A'Hearn

Perth Strathearn House

Broxden Business Park,
Lamberkine Drive, Perth, PH1 1RX
tel 01738 627989 fax 01738 630997

www.sepa.org.uk • customer enquiries 03000 99 66 99

Comments to the Development Quality Manager on a Planning Application

Planning Application ref.	18/00726/FLL	Comments provided by	D.Lynn
Service/Section	TES - Flooding	Contact Details	floodingdevelopmentcontrol@pkc.gov.uk
Description of Proposal	Change of use and alterations to agricultural steading to form 2no. dwellinghouses, formation of additional vehicular access and associated works (in part retrospect)		
Address of site	Hosh Farm Steading The Hosh Crieff PH7 4HA		
Comments on the proposal	<p>Objection,</p> <p>Some discrepancies have been noticed within the FRA and such have also been highlighted as a concern by SEPA. I would agree with SEPA's request that due to issues noted within the supplied FRA that a further detailed FRA should be submitted as part of the application.</p>		
Recommended planning condition(s)	N/A		
Recommended informative(s) for applicant	PKC Flooding and Flood Risk Guidance Document (June 2014)		
Date comments returned	12/07/2018		

