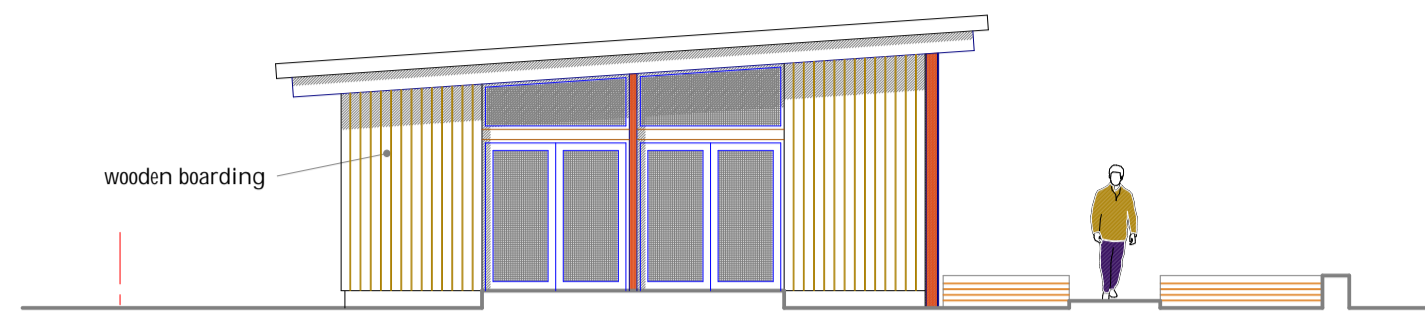
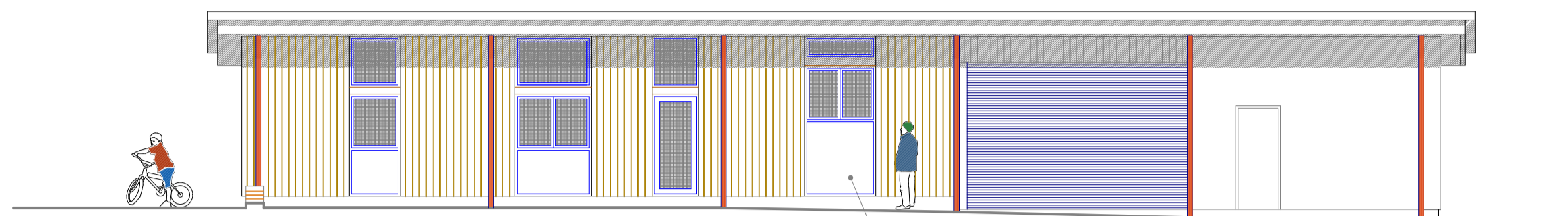


WEST ELEVATION

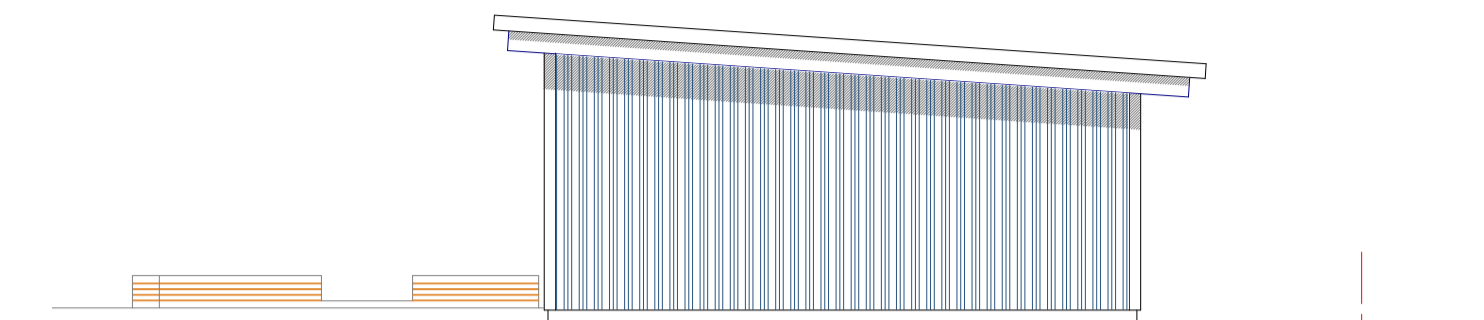


SOUTH ELEVATION



the floor level of the bedrooms is 600 above that of the main apartment ... going upstairs to bed seems right, even if it is only a few steps and this will give the bedrooms more privacy from outside and a better feeling of security

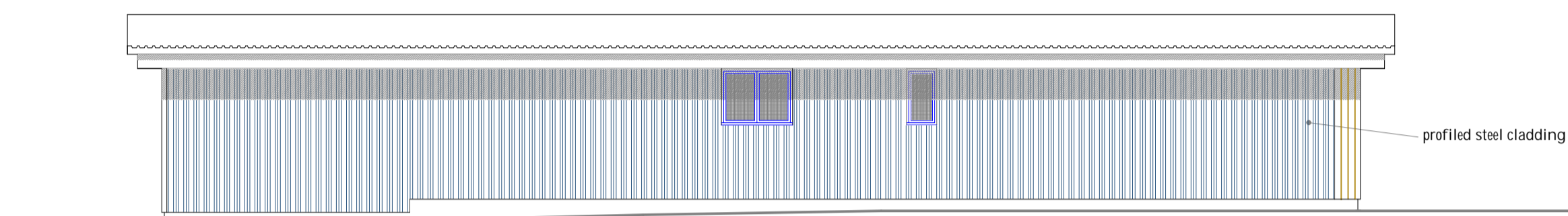
EAST ELEVATION



VIEW FROM THE SOUTH WEST



NORTH ELEVATION



NOTES

The proposed conversion is from a garden ancillary building to a studio apartment to provide additional living accommodation at the Firs.

The converted building will be required to comply with the latest building regulations in respect of a dwelling. The nature of the existing roof and important aspects of the building regulations which will have an important influence on the design of the conversion are...

THE EXISTING ROOF

The existing roof is in reasonable condition, but it appears to be of profiled asbestos cement sheets. These sheets have a useful life of about forty years before they become brittle and extremely dangerous to walk on. The existing Zed purlins are also rusty and would need to be made good. While it would be possible to insulate the existing roof covering from within this would provide a roof construction with a limited life span.

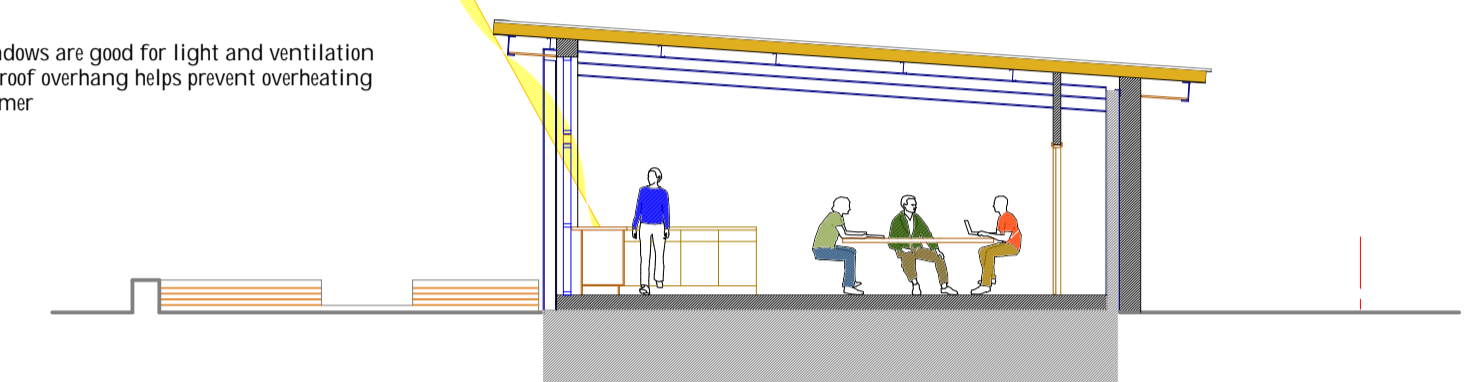
STRUCTURE

I am no structural engineer, but it seems very likely to me that the existing steel frame will not comply with current structural design codes and that the rafters and possibly purlins will be found to be undersized. I suspect that the practical solution to this will be to weld a structural I-bee section to the top of the rafters to form a composite rafter section of sufficient depth. On Section A I have shown a zone of 200 above the existing rafters and new 142 deep Zed purlins. The structural solution will obviously have to be designed by a structural engineer in due course but I think that what I have shown will be accurate enough for planning purposes.

THERMAL INSULATION

High values of thermal insulation of the external fabric are now required. While it would be possible to insulate the existing roof covering from within this would provide a roof construction with a limited life span. When considered together with the structural issue I think the cost effective solution is to replace the existing roof with insulated steel roof panels such as KINGSPAN KS1000. This will provide a straightforward construction solution and give the best protection to all the expense invested in the new apartment below.

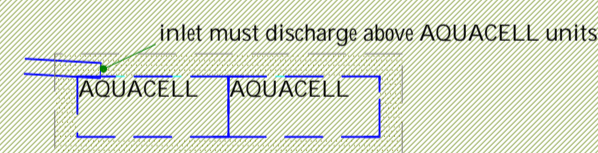
SECTION A



tall windows are good for light and ventilation but the roof overhang helps prevent overheating in summer

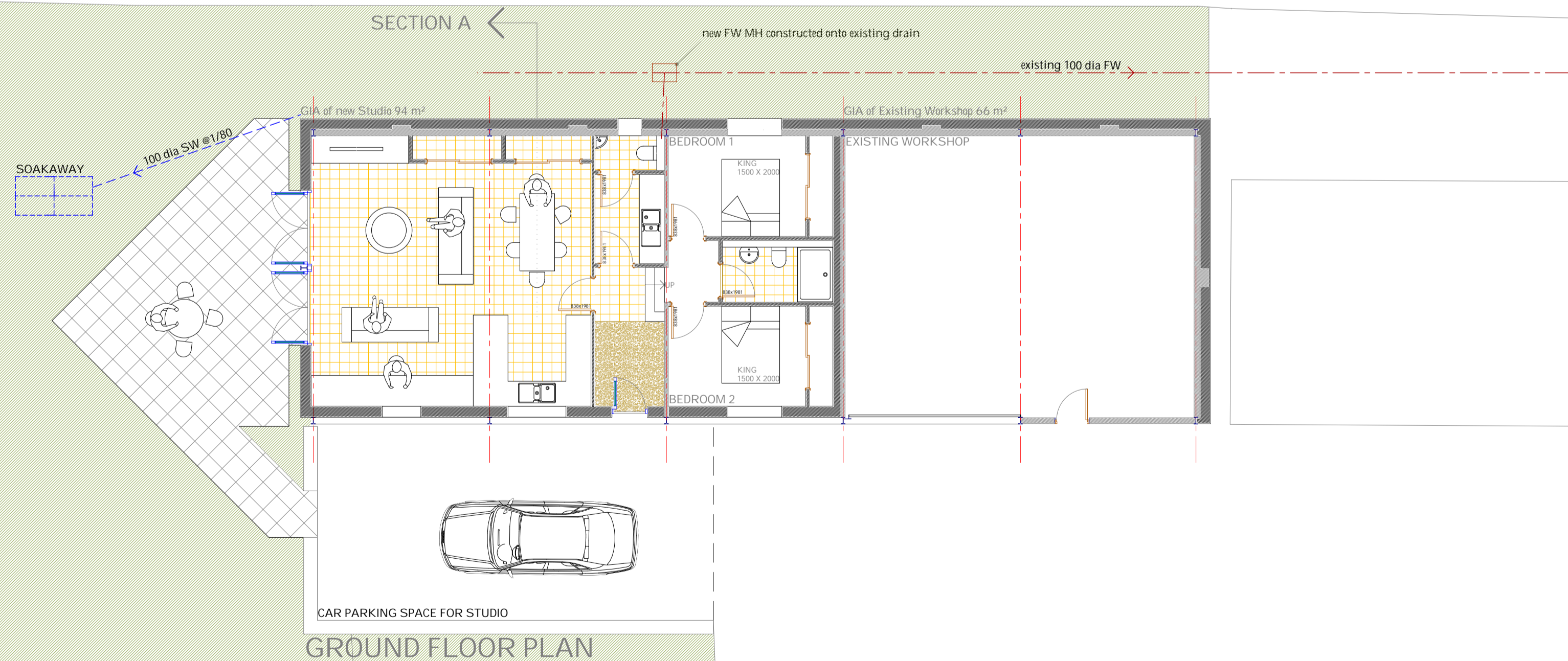
SOAKAWAY DETAIL 1/50

500Wx1000Lx400H AQUACELL = 0.2mcu



AQUACELL units to be wrapped in filter membrane
AQUACELL units to have 150 coarse sand surround

Soakaway to be sized in accordance with BRE Digest 365
top of soakaways to have 700 cover...
soakaway must be at least 5000 from building
and 2500 from boundary
with highest possible inlet levels for drainage to flow
but min 600 cover required to pipes



GROUND FLOOR PLAN

Revision

Curtis Cryer : Architects

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Job **Studio Apartment at The Firs, Rockhampton, GL13 9DY**

Drawing **Plan, Section, Elevations ... As Proposed**

date	August 2023	scale	1/100 @ A1	No.	2094/002
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drawn by David Cryer