Refusal of Planning Application – re Proposed erection of small wooden lodge to facilitate forestry operation at Kahiwi Wood, Califer Hill, Forres

I submitted my planning application after careful research and review of current woodland and forestry policy and strategy documentation both existing and consultative.

On 10th July 2019 Moray Council's Planning Officer issued her decision and unfortunately it was a refusal. Regardless of all the supporting information, she could not recommend it for approval because it is against policy : -

The presumption against development in woodland use is advised by Scottish Forestry and is reflected in Local Development Plan Policies E4 Trees and Development and ER2 Development in Woodlands. Having considered the proposal against these requirements the application for residential use in this existing woodland is not acceptable and is against the provisions of the Moray Local Development Plan 2015.

Despite there being existing previously approved applications in woodland in the area, these were assessed under old policy, and apparently the presumption against development in woodland was not present in the old development plan.

I believe that the rigid interpretation of Policies E4 and ER2 does not produce a balanced outcome and the proposal would be an acceptable departure on the basis of best forestry and woodland management practices and security regarding my current low impact silviculture forestry business and proposed future related wood craft business.

I purchased the 22.08 hectares (55 acres) of woodland from Burgie Estate in June 2015 and undertook considerable time and effort to research and prepare my aims and objectives in order to submit my 10 year woodland management plan to Forestry Commission Scotland (now Scottish Forestry) which was approved in March 2016 and my felling and thinning licence approved in May 2016 – see the following extract :-

"The management plan for Kahiwi Wood aims in its objective to restructure over the longer term 22.08 hectares of woodland, planted under the previous ownership with purely commercial aims, into a more biodiversically sustainable asset that is more acceptable to both the environment and local wildlife.

The main aims for Kahiwi Wood are to gradually restructure the woodland over the longer term, using a labour intensive sympathetic low impact silvicultural regime; and to develop a biodiversically sustainable asset, which is sufficiently robust to service small scale sustainable timber production.

The transition from predominantly commercial management aims, as exist at present, towards fulfilment of the outlined objectives above is anticipated to occur progressively over the period of this plan and that of its successor, i.e. 20 years.

The long-term management aims for Kahiwi Wood are:

§ To manage the woodland on a natural, sustainable basis with a perpetuating age class diversity encouraged.

§ To prioritise native species in keeping with the environmental attributes of the site.

§ To provide structural and species diversity that safeguards and enhances the aesthetic, environmental and wildlife value of the area.

§ To encourage the on-site habitat development of indigenous flora and fauna.

§ To maintain the economic viability of the woodland.

§ To maintain and enhance the amenity interest.

§ To maintain and enhance the landscape interest.

§ To work with the latest FC guidelines and nature conservation recommendations."

My ongoing approved management strategy is to enhance the woodland through maximising its biodiversity by removing all non-native species and encouraging regeneration of native species and replanting where ever necessary, while still achieving an economic low impact silviculture forestry operation.

This low impact approach protects the flora and fauna of the woodland and encourages natural regeneration by minimising the disturbance to the woodland floor during the timber extraction process. By maximising this form of presence on site we also reduce the deer presence and can use natural regeneration and more selective hands on restocking policies to achieve our aims of a mutli- canopied diverse native woodland.

My low impact silviculture philosophy is only achievable through a large amount of manhours and the use of smaller forestry extraction machinery which is currently stored in my shed on site. This philosophy requires the majority of the timber extraction and tree maintenance to be undertaken from September to March out with the breeding, nesting and growing season in order to minimise the effect on the flora and fauna. This means available daylight working hours are at a premium, as are suitable weather conditions. Further essential spring/ summer maintenance work eg ditch clearing to encourage good drainage and track repairing must be undertaken in a labour intensive manner to protect the woodland floor and to encourage regeneration. Thus being able to have a small permanent lodge onsite would not only allow maximisation of available working hours but also reduce our carbon footprint by removing the current two hour travelling and also set up/ pack up time each day to the woodland as all necessary clothe changes, food and fuel etc need to be planned and packed each day.

I feel the requirement for full time presence on site is not only critical for the running of the business but also for security. Having expensive equipment and its maintenance tools on site as well stacked felled trees poses an extreme security risk. If there is no permanent presence on site there is a high risk of theft which would have a substantial effect on the economic running of the business should equipment or timber be stolen. Felled timber has been stolen from nearby woodlands in the past and additionally fireworks were let off in my entrance track on Hogmanay 2019.

The current philosophy for small farms, crofts etc is that resident owner management is encouraged if not the norm and I feel current small scale woodland management on a low impact silviculture philosophy should be viewed in a similar light as it is just as labour intensive and the woodland assets should be afforded the similar protection for their owners and the wider community.

I aim to maximise the economic value of all extracted timber by selling the larger elements to local businesses and to sell the smaller branches to local artisans for furniture or craft making endeavours. I also hope to eventually develop my current wood crafting hobby into my own artisan wood crafting business.

Currently all of my felled softwood timber is sold seasoned to Nairn Fuels for them to process and the current agreement is that it is stacked and seasoned on my site as they have limited yard area for soft wood storage.

Local businesses in the Forres area have given clear undertakings for larger felled hardwood and Larch processed boards for construction and a local business has agreed to undertake the boarding process. An operation which can only be undertaken in the spring/summer months as this machinery can only operate above certain ambient temperatures, again requiring stacking of timber on site until it can be sent for boarding.

I have also identified a new local start up business who is very willing to utilise all smaller hardwood and softwood branches for artisan furniture etc purposes.

Having had 3 failed attempts to buy and then rent properties close to the woodland I decided to research all available policy/strategy documentation at local and national government level, covering woodland management for the future. As a result of which I felt my woodland philosophy and business model could mean there may be potential for us to live on and work the wood per my approved forestry plan low impact silviculture regime.

I thus submitted a pre planning application to Moray Council in January 2019 for a very small (38metre square living space) wooden lodge situated at my existing yard/ entrance area, which received a positive response from Moray Council Planning in February 2019. The existing entrance track and working yard area has always been shown as a clearing on all previous aerial photographs of the woodland and is where all the existing (now overgrown) internal forestry access tracks converge.

Given the positive response, I decided to lodge a full application which was submitted by my architect in April 2019. As shown on the supporting drawings (reference CAD-142) the proposal is not line with a standard house seeking permission. There is no grassed private garden space etc as the lodge is proposed to sit in the hardcore yard where it can be an integrated part of the working space.

This current hardcore yard area (which David Hay of Scottish Forestry saw in January 2019) was and still is cleared to provide an adequate safe trailer/truck turning area and scots pines seasoning stands to accommodate the licenced thinning of area 2a and 2b per my approved woodland plan approx. 27 acres in area. This will result in selective thinnings of up to 3000 immature scots pines all requiring stacking for seasoning prior to sale to Nairn Fuels as per our current agreement mentioned earlier. This thinning work was due to be commence in early 2019.

However events took a turn for the worse in February as I was diagnosed with a severe hip problem relating to my ten year old metal on metal hip replacement, which had been slowly dissolving my pelvis and femur and x-rays at the end of February revealed that I had practically no bone left to support the joint. I was told by my consultant to cease all exercise and await a major hip revision. This took place in early May resulting in 5 hours of major surgery and major rehab to get back on my feet and I will not be back to woodland operations until January 2020. My architect submitted the full planning application in April and in reality had very little input from myself as I have been hors de combat and my husband has been looking after me full time and all the while trying to service his accountancy business. Our long term strategy is to wind down the existing accountancy business and to become full time foresters at Kahiwi Wood.

I have always applied for prior notification approval for any works at my woodland, from the initial entrance track repair to our forestry storage shed and our approved but not yet erected composting toilet and open bay wood store. I was unaware that I needed prior notification approval to extend the hardstand for our trailer turning and wood stacking stands and apologise if I have been errant with this.

In order to facilitate my wood crafting hobby and my desire to eventually develop this into an artisan wood crafting business I ordered in March 2018 a modified shepherds hut with estimated delivery in 2020 due to the 2-3 year waiting list at the time of order. It is designed for wood crafting and is towable. However in late 2018 the builder contacted me to say he had restructured his manufacturing and the shepherds hut would be ready for delivery in early 2019. Not only was this as my hip issues were being diagnosed but also after we had moved to our existing rental accommodation where there was no area for storage of such. I thus arranged for delivery in February 2019 to our hardstand yard for temporary storage until such time as my hip issues and our future living accommodation was clarified.

I do not want a development plot or anything along such lines at my woodland, which I value too highly as native woodland and wish to continue to work it to maintain and enhance where ever possible its wonderful biodiversity.

Design statement for proposed dwellinghouse and workshops at Kahiwi Wood, Califer, Rafford, Moray

Background

This pre-application enquiry is being made by Cameron Architectural Design on behalf of Mr and Mrs McGann.

The site in question is located in Morayshire, approximately 4 miles south-east of the small town of Forres. Ordnance Survey Grid Reference: NJ 08966/57307. This is all indicated on the attached supporting Location plan.

The site identified as the proposed house and workshop location is an existing area of hardstanding which is bound on all sides by mature tree planting forming part of Kahiwi wood.

Context

Kahiwi wood is a 20 hectare planted mixed coniferous woodland located in Morayshire as noted above..

Located approximately 4 miles from Forres, this is a town that contains all the necessary local amenities that you would expect to find in a popular, ever growing town i.e supermarkets, petrol stations, restaurants, garages etc.

Servicing the proposed site within Kahiwi wood is not expected to be a problem. There is an existing electricity supply on site which serves the workshop.

A water supply from Scottish Water has already been applied for as this is required as part of the business as well as serving any future house or workshops.

Heating will be provided wood burning stoves. All the fire wood will be supplied from felled trees located within Kahiwi wood, thus lowering vehicle movements in and out of the site.

Solar thermal panels will also be provided to generate with the production of hot water. A wood burning stove may also be fitted with a back boiler to supplement the solar panels.

All drainage for both foul and surface water will be catered for within the site boundaries via soakaways.

The driving force for this proposed house is the need for Mr and Mrs McGaan to be located on site as they aim to make a viable business from the management of Kahiwi wood.

The main aims of Kahiwi wood are:

- To gradually restructure the woodland over the longer term using a labour intensive sympathetic low impact silvicultural regime;
- Develop a biodiversically sustainable asset, which is sufficiently robust to service small scale sustainable timber and firewood production with a move to higher value added products in the medium term (eg wood turning)

Restructuring of Kahiwi wood commenced in 2016 in line with the approved detailed forestry plan (uploaded as part of the supporting documents).

The transition from predominantly commercial management aims, as exist at present, towards fulfilment of the outlined objectives noted above is anticipated to occur progressively over the period of this plan (10 years) and that of its successor plan, i.e 20 years.

The long term management aims for Kahiwi wood are:

- To manage the woodland on a natural, sustainable basis with a perpetuating age class diversity encouraged.
- To prioritise native species in keeping with the environmental attributes of the site.
- To provide structural and species diversity that safeguards and enhances the aesthetic, environmental and wildlife value of the area.
- To encourage the on site habitat development of indigenous flora and fauna.
- To maintain the economic viability of the woodland.
- To maintain and enhance the amenity interest.
- To maintain and enhance the landscape interest.
- To work with the latest FC guidelines and nature conservation recommendations.
- To produce a range of timber products which will meet market requirements on a sustainable basis.
- To develop a relatively steady, modest timber revenues on a micro-basis to minimize adverse disturbance to woodland environment.
- To ensure satisfactory development of the stands of trees by regular selective thinning.
- To maintain habitats for wildlife and extend and introduce areas of mixed native broadleaves species and open ground.
- To implement monitoring of key species and impact of management activities. To minimize the use of herbicides and insecticides. The removal of any invasive exotic woodland species if in conflict with environmental objectives.
- To comply with the UK forestry standard and UK wood assurance standard in all forestry planning and operations.

This management plan aims in its objective to provide the operational framework by which woodland restructuring can be facilitated over the medium and longer term.
The 22.08 hectares identified as Kahiwi Wood is a stand-alone management unit, initially planted with a purely commercial aims. Under new ownership however, the main focus of woodland management is to gradually and sensitively diversify the existing woodland via its restructuring.

Operation forest management is to be implemented entirely on an internal basis by the owner and associated family members. The labour intensive low impact silvicultural regime to be adopted throughout the woodland will create a significant presence on site by the owner and family members in line with best European practice managing small woodlands and will create minimal disturbance to the floral and fauna of the wood.

Financial summary

The wood has been neglected for many years and requires considerable remedial work in the short-term clearing felled and windblown timber which will give an initial injection of revenue. The clear-fell of the Sitka Spruce (see forestry management plan) will also give an initial injection of revenue, thereafter income form thinning and firewood will be steady.

The market has been tested and all available production can be sold locally as the cost of transporting timber long distances makes it un-economic at this level. All the wood recovered so far has been sold and there continues to be satisfactory enquiry levels.

The costs in the plan assumes the owner is based on-site thereby improving productivity and lowering the carbon footprint of the wood. It is estimated that revenue would be reduced by up to 25% (travelling time)

if the wood had to be serviced from the owners existing location and expenses would not decrease. This makes the project economically margin at best and increases the risk profile significantly.

Risk summary

The market for timber is strong at present with a number of significant biomass projects in the local area (Diageo, Pluscarden Abbey, Gordonston School) meaning demand will remain strong for large scale production FSC woods leaving the small local suppliers to satisfy local demand for top-up biomass and firewood.

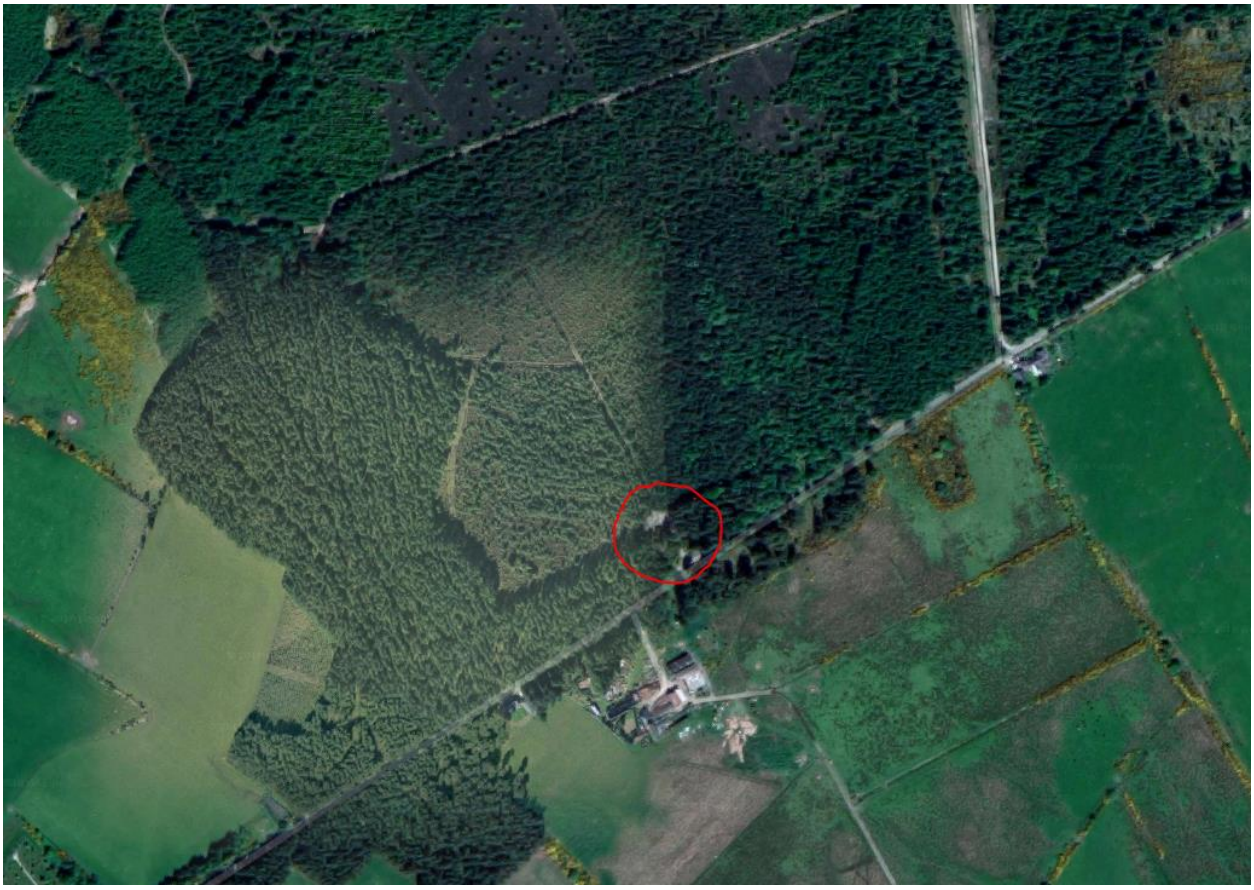
The principal risk to the business is criminal activity, theft of firewood and/or equipment. The neighbour's (Ian Lawson) wood has suffered theft of firewood in the last couple of years and both the local and national press continuously run stories of equipment and fuel being stolen from rural locations. Security is a concern and ideally there should be on-site presence at all times.

Labour input required

There is sufficient activity for one to one and half full-time equivalents each year of the ten-year plan. At present the owner spends between 2 and 3 hours travelling to and from site which is time that could be invested in the wood and also increases the carbon footprint of the wood. This when considered with the security aspect means that to be commercially viable the owner should be based on site.

Conclusion

The owner is committed to returning the wood to a natural, vibrant and diverse ecosystem of native timber and fauna which functions commercially. The labour intensive low impact silverculture approach will achieve this, however, the approach requires the owners presence on site.



Movement/connection

Given the countryside location of the proposed house there is no requirement to provide linked footpaths.

Vehicle access into the site will be gained by using the existing junction complete with lay-by in accordance with Moray Councils standards for road construction consent and adoption document.

Refuse bins serving the house will be located close to the entrance to allow for easy pick up and drop off.

Buildings/identity

It is not proposed to provide any further screen planting or boundary treatments given the existing area of hardstanding is screened on all sides by long established, mature tree planting.

The proposed house is to be a minimalist log cabin with a floor area of 38sqm, supplied by 'Forest Log Cabins' or equal and approved.

The new dwellinghouse will be built to a high standard, be energy efficient and designed to have low emissions rate.

Modern building techniques and thoughtful design will be used throughout to minimize on any potential cold bridging between joining materials.

Openings and their orientations will be investigated to try and maximize on solar gains.

A 'fabric first' approach will be taken to ensure energy efficient constructions are used from the very first to the last step.

Design principles

The main planning policy in question for an application of this type is Policy HY – New housing in the open countryside.

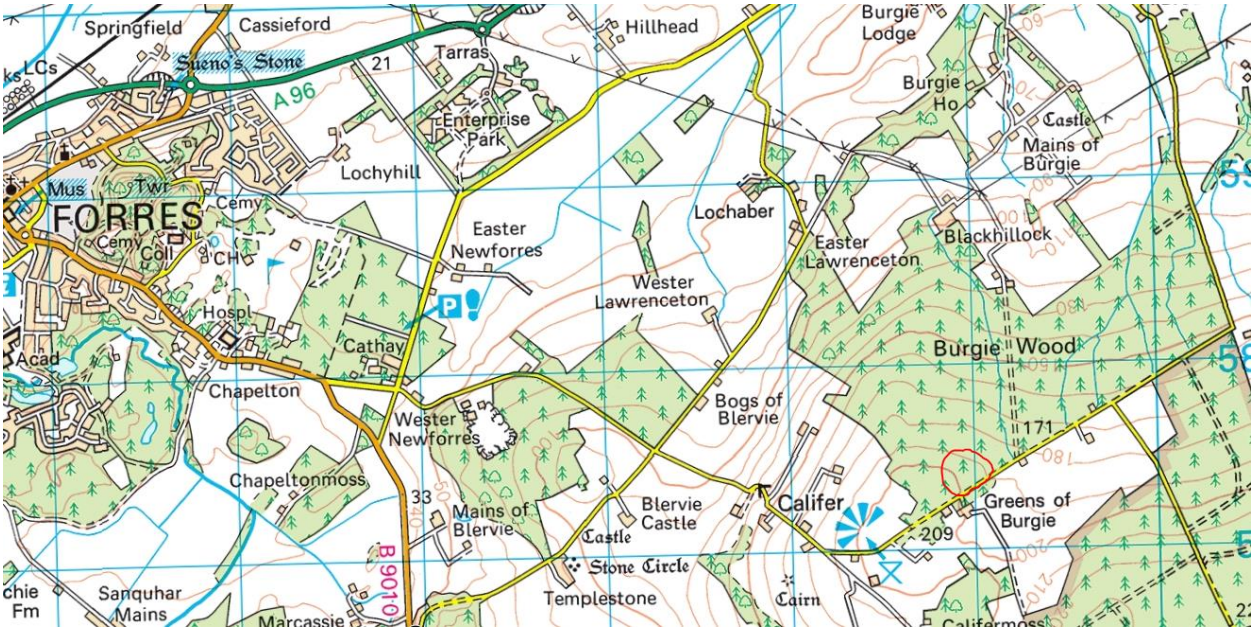
Policy H7 requires that at least 50% of the site boundaries of a proposal are long established, and are capable of distinguishing the site from surrounding land. Examples include dykes, hedgerows, watercourses, woodlands, tracks and roadways.

As shown on the attached supporting location plan and site plan as well as historic plans the woodland provides a clear defined boundary edge.

Siting of the house is imperative to ensure the existing woodland screening the site from the road remains the dominant visual feature.

The proposed house should fall in line with following design features:

- A roof pitch between 40-55 degrees.
- A gable width of no more than 2.5 times the height of the wall from ground level to the eaves.
- Uniform external finishes and materials including slate or dark 'slate effect' roof tiles.
- A vertical emphasis and uniformity to all windows and doors.
- Boundary decarmation that reflects the established character or style in the locality.
- Proposals must be accompanied by a landscaping plan showing an appropriate proportion of the plot, generally 25% to be planted with native tree species at least 1.5 metres in height.



Conclusion

Given the small scale development that is being proposed and the need for the on-site presence to provide a better business service we would suggest this proposal falls within policy and should be considered as an acceptable addition to the area.

Gary Mackintosh
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gmcsurveys

Surveys, Setting-Out Civil Engineering Design

Site Investigation & Drainage Assessment

SITE AT KAHIWI WOOD, CALIFER HILL, FORRES

Gary Mackintosh Bsc
gmcsurveys@gmail.com

Contents

Client:

Mrs R Mcgaan

Site Address:

Site Kahiwi Wood
Califer
By Forres

Planning Reference:

N/A

Date:

7th April 2019

Job Number:

0482

Company Information:

Assessment completed by:

Gary Mackintosh Bsc
GMCSurveys
34 Castle Street
Forres
Moray
IV36 1PW
Email: gmcsurveys@gmail.com
Telephone: 07557431702

Site Description:

The proposed site is located to the north east of Greens of Burgie, By Califer Viewpoint, Forres.

The are no formal boundaries to the proposed site area with the existing tree line outlining the site area as indicated within Appendix A. The site has a medium gradient falling from south west to north east. The SEPA Flood Maps have been consulted which indicate that the site is at no risk of fluvial or pluvial flooding up to and including a 1:200year event.

GMC Surveys have been asked to carry out a site investigation in order to provide a drainage solution in relation to the proposed single bed dwelling within the site.

Soil Conditions:

Excavations were carried out using a mechanical digger on 5th April 2019 to assess the existing ground conditions and carry out infiltration and percolation testing for the dispersal of foul and surface waters via soakaways.

The trial pits were excavated to depths of 1.5m. The pits were left open and no ground water was encountered.

The excavations provided existing ground conditions of 0 – 250mm Topsoil with many roots overlying light brown/orange, medium to medium fine Slightly gravelly sand with some large cobbles to a depth of 900mm, the sand overlaid rock easily broken by the bucket of the digger for approximately 500 – 600mm.

The trial pits were left open and there was no evidence of contamination or groundwater present within the pits and the natural ground has a bearing capacity of in excess of 100kn/m².

Percolation/Soakaway Testing:

Percolation testing was carried out in full accordance with BS6297: 2007 + A1: 2008 and as described in Section 3.9 of the Scottish Building Standards Technical Handbook (Domestic). The results can be found in the table below.

	1st	2nd	3rd	Mean
Date of Test	**05/04/19**	**05/04/19**	**05/04/19**	
	1920s	2700s	3480s	2700s
	2340s	2520s	2940s	2600s
Average Soil Vp				**17.67s/mm**

Infiltration testing:

Infiltration testing was carried out in full accordance with BRE digest 365. The results can be found in the table below.

Infiltration Test	**Pit Dimensions (w/l)**	**Test Zone (mbgl)**	**Infiltration Rate (m/s)**
INF01	0.8mx 1.0m	0.5 - 1.1	3.85×10^{-5}

Conclusion and Recommendations:

The natural ground is suitable for Traditional strip foundations designed in accordance with BS8110 – Structural use of Concrete.

Based on the onsite investigations it can be confirmed that the underlying soils are suitable for the use of standard stonefilled soakaways as a drainage solution for both foul and surface waters.

The Vp rate is above the maximum threshold of 15s/mm therefore a 'Standard Septic Tank' would be suitable, the final details of which are to be confirmed by the chosen supplier.

Foul Water Discharge via Soakaway:

The current proposals are for a 1 bed property to be erected within the site however the minimum allowable within SEPA Guidance is 5PE therefore:

Soil Percolation Value – 17.67s/mm

No of Persons (5bed) – 5PE

Min Base Area (A=Vp x PE x 0.25) = **22.09m²**

This can be provided with dimensions of **5.6m x 4.0m x 0.45m** below the invert level of the pipe. The soakaway dimensions may be altered to provide a better fit within the plot ensuring that the base area of 22.09m² is maintained.

Surface Water Dispersal via Soakaway:

Please see attached surface water calculations detailing the requirement and suitability for soakaway dimensions of **5.0m x 2.0m at a depth of 0.8m** below the invert level based on the proposed contributing area of 100m² (Indicative) the final house design is to be confirmed at the time of this report. The surface water soakaway is to be amended should there be an increase to the proposed roof area during final design.

Soakaway Details can be found in Appendix B.

SEPA and Building Regulations require that infiltration systems (soakaways) are located at least:

- 50m from any spring, well or borehole used as drinking water supply
- 10m horizontally from any water course and any inland and coastal waters, permeable drain (including culvert), road or railway
- 5m from a building or boundary

MasterDrain
SW 16.10

gmcsurveys
Surveys,Setting Out Civil Engineering Design

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Mobile: 07557 431 702

Job No.	Sheet no.	Date
0482	1	07/04/19

Project	By	Checked	Approved
Kahiwi Wood, Clalifer, By Forres	GM		

Title: Surface Water Soakaway (30year)

Rectangular pit design data:-

Pit length	= 5 m	Pit width	= 2 m
Depth below invert	= .8 m	Percentage voids	= 30.0%
Imperm. area	= 100 m²	Infilt. factor	= 0.000038 m/s
Return period	= 30 yrs	Climate change	= 30%

Calculations :-

Surface area of soakaway to 50% storage depth (not inc. base):-

a_{s50} = 2 x (length + width) x depth/2 = 5.6 m²

Outflow factor : O = a_{s50} x Infiltration rate = 0.0002128 m/s

Soakaway storage volume : S_{actual} = length x width x depth x %voids/100 = 2.4 m³

Duration	Rainfall mm/hr	Inflow m³	Depth (hmax) m	Outflow m³	Storage m³
5 mins	89.9	0.7	0.23	0.06	0.68
10 mins	69.6	1.2	0.34	0.13	1.03
15 mins	58.1	1.5	0.42	0.19	1.26
30 mins	41.0	2.0	0.56	0.38	1.67
1 hrs	27.7	2.8	0.67	0.77	2.00
2 hrs	18.1	3.6	0.70	1.53	2.09
4 hrs	11.6	4.7	0.53	3.06	1.59
6 hrs	9.0	5.4	0.26	4.60	0.78
10 hrs	6.4	6.4	0.00	7.66	0.00
24 hrs	3.6	8.7	0.00	18.39	0.00

Actual volume : S_{actual} = 2.400 m³

Required volume : $S_{reqd.}$ = 2.090 m³

Soakaway volume storage OK.

Minimum required a_{s50} : 4.88 m²

Actual a_{s50} : 5.60 m²

Minimum depth required: 0.70 m

Time to maximum 2 hrs

Emptying time to 50% volume = t_{s50} = S_{reqd} x 0.5 / (a_{s50} x Infiltration rate) = 01:21 (hr:min))

Soakaway emptying time is OK.

Location hydrological data (FSR):-

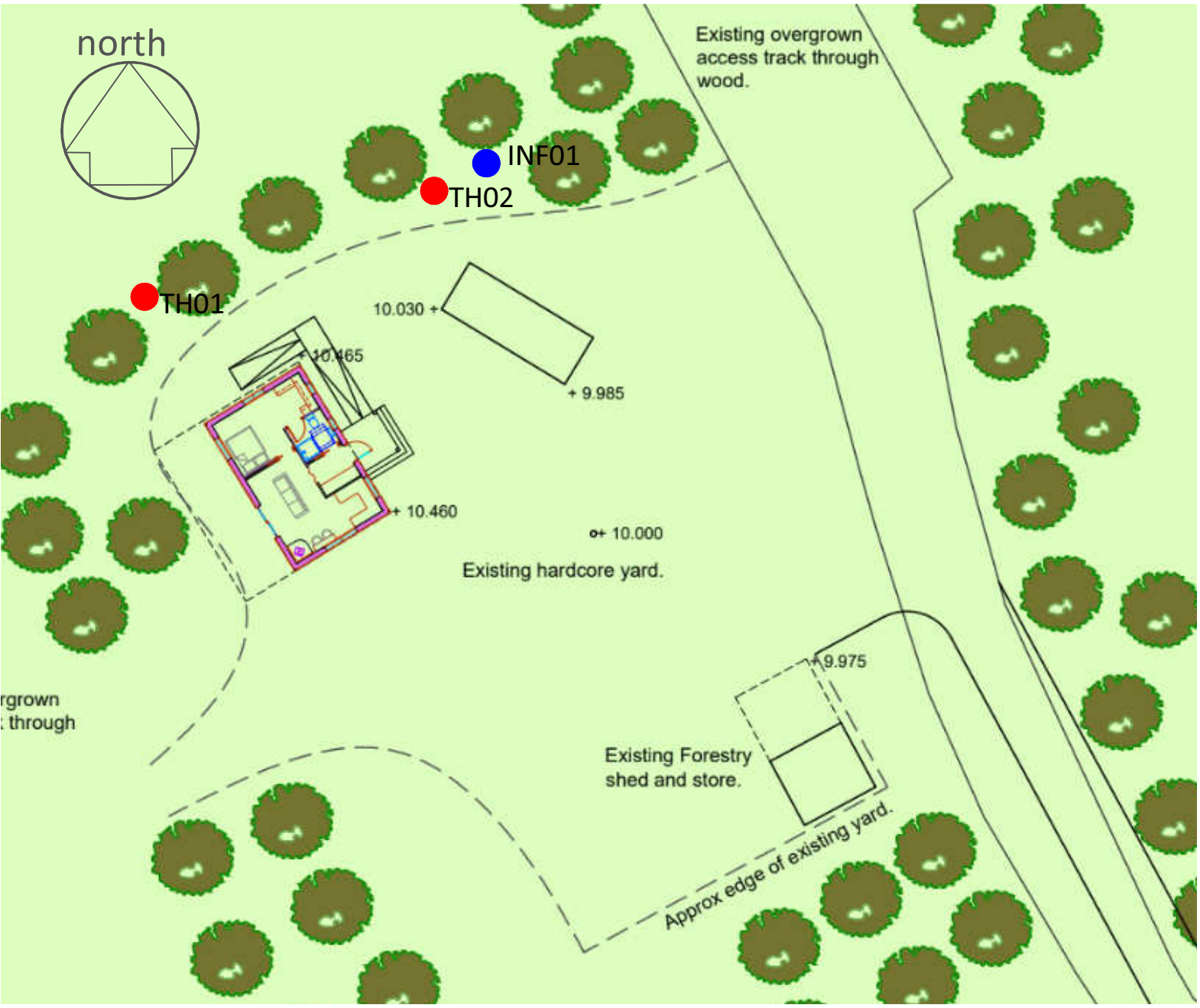
Location	= FORRES	Grid reference	= NJ0358
M5-60 (mm)	= 14	r	= 0.24
Soil index	= 0.15	SAAR (mm/yr)	= 720
WRAP	= 1	Area = Scotland and N. Ireland	

Soil classification for WRAP type 1
i) Well drained permeable sandy or loam soils and shallower analogues over highly permeable limestone, chalk, sandstone or related drifts;
ii) Earthy peat soils drained by dykes and pumps;
iii) Less permeable loamy over clayey soils on plateaux adjacent to very permeable soils in valleys.

N.B. The rainfall rates are calculated using the location specific values above in accordance with the Wallingford procedure.

APPENDIX A

Site/Testhole Location



REV:	DESCRIPTION:	BY:	DATE:

STATUS: ISSUE

gmcsurveys
Surveys, Setting Out, Civil Engineering Design
T: 07557 431 702
E: gmcsurveys@gmail.com

CLIENT: Mrs R Mcgaan

SITE: Site at Kahiwi Wood Califer, By Forres

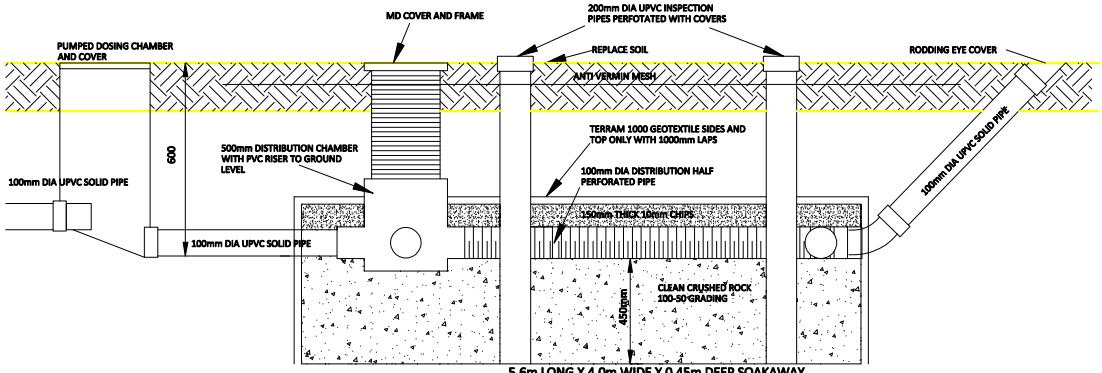
TITLE: Test Hole Location/ Site Layout

SCALE AT A4:	DATE:	DRAWN:	CHECKED:
NTS	APR19	GM	

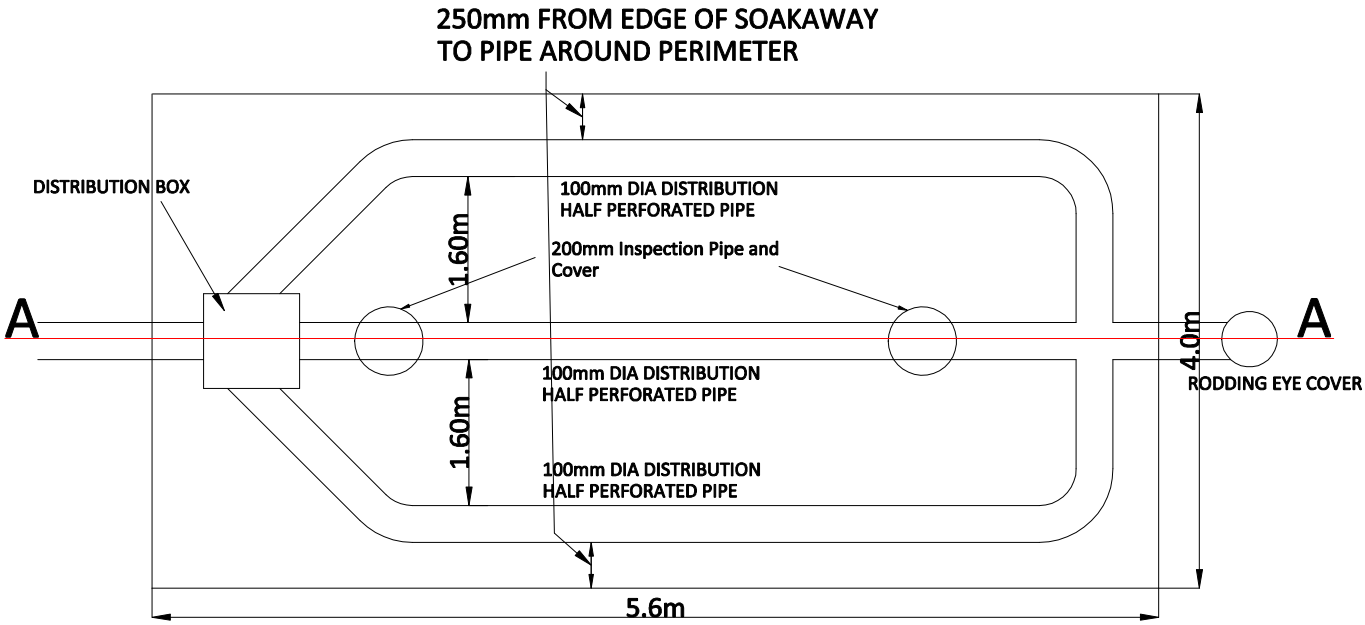
PROJECT NO:	DRAWING NO:	REVISION:
0482	Appendix A	-

APPENDIX B

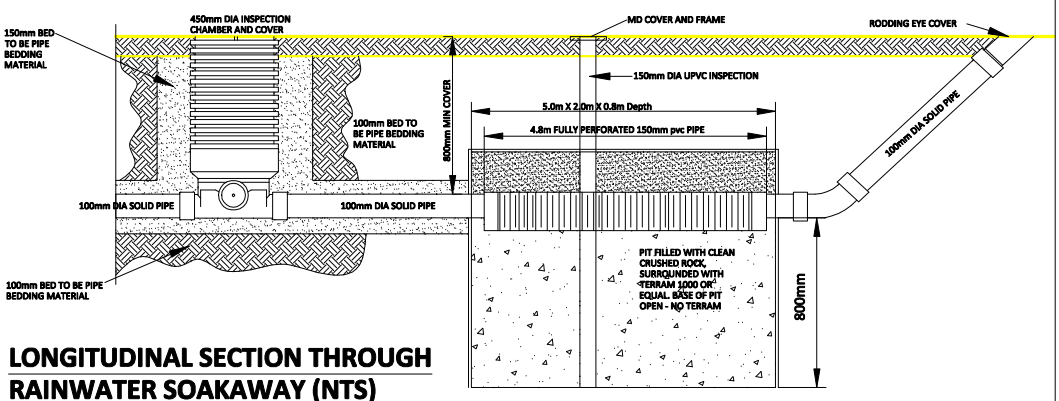
Soakaway Details/Certificates



SECTION A - A THROUGH
FOUL WATER SOAKAWAY (NTS)



PLAN VIEW
SOAKAWAY ARRANGEMENTS (NTS)



LONGITUDINAL SECTION THROUGH
RAINWATER SOAKAWAY (NTS)

REV:	DESCRIPTION:	BY:	DATE:

STATUS: ISSUE

gmcsurveys
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T: 07557 431 702
E: gmcsurveys@gmail.com

CLIENT: Mrs R Mcgaan

SITE: Site at Kahiwi Wood Califer, By Forres

TITLE: Soakaway Details

SCALE AT A4:	DATE:	DRAWN:	CHECKED:
NTS	APR19	GM	

PROJECT NO:	DRAWING NO:	REVISION:
0482	Appendix B	-

gmcsurveys
Surveys,Setting Out Civil Engineering Design

Certificate For Proposed Sub – Surface Soakaways Foul Water

Applicants Name: Mrs R Mcgaan
Address: C/O Cameron Architectural Design
Site Address: Site at Kahiwi Wood, Califer by Forres
Date of Tests: 5th April 2019
Weather Conditions: Dry/Clear

Percolation Test/Soakaway Sizing:

	1st	2nd	3rd	Mean
Date of Test	**05/04/19**	**05/04/19**	**05/04/19**	
	1920s 2340s	2700s 2520s	3480s 2940s	2700s 2600s
Average Soil Vp				**17.67s/mm**

Location: TP1 & TP2
Average Soil Vp: 17.67s/mm
PE: 5
Base Area (min): 22.09m^2

I hereby certify that I have carried out the above tests in full accordance with BS6297: 2007 + A1: 2008 and as described in Section 3.9 of the Scottish Building Standards Technical Handbook (Domestic).

Signed: G Mackintosh Gary Mackintosh BSc. Date:7th April 2019

Company: GMC Surveys, 34 Castle Street, Forres, Morayshire. IV36 1PW

gmcsurveys
34 castle Street
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gmcsurveys
Surveys,Setting Out Civil Engineering Design

Certificate For Proposed Sub – Surface Soakaways
Surface Water

Applicants Name: Mrs R Mcgaan
Address: C/O Cameron Architectural Design
Site Address: Site at Kahiwi Wood, Califer By Forres
Date of Tests: 5th April 2019
Weather Conditions: Dry/Clear

Trial Pit Test – Surface Water:

Depth of Excavation: 1.5
Water Table Present: No

Infiltration Test:

Location: INF01
Infiltration Test Zone: 0.5 – 1.1mbgl
Infiltration Rate (m/s): 2.85×10^{-5}
Contributing Area: $100m^2$ (indicative)
Soakaway Size: 5.0m x 2.0m x 0.8 below the invert of the pipe

I hereby certify that I have carried out the above tests in accordance with the procedures specified in BRE Digest 365:1991.

Signed: G Mackintosh Gary Mackintosh BSc. Date: 7th April 2019

Company: GMC Surveys, 34 Castle Street, Forres, Morayshire. IV36 1PW

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Forestry Commission Scotland
Coimisean na Coilltearachd Alba

Grampian Conservancy
Portsoy Road
Huntly
AB54 4SJ

Tel 01466 794542
Fax 01466 794986
grampian.cons@forestry.gsi.gov.uk

Conservator
James Nott

Mrs R McGaan
[redacted]

Date: 09/03/16

Dear Mrs McGaan

Approval of Woodland Management Plan
Name of Plan: Kahiwi Wood
File Reference: MPL310042

We hereby accept the management plan submitted to over operations on Kahiwi Wood. Please find enclosed a copy signed as approved for your records.

Please note that the FCS approval for the Plan begins on 09 March 2016 and expires 10 years after the approval date of this Plan on 09 March 2026.

Yours sincerely

[redacted]

For Conservator

Forestry Commission Scotland
Coimisean na Coilltearachd Alba

Management Plan

Please refer to the Management Plan Guidance note for advice on how to complete your management plan.

You must submit the Management Plan before any related Forestry Grant Scheme application. We will not approve your grant application until your Management Plan has been approved.

1. Details

Management Plan Details			
Management Plan Name:	**Kahiwi Wood**		
Business Reference Number:	230911	Main Location Code:	602/0084
Grid Reference: (e.g. NH 234 567)	NJ 08966/57307	Nearest town or locality:	Califer, Burgie near FORRES
Local Authority:		MORAY	
Management Plan area (hectares):		22.08 hectares	
List associated maps:		The maps appended (Appendix I) of accompanying Detailed Woodland Management Plan provide the following information: • Map 1 - Location • Map 2 - Compartment • Map 3 - Concepts • Map 4 - Felling & Thinning Plan • Map 5 - Restocking Plan.	

Owner's Details				
Title:	Mrs	Forename:	Rhoda	
Surname:	McGaan			
Organisation:	Rhoda M L McGaan		Position:	Owner
Primary Contact Number:	01667 451582		Alternative Contact Number:	07785717474
Email:	mcgaanoff@cqm.co.uk			
Address:	78 Beech Avenue			
NAIRN				
Postcode:	IV12 4SY		Country:	Scotland

Agent's Details					
Title:		Forename:			
Surname:					
Organisation:			Position:		
Primary Contact Number:			Alternative Contact Number:		
Email:					
Address:					
Postcode:			Country:		

Approval - to be completed by FCS staff:			
Management Plan Reference Number:	MPH3100412		
Plan Period: (ten years) (month/year)	From: 14/3/16	To: 14/3/26	
Operations Manager Signature:	[redacted]	Approval Date: (dd/mm/yyyy)	14/3/16

2. Woodland Description

Give information about the following:

- past management of the woodland
- current species and ages
- statutory and non-statutory constraints (e.g. designations, archaeological interests)
- existing or potential public access
- woodland protection

Use the Land Information Search to help you complete this section. For more detailed information on the Native Woodland Survey of Scotland use the FC Map Viewer.

2.1 Maps required

Provide maps to support your plan, as outlined in the guidance note. Please list all of the maps that you are including with your management plan in section 1 Management Plan Details.

2.2 History of management

Kahiwi Wood is located in Morayshire, approximately 4 miles south-east of the small town of Forres.

Ordnance Survey Grid Reference: NJ 08966/57307

A Location Map is appended (Map 1)in The Accompanying Detailed Woodland Management Plan.

Kahiwi Wood is a privately-owned forestry plantation; which, under its previous ownership, formed part of a large mixed estate's commercial forestry holding. The area of woodland, extending to 22.08 hectares, forms part of the extensive contiguous block of predominantly commercial conifer forestry located in the mid reaches of Morayshire. This includes a number of private estates and large forest units commercially managed by Forestry Commission Scotland (Grampian Conservancy)

Surrounding the woodland block is prime arable agricultural land on the lower reaches to the north; and to the south, mixed arable farms and estates with riparian linkages and wooded fringes.

Kahiwi Wood is located towards the western boundary of the wider afforested area. The north, east and west boundaries of the woodland is formed by conifer plantation; the south boundary is formed by the boundary with the unclassified public road running west-east.

The local landscape is classified as 'Rolling Farmland and Forests' as defined in

'The Moray and Nairn Landscape Assessment'- SNH commissioned report (1998). This categorisation is found on the foothills of higher ground prevalent to the south in upland Moray. This landscape sits in the transition between the open fertile coastal plain of coastal farmland and the expansive open uplands.

The current woodland,Kahiwi Wood, previously known as South West Corner Burgie Wood, encompasses varying age-classes and species, was planted largely between 1970 and 1990 by Burgie Estate. Older parts of the Scots pine component have been subject to previous thinning but no follow up operations have been undertaken. Some beat up planting with Scots pine has been implemented during the last 5 - 8 years on areas where the initial Sitka spruce establishment has failed.

The transfer of ownership from Burgie Estate to Mrs R. McGaan took place during summer 2015.

No other details of historic management are currently available, although historic mapping provides an indication that the area has been afforested since at least the 19th Century.

Operational forest management is to be implemented entirely on an internal basis by the owner and associated family members. The labour intensive low impact silvicultural regime to be adopted throughout the woodland will create a significant presence on site by the owner and family members. This will in turn assist in deer management and the overall security of the woodland. When professional assistance is required it will be instructed where applicable and appropriate.

Kahiwi Wood is a planted mixed coniferous woodland, with a minor broadleaf component.

There are four main age-classes, ranging from around 45-50 years (P(1960-75) to 25 years (P1990). A small area of replacement Sots pine (SP) has also been implemented around 5 years ago in a section of failed Sitka spruce.

Sitka spruce (SS) and Scots Pine are the predominant species. Other species include European larch (EL), Noble fir (NF) and mixed broadleaves (MB), including Birch, Holly, rowan and willow. A complex mosaic of small glades exists in places resulting from planting failures (OG) – this aids the diversity present in the age structure of the woodland as a whole.

The Wind Hazard Classification for the woodland is relatively low, which will not restrict thinning. Soils are equally windfirm.

Although Kahiwi Wood is primarily a block of conifer plantation, there exists a pleasing diversity of age-class which provides scope for development of positive conservation and biodiversity enhancement to be incorporated into future management planning.

The woodland habitat therefore provides good potential habitat for encouraging a broad range of native mammals and bird species to both reside on and visit the

site.

2.3 Species and age

The Woodland Management Unit has been allocated into management units with common species and stocking characteristics (Map 2 in Detailed Woodland Management Plan).

Management Unit 1 - 5.73 hectares

- Mid rotation Scots pine ca. 40-45 years old, with scattered larch and mixed broadleaves - birch, rowan, holly.
- Some existing glades, windblown in origin;
- tree form average for age and stocking density – good final logging potential with implementation of appropriate sensitive management.
- Peridermium Pini (resin top disease) is fairly widespread (see Section 5.4, below) - disease controllable by implementation of sensitive thinning.
- Standing deadwood present - for retention.
- Grasses predominate, with some gorse incursion.
- Heather and blaeberry present in places - management to aid expansion by micro-management intervention.

Management Unit 2A - 5.66 hectares

- Matrix of Scots pine, interspersed with scattered individual stems and groups of Sitka Spruce. Ca 22-25 years old.
- Scattered groups and individual stems of pinewood-compatible broadleaves, with scattered juniper present.
- NVC (National Vegetation Classification) W18 type woodland refers.

Management Unit 2B - 5.15 hectares

- Matrix of Scots pine, interspersed with scattered individual stems and groups of Sitka spruce. Ca 22-25 years old.
- Scattered groups and individual stems of pinewood-compatible broadleaves, with scattered juniper present.
- Slow establishment - average of around 7 years or so in development behind compartment 2a - due to poorer soils
- Crop smaller than Management Unit 2A
- More glades are present than in Management Unit A.

Management Unit 3A - 1.33 hectares

- Matrix of planted Sitka spruce, with scattered broadleaves under current suppression by the conifer matrix. Approximately 25 years old.
- Fairly fertile area. • Closed spruce canopy has eradicated most ground vegetation
- Grasses and herbs would more than likely re-establish if spruce crop were to be removed.

Management Unit 3B - 2.02 hectares

- Spruce establishing with minor areas of failure - as such, mosaic of small, interconnected glades present.
- Heather and associated mosses predominate.

Management Unit 3C - 0.73 hectares

- Significant failure of Sitka spruce resulting in subsequent beating up with Scots Pine on cultivated mounds.
- Vermin browsing has reduced Scots pine stocking.
- Heather and associated mosses predominate.

Management Unit 4 - 1.47 hectares

- Mixed conifer planting Sitka spruce and noble fir in equal proportion. Other species present include individual broadleaves, mainly birch and larch with secondary oak and ash. A minor component of juniper is also present.
- Planted conifers, approximately 25 years old.
- Trees are in good health, with full stocking depleted by small glades throughout. The western watercourse corridor fringe is largely clear of conifer growth.
- The existing mixture of conifers present is now rarely planted. Noble Fir is a species with low timber value, due to its brittle wood fibre composition. Subjectively, however, it forms a handsome, characterful tree worthy of retention. It is windfirm, generally of constant upright form, and its large cones are favoured by red squirrel as a food source.
- The predominant ground flora is heather, with grasses replacing in denser conifer groupings.

2.4 Constraints and designations

Use of the Kahiwi Wood is currently limited to minor woodland management operations implemented by the owners and their immediate family members. No other usage, such as recreational use by members of the public, is known to take place. Recreational horse riding, however, does take place on roads and tracks in the woodland blocks adjacent, as does deer control.

Shooting rights are held by the woodland owner and a programme of sustainable deer control will be implemented by a fully qualified and licensed deer controller. Deer cull returns are required to be notified under statute to Scottish Natural Heritage on an annual basis.

There are no existing grants or licences currently apportioned to the Woodland.

(Source: FCS Land Information Search [2015]).

No formal designations or classifications are known to affect the woodland area.

(Source: Scottish Natural Heritage [2015]).

Health & Safety

All activities that take place within Kahiwi Wood are subject to risk assessment and site inspection processes, in line with current Health & Safety Policy.

Standing trees adjacent to public roads will be subject to regular health inspections.

Constraints

Constraints include: proximity to paths and highways, proximity to overhead electricity cables.

Illegal Behaviour

Illegal behaviour is not considered to be at a high enough level to pose a threat to the woodland. Any material found present on site is quickly uplifted and disposed off appropriately. Some minor fly-tipping takes place, as does some littering. It should be noted however that illegal behaviour has been recorded on the neighbouring woodland during the last twelve months with stacked timber being stolen from site.

Pests & Diseases

There are no current notifiable pests or diseases knowingly present within Kahiwi

Wood. However further inspection and on-going monitoring will take place on a regular basis to assess the condition of the trees within the wood for any signs of damage or disease. Diligence with bio-security and hygiene when visiting the wood will be implemented as a matter of routine.

2.5 Public access

There are no classified rights of way or known permissive paths located within Kahiwi Wood. The woodland block is also not currently served by any formal forest tracks or road. Source: FCS Land Information Search (2015).

Access to the woodland travelling from Forres is initially via the B9010 and then via the unclassified public road signposted for the well-known local visitor attraction - Califer Viewpoint. Direct access to the woodland block is from the unclassified road approximately 500 metres east of the viewpoint entrance, via an existing formed hard standing, a padlocked barrier is in place.

The location of the woodland is close to large significant areas of woodland with extensive public access provision; for example, the Forestry Commission sites at Culbin Forest and Monaughty Forest. It is not therefore intended to encourage access.

However, under the Land Reform (Scotland) Act (2003), the general public have a right to freedom of access onto private ground as long as this is undertaken responsibly, as per outlined within the Scottish Outdoor Access Code.

2.6 Woodland Protection

Plant Health (including tree health and invasive or noxious plants)

The forest offers conifer stands of mixed species with variations in age and size classes. Small areas of planted and sporadic naturally regenerating broadleaves contribute to the woodland structure and its biodiversity. There is limited open ground,restricted to predominantly narrow rides and the public roadside verge. Randomlyvarying establishment of Sitka spruce has facilitated the development of a diversity of tree sizes, maintained within a matrix of small open glades.

There are no current notifiable pests or diseases knowingly present within Kahiwi Wood. However further inspection and on-going monitoring will take place on a regular basis to assess the condition of the trees within the wood for any signs of damage or disease.

The woodland is categorised as a coniferous plantation habitat type, as per the East Scotland Local Biodiversity Action Plan (LBAP) which covers Aberdeen, Aberdeenshire and Moray. Within this habitat type a number of UK Biodiversity Action Plan Priority Species are potentially likely to be present, in or within the environs of the woodland. Woodland management operations implemented will take full account of the conservation and enhancement of all species present.

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Deer, Livestock and other mammals

Potential suitable habitats for several protected species exist throughout the woodland.

For example, mammals such as red squirrel (Sciurus vulgaris); pine marten (Martes martes); badger Meles meles), and Scottish wildcat (Felis silvestris silvestris); bird species such as black grouse (Tetrao tetrix), capercaillie (Tetrao urogallus) and Scottish cross-bill (Loxia curvirostra); plant species such as Juniper (Juniperus communis); twinflower, various pinewood orchid and wintergreen spp.

Capercaillie and grouse are known to lek on and in woodlands and moorland in the surrounding district.

A comprehensive walkover survey of relevant areas will be undertaken prior to any woodland operations that could cause disturbance or damage. Appropriate measures will be put in place for any constraint discovered.

Further mammals have also been noted as present within Kahiwi Wood and include: roe deer, rabbits, hare, fox, stoat and weasel. No systematic information is currently available on small mammals such as voles, shrews, and field mice, however they have been observed and most probably support the presence of owls and other raptors.

A wide range of woodland dwelling birds are present within the Kahiwi wood. Common passerine species present include: song and mistle thrush, tree sparrow, chaffinch, greenfinch, wood pigeon, siskin, and various titmice spp. Corvids present include jackdaw, jay and various crow spp. Other woodland bird species which may inhabit the wood could include great spotted woodpecker, wild pheasant and woodcock. The woodland will also potentially support a range of raptors, a number of which may be classified as protected species

A range of ground flora is present within Kahiwi Wood, predominantly consisting of a mosaic of heather, blaeberry and grasses; with heather being progressively suppressed through lack of light by the closing canopy. Gorse spp., broom and whin, have also established in the more open western

sections. Woodland flowers are also present, and include honeysuckle and woodland orchids. No formal vegetation survey has been carried out within the woodland.

Woodland management operations implemented will take full account of the conservation and enhancement of native flora present, and specific measures will also take place to remove and eradicate invasive weeds and scrub growth.

Grey Squirrels

No grey squirrels have been found in the woodland

Water & Soil (soil erosion, acidification of water, pollution etc.)

Geology and Soils - The predominate underlying soils are sedimentary in origin - Till Diamication (pale brown, fine grain sand) with an underlying bedrock of Grampian Group Psammite and semipelite. Source: British Geological Survey, Geology of Britain Viewer.

The woodland lies on generally gently sloping ground of northern aspect with no distinct geological features.

Topography, Aspect and Elevation - The area is of even gradient and occupies a gentle northern aspect. The elevation of the Woodland Management Unit (WMU) ranges from 200metres in the south to 100 metres in the north above sea level.

Exposure is moderate to high in relation to local topography.

Hydrology - No major watercourses are located within or nearby the woodland. The River Lossie valley is located five kilometres to the south and east.

The woodland is a naturally free-draining site and has benefited from previous conventional single furrow ploughing cultivation - a system of open drains is present. Located towards the eastern boundary is a small drainage burn. This is free-draining and provides positive environmental diversity to the woodland block.

Environment (flooding, wind damage, fire, invasive species etc.)

Windthrow Hazard Classifications indicates that the woodland lies in an area estimated to range from 3 to 5 (using the SAMS scoring system). There are maturing sections of the wood which are now considered susceptible to windblow and this is demonstrated by the small patches of damage present towards the western boundary.

No non-native species (other than planted conifers) have as yet been identified as being present within Kahiwi Wood. Should any such species, whether floral or faunal, be identified, they will be dealt with swiftly to maintain the integrity of the woodland in line with the aims and objectives of management.

Deadwood is an important habitat and contributes significantly to biodiversity, and its maintenance with woodlands is an UK Woodland Assurance Standard compliance requirement. The management of Kahiwi Wood will therefore allow for retention of significant amounts of deadwood. Specifically, deadwood (both standing and fallen) will be retained wherever possible.

Climate Change Resilience (provenance, lack of diversity, uniform structure)

Climate

The following data for the approximate location is extracted from UK mapped averages for between 1981 and 2010.

Source: Met Office,http://www.metoffice.gov.uk/public/weather/climate):

§ Mean temperature between 9 and 10 °C

§ 60 to 80 days of air frost

§ 125 to 150 days of ground frost

§ 10 to 20 days snow lying.

§ 1200 to 1300 hours sunshine duration

§ 700 to 800 millimetres of rainfall

§ 130 to 140 days of rainfall (=>1 mm)

§ Mean wind speed between 8-10 knots

3. Vision and Objectives

Tell us how you intend to manage the woodland in the long term and your goals for its development.

3.1 Vision

Describe your long term vision for the woodland(s).

The management plan for Kahiwi Wood aims in its objective to restructure over the longer term 22.08 hectares of woodland, planted with purely commercial aims, into a more biodiversically sustainable asset that is more acceptable to both the environment and local wildlife.

The main aims for Kahiwi Wood are to gradually restructure the woodland over the longer term, using a labour intensive sympathetic low impact silvicultural regime; and to develop a biodiversically sustainable asset, which is sufficiently robust to service small scale sustainable timber production.

The woodland block carries varying growth patterns that can be utilised to advantage to maximise the potential for smaller-scale harvesting to be employed, plus permit in general a more gradual, 'micro-approach' to management

implementation of inputs.

The Woodland Management Unit (WMU) area has been allocated into submanagement units with common species and stocking characteristics. These allocations should also advance the facilitation of possible Forestry Commission grant aid assistance under the auspices of the Scottish Rural Development Programme, if so desired.

The transition from predominantly commercial management aims, as exist at present, towards fulfilment of the outlined objectives above is anticipated to occur progressively over the period of this plan and that of its successor, i.e. 20 years.

The long-term management aims for Kahiwi Wood are:

§ To manage the woodland on a natural, sustainable basis with a perpetuating age class diversity encouraged.

§ To prioritise native species in keeping with the environmental attributes of the site.

§ To provide structural and species diversity that safeguards and enhances the aesthetic, environmental and wildlife value of the area.

§ To encourage the on-site habitat development of indigenous flora and fauna.

§ To maintain the economic viability of the woodland.

§ To maintain and enhance the amenity interest.

§ To maintain and enhance the landscape interest.

§ To work with the latest FC guidelines and nature conservation recommendations.

3.2 Management objectives

Give your objectives of management and also how you will manage the woodland sustainably. Your objectives should be specific and you should also be able to measure their outcomes.

No.	Objectives (including environmental, economic and social considerations)
1	To produce a range of timber products which will meet market requirements on a sustainable basis.
2	To develop a relatively steady, modest timber revenues on a micro-basis to minimise adverse disturbance to woodland environment.
3	To ensure satisfactory development of the stands of trees by regular selective thinning.

No.	Objectives (including environmental, economic and social considerations)
4	To maintain habitats for wildlife and extend and introduce areas of mixed native broadleaves species and open ground.
5	To implement monitoring of key species and impact of management activities. To minimise the use of herbicides and insecticides. The removal of any invasive exotic woodland species if in conflict with environmental objectives. To comply with the UK Forestry Standard and UK Wood Assurance Standard in all forestry planning and operations.

4. Stakeholder Engagement (if required)

This may be required depending on the work you intend on carrying out in the woodland and the constraints or designations that have been identified.

Individual/ Organisation	Date contacted	Date feedback received	Response	Action

5. Analysis and Management Strategy

Analyse the information from the previous sections and identify how to make best use of your woodland and its resources to achieve your objectives.

5.1 Constraints and Opportunities

Using the table below analyse any issues raised or relevant features within your woodland and record the constraints and opportunities.

Feature/Issue	Constraint	Opportunity
REFER SECTION 8.2 TO	8.7.7 OF ATTACHED	DETAILED WOODLAND MANAGEMENT PLAN

Additional detail:		

5.2 Management Strategy

Following your analysis, provide a broad statement describing your management strategy. Consider all aspects (economics, access, biodiversity, landscape) and pay particular attention to your silvicultural strategy for meeting your management objectives.

This management plan aims in its objective to provide the operational framework by which woodland restructuring can be facilitated over the medium and longer term.

The 22.08 hectares identified as Kahiwi Wood is a stand-alone management unit, initially planted with a purely commercial aims. Under new ownership however, the main focus of woodland management is to gradually and sensitively diversify the existing woodland via its restructuring.

In facilitating this goal, Kahiwi Wood carries varying growth patterns that can be utilised to advantage to maximise the potential for smaller-scale harvesting to be employed, thus permitting a more gradual, 'micro-approach' to management implementation of inputs.

In view of the wide-ranging management objectives listed in 3.2 above, the management prescriptions for sustainable woodland management for the initial 10 year management term period, 2016 – 2026, are detailed below.

The transition from predominantly commercial management aims, as exist at present, towards fulfilment of the outlined objectives above is anticipated to occur progressively over the period of this plan and that of its successor, i.e. 20 years.

6. Management Proposals

Tell us the management operations you intend to carry out over the next 10 years to help meet your management objectives for the woodland.

Central to the management strategy for Kahiwi Wood is the intention to implement from an early stage in the first term of management planning, a Low Impact Silvicultural Policy (LISS) throughout the entirety of the management unit. This offers an alternative to the more intrusive block clearfelling regimes prevalent in purely commercial forest units.

Detailed within Table A, Appendix I of accompanying Detailed Woodland Management Plan, is a sub-compartment summary of these proposed operations.

Felling, thinning and restructuring proposals are outlined in Maps 4 & 5 in the accompanying Detailed Woodland Management Plan.

Kahiwi Wood

Business Plan

Executive Summary

Kahiwi Wood is a 20-hectare planted mixed coniferous woodland, with a minor broadleaf component, located in Morayshire, approximately 4 miles south-east of the small town of Forres. Ordnance Survey Grid Reference: NJ 08966/57307. Kahiwi Wood is located towards the western boundary of the wider afforested area. The north, east and west boundaries of the woodland is formed by conifer plantation; the south boundary is formed by the boundary with the unclassified public road running west-east. The transfer of ownership from Burgie Estate to Mrs R. McGaan took place in June 2015.

There are four main age classes of timber, ranging from around 45-50 years (P (1960-75) to 25 years (P1990).

This main aims for Kahiwi Wood are:

to be gradually restructure the woodland over the longer term,

using a labour intensive sympathetic low impact silvicultural regime;

and to develop a biodiversically sustainable asset, which is sufficiently robust to service small scale sustainable timber and firewood production with a move to higher value added products in the medium term (for example wood turning).

The woodland block carries varying growth patterns that can be utilised to advantage to maximise the potential for smaller-scale harvesting to be employed, plus permit in general a gradual, ‘micro-approach’ to management implementation of inputs.

Restructuring of Kahiwi Wood commenced in 2016 in line with the approved detailed forestry plan attached as annex 1.

The transition from predominantly commercial management aims, as exist at present, towards fulfilment of the outlined objectives above is anticipated to occur progressively over the period of this plan (10 years) and that of its successor, i.e. 20 years.

The long-term management aims for Kahiwi Wood are:

To manage the woodland on a natural, sustainable basis with a perpetuating age class diversity encouraged.
To prioritise native species in keeping with the environmental attributes of the site.
To provide structural and species diversity that safeguards and enhances the aesthetic, environmental and wildlife value of the area.
To encourage the on-site habitat development of indigenous flora and fauna.
To maintain the economic viability of the woodland.
To maintain and enhance the amenity interest.
To maintain and enhance the landscape interest.
To work with the latest FC guidelines and nature conservation recommendations.
To produce a range of timber products which will meet market requirements on a sustainable basis.

To develop a relatively steady, modest timber revenues on a micro-basis to minimise adverse disturbance to woodland environment.
To ensure satisfactory development of the stands of trees by regular selective thinning.
To maintain habitats for wildlife and extend and introduce areas of mixed native broadleaves species and open ground.
To implement monitoring of key species and impact of management activities. To minimise the use of herbicides and insecticides. The removal of any invasive exotic woodland species if in conflict with environmental objectives.
To comply with the UK Forestry Standard and UK Wood Assurance Standard in all forestry planning and operations.
This management plan aims in its objective to provide the operational framework by which woodland restructuring can be facilitated over the medium and longer term.
The 22.08 hectares identified as Kahiwi Wood is a stand-alone management unit, initially planted with a purely commercial aims. Under new ownership however, the main focus of woodland management is to gradually and sensitively diversify the existing woodland via its restructuring.

Operation forest management is to be implemented entirely on an internal bais by the owner and associated family members. The labour intensive low impact silvicultural regime to be adopted throughout the woodland will create a significant presence on site by the owner and family members in line with best European practice managing small woodlands and will create minimal disturbance to the floral and fauna of the wood

Financial Summary (see annex)

The wood has been neglected for many years and requires considerable remedial work in the short-term clearing felled and windblown timber which will give an initial injection of revenue. The clear-fell of the Sitka Spruce (see forestry management plan) will also give an initial injection of revenue, thereafter income form thinning and firewood will be steady.

The market has been tested and all available production can be sold locally as the cost of transporting timber long distances makes it un-economic at this level. All the wood recovered so far has been sold and there continues to be satisfactory enquiry levels.

See annex two for a summary ten-year financial projection in line with the forestry management plan. The costs in the plan assumes the owner is based on-site thereby improving productivity and lowering the carbon footprint of the wood. It is estimated that revenue would be reduced by up to 25% (travelling time) if the wood had to be serviced from the owners existing location and expenses would not decrease. This makes the project economically margin at best and increases the risk profile significantly.

The owner does not require any financial contribution from the wood in the short/medium term as the family has other earned income and the necessary capital expenditure has already been made to harvest and process the timber.

Risk Summary

There are few financial risks as the income from the wood is not require to fund/make a contribution to the owners living expenses. If turnover is lower than

expected or costs are higher than expected there is a significant margin of safety built into the projections. This coupled with the fact that the product does not go “off” (in fact the product increases) the longer it is not harvested.

The market for timber is strong at present with a number of significant biomass projects in the local area (Diageo, Pluscarden Abbey, Gordonston School) meaning demand will remain strong for large scale production FSC woods leaving the small local suppliers to satisfy local demand for top-up biomass and firewood.

The principal risk to the business is criminal activity, theft of firewood and/or equipment. The neighbour’s (Ian Lawson) wood has suffered theft of firewood in the last couple of years and both the local and national press continuously run stories of equipment and fuel being stolen from rural locations. Security is a concern and ideally there should be on-site presence at all times.

Labour input required

The forestry plan in appendix 1 describes the ongoing operational activity to be completed by year. Using those activities as a guideline the number of man hours required per annum is noted on the financial projections. There is sufficient activity for one to one and half full-time equivalents each year of the ten-year plan. At present the owner spends between 2 and 3 hours travelling to and from site which is time that could be invested in the wood and also increases the carbon footprint of the wood. This when considered with the security aspect means that to be commercially viable the owner should be based on site.

Conclusion

The owner is committed to returning the wood to a natural, vibrant and diverse ecosystem of native timber and fauna which functions commercially. The labour intensive low impact silverculture approach will achieve this, however, the approach requires the owners presence on site.

Kahiwi Wood

Ten Year Financial Projection

Year to 31 December	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Sales											
Roundwood	28,000	8,000	8,000	8,000	12,000	8,000	8,000	8,000	8,000	12,000	8,000
Firewood	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Other (holly, branches etc)	500	1,000	2,000	2,000	2,000	2,000	3,000	3,000	3,000	3,000	3,000
Higher added value items	0	0	0	2,000	3,000	5,000	7,000	9,000	12,000	12,000	12,000
	38,500	19,000	20,000	22,000	27,000	25,000	28,000	30,000	33,000	37,000	33,000
Cost of sales											
Transport	7,700	3,800	4,000	4,000	4,800	4,000	4,200	4,200	4,200	5,000	4,200
Cutting expenses	3,850	1,900	2,000	2,000	2,400	2,000	2,100	2,100	2,100	2,500	2,100
Conversion costs higher value	0	0	0	800	1,200	2,000	2,800	3,600	4,800	4,800	4,800
Replanting costs	7,000	2,000	2,000	2,000	3,000	2,000	2,000	2,000	2,000	3,000	2,000
	18,550	7,700	8,000	8,800	11,400	10,000	11,100	11,900	13,100	15,300	13,100
Gross profit	19,950	11,300	12,000	13,200	15,600	15,000	16,900	18,100	19,900	21,700	19,900
Overheads											
Professional fees	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Repairs & maintenance	3,850	1,900	2,000	2,200	2,700	2,500	2,800	3,000	3,300	3,700	3,300
Insurance etc	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
	5,850	3,900	4,000	4,200	4,700	4,500	4,800	5,000	5,300	5,700	5,300
Net profit	14,100	7,400	8,000	9,000	10,900	10,500	12,100	13,100	14,600	16,000	14,600
Labour hours required forestry management											
harvest timber	640	160	160	160	160	160	160	160	160	160	160
selective thin 1	320	0	0	0	0	320	0	0	0	0	320
replanting/maintenance	320	320	320	320	320	320	320	320	320	320	320

selective thin other	0	160	80	80	80	80	160	80	80	80	80
selective thin exotics/gorse	0	160	160	160	160	160	160	160	160	160	160
other	320	640	640	640	640	640	640	640	640	640	640
	1,600	1,440	1,360	1,360	1,360	1,680	1,440	1,360	1,360	1,360	1,680
Labour hours required production											
Firewood production	200	200	200	200	200	200	200	200	200	200	200
Other	10	20	40	40	40	40	60	60	60	60	60
value added	0	0	0	20	30	50	70	90	120	120	120
	210	220	240	260	270	290	330	350	380	380	380
TOTAL	1,810	1,660	1,600	1,620	1,630	1,970	1,770	1,710	1,740	1,740	2,060

Dunvegan
Binsness
FORRES
IV36 2SP

01 July 2019

FAO Shona Strachan
Moray Council
Elgin
Moray
IV30 1BX

Your ref: 19/00452/APP

Dear Shona

Proposed erection of dwelling at Kahiwi Wood, Califer Hill, Forres

In relation to your email to our architect (Scott Cameron) dated the 24th of June 2019 and previous email from David Hay at Scottish Forestry dated the 7th of June 2019, I would like to provide some more detail in support of the proposal.

Whilst I appreciate planning policies E4 and ER2 presume against development which result in the loss of woodland, I feel this case is unique in its nature, as the whole premise of the proposal is to assist with the on-going forestry work at Kahiwi wood per my approved Forestry Commission 10 year plan (submitted via email as supporting documentation to my application) and my associated Felling and Thinning licences. I am not looking for a development plot and have absolutely no desire for such in my woodland.

My whole philosophy for the woodland is to maximise its biodiversity, while still achieving an economic low impact silviculture forestry operation. This is only achievable through a highly labour intensive and small machinery based operation by myself, my husband and other family members.

All of my felled timber is sold seasoned to Nairn Fuels for them to process and the current agreement is that it is stacked and seasoned on my site as they have limited yard area for soft wood storage.

The requirement for full time presence on site is not only critical for the running of the business but also for security. I submitted a pre-planning application in January 2019 for a 40 metre square wooden lodge to see if there would be any potential for us to live on and work the wood per our approved forestry plan low impact silviculture regime. The philosophy behind this being to reduce our carbon footprint and maximise our available working hours through the elimination of the current two hour daily travelling time to and from the woodland. Further having expensive equipment on site as well stacked felled trees poses an extreme security risk. If there is no permanent presence on site there is a high risk of theft which would have a substantial effect on the economic running of the business should equipment or timber be stolen. Felled timber has been stolen from nearby woodlands in the past, additionally fireworks were let off in our entrance track on Hogmanay 2019.

I received a positive response to my preplanning application from Moray Council Planning in February 2019. Hence decided to lodge a full application which was submitted by our architect in April 2019. As shown on the supporting drawings (reference CAD-142) the proposal is not line with a standard house seeking permission. There is no grassed private garden space etc as the lodge is proposed to sit in a hardcore yard where it can be an integrated part of the working space.

The hard stand area (David Hay saw) was and still is cleared for trailer turning and scots pines seasoning stands to accommodate the thinning of area 2a and 2b per my woodland plan, which I was due to undertake this spring and summer. However events took a turn for the worse in February as I was diagnosed with a severe hip problem relating to my ten year old metal on metal hip replacement, which had been slowly dissolving my pelvis and femur and x-rays at the end of February revealed that I had practically no bone left to support the joint. I was told by my consultant to cease all exercise and await a major hip revision. This took place in early May resulting in 5 hours of major surgery and major rehab to get back on my feet and I will not be back to woodland operations until January 2020. My architect submitted the full planning application in April and in reality had very little input from myself as I have been hors de combat and my husband has been looking after me full time and all the while trying to service his accountancy business. Our long term strategy is to wind down the existing accountancy business and to become full time foresters at Kahiwi Wood

I do not want a development plot or anything along such lines at my woodland, which I value too highly as native woodland and wish to continue to work it to maintain and enhance where ever possible its wonderful biodiversity.

I have always applied for prior notification approval for any works at my woodland, from the initial entrance track repair to our forestry storage shed and our approved but not yet erected composting toilet and open bay wood store. I was unaware that I needed prior notification approval to extend the hardstand for our trailer turning and wood stacking stands and apologise if I have been errant with this.

I have noted the issue of compensatory planting and as I do not own any other pieces of land which are not already woodland I am willing to accept the cost of £1200 per 0.1 hectare as a financial contribution.

In addition to this to reassure Moray Council of my intentions I would be happy for any dwelling to be tied to the woodland via a section 75 to ensure it cannot be sold off as a separate entity.

I hope the details noted above as well as all the supporting information submitted as part of the planning application can be taken into account and reviewed.

I have sent an email to David Hay regarding the above, however he is out of his office until 16th July so I have not had a chance to date to discuss any of the details etc with him

Yours sincerely

[redacted]

Mrs Rhoda (Ray) McGaan

Low Impact Silviculture Woodland Management

Tractor with winch attached and timber bogey in open bay of shed

All smaller scale equipment stored in secure bay of shed

Road legal towing trailer in background as all other machinery only licensed for use in woodland.

Low Impact Silviculture Woodland Management

Tractor with winch on internal track ready to pull timber

Tree felled snedded and cut into 2-3metre lengths for extraction by winch

Low Impact Silviculture Woodland Management

Timber lengths chained together and chain fed through cone and attached to winch cable for towing.

Timber length being towed to tractor

This methodology ensures minimal impact on forest floor flora from timber extraction but sufficient light disturbance to help promote self regeneration of scots pine trees

Low Impact Silviculture Woodland Management

Timber lengths manually loaded onto bogey for transport via internal tracks to seasoning stand in yard area

Low Impact Silviculture Woodland Management

Timber lengths manually unloaded onto seasoning stand in yard area

Seasoning stands have base of sitka spruce lengths and are covered with tarpaulins to ensure lengths remain dry to season properly

Kahiwi wood boundary
Forestry compartment boundary

RumRoy Ltd
Forestry, Land & Environmental Management
E: amy@rumroy.co.uk Tel: 01309-651260

Kahiwi Woods

Woodland Compartments

Project: Burgie_Woods	N
Scale at A3: 1:2,500	
Date: 08/12/2015	

1
5.73 ha

2b
5.15 ha

2a
5.66 ha

3c
0.73 ha

3b
2.02 ha

3a
1.33 ha

4
1.47 ha

50 0 50 100 m

308600 308800 309000 309200 309400

857800 857600 857400 857200

Kahiwi wood boundary
Forestry compartment boundary

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Kahiwi Woods

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1
5.73 ha

2a
5.66 ha

2b
5.15 ha

3a
1.33 ha

3b
2.02 ha

3c
0.73 ha

4
1.47 ha

Drain
Issues
Juniper
Reservoir
Drain
Drain
Drain
Greens of Burgie
Mast

50 0 50 100 m

308600 308800 309000 309200 309400
857800 857600 857400 857200

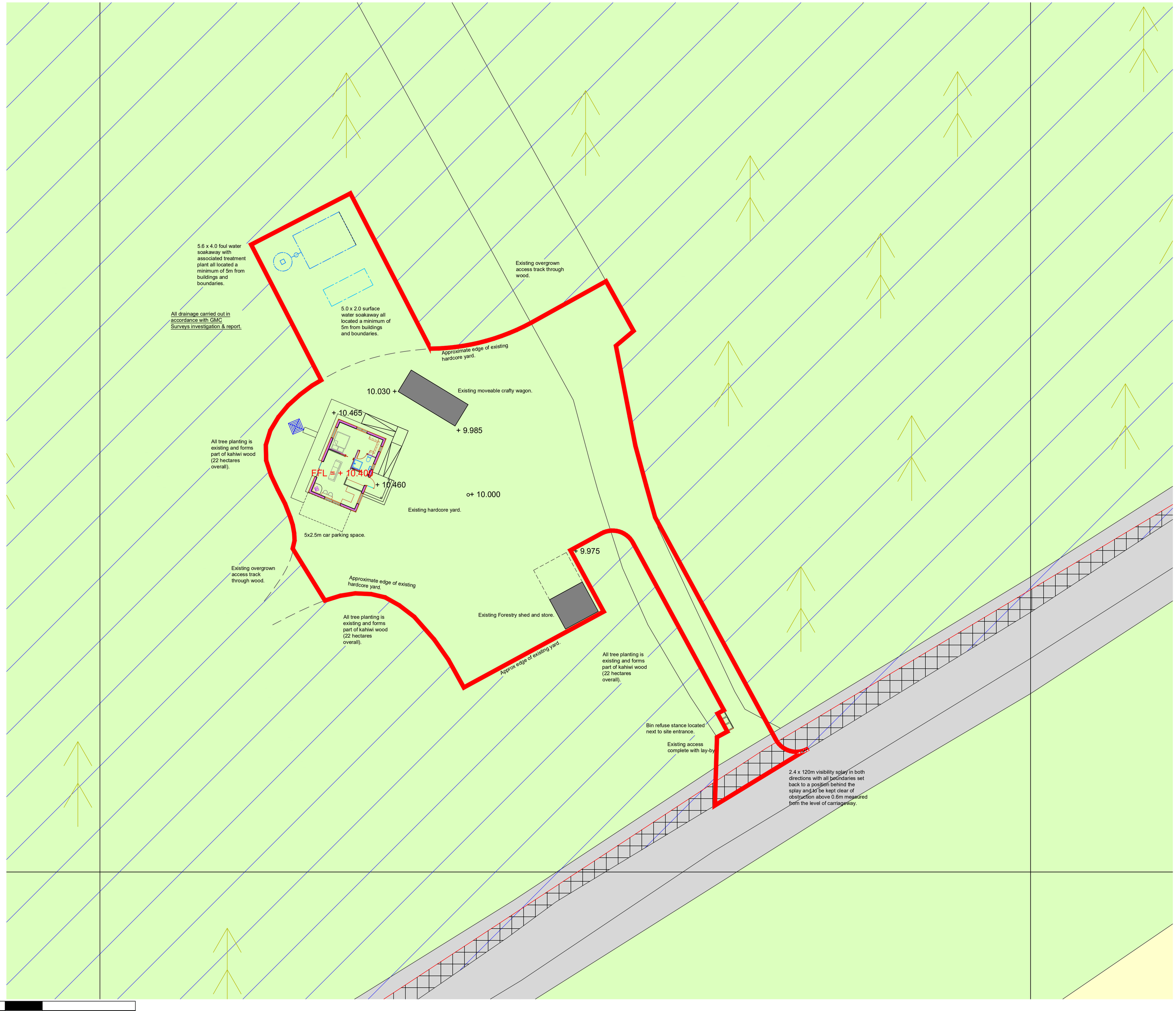
CAMERON
ARCHITECTURAL
DESIGN

Proposed dwelling at,
Kahiwi Wood,
Califer Hill, for
Mr & Mrs McGaan

Proposals

1:200 @ A1

CAD-142-001 Rev C



Site plan 1:200

0 2 4 6 10 20
SCALE 1:200 m

CAMERON
ARCHITECTURAL
DESIGN

Proposed dwelling at,
Kahiwi Wood,
Califer Hill, for
Mr & Mrs McGaan

Loc plan

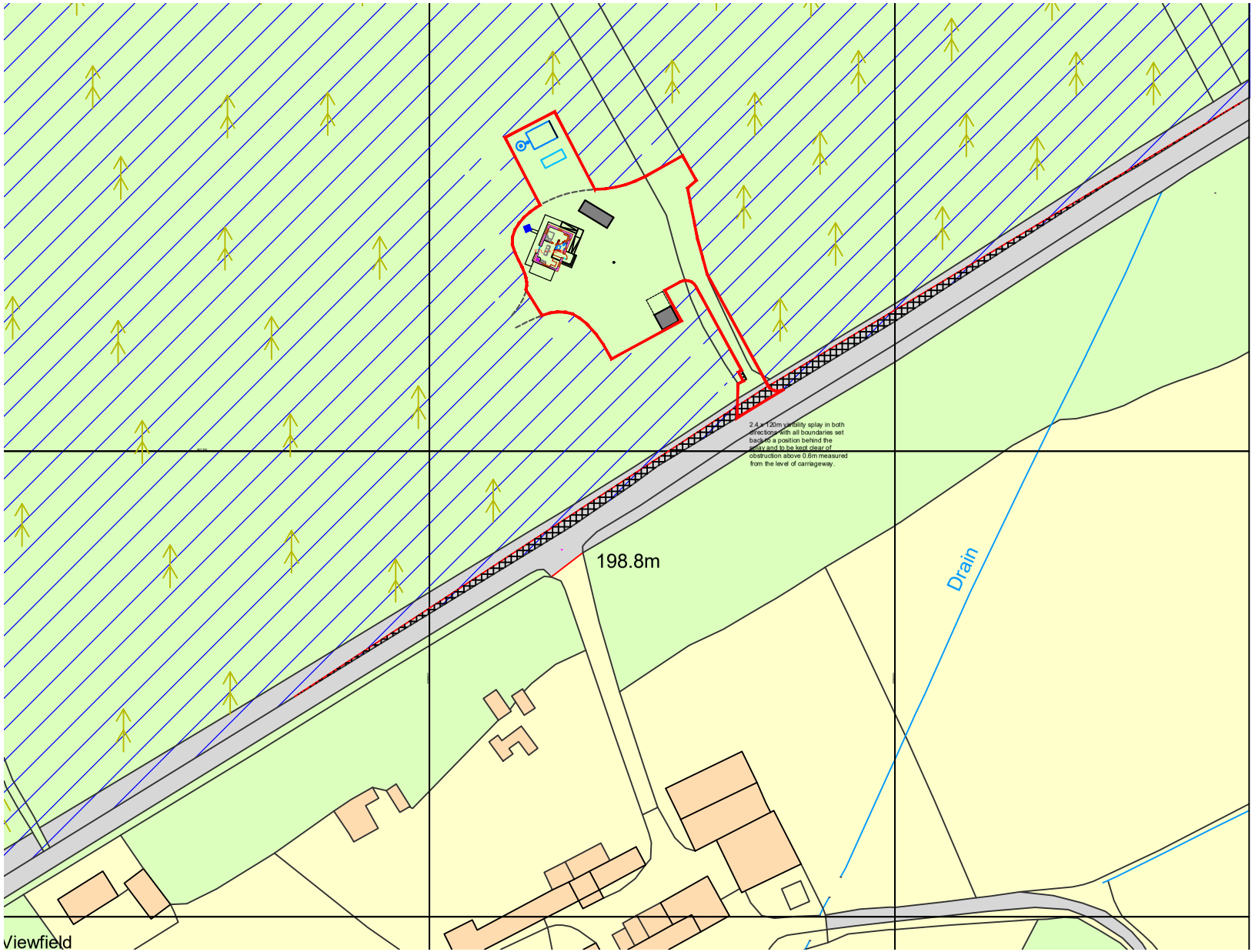
1:1250 @ A4

CAD-142-002 A

N

W E

S



Location plan 1:1250

0m 25m 50m 100m 150m

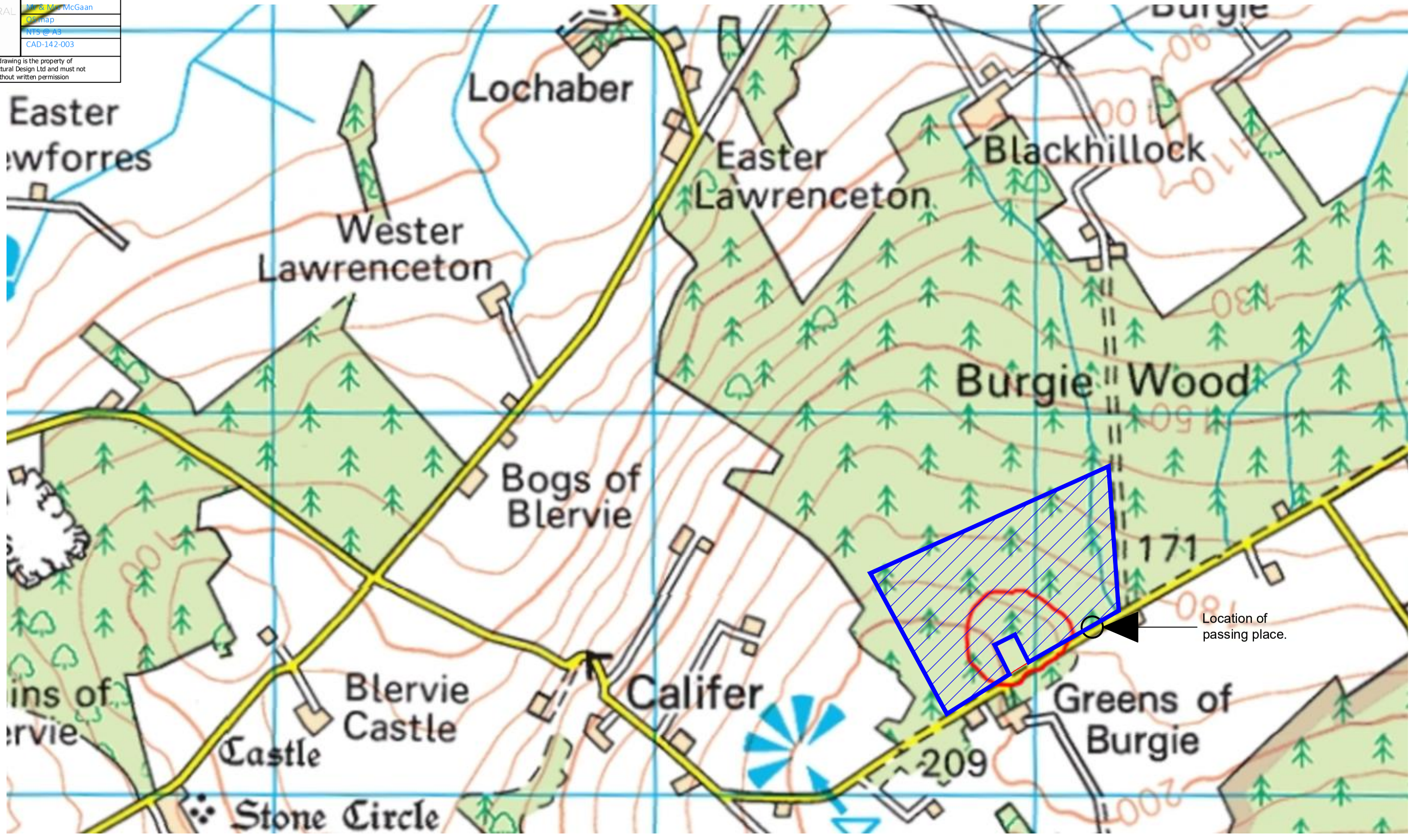
CAMERON
ARCHITECTURAL
DESIGN

Proposed dwelling at,
Kahiwi Wood,
Califer Hill, for
Mr & Mrs McGaan

OS map

NTS @ A3

CAD-142-003



OS map 1:10,000

0m 2000m 4000m 6000m 8000m 10,000m

CAMERON
ARCHITECTURAL
DESIGN

Proposed dwelling at,
Kahiwi Wood,
Califer Hill, for
Mr & Mrs McGaan

Proposals

1:50 / 100 @ A1

CAD-142-005 A

0 1 2 3 4 5
SCALE 1:50 m

EXTERNAL FINISHES

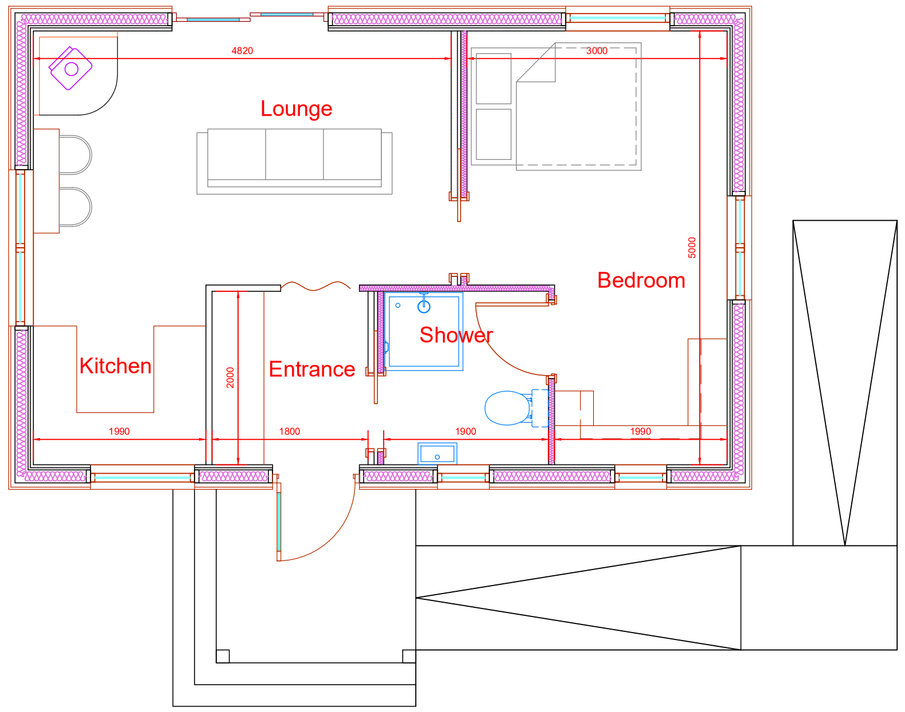
Roof finished with metal profile sheets.

Black pvc rainwater goods.

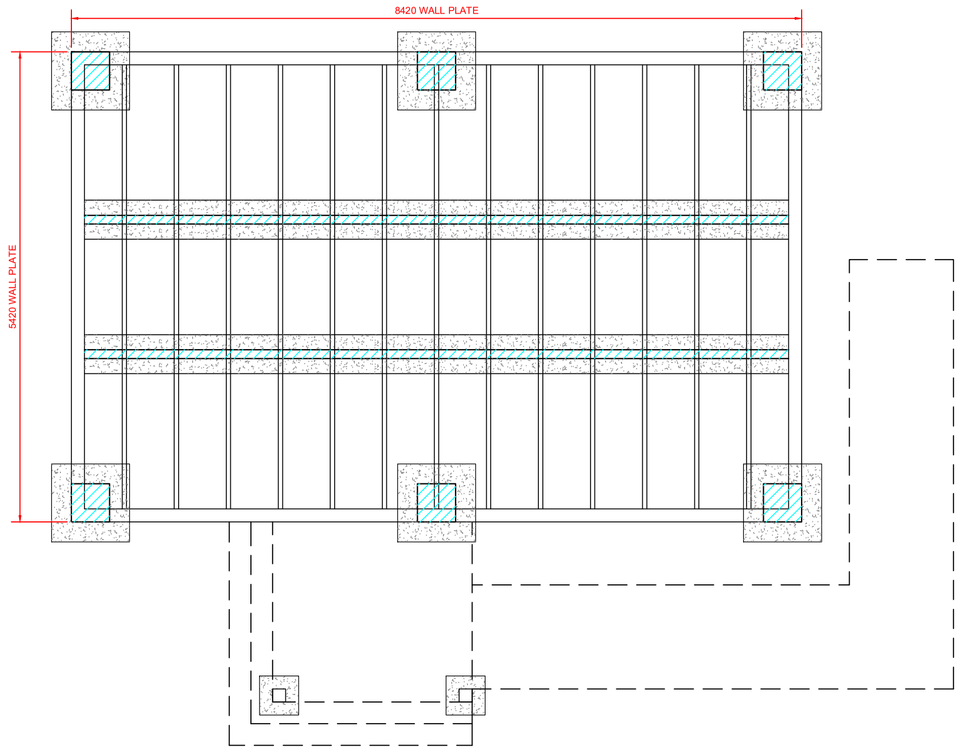
Smooth cement render basecourse.

Timber windows & doors (painted).

Vertical larch cladding.



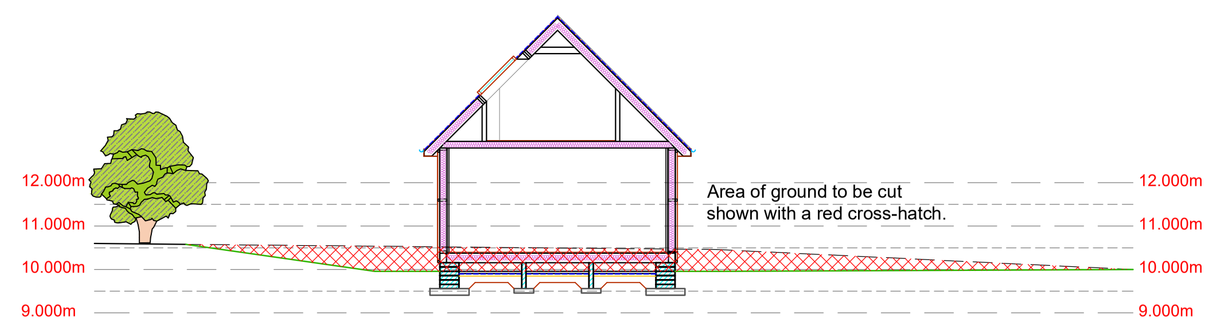
Floor plan 1:50



Draft foundation plan 1:50

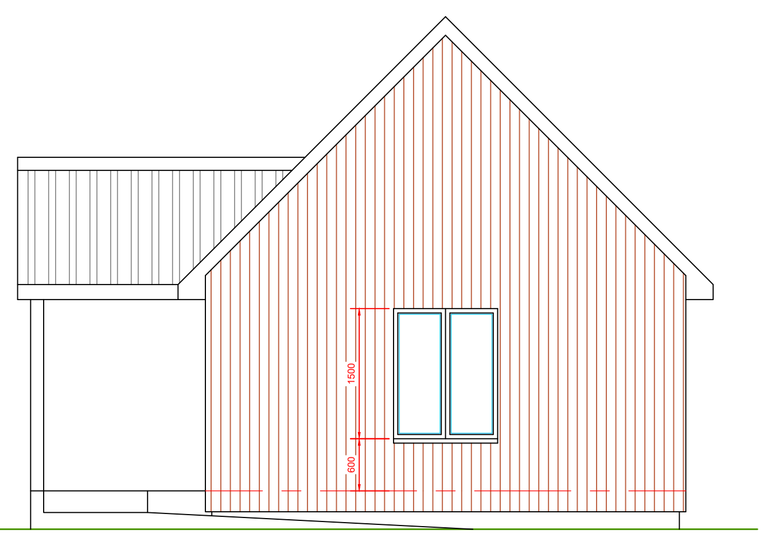
Side elevation 1:50

Front elevation 1:50



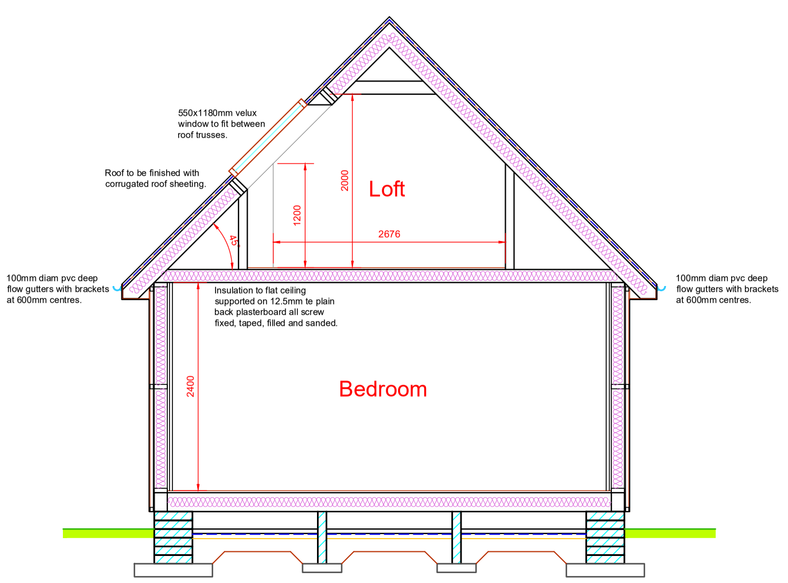
Site section 1:100

0m 2m 4m 6m 8m 10m



Side elevation 1:50

Rear elevation 1:50



Typical section 1:50

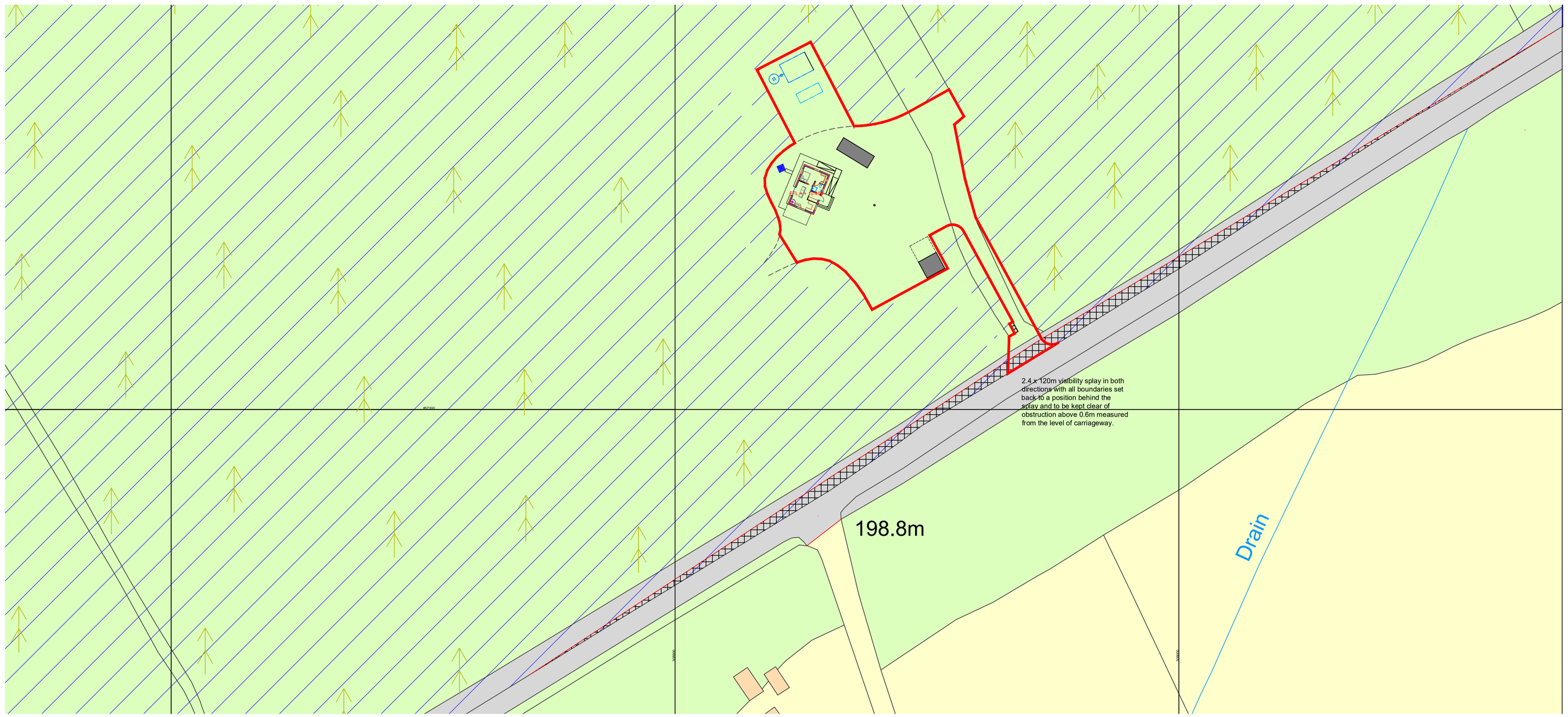
CAMERON
ARCHITECTURAL
DESIGN

Proposed dwelling at,
Kahiwi Wood,
Califer Hill, for
Mr & Mrs McGaan

Visibility splay + passing

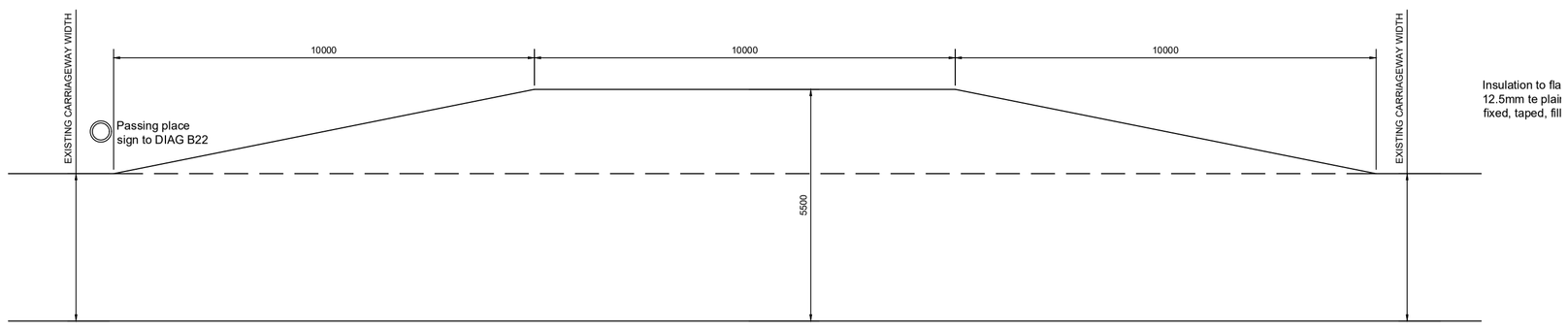
as shown @ A1

CAD-142-006



Site plan 1:500

Location plan 1:5000



Passing place detail 1:100