

**BEFORE THE HEARINGS PANEL
FOR THE CENTRAL OTAGO DISTRICT COUNCIL**

UNDER the Resource Management Act 1991

IN THE MATTER of RC240033 an application for land use consent to construct a second residential dwelling in the Rural Residential Area at 353 Dunstan Road, Alexandra

BY **NATASHA WILLIAMS**
Applicant

REPLY LEGAL SUBMISSIONS FOR THE APPLICANT

Dated: 31 January 2025

MAY IT PLEASE THE COMMISSIONERS

Introduction

- [1] These reply submissions are made on behalf of Natasha Williams (**Applicant**), in support of RC240033 (**Application / Proposal**).
- [2] The hearing for the Proposal was held at the Central Otago District Council (**Council**) offices on 10 December 2024 (**Hearing**). Counsel sought leave to respond to matters by way of reply at the Hearing. This was granted by the Commissioners, to be filed by 31 January 2025.
- [3] After preliminary matters for the reply are dealt with, Counsel wishes to respond to the following specific points which were in the focus of Commissioner questions in the course of the hearing:
- (a) the application and helpfulness of applying the permitted baseline in determining the Proposal;
 - (b) the potential bulk and cumulative effects of the Proposal; and
 - (c) the application, relevant mitigation, and effects of the proposed skyline breach, in terms of the associated effects on character, landscape values, and rural amenity.

Preliminary matters

Finalised landscape and construction plans

- [4] At the hearing, Counsel and the Applicant's landscape and planning witnesses tabled a series of revised designs and proposed conditions of consent, stemming from initial concerns raised in the s 42A report, despite no neighbours having raised any issues.
- [5] The revised Proposal ensures that the visual effect of the built form of the proposed dwelling is much lower than that which was assessed originally in the s 42A report, by:
- (a) rotating the dwelling 90 degrees (so it is not 'broadside' to the road);

- (b) shifting the building further into the Site, increasing setbacks and visibility from the road; and
- (c) ensuring that screening of the building is secured by way of an amended landscaping plan demonstrating the retention of mature vegetation.

[6] The finalised landscape plans are attached as **Appendix A**.

[7] The finalised construction plans are attached as **Appendix B**.

[8] These finalised plans are offered to be included as conditions of consent, further to those conditions of consent offered by the Applicant, as set out by the Applicant's expert planner, Mr Kloosterman.¹

[9] Counsel notes in addition to these conditions:

- (a) an additional landscape condition was tabled at the hearing by Mr Kloosterman, which is similarly offered to be included in the conditions of consent;² and
- (b) an additional landscape condition was included by Mr Tyler in his initial report, recommending that at least 75% of trees along the road frontage should be retained to maintain screening to the road.³

[10] The Applicant also offers to include these as final conditions.

Updated affected persons approvals

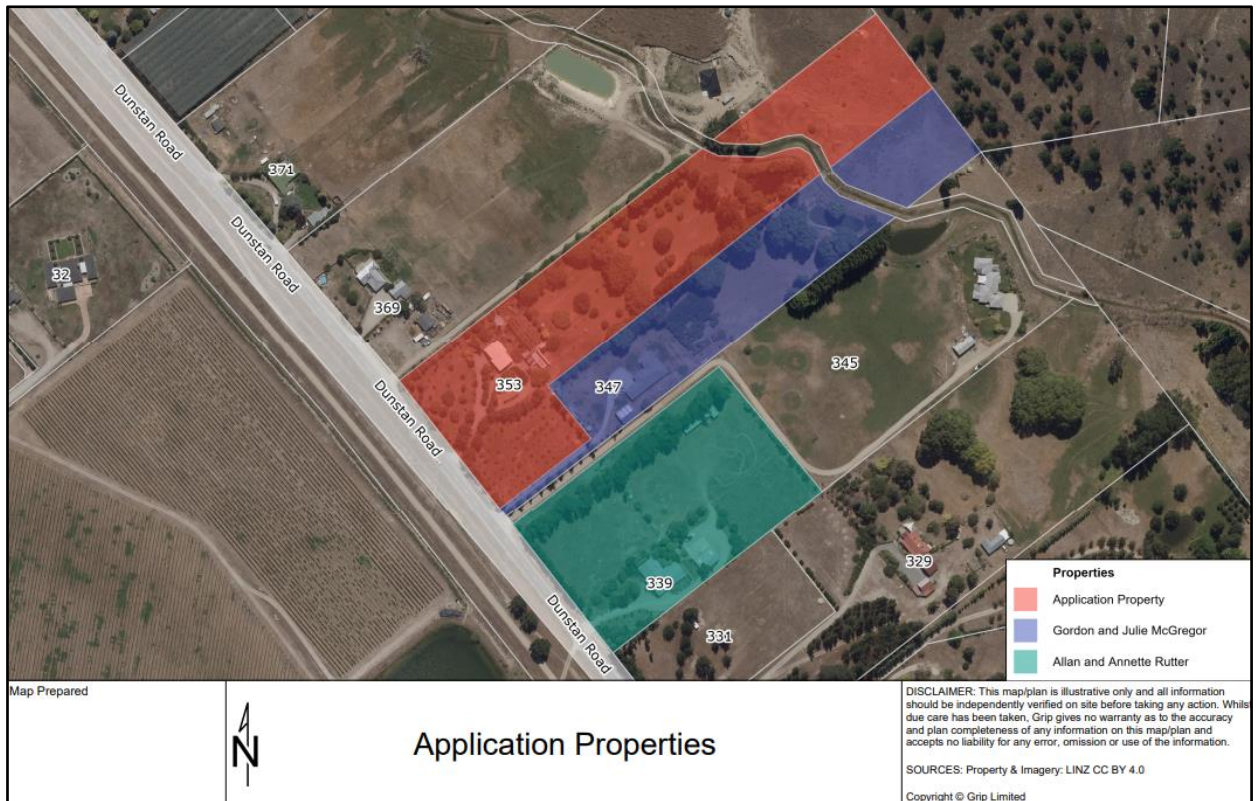
[11] In light of the above revised design, the Commissioners also sought that updated affected persons approvals (**APA**) be provided from adjacent properties.

¹ Evidence of Peter Kloosterman, at [55].

² Summary of evidence of Peter Kloosterman, at [12]. For ease, this condition reads: "All trees marked as 'existing trees' within the landscape plan are to be retained. Any tree that dies or becomes diseased shall be replaced by an equivalent or similar species within the first available planting season"

³ Evidence of Richard Tyler, at [6.3].

[12] Those two properties (blue and green) whose owners provided original APAs are shown beside the Applicant's property (red) on the below map:



[13] The owners of 347 Dunstan Road, Gordon and Julie McGregor, have provided an updated APA. This is attached as **Appendix C**.

[14] Counsel has been advised by the Applicant that 339 Dunstan Road was sold on or around 5 January 2025. As a result, combined with the fact that the owners/vendors do not reside at the property, the Applicant has not been able to obtain an updated APA from this property. To clarify, the request for an updated APA has not been refused, the Applicant has simply not been able to meet and discuss with the owners.

[15] However, consistent with the expert opinions of Messrs Kloosterman⁴ and Tyler⁵ for the Applicant, Counsel notes:

(a) The owners of 347 Dunstan Road are most affected by the revised proposal, due to the revised building being located closer to their boundary. They have provided their updated APA. This was also

⁴ As set out in the summary statement of evidence of Peter Kloosterman, at [5].

⁵ As set out in the summary statement of evidence of Richard Tyler, at [10].

indicated by the Commissioners in their questions, with specific questions regarding the effects of the revised proposal on 347 Dunstan Road being asked.

- (b) There is a very limited change in adverse effects on 339 Dunstan Road compared to what effects existed under the original plans. As such, the Applicant respectfully seeks to rely on the original APA in terms of the level of acceptable effects on 339 Dunstan Road.

[16] In light of the above, it is submitted that not receiving an updated APA from 339 Dunstan Road is inconsequential to the Commission's overall decision under s 104 RMA. For the reasons set out in Mr Tyler's evidence, effects from the updated proposal on 339 Dunstan Road and the wider environment are, given the long viewing distance and immediate screening trees, very low at most.⁶

Role of Ms Rodgers in hearings

[17] Counsel notes that Ms Ann Rodgers, Principal Policy Planner for CODC, was in attendance at the hearing of 10 December 2024. Counsel understands that Ms Rodgers' role at the hearing was, in general, to provide advice and guidance to the Commissioners, to aid in their decision making.

[18] However, through the hearing, the majority of questions and prompts seemed to come from Ms Rodgers (albeit through 'clarifications'), rather than the Commissioners themselves. While grateful for Ms Rodgers' expertise in planning and consenting matters, Counsel does not consider it proper process that the majority of questions were made on behalf of the Commissioners, and it seemed that this level of engagement crosses the threshold of what could be considered 'advice and guidance'.

[19] As part of their decision, Counsel would be grateful if the Commissioners could please clarify the extent Ms Rodgers, and indeed any planning

⁶ Ibid.

advisor, should be involved in the substantive points of a hearing and decision making.

Permitted baseline

- [20] The written and oral legal submissions previously presented to the Commissioners extensively cover the application of the permitted baseline and existing environment to this matter. However, the hearing raised some further points that need clarifying, particularly regarding comments from Mr Adam Vincent – the s 42A report author.
- [21] As stated, the s 42A report does not apply any permitted baseline due to there being no permitted residential activities at the Site, nor for breach of the skyline breaching Rule 4.7.6D.b of the Plan.
- [22] It is still the Applicant's position that it is helpful and non-fanciful to apply the permitted baseline to this Application as a comparator of effects. Though, it is ultimately applied at the Commissioners' discretion.
- [23] At the hearing, Mr Vincent expanded further on his comments in the s 42A report, stating that (in summary) no building of the scale and effects can be constructed as a permitted activity in the location, therefore the permitted baseline should not be applied. While it was accepted that a non-residential structure was permitted up to 10m, this was discounted as the proposal is residential (albeit a converted non-residential structure).
- [24] With respect to Mr Vincent, this is an incorrect application of the permitted baseline. The test is not whether another building of the same intended activity/use can be constructed as a permitted activity. Instead, one should assess what the effects of permitted activities at the site are and, if the Commissioners agree it is helpful, disregard those effects when determining the Application.
- [25] As stated in legal submissions,⁷ there are relevant permitted activities for non-residential / farm buildings within the Site, which would contribute to effects in terms of built form, cumulative landscape effects, and

⁷ Legal submissions for the Applicant, at [17].

landscape character. This includes the construction of a 10m tall non-residential barn/shed (save for skyline breaches).⁸

[26] In terms of determining whether the permitted baseline test should be used, this was set out at [18]-[21] of legal submissions. Counsel considers that the permitted baseline is a useful tool for those same reasons as submitted.

[27] In any event, and noting that the application of the baseline is at the Commission's discretion, the Applicant's proposal does not turn on the baseline being applied. As addressed in the Applicant's expert evidence,⁹ with or without applying a baseline the visual/amenity effects of the Proposal overall are very low, with low effects in winter (due to the deciduous nature of screening trees). There will also be no adverse cumulative effects, with the proposed building consistent with landscape character.¹⁰

Bulk and cumulative effects

[28] Also apparent at the hearing were concerns regarding the effects of the Proposal on the rural amenity and character of the area. Mr Vincent made several comments in this regard, including that the proposed building would be one of/the largest/tallest in the district.

[29] This is an unfounded claim with no supporting evidence. In fact, the evidence of Mr Tyler is that the height is not unusual in the rural locality, considering other barns and farm buildings.¹¹ Counsel also notes that while the proposed height is 8.8m (9.3m including the chimney), as previously stated, farm buildings up to 10m in height can be constructed as a permitted activity.

[30] Counsel notes the evidence of Mr Tyler for the Applicant, which considers that there would only be a short and filtered view of the proposed building when driving past. The existing and planned vegetation means the Site is well screened and, at worst, would be

⁸ Standard 4.7.6A.f

⁹ Evidence of Richard Tyler, at [8.5].

¹⁰ At [8.6]-[8.9].

¹¹ At [8.3].

softened by twiggy foliage in winter.¹² Also from Mr Tyler, the effect of building height is reduced when considering architectural/rural vernacular and gable design.¹³

[31] This view is not challenged as there is no corresponding peer review landscape report.¹⁴ A simple drive-by of the Site confirms that the structure would be well-screened. The setback and effective screening of the Proposal also reduces cumulative effects.¹⁵

[32] The Applicant has also heeded suggestions from the s 42A report and relocated the proposed building further from Dunstan Road, thereby further reducing bulk effects.

[33] The s 42A report and hearing comments of Mr Vincent also noted the density of housing at this location along Dunstan Road between Coates Road and Waldron Road.¹⁶ This assessment is based solely on the northeastern side of Dunstan Road and, as stated above, is not an opinion expressed by a qualified landscape architect. The southwestern side of the road is a rural allotment currently being used for viticulture and related activities. The lack of dwellings there reduces the overall effect of the Proposal as only transient experiences will be affected (to a low degree) compared to the impact on a neighbourhood.

[34] As a consequence, and reiterating the evidence of Mr Kloosterman,¹⁷ the Applicant considers the density assessment flawed and excludes the very relevant fact that nearly half of the location contains no dwellings at all. This, combined with the effective screening and building placement, means the Applicant still considers the Proposal will have less than minor density and cumulative effects. Dwellings along Dunstan Road are also largely screened behind vegetation, further limiting density and cumulative effects.

[35] It is submitted that Mr Vincent's consideration of both visibility and density effects is particularly 'static' and views the Site in an artificially

¹² At [6.3].

¹³ At [8.4].

¹⁴ That Mr Tyler was the only qualified landscape architect in attendance, and that his opinion should therefore be preferred, was accepted by Mr Vincent in the hearing.

¹⁵ Evidence of Richard Tyler, at [8.8].

¹⁶ Section 42A report, at 10.

¹⁷ Evidence of Peter Kloosterman, at [27].

isolated context through a narrow lens which would not ordinarily be a view or experience attained by passers-by traveling on Dunstan Road. Counsel submits that the Commissioners should be guided by the only qualified landscape assessment before it, and which is unchallenged, in terms of density and visibility effects, the conclusions of which are that effects will be very low, or low in winter.¹⁸

Skyline breach

[36] The skyline breach for the proposed building, when viewed from certain locations on Dunstan Road, has been the subject of much discussion in both the s 42A report and hearing. The breach of standard 4.7.6D.b results in a restricted discretionary activity (though the proposal overall is assessed as discretionary).

[37] Mr Vincent considers that “the skyline breach is an avoidable factor of the design of the dwelling...”,¹⁹ effectively by replacing the current building design for an entirely new and lower building height. He continued with this line of thought at the hearing, with little allowance for the extensive mitigation features at the Site.

[38] The Applicant considers this an incorrect application of the standard. The District Plan does not provide that a skyline breach is to be avoided at all costs, but expressly contemplates mitigation. This is supported by the rules, standards, and policies of the District Plan, and also previous decisions involving skyline breaches.

[39] Rule 4.7.3.iii, regarding the extent of the Council’s discretion when dealing with a skyline breach in standard 4.7.6D.b, clearly allows for mitigation of the breach through screening and planting, and accounts for the prominence of the breach. As stated in the evidence of Mr Kloosterman, Policy 4.4.2 provides for avoidance, remediation or mitigation of adverse effects, with the intrusion over a Skyline not automatically defaulting to a decline.²⁰

¹⁸ Evidence of Richard Tyler, at [8.5].

¹⁹ Section 42A report, at 9.

²⁰ Evidence of Peter Kloosterman, at [37].

- [40] The effectiveness of this mitigation is clear in Mr Tyler's evidence. Photomontages in his Attachment A show how well screened the proposed building will be from Dunstan Road, with Mr Tyler's assessment of these views provided in writing.²¹ The revised proposal is even less prominent, with skyline breaches further reduced, making the screening all that more effective.
- [41] While it was only briefly mentioned in legal submissions,²² it is not uncommon for consent to be granted to Proposals with a skyline breach under r 4.7.6D.b. Though Counsel acknowledges that each decision must be made on its own merits, the above is evidenced by a similar application for a second dwelling on a lot in the Rural Resource Area, at 519 Springvale Road.²³ The Commission there found the effects from the skyline breach could be suitably screened, incorporating a shelterbelt and existing trees along Springvale Road. Counsel considers this reasoning is applicable to the current Application due to the existing and proposed vegetation, and the similar context.
- [42] Additionally, there is only a breach when viewed from Dunstan Road, where users will be travelling at 80 kmph. Users of the Otago Central Rail Trail, travelling much slower, will not see any breach. This context further reduces effects. Mr Vincent's concerns as to skyline breach are effectively limited to one static viewpoint on the side of the road, very close to the property boundary, such as to artificially be looking close and up at the building, thus creating a somewhat 'technical' skyline breach. It is submitted such an approach does not accord with what appears to be the intention of the rule, which is rather about prominent ridges and skylines and their protection. Mr Vincent's static and constrained viewpoint of a skyline breach does not take into account a holistic landscape experience as the ordinary road user would view the proposed building, when travelling in this context.
- [43] Applying the above, the Applicant considers that the proposed skyline breach can be adequately mitigated to a point where it results in less than minor effects. Contrary to the position taken by Mr Vincent,

²¹ Evidence of Richard Tyler, at [8.2].

²² Legal submissions for the Applicant, at [35].

²³ RC220367

standard 4.7.6D.b does not provide for hard and fast avoidance, but allows for mitigation. This is consistent with higher order landscape policies and objectives of the District Plan for this zone which do not anticipate a no change outcome or avoidance of visibility.²⁴

[44] This is shown in previous decisions involving similar circumstances. The Applicant has provided this mitigation in the form of current and proposed plantings, which the evidence of Mr Tyler shows to be very effective in screening views of the proposal and skyline breach.²⁵

[45] Regardless, the revised Proposal, setting the proposed dwelling further back against the hillside and rotating it 90 degrees to the roadside, likewise reduces effects to minor or less than minor, making the Proposal suitable for the grant of consent according to the relevant objectives and policies of the Rural Residential zone.²⁶

Conclusion

[46] The Applicant considers that the Proposal, as revised, appropriately addresses the key issues raised in the hearing and the s 42A report, including the permitted baseline, cumulative / bulk effects, and the skyline breach. The evidence provided by the Applicant's experts demonstrates that the adverse effects of the Proposal, both individually and cumulatively, are appropriately mitigated such as to support the grant of consent under s 104 RMA.

[47] In particular:

- (a) The application of the permitted baseline provides a practical and fair context for assessing the Proposal's effects, acknowledging the permitted activities at the Site. With or without an application of the baseline, the Applicant's planning and landscape evidence

²⁴ Evidence of Peter Kloosterman, at [37].

²⁵ Evidence of Richard Tyler, at [8.5].

²⁶ Objectives 4.3.1 and 4.3.3, and Policies 4.4.2 and 4.4.10, as covered in the Evidence of Peter Kloosterman, at [28]-[42].

is that the proposal's effects are minor or less than minor and overall consistent with the relevant objectives and policies.

- (b) The concerns regarding rural character and amenity have been addressed through the revised design, vegetation and landscape mitigation, and reduced prominence of the proposed building.
- (c) The skyline breach has been mitigated to a degree where the effects are less than minor, consistent with the District Plan's intentions for this rule and past decisions of the Council.

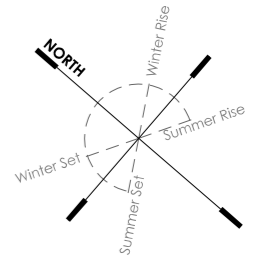
[48] For the above reasons Counsel submits that the Commissioners consent to the Proposal, subject to the conditions offered in the evidence of Mr Kloosterman tabled at the hearing, and on the basis of revised plans attached.

Dated 31 January 2025



.....
R E M Hill / B A G Russell
Counsel for the Applicant

Appendix A - Updated plans





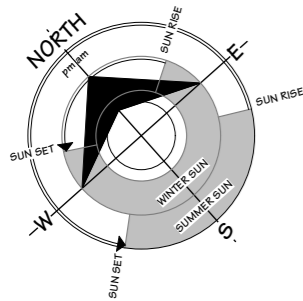
Appendix B – Updated Architectural Set

**PROPOSED NEWDWELLING
FOR
NATASHA WILLIAMS
AT
353 DUNSTAN ROAD,
ALEXANDRA**

PLAN SET INDEX	SHEET	PLAN SET INDEX	SHEET	PLAN SET INDEX	SHEET	PLAN SET INDEX	SHEET
COVER PAGE	01	BRACING CALCULATIONS 2	21	BENT B	40	EAVE & RIDGE DETAILS	59
LOCATION PLAN	02	BRACING CALCULATIONS 3	22	BENT C	41	BARGE TO WALL JUNCTION DETAIL	60
SITE PLAN	03	BRACING CALCULATIONS 4	23	BENT D	42	BRICK TO WALL JUNCTION DETAIL	61
GROUND FLOOR DRAINAGE PLAN	05	BRACE FIXING DETAILS	24	ELEVATION 1	43	CHIMNEY DETAILS	62
FIRST FLOOR DRAINAGE PLAN	06	BRACE FIXING DETAILS	25	ELEVATION 2	44	CHIMNEY FLASHING DETAILS	63
ROOF CATCHMENT PLAN PLAN	07	GROUND FLOOR ELECTRICAL PLAN	26	3D VIEW	45	EXPANSION JOINT & CONTROL JOINT DETAILS	64
GROUND FLOOR PLAN	08	FIRST FLOOR ELECTRICAL PLAN	27	BENT Y & Z	46	BRICK VENEER GUTTER TO WALL JUNCTION DETAIL	65
FIRST FLOOR PLAN	09	SECTION A-A	28	ELEVATION 3	47	DRAINAGE DETAILS	66
DIMENSION PLAN	10	SECTION B-B	29	ELEVATION 4	48	WET AREA DETAILS	67
ELEVATIONS	11	DOOR SCHEDULE	30	BASE DETAILS	49	WET AREA DETAILS	68
ELEVATIONS	12	WINDOW SCHEDULE - SHEET 1	31	PIPE PENETRATION DETAILS	50	WET AREA DETAILS	69
GROUND FLOOR ROOF/STUD FIXING/LINTEL FIXING PLAN	13	WINDOW SCHEDULE - SHEET 2	32	CORNER JUNCTION DETAILS	51	HWC DETAILS	70
FIRST FLOOR ROOF/STUD FIXING/LINTEL FIXING PLAN	14	3D VIEWS	33	CORNER JUNCTION DETAILS	52	COOKTOP DETAIL	71
STUD TO TOP PLATE/LINTEL FIXING DETAILS	15	3D VIEWS	34	JOINERY DETAILS	53	STAIR & HANDRAIL DETAILS	72
STUD TO TOP PLATE/LINTEL FIXING DETAILS	16	FOUNDATION PLAN	35	JOINERY DETAILS	54	H1 Calculation	73
STUD TO TOP PLATE/LINTEL FIXING DETAILS	17	POST LAYOUT PLAN	36	JOINERY DETAILS	55		
GROUND FLOOR BRACING PLAN	18	MID-FLOOR FRAMING LAYOUT	37	DOOR SILL DETAILS	56		
FIRST FLOOR BRACING PLAN	19	BENT A	38	SCHIST STONE EAVE & BARGE DETAILS	57		
BRACING CALCULATIONS 1	20	BEDROOM BENT	39	VERTICAL SHIPLA EAVE & BARGE DETAILS	58		



DATE: 10 DEC 24	SHEET: 1 / 73
JOB #: 23071	
COVER PAGE	
SCALE: NOT TO SCALE	



LOT 1-2 DP 316193
25,150m²

WIND ZONE HIGH
 EARTHQUAKE ZONE 2
 CORROSION ZONE B
 CLIMATE ZONE 6
 SNOW LOADING N5

BUILDING FOOTPRINT: 305.85m²

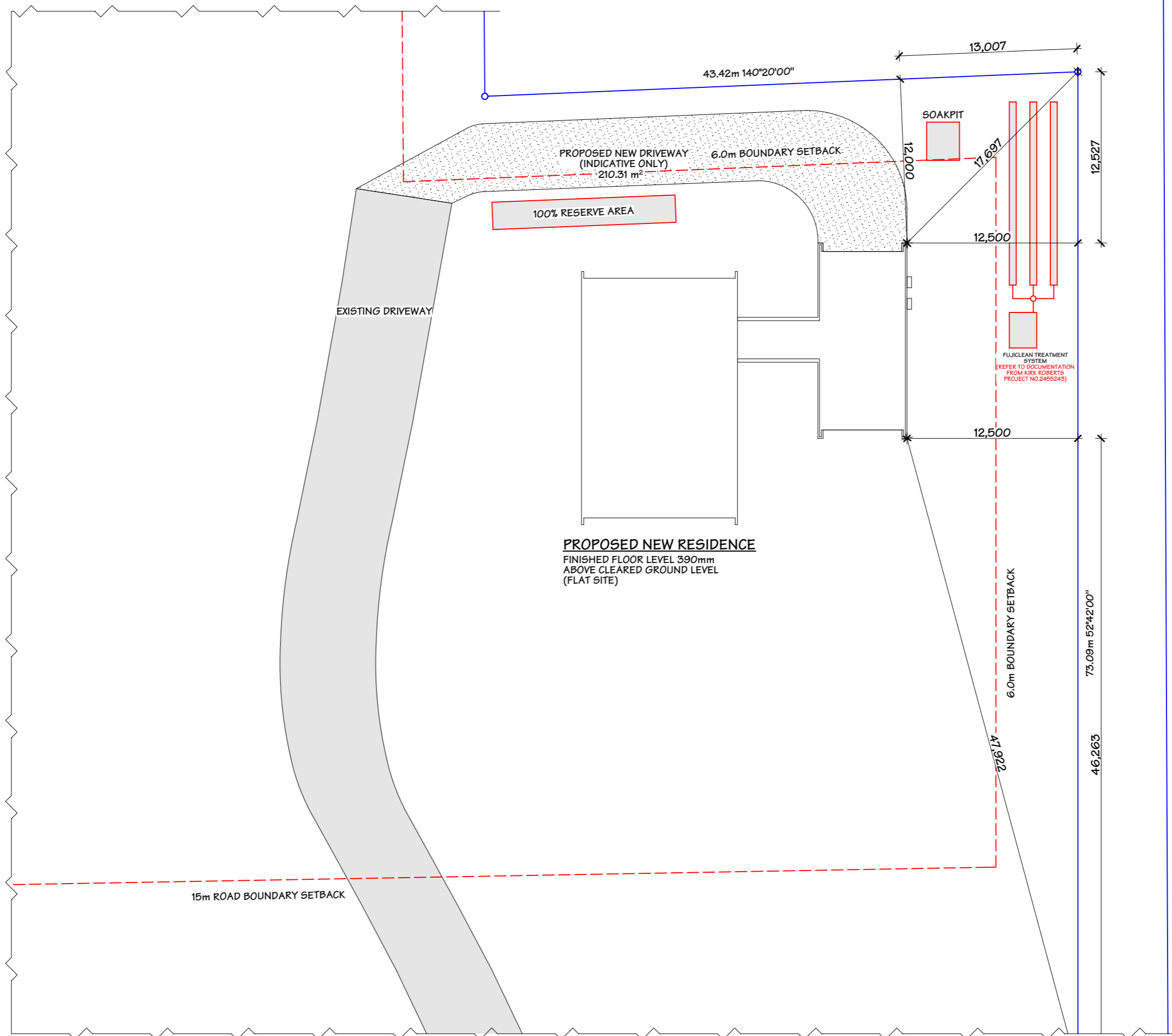
RURAL RESOURCE AREA
 CENTRAL OTAGO DISTRICT COUNCIL

**NOTE: HAZARD MANAGEMENT
 TEMPORARY FENCING**

IF A WORK SITE IS NOT COMPLETELY ENCLOSED AND UNAUTHORISED ENTRY BY CHILDREN IS LIKELY, IT IS ACCEPTABLE FOR SPECIFIC HAZARDS TO BE FENCED ONLY WHEN WORKERS ARE ABSENT FROM THE IMMEDIATE VICINITY WHERE A POTENTIAL HAZARD AT A WORK SITE MAKES A SAFETY BARRIER NECESSARY, A BARRIER COMPLYING WITH TABLE 1, NZBC F5/AS1 IS AN ACCEPTABLE SOLUTION

- PATIO AND PAVING TO FRONT DOOR TO COMPLY WITH NZBC D1 2.1 SLIP RESISTANCE TABLE 2. MAXIMUM STEP HEIGHT TO COMMON / MAIN PRIVATE STAIRWAYS TO BE 190mm.

DISCLAIMER:
 FINISH FLOOR LEVEL MUST BE VERIFIED ON SITE IN CONJUNCTION WITH DATUM PRIOR TO COMMENCEMENT OF WORK



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
SITE PLAN

LEGAL DESCRIPTION:
 LOT: 1-2
 DP: 316193
 ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

NOTES:
 - Subject to council approval
 - All measurements to be confirmed on site by the contractor prior to the commencement of work.
 - All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
 10 DEC 24
 AMENDMENT DATE:
 241210.1820
 VERSION:
 WD-01

DESIGNER:
 HTC
 DRAWN:
 JON
 CHECKED:
 JON

SCALE:
 1:300
 JOB#:
 23071
 SHEET:
3
 73

PLUMBING KEY		
FIXTURES DISCHARGING TO GULLY TRAPS	DISCHARGE PIPE SIZE	GRADE
BATH	40Ø	1:40
VAN	40Ø	1:40
SHOWER	40Ø	1:40
LAUNDRY TUB + WM	50Ø	1:40
KITCHEN SINK	50Ø	1:40
FIXTURES DISCHARGING TO VENTED DRAIN UNDER SLAB	DISCHARGE PIPE SIZE	GRADE
WATER CLOSET	100Ø	1:60
FIXTURES DISCHARGING TO VENTED STACK	DISCHARGE PIPE SIZE	GRADE
BATH	40Ø	1:40
BASIN	40Ø	1:40
SHOWER	40Ø	1:40
WATER CLOSET	80Ø	1:60
WATER CLOSET	100Ø	1:60
VENT SIZES	PIPE SIZE	GRADE
TERMINAL VENT	80Ø	N/A
DRAIN VENTS	40Ø	N/A
SANITARY DRAINAGE	PIPE SIZE	GRADE
SEWERAGE LINES	100Ø	1:120
SOIL STACK	100Ø	N/A
STORMWATER DRAINAGE		
STORMWATER LINES	100Ø	1:120
DOWNPIPES	80Ø	N/A
SANITARY SEWER PLUMBING TO NZBC G13/A51 AND DRAINAGE TO NZBC G13/A52. STORMWATER DRAINAGE TO NZBC E1/A51. PIPE SIZES, GRADES, AND LAYOUT, TO BE CONFIRMED BY A REGISTERED PLUMBER/DRAINLAYER.		
PIPE JUNCTION OF ALL STORMWATER & SANITARY SEWER SERVICES TO HAVE AN ELBOW/INTERSECTION ANGLE OF 45-60		
LEGEND:		
DP - DOWNPIPE		
IO - INSPECTION OPENING		
CE - CLEANING EYE		
ORG - OVERFLOW RELIEF GULLY		
GT - GULLY TRAP		
AAV - AIR ADMITTANCE VALVE		
TV - TERMINAL VENT		
ST - SOIL STACK		

SOAK PIT CALCULATION AS PER NZBC E1 SECT 9.0.5

$V_{stor} = R_c - V_{soak}$

V_{stor} = VOLUME OF STORAGE REQUIRED IN THE SOAK PIT

R_c = RUN OFF DISCHARGING FROM CATCHMENT TO SOAK PIT IN 1HR

V_{soak} = VOLUME DISPOSAL OF BY SOAKAGE IN HOUR (m^3)

$R_c = 10CIA$

WHERE

C = RUNOFF COEFFICENT (SEE TABLE 1)

I = RAINFALL INTENSITY (mm/hr) BASED ON 1hr DURATION OF AN EVENT HAVING A 10% PROBABILITY OF OCCURRING ANUALLY

A = AREA (HECTARES) OF CATCHMENT DISCHARGING TO THE SOAK PIT.

ROOF

$R_c = 10 \times 0.9 \times 14.4 \times 0.0328$

$R_c = 4.25$

$V_{soak} = A_{sp} \rho_r / 1000$

WHERE

A_{sp} = AREA OF THE BASE OF THE SOAK PIT

ρ_r = SOAKAGE RATE (mm/hr) DETERMIND FROM 9.0.2

$V_{soak} = 16 \times 0 / 1000$

$V_{soak} = 0$

$V_{stor} = R_c - V_{soak}$

$V_{stor} = 4.25 - 0$

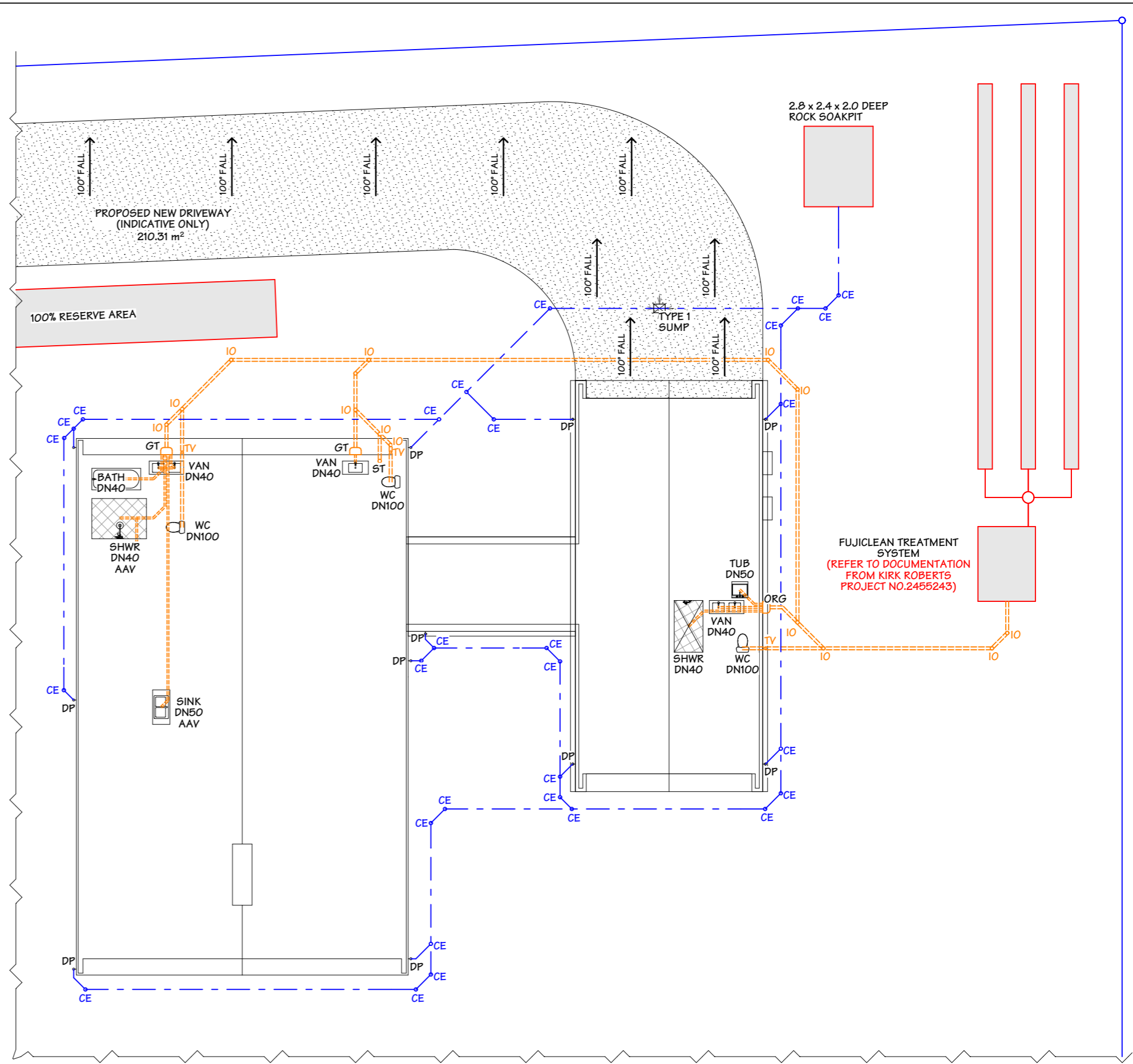
$V_{stor} = 4.25m^3$ REQUIRED VOLUME IN SOAK PIT

$4.25m^3 / 0.38$ (USABLE VOLUME IS 0.38 OF HOLE SIZE WHEN SOAK PIT COMPRISES OF ROCK)

$= 11.19m^3$

SOAK PITS REQUIRE = 2.8m x 2.4m x 2.0m DEEP SOAK PITS

NOTE:
THE RATE OF SOAKAGE INTO THE GROUND HAS NOT BEEN CONSIDERED AS THE NATURE OF THE GROUND VARIES THROUGHOUT THE DISTRICT AND IN THE AREAS OF POOR SOAKAGE AN OVERFLOW OUTLET TO AN APPROVED OUT FALL IS ALLOWED.



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
GROUND FLOOR DRAINAGE PLAN

LEGAL DESCRIPTION:
LOT: 1-2
DP: 316193
ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

NOTES:
- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work.
- All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
10 DEC 24
AMENDMENT DATE:
241210.1820
VERSION:
WD-01

DESIGNER:
HTC
DRAWN:
JON
CHECKED:
JON

SCALE:
1:150
JOB#:
23071
SHEET:
5

PLUMBING KEY		
FIXTURES DISCHARGING TO GULLY TRAPS	DISCHARGE PIPE SIZE	GRADE
BATH	40Ø	1:40
VAN	40Ø	1:40
SHOWER	40Ø	1:40
LAUNDRY TUB + WM	50Ø	1:40
KITCHEN SINK	50Ø	1:40
FIXTURES DISCHARGING TO VENTED DRAIN UNDER SLAB	DISCHARGE PIPE SIZE	GRADE
WATER CLOSET	100Ø	1:60
FIXTURES DISCHARGING TO VENTED STACK	DISCHARGE PIPE SIZE	GRADE
BATH	40Ø	1:40
BASIN	40Ø	1:40
SHOWER	40Ø	1:40
WATER CLOSET	80Ø	1:60
WATER CLOSET	100Ø	1:60
VENT SIZES	PIPE SIZE	GRADE
TERMINAL VENT	80Ø	N/A
DRAIN VENTS	40Ø	N/A
SANITARY DRAINAGE	PIPE SIZE	GRADE
SEWERAGE LINES	100Ø	1:120
SOIL STACK	100Ø	N/A
STORMWATER DRAINAGE		
STORMWATER LINES	100Ø	1:120
DOWNPIPES	80Ø	N/A
SANITARY SEWER PLUMBING TO NZBC G13/A51 AND DRAINAGE TO NZBC G13/A52. STORMWATER DRAINAGE TO NZBC E1/A51. PIPE SIZES, GRADES, AND LAYOUT, TO BE CONFIRMED BY A REGISTERED PLUMBER/DRAINLAYER.		
PIPE JUNCTION OF ALL STORMWATER & SANITARY SEWER SERVICES TO HAVE AN ELBOW/INTERSECTION ANGLE OF 45-60		
LEGEND:		
DP - DOWNPIPE		
IO - INSPECTION OPENING		
CE - CLEANING EYE		
ORG - OVERFLOW RELIEF GULLY		
GT - GULLY TRAP		
AAV - AIR ADMITTANCE VALVE		
TV - TERMINAL VENT		
ST - SOIL STACK		

SOAK PIT CALCULATION AS PER NZBC E1 SECT 9.0.5

$V_{stor} = R_c - V_{soak}$

V_{stor} = VOLUME OF STORAGE REQUIRED IN THE SOAK PIT

R_c = RUN OFF DISCHARGING FROM CATCHMENT TO SOAK PIT IN 1HR

V_{soak} = VOLUME DISPOSAL OF BY SOAKAGE IN HOUR (m³)

$R_c = 10C IA$

WHERE

C = RUNOFF COEFFICIENT (SEE TABLE 1)

I = RAINFALL INTENSITY (mm/hr) BASED ON 1hr DURATION OF AN EVENT HAVING A 10% PROBABILITY OF OCCURRING ANUALLY

A = AREA (HECTARES) OF CATCHMENT DISCHARGING TO THE SOAK PIT.

ROOF

$R_c = 10 \times 0.9 \times 14.4 \times 0.0328$

$R_c = 4.25$

$V_{soak} = A_{sp} S_r / 1000$

WHERE

A_{sp} = AREA OF THE BASE OF THE SOAK PIT

S_r = SOAKAGE RATE (mm/hr) DETERMIND FROM 9.0.2

$V_{soak} = 16 \times 0 / 1000$

$V_{soak} = 0$

$V_{stor} = R_c - V_{soak}$

$V_{stor} = 4.25 - 0$

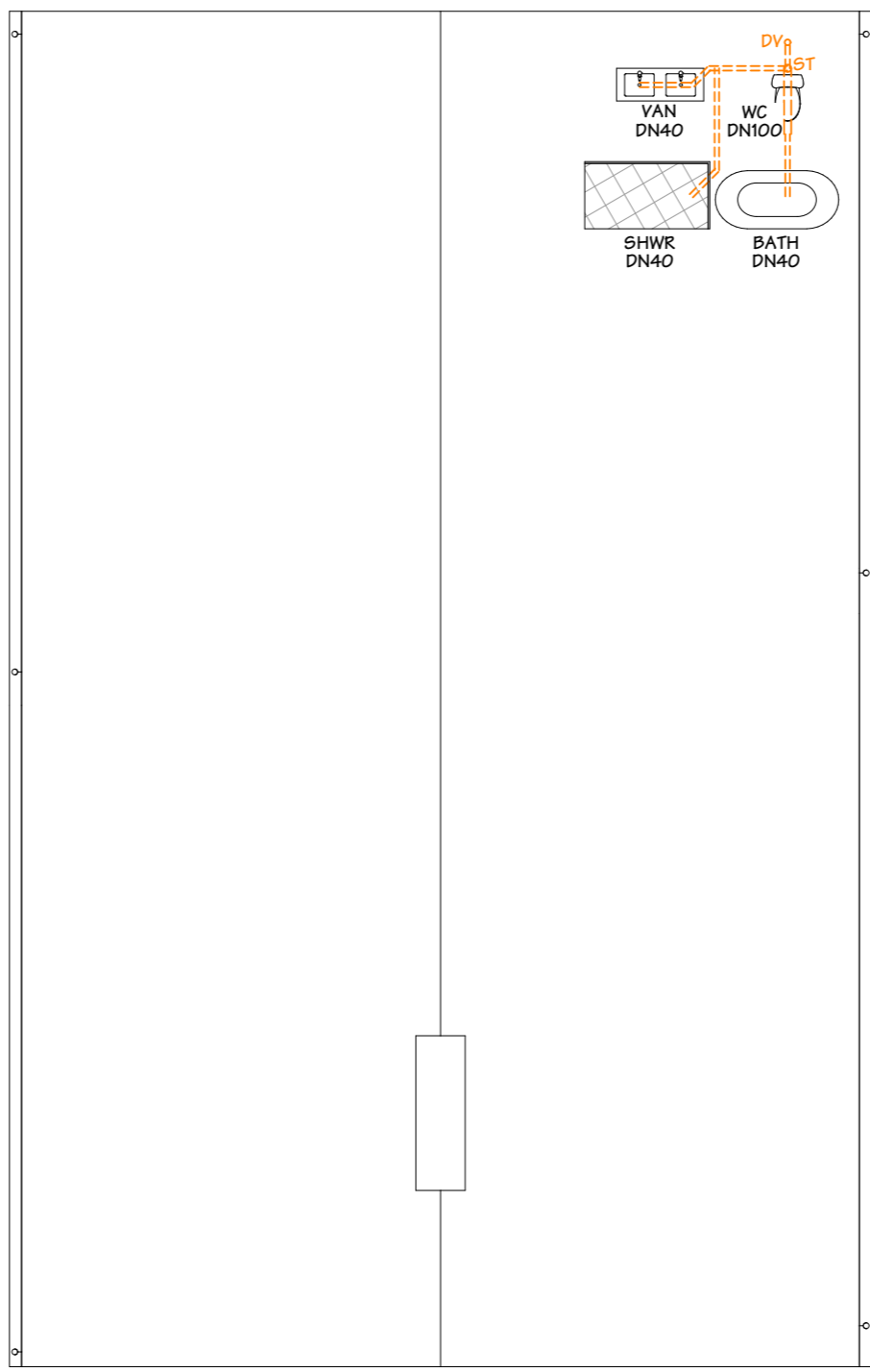
$V_{stor} = 4.25m^3$ REQUIRED VOLUME IN SOAK PIT

$4.25m^3 / 0.38$ (USABLE VOLUME IS 0.38 OF HOLE SIZE WHEN SOAK PIT COMPRISES OF ROCK)

$= 11.19m^3$

SOAK PITS REQUIRE = 2.8m x 2.4m x 2.0m DEEP SOAK PITS

NOTE:
THE RATE OF SOAKAGE INTO THE GROUND HAS NOT BEEN CONSIDERED AS THE NATURE OF THE GROUND VARIES THROUGHOUT THE DISTRICT AND IN THE AREAS OF POOR SOAKAGE AN OVERFLOW OUTLET TO AN APPROVED OUT FALL IS ALLOWED.



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
FIRST FLOOR DRAINAGE PLAN

LEGAL DESCRIPTION:
LOT: 1-2
DP: 316193
ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

NOTES:
- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work.
- All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
10 DEC 24
AMENDMENT DATE:
241210.1820
VERSION:
WD-01

DESIGNER:
HTC
DRAWN:
JON
CHECKED:
JON

SCALE:
1:100
JOB#:
23071
SHEET:
6

ALLOWABLE ROOF PLAN AREA SERVED BY SECTION OF GUTTER

REFERENCE: E1/AS1 5.0 ROOF GUTTERS

ROOF PITCH: 31.5° & 3°
 CROSS SECTIONAL AREA OF GUTTER: 12500mm²
 DESIGN RAINFALL INTENSITY 'I': 100mm/hr

THEREFORE FROM FIG.15 (25° - 35° roof pitch):

ALLOWABLE ROOF PLAN AREA: 80m²
 Measured section is from gutter high point to DP

DOWNPIPE CALCULATION
 NOTE: 1 DOWNPIPE PER 80m²

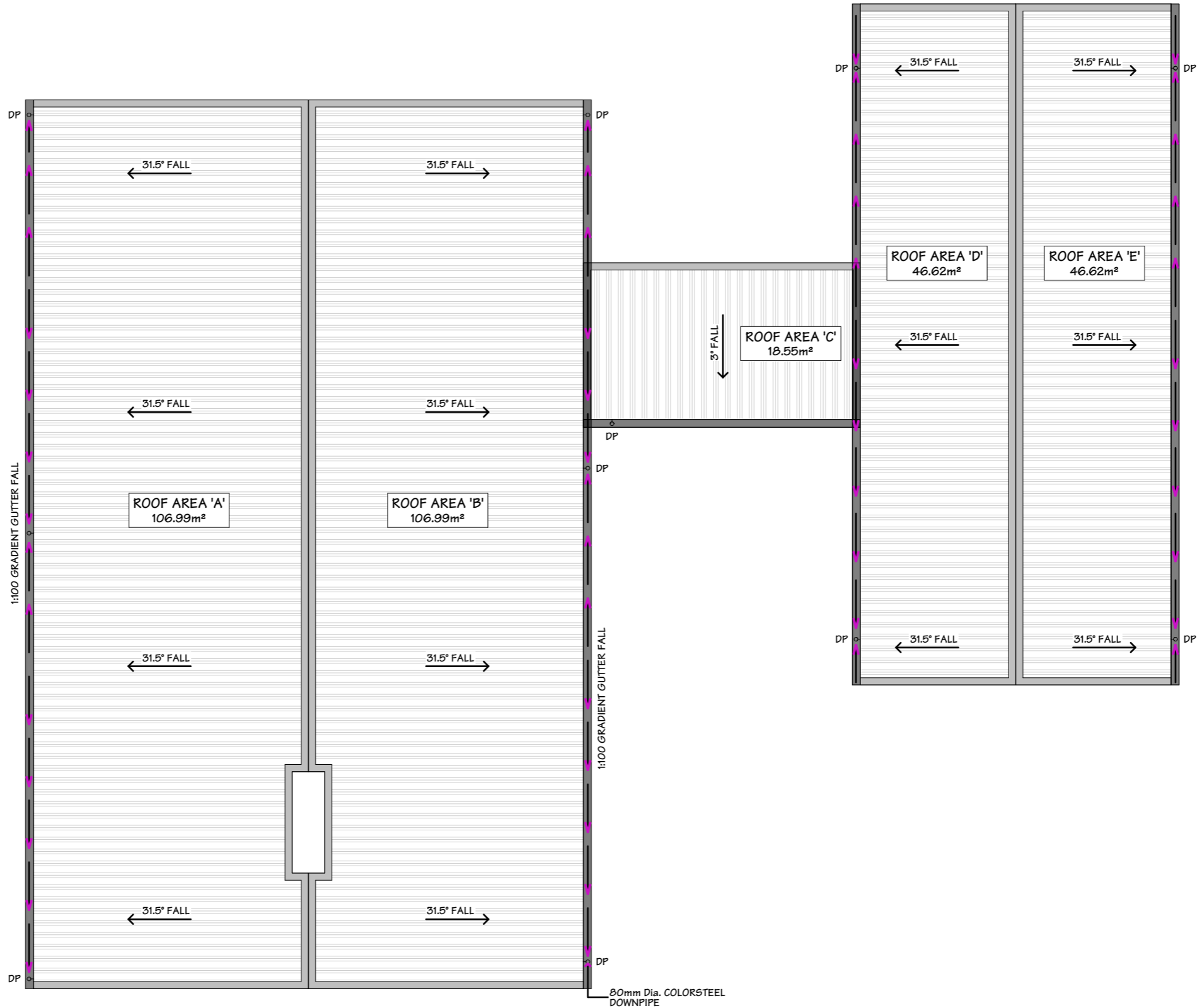
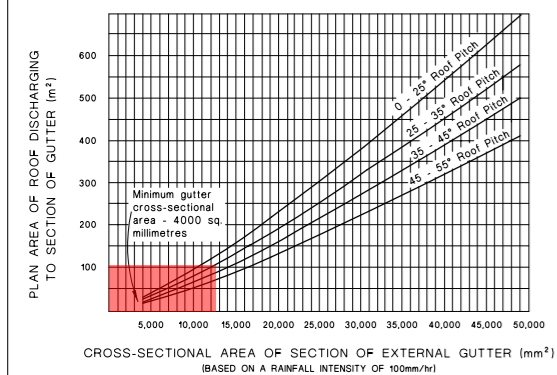
ROOF PLAN AREA 'A': = 106.99m² = 2 DOWNPIPES
 ROOF PLAN AREA 'B': = 106.99m² = 2 DOWNPIPES
 ROOF PLAN AREA 'C': = 18.55m² = 1 DOWNPIPE
 ROOF PLAN AREA 'D': = 46.62m² = 2 DOWNPIPES
 ROOF PLAN AREA 'E': = 46.62m² = 2 DOWNPIPES

GUTTER FALL DIRECTION IS GOVERNED BY THE MAX. CROSS-SECTIONAL AREA (CSA) OF EXTERNAL GUTTER (E1/AS1 FIGURE 15) MAX. PLAN AREA OF BEING SERVED BY THE EXTERNAL GUTTER MUST NOT EXCEED ITS MAX. CSA.

CROSS-SECTIONAL AREA (CSA) OF EXTERNAL GUTTER
 SELECTED METALCRAFT HALF ROUND GUTTER HAS A MAX. CSA OF 8627mm²

AS PER E1/AS1 FIGURE 15 CROSS-SECTIONAL AREA OF SECTION OF EXTERNAL GUTTER IS = 8200mm² APPROX.
 MAX. DISCHARGING ROOF PLAN AREA OF =53.32m²

Figure 15: Cross-sectional Area of External Gutter
 Paragraphs 5.1.2 and 5.1.3



80mm Dia. COLORSTEEL DOWNPIPE



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
ROOF CATCHMENT PLAN PLAN

LEGAL DESCRIPTION:
 LOT: 1-2
 DP: 316193
 ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

NOTES:
 - Subject to council approval
 - All measurements to be confirmed on site by the contractor prior to the commencement of work.
 - All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
 10 DEC 24
 AMENDMENT DATE:
 241210.1820
 VERSION:
 WD-01

DESIGNER:
 HTC
 DRAWN:
 JON
 CHECKED:
 JON

SCALE:
 1:100,
 1:1.99
 JOB#:
 23071
 SHEET:
7

EXTERIOR FRAMING
 165mm NZSIP PANEL (SED)
 (GROUND FLOOR & FIRST FLOOR)

EXTERIOR FRAMING
 140x45 STUDS UP TO 5.0m-AT 300mm crs (SED)
 (GROUND FLOOR & FIRST FLOOR)

EXTERIOR FRAMING
 140x45 STUDS UP TO 3.2-AT 600mm crs
 (GROUND FLOOR & FIRST FLOOR)

INTERIOR FRAMING
 90x45 STUDS UP TO 2.9m-AT 600mm crs
 (GROUND FLOOR)

140x45 STUDS UP TO 4.8m-AT 400mm crs
 (FIRST FLOOR)

ROOF FRAMING
 215mm NZSIP ROOF PANEL

NOTES
 BUILDING CONTRACTOR TO CHECK ALL DIMENSIONS BEFORE COMMENCING CONSTRUCTION

ALL GLAZING TO COMPLY WITH NZS 4223 INCLUDING SAFETY GLASS TO SHOWER DOORS

DOUBLE GLAZING TO ALL EXTERIOR JOINERY, EXCLUDING GARAGE SPACE

OFFSET JOINERY IS DIMENSIONED OTHERWISE CONSIDERED CENTRED IN WALL SPACE

NOTES

NOTE 1:
 WALL LINING ADJACENT TO KITCHEN APPLIANCES AND FACILITIES SHALL HAVE IMPERVIOUS SURFACES THAT CAN BE EASILY CLEANED AND MAINTAINED IN A HYGIENIC CONDITION

NOTE 2:
 FEATURE LADDER

NOTE 3:
 10" WIDE RECLAIMED THRESHING FLOOR BOARDS

NOTE 4:
 140 x 45 FRAMING WITH BRICK FEATURE CLADDING
 (DESIGN TBC BY ENGINEER)

NOTE 5:
 FIREPLACE: ESCEA DS1400 DOUBLE SIDE GAS

NOTE 6:
 ATTIC FLOOR (0.5kPa MAX) AREA 3.0m(w) x 4.0m (l) x 1.5m HIGH

NOTE 7:
 HOMETECH LWS2800 ATTIC STAIR. 600mm x 1300mm OPENING

NOTE 8:
 WINE CELLAR UNDER STAIR CASE

NOTE 9:
 BATH TO BE SUNKEN INTO THE SLAB

KEY

- INDICATES SED BEAM
- INDICATES SED POST
- INDICATES FLAT CEILING TRUSSES
- 165mm NZSIP PANEL
- 140mm TIMBER FRAME

***SD** SMOKE DETECTOR WITH HUSH BUTTON

→ HEATED TOWEL RAIL

FLOOR FINISH NOTES:

INDICATES CERAMIC TILE FLOORING - WHERE EXPOSED TO WATER SPLASH MUST HAVE A MIN. 6% WATER ABSORPTION, WATERPROOF GROUTED JOINTS AND BED WITH AN ADHESIVE SPECIFIED BY THE TILE MANUFACTURER AS BEING SUITABLE FOR THE TILES, SUBSTRATE AND ENVIRONMENT OF USE - WHERE IN A WET AREA, TILES MUST BE AS ABOVE AND LAID OVER AN IMPERVIOUS LINING OR MEMBRANE TO FLOORS AND WALLS. FLOORS SHALL FALL AT 1:50 TO WASTE

- PATIO AND PAVING TO FRONT DOOR TO COMPLY WITH NZBC D1 2.1 SLIP RESISTANCE TABLE 2. MAXIMUM STEP HEIGHT TO COMMON / MAIN PRIVATE STAIRWAYS TO BE 190mm.

GROUND FLOOR AREAS:

LIVING AREA:	257.08m ²
GARAGE AREA:	42.43m ²
TOTAL GROUND AREA:	299.51m ²

ROOF AREAS:

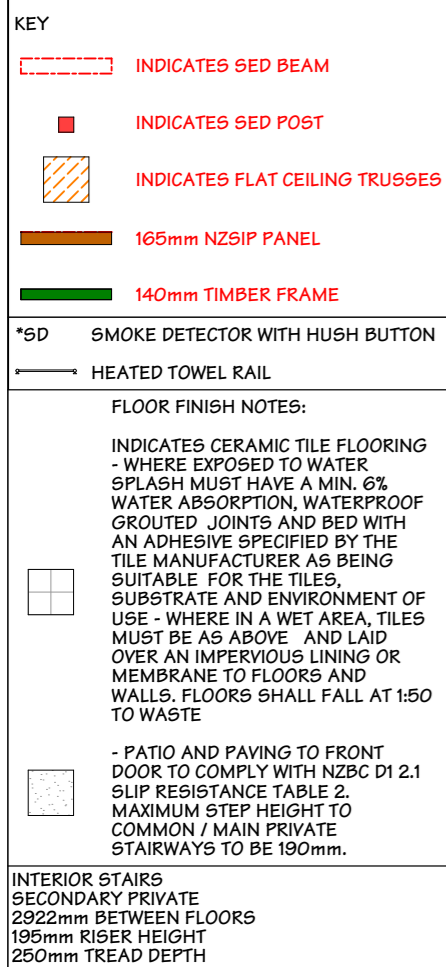
MAIN ROOF:	215.44m ²
LINKWAY ROOF:	19.71m ²
GARAGE/GUEST ROOF:	93.24m ²
TOTAL ROOF AREA:	328.39m ²

ADDITIONAL AREAS

DECK 1 AREA:	39.78m ²
DECK 2 AREA:	22.35m ²
VERANDAH AREA:	74.14m ²
PATIO AREA:	10.06m ²
AREA OVER FOUNDATION:	305.85m ²
TOTAL ADDITIONAL AREA:	452.18m ²

FIRST FLOOR AREA: 83.16m²

TOTAL AREA: 382.67m²



JOB TITLE:
 NATASHA WILLIAMS

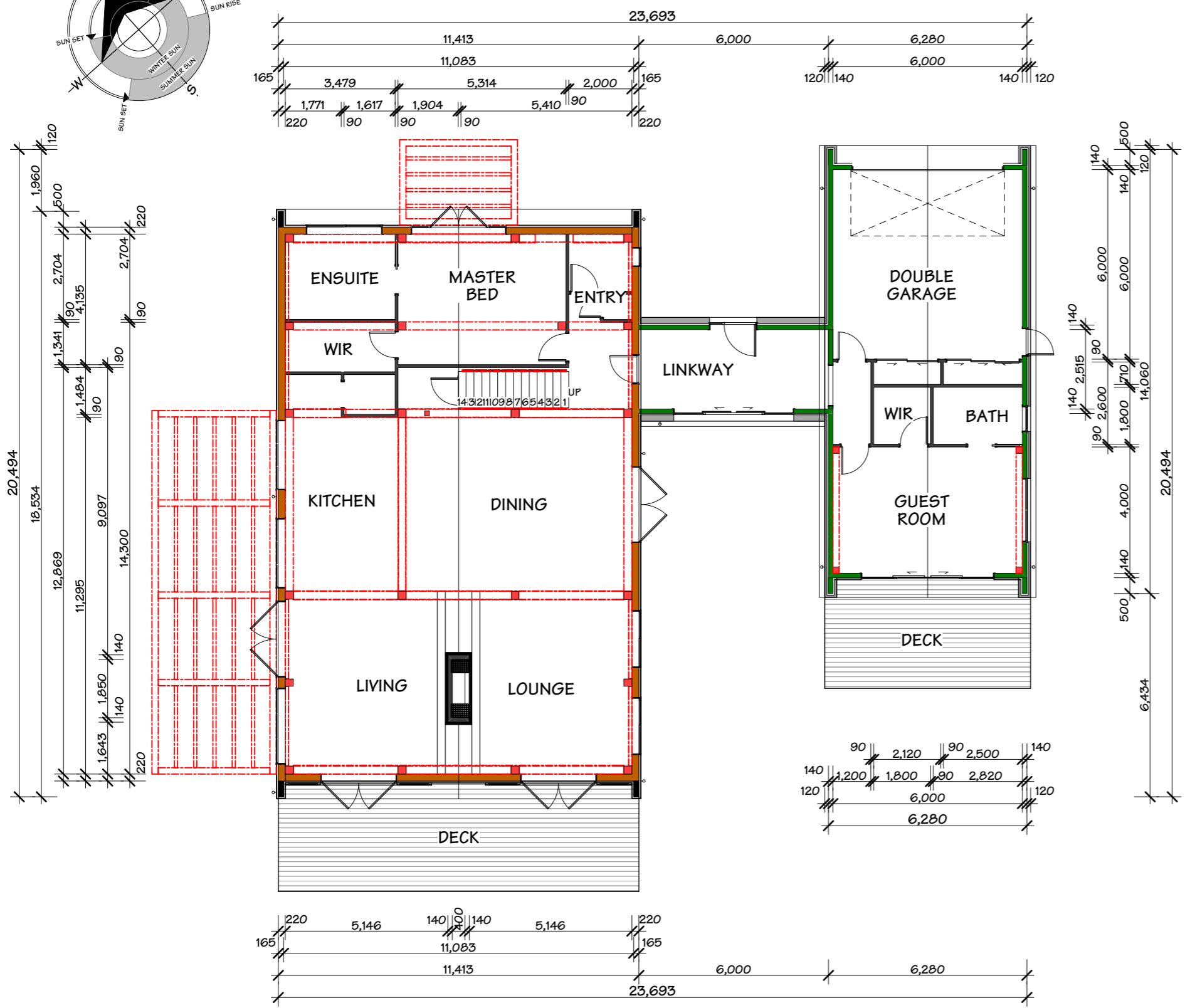
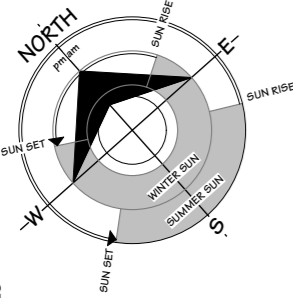
DRAWING TITLE:
 FIRST FLOOR PLAN

LEGAL DESCRIPTION:
 LOT: 1-2
 DP: 316193
 ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

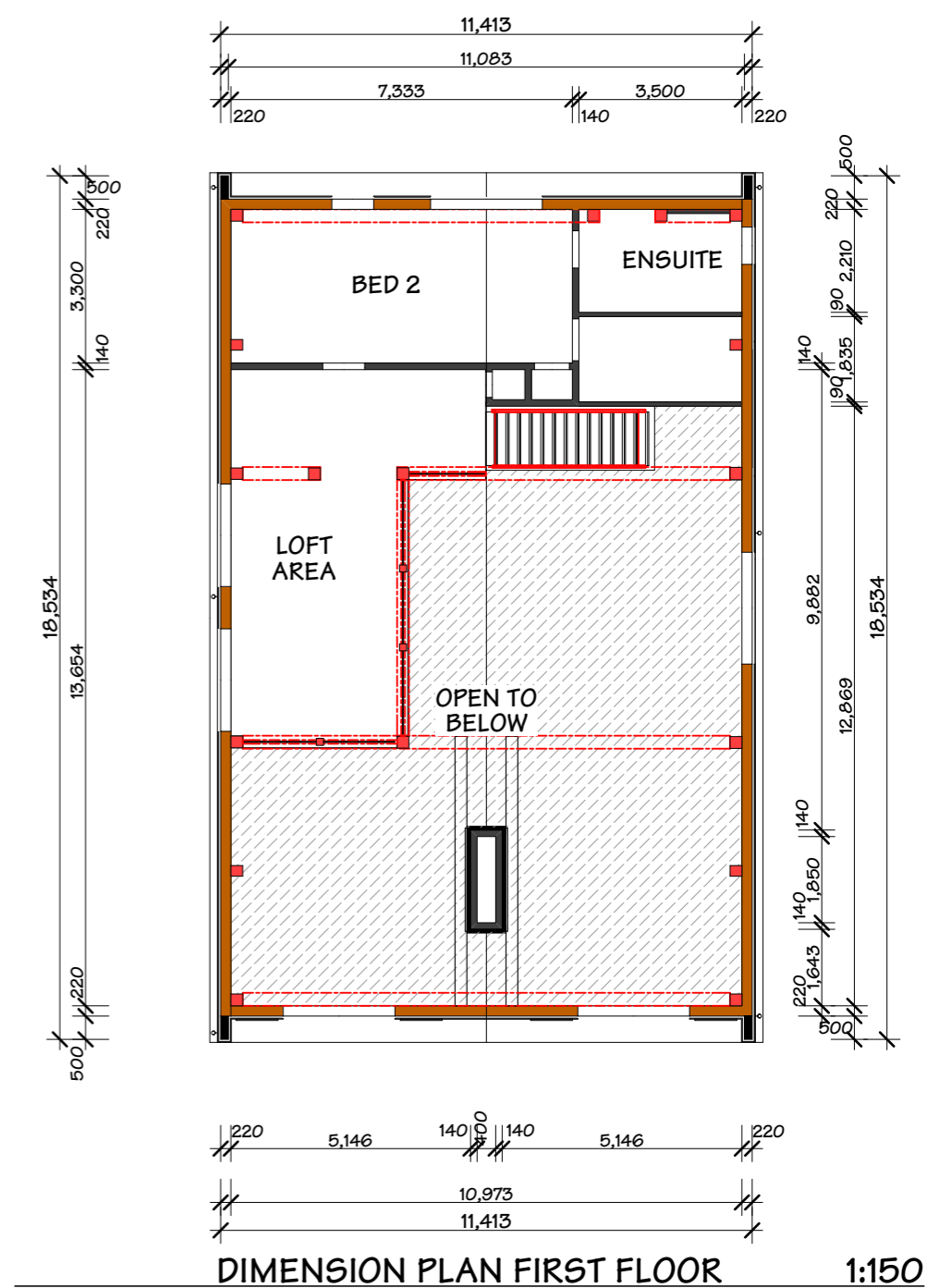
NOTES:

- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work.
- All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE: 10 DEC 24		DESIGNER: HTC	SCALE: 1:100	SHEET: 9
AMENDMENT DATE: 241210.1820		DRAWN: JON		
VERSION: WD-01	REV NO: 00	CHECKED: JON	JOB#: 23071	



DIMENSION PLAN GROUND FLOOR 1:150



DIMENSION PLAN FIRST FLOOR 1:150



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
DIMENSION PLAN

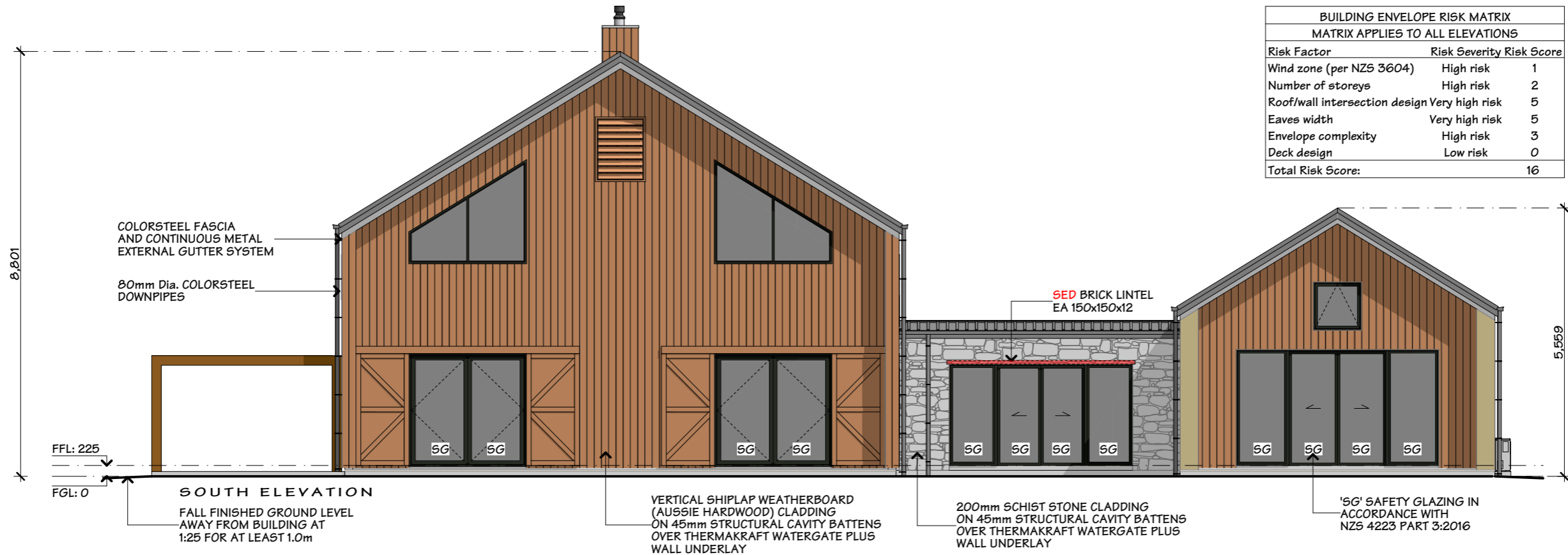
LEGAL DESCRIPTION:
LOT: 1-2
DP: 316193
ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

NOTES:
- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work.
- All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

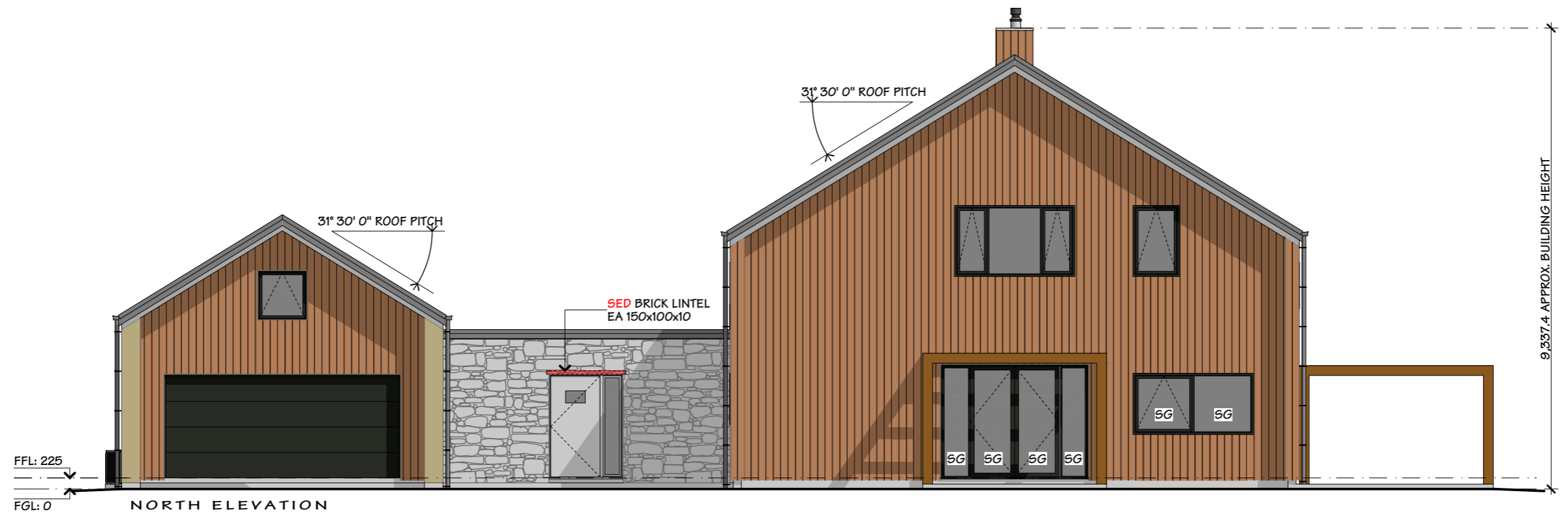
DATE OF ISSUE:
10 DEC 24
AMENDMENT DATE:
241210.1820
VERSION:
WD-01

DESIGNER:
HTC
DRAWN:
JON
CHECKED:
JON

SCALE:
1:150
JOB#:
23071
SHEET:
10
73



BUILDING ENVELOPE RISK MATRIX		
MATRIX APPLIES TO ALL ELEVATIONS		
Risk Factor	Risk Severity	Risk Score
Wind zone (per NZS 3604)	High risk	1
Number of storeys	High risk	2
Roof/wall intersection design	Very high risk	5
Eaves width	Very high risk	5
Envelope complexity	High risk	3
Deck design	Low risk	0
Total Risk Score:		16



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
ELEVATIONS

LEGAL DESCRIPTION:
LOT: 1-2
DP: 316193
ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

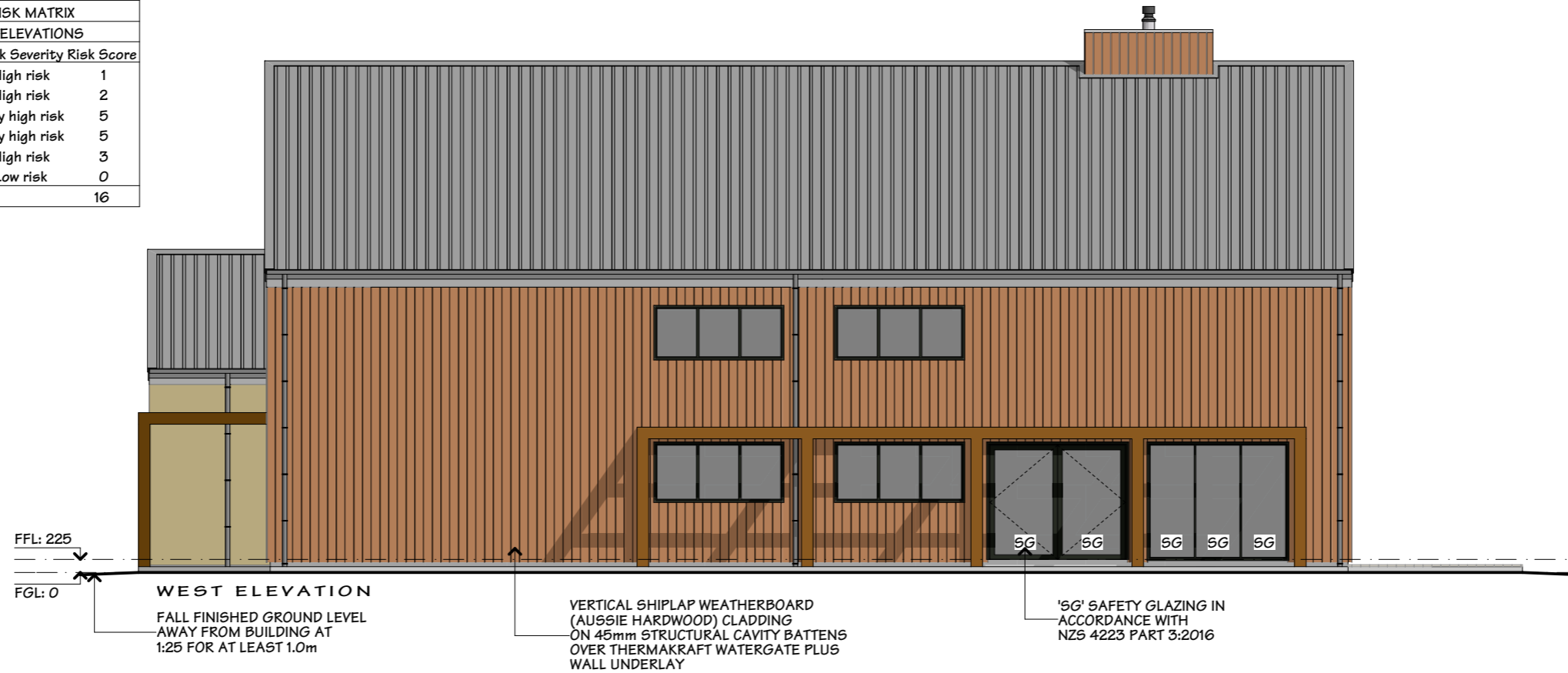
NOTES:
- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work.
- All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
10 DEC 24
AMENDMENT DATE:
241210.1820
VERSION:
WD-01

DESIGNER:
HTC
DRAWN:
JON
CHECKED:
JON

SCALE:
1:100
JOB#:
23071
SHEET:
11
73

BUILDING ENVELOPE RISK MATRIX		
MATRIX APPLIES TO ALL ELEVATIONS		
Risk Factor	Risk Severity	Risk Score
Wind zone (per NZS 3604)	High risk	1
Number of storeys	High risk	2
Roof/wall intersection design	Very high risk	5
Eaves width	Very high risk	5
Envelope complexity	High risk	3
Deck design	Low risk	0
Total Risk Score:		16



JOB TITLE:

NATASHA WILLIAMS

DRAWING TITLE:

ELEVATIONS

LEGAL DESCRIPTION:

LOT: 1-2
DP: 316193
ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

NOTES:

- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work.
- All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:

10 DEC 24

AMENDMENT DATE:

241210.1820

VERSION:

WD-01

REV NO:

00

DESIGNER:

HTC

DRAWN:

JON

CHECKED:

JON

SCALE:

1:100

JOB#:


23071

SHEET:


12


KEY

2/90x45 MSG8 TYPE F	LINTEL SIZE	
TYPE	LUMBERLOK TYPE	LINTEL FIXING

 STUD TO TOP PLATE INTERNAL LOAD BEARING WALL FIXING TYPE B (TO HATCHED AREA)

 ROOF DIAPHRAGM VIA NZSIPS ROOF PANEL

 RANGEHOOD DUCTING VENTING OUT THROUGH WALL (MANROSE EXTRACTOR FAN TO BE 150mm DIA 380m³/hr OR 50L/s INLINE FAN)

 EXTRACTOR FAN DUCTING VENTING OUT THROUGH WALL (MANROSE EXTRACTOR FAN TO BE 150mm DIA 230m³/hr OR 25L/s INLINE FAN)

NOTE:
ALL SED BEAMS, RAFTERS, JOIST, AND FIXINGS AS PER ENGINEER'S DESIGN AND DOCUMENTS

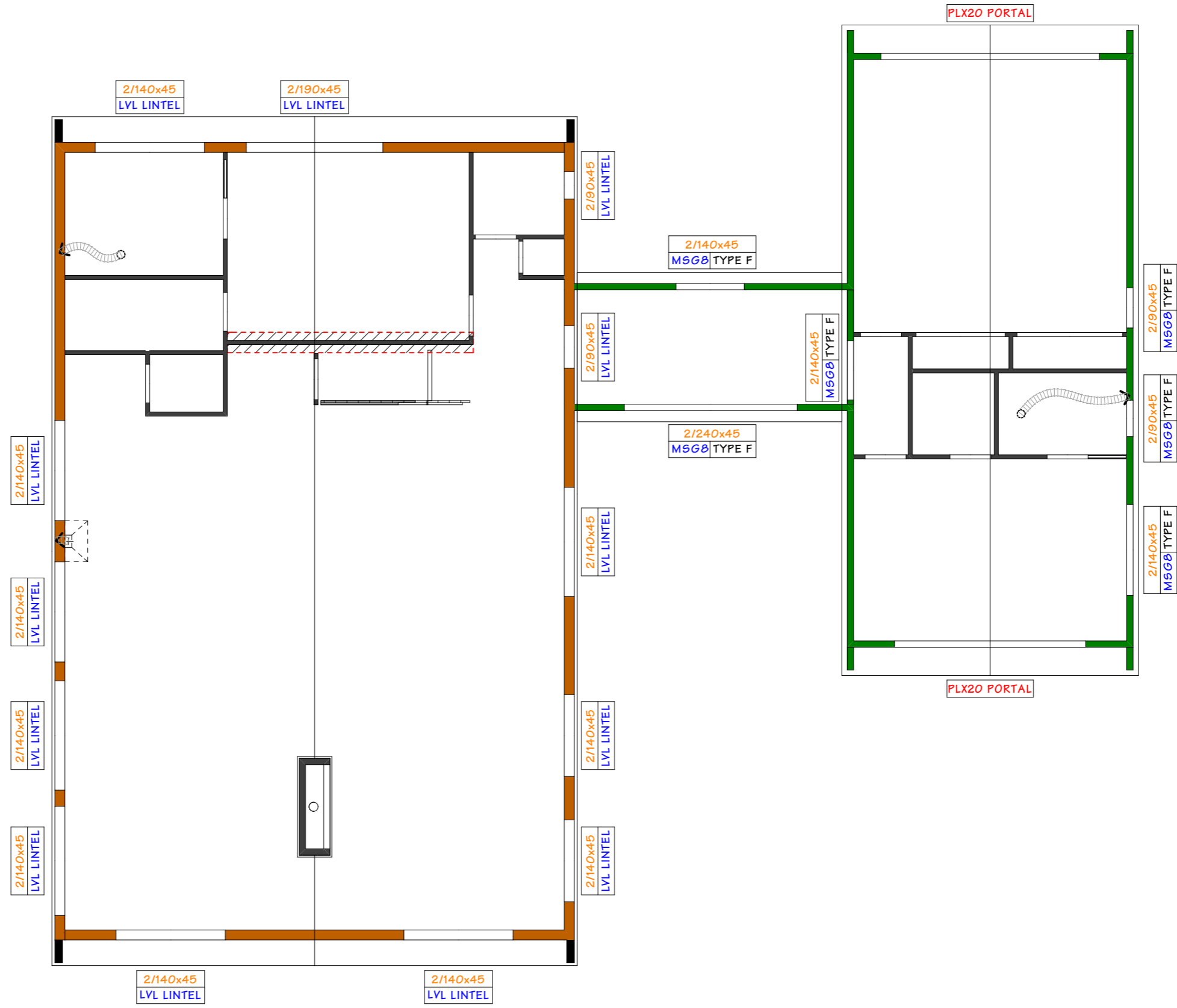
LINTEL FIXINGS > 1.2m: 1 STRAP TO EITHER END OF LINTEL,
1 STRAP TO TRIMMER TO BOTTOM PLATE EITHER END OF LINTEL

LINTEL FIXING < 1.2m: NO SPECIFIC FIXINGS REQUIRED
CONFIRM VENT LOCATIONS PRIOR TO FABRICATION OF ROOF FRAMING
- VENTS SHOWN INDICATIVE ONLY

ROOF PITCH
31.5°

NOTE
BEAM/LINTEL SIZES AND WALL FRAMING/STUDS CALCULATED BY ENGINEER.

LINTEL AND STUD FIXINGS ARE TO MITEK LUMBERLOK 03/2024 & ENGINEER'S CALCULATIONS. REFER TO DETAILS



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
**GROUND FLOOR ROOF/STUD
FIXING/LINTEL FIXING PLAN**

LEGAL DESCRIPTION:
LOT: 1-2
DP: 316193
ADDRESS: 353 DUNSTAN
ROAD, ALEXANDRA

NOTES:
- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work.
- All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
10 DEC 24
AMENDMENT DATE:
241210.1820
VERSION:
WD-01

DESIGNER:
HTC
DRAWN:
JON
CHECKED:
JON

SCALE:
1:100
JOB#:
23071
SHEET:
13
73

KEY

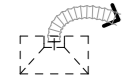
2/90x45 MSG8 TYPE F	LINTEL SIZE	
TYPE	LUMBERLOK TYPE	LINTEL FIXING



STUD TO TOP PLATE INTERNAL
LOAD BEARING WALL FIXING
TYPE B (TO HATCHED AREA)



ROOF DIAPHRAGM VIA
NZSIPs ROOF PANEL



RANGEHOOD DUCTING
VENTING OUT THROUGH WALL
(MANROSE EXTRACTOR FAN TO
BE 150mm DIA 380m³/hr OR
50L/s INLINE FAN)



EXTRACTOR FAN DUCTING
VENTING OUT THROUGH WALL
(MANROSE EXTRACTOR FAN TO
BE 150mm DIA 230m³/hr OR
25L/s INLINE FAN)

NOTE:
ALL SED BEAMS, RAFTERS, JOIST, AND FIXINGS AS PER
ENGINEER'S DESIGN AND DOCUMENTS

LINTEL FIXINGS > 1.2m: 1 STRAP TO EITHER END OF
LINTEL,
1 STRAP TO TRIMMER TO BOTTOM PLATE EITHER END OF
LINTEL

LINTEL FIXING < 1.2m: NO SPECIFIC FIXINGS REQUIRED

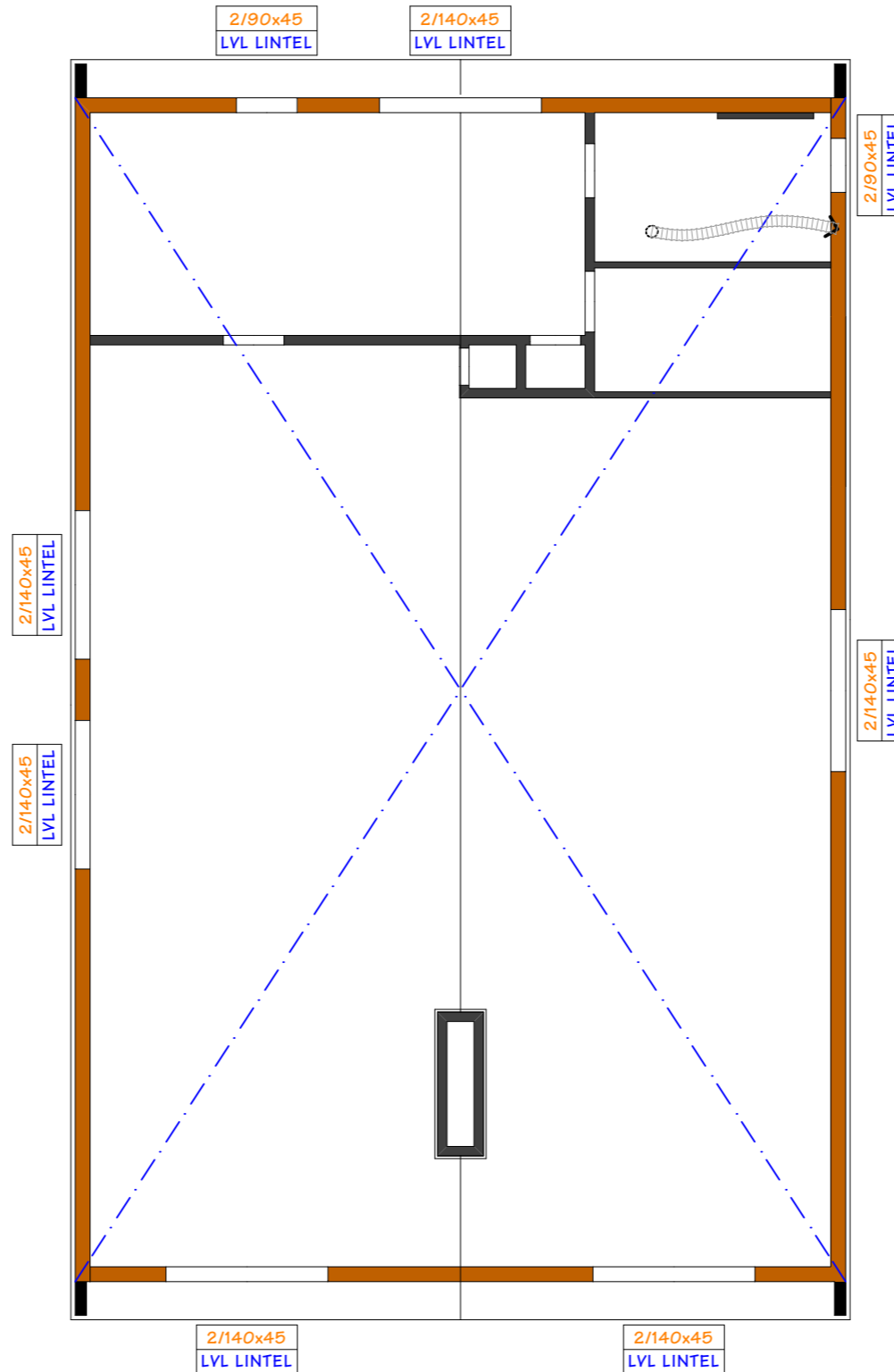
CONFIRM VENT LOCATIONS PRIOR TO FABRICATION OF
ROOF FRAMING
- VENTS SHOWN INDICATIVE ONLY

ROOF PITCH
31.5°

NOTE

BEAM/LINTEL SIZES AND WALL FRAMING/STUDS
CALCULATED BY ENGINEER.

LINTEL AND STUD FIXINGS ARE TO MITEK LUMBERLOK
03/2024 & ENGINEER'S CALCULATIONS. REFER TO
DETAILS



JOB TITLE:

NATASHA WILLIAMS

DRAWING TITLE:

FIRST FLOOR ROOF/STUD
FIXING/LINTEL FIXING PLAN

LEGAL DESCRIPTION:

LOT: 1-2
DP: 316193
ADDRESS: 353 DUNSTAN
ROAD, ALEXANDRA

NOTES:

- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work.
- All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:

10 DEC 24

AMENDMENT DATE:

241210.1820

VERSION:
WD-01

REV NO:
00

DESIGNER:

HTC

DRAWN:

JON

CHECKED:

JON

SCALE:

1:100

JOB#:

23071

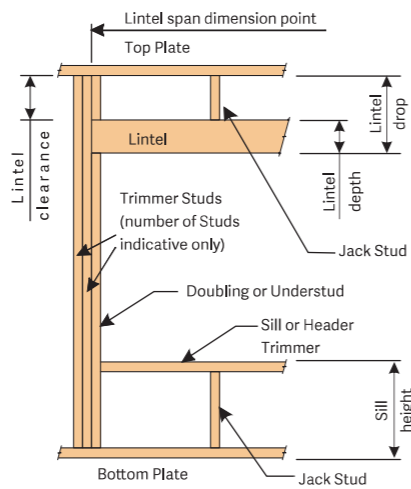
SHEET:

14

STUD-LOK LINTEL FIXING OPTIONS FOR ON-SITE

ALTERNATIVE TO TABLE 8.14 & FIGURE 8.12 NZS 3604:2011

- All fixings are designed for vertical loads only. Dead loads include the roof weight and standard ceiling weight of 0.20kPa.
- These fixings assume the correct choice of rafter/truss to top plate connections have been made.
- All fixings assume bottom plate thickness of 45mm maximum
- Wall framing arrangements under girder trusses are not covered in this schedule
- All timber selections are as per NZS 3604:2011.



LINTEL SUPPORTING GIRDER TRUSSES

Roof Tributary Area	Light Roof			Heavy Roof		
	Low, Medium, High	Very High	Extra High	Low, Medium, High	Very High	Extra High
8.6m ²	G	G	H	G	G	H
11.6m ²	G	H	H	G	G	H
12.1m ²	G	H	H	G	H	H
15.3m ²	H	H	-	G	H	H
19.1m ²	H	-	-	G	H	-
20.9m ²	H	-	-	H	H	-
21.8m ²	H	-	-	H	-	-
34.3m ²	-	-	-	H	-	-

NOTES:

1. Roof Tributary Area = approx. 1/2 x (total roof area on girder and rafter trusses supported by lintel)
2. Assumed girder truss is at mid-span or middle third span of lintel
3. Use similar fixings for both ends of lintel
4. All other cases require specific engineering design

SELECTION CHART FOR LINTEL FIXING

Lintel Span (m)	Loaded Dimension (m)	Light Roof					Heavy Roof				
		Wind Zone					Wind Zone				
		Low	Medium	High	Very High	Extra High	Low	Medium	High	Very High	Extra High
1.0	2.0	E	E	E	F	F	E	E	E	E	F
	3.0	E	E	F	F	F	E	E	E	F	F
	4.0	E	F	F	F	G	E	E	F	F	F
	5.0	E	F	F	G	G	E	E	F	F	G
	6.0	E	F	F	G	G	E	E	F	F	G
1.2	2.0	E	E	F	F	F	E	E	E	F	F
	3.0	E	E	F	F	F	E	E	F	F	F
	4.0	E	F	F	G	G	E	E	F	F	G
	5.0	E	F	F	G	G	E	E	F	F	G
	6.0	F	F	G	G	H	E	E	F	G	G
1.5	2.0	E	E	F	F	F	E	E	E	F	F
	3.0	E	F	F	F	G	E	E	F	F	F
	4.0	E	F	F	G	G	E	E	F	F	G
	5.0	F	F	G	G	H	E	E	F	G	G
	6.0	F	F	G	H	H	E	E	F	G	H
2.0	2.0	E	F	F	F	G	E	E	F	F	F
	3.0	E	F	F	G	G	E	E	F	F	G
	4.0	F	F	G	G	H	E	E	F	G	G
	5.0	F	F	G	H	H	E	E	F	G	H
	6.0	F	G	G	H	H	E	F	G	H	H
2.4	2.0	E	F	F	G	G	E	E	F	F	G
	3.0	F	F	G	G	H	E	E	F	G	G
	4.0	F	F	G	H	H	E	E	F	G	H
	5.0	F	G	G	H	H	E	F	G	H	H
	6.0	F	G	H	H	-	E	F	G	H	H
3.0	2.0	E	F	F	G	G	E	E	F	F	G
	3.0	F	F	G	H	H	E	E	F	G	H
	4.0	F	G	G	H	H	E	F	G	H	H
	5.0	F	G	H	H	-	E	F	G	H	H
	6.0	F	G	H	-	-	E	F	G	H	-
3.6	2.0	F	F	G	G	H	E	E	F	G	G
	3.0	F	F	G	H	H	E	F	G	G	H
	4.0	F	G	H	H	-	E	F	G	H	H
	5.0	F	G	H	-	-	E	F	G	H	-
	6.0	G	H	H	-	-	E	F	H	-	-
4.2	2.0	F	F	G	G	H	E	E	F	G	G
	3.0	F	G	H	H	-	E	F	G	H	H
	4.0	F	G	H	-	-	E	F	G	H	-
	5.0	G	H	H	-	-	E	F	H	-	-
	6.0	G	H	-	-	-	E	F	H	-	-
4.5	2.0	F	F	G	H	H	E	E	F	G	H
	3.0	F	G	H	H	-	E	F	G	H	H
	3.4	F	G	H	H	-	E	F	G	H	H
	4.0	F	G	H	-	-	E	F	G	H	-
	5.0	G	H	-	-	-	E	F	H	-	-
4.8	2.0	F	F	G	H	H	E	E	F	G	H
	3.0	F	G	H	H	-	E	F	G	H	H
	3.2	F	G	H	H	-	E	F	G	H	H
	4.0	F	G	H	-	-	E	F	H	H	-
	5.0	G	H	-	-	-	E	F	H	-	-
5.1	2.0	F	F	G	H	H	E	E	F	G	H
	3.0	F	G	H	H	-	E	F	G	H	H
	3.5	F	G	H	-	-	E	F	G	H	-
	4.0	G	G	H	-	-	E	F	H	H	-
	5.0	G	H	-	-	-	E	F	H	-	-
5.4	2.0	F	F	G	H	H	E	E	F	G	H
	2.8	F	G	H	H	-	E	F	G	H	H
	3.0	F	G	H	-	-	E	F	G	H	-
	4.0	G	H	H	-	-	E	F	H	-	-
	5.0	G	H	-	-	-	E	F	H	-	-

STUD-LOK LINTEL FIXING OPTIONS FOR ON-SITE

TYPE F 4.0kN

For Lintel 140mm min.
2 x STUD-LOK SL125 (green)
Refer Detail 1 for 90mm Stud
Refer Detail 2 for 140mm Stud

1 x STUD-LOK SL80 (white) directly below Lintel
OR
Nail as per NZS 3604:2011

STUD-LOK SL80 (white)
Trimmer to Understud at 400mm crs.
OR
Nail as per NZS 3604:2011

TYPE G 7.5kN

For Lintel 140mm min.
4 x STUD-LOK SL125 (green)
Refer Detail 3 for 90mm Stud
Refer Detail 4 for 140mm Stud

1 x STUD-LOK SL80 (white) directly below Lintel
OR
Nail as per NZS 3604:2011

STUD-LOK SL80 (white)
Trimmer to Understud at 400mm crs.
OR
Nail as per NZS 3604:2011

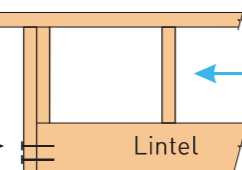
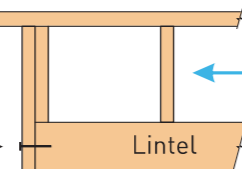
OR

STUD-LOK SL80 (white)
Trimmer to Understud at 400mm crs.
OR
Nail as per NZS 3604:2011

400mm Sheet Brace Strap to one side
6 x 30mm x 3,15 dia. Nails to Stud

3 x 30mm x 3,15 dia. Nails to Bottom Plate

6 x 30mm x 3,15 dia. Nails to Timber Joist/Bearer



OR

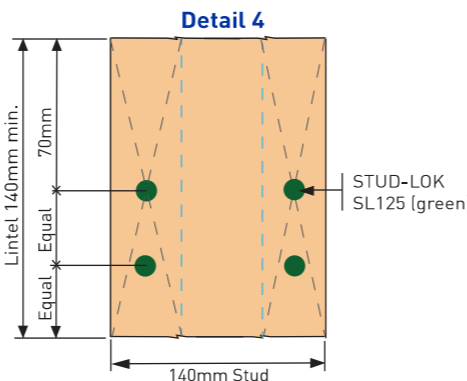
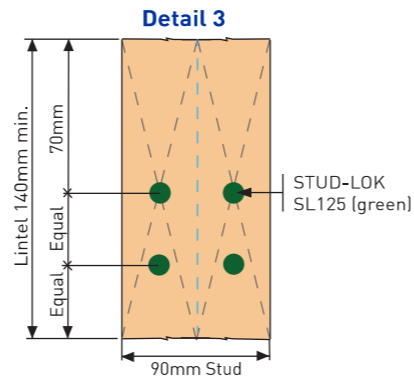
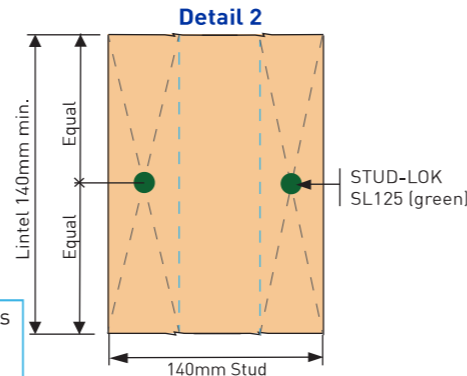
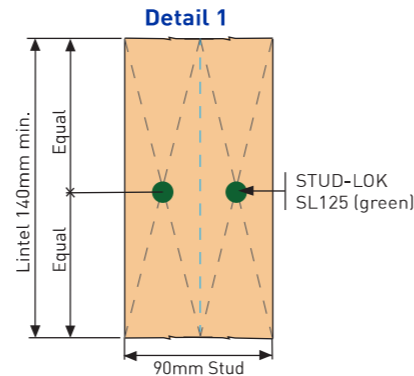


For fixing of Jack Studs refer to Jack Stud to Top Plate & Lintel Fixing brochure

Stud numbers indicative only. Refer Table 8.5 NZS 3604:2011

For fixing of Jack Studs refer to Jack Stud to Top Plate & Lintel Fixing brochure

Stud numbers indicative only. Refer Table 8.5 NZS 3604:2011



STUD-LOK LINTEL FIXING OPTIONS FOR ON-SITE

TYPE H 13.5kN

For Lintel 190mm min.
6 x STUD-LOK SL170 (blue)
Refer Detail 5 for 90mm Stud
Refer Detail 6 for 140mm Stud

1 x STUD-LOK SL80 (white) directly below Lintel
OR
Nail as per NZS 3604:2011

STUD-LOK SL80 (white)
Trimmer to Understud at 400mm crs. both side
OR
Nail as per NZS 3604:2011

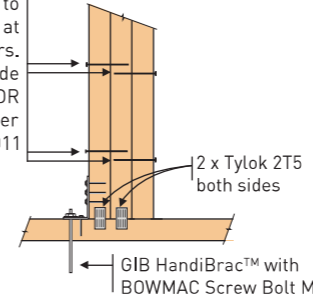
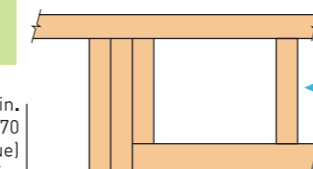
2 x Tylok 2T5 both sides
GIB HandiBrac™ with BOWMAC Screw Bolt M10 x 140mm

STUD-LOK SL80 (white)
Trimmer to Understud at 400mm crs. both sides
OR
Nail as per NZS 3604:2011

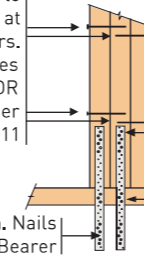
2 x 400mm Sheet Brace Straps to one side
6 x 30mm x 3,15 dia. Nails to Stud

3 x 30mm x 3,15 dia. Nails to Bottom Plate

6 x 30mm x 3,15 dia. Nails to Timber Joist/Bearer

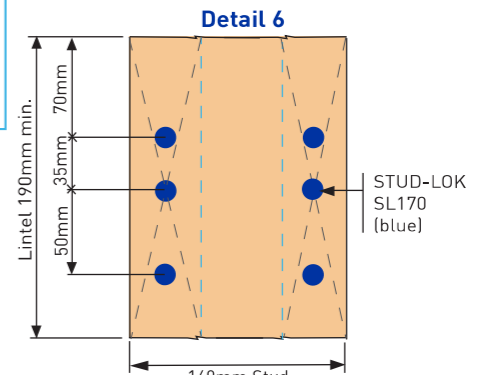
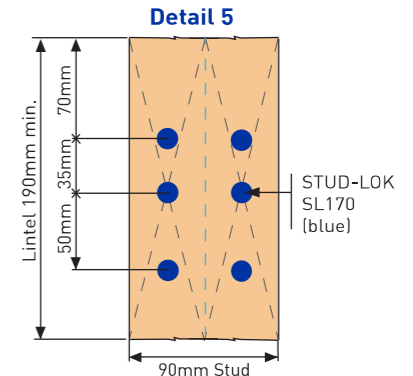


OR



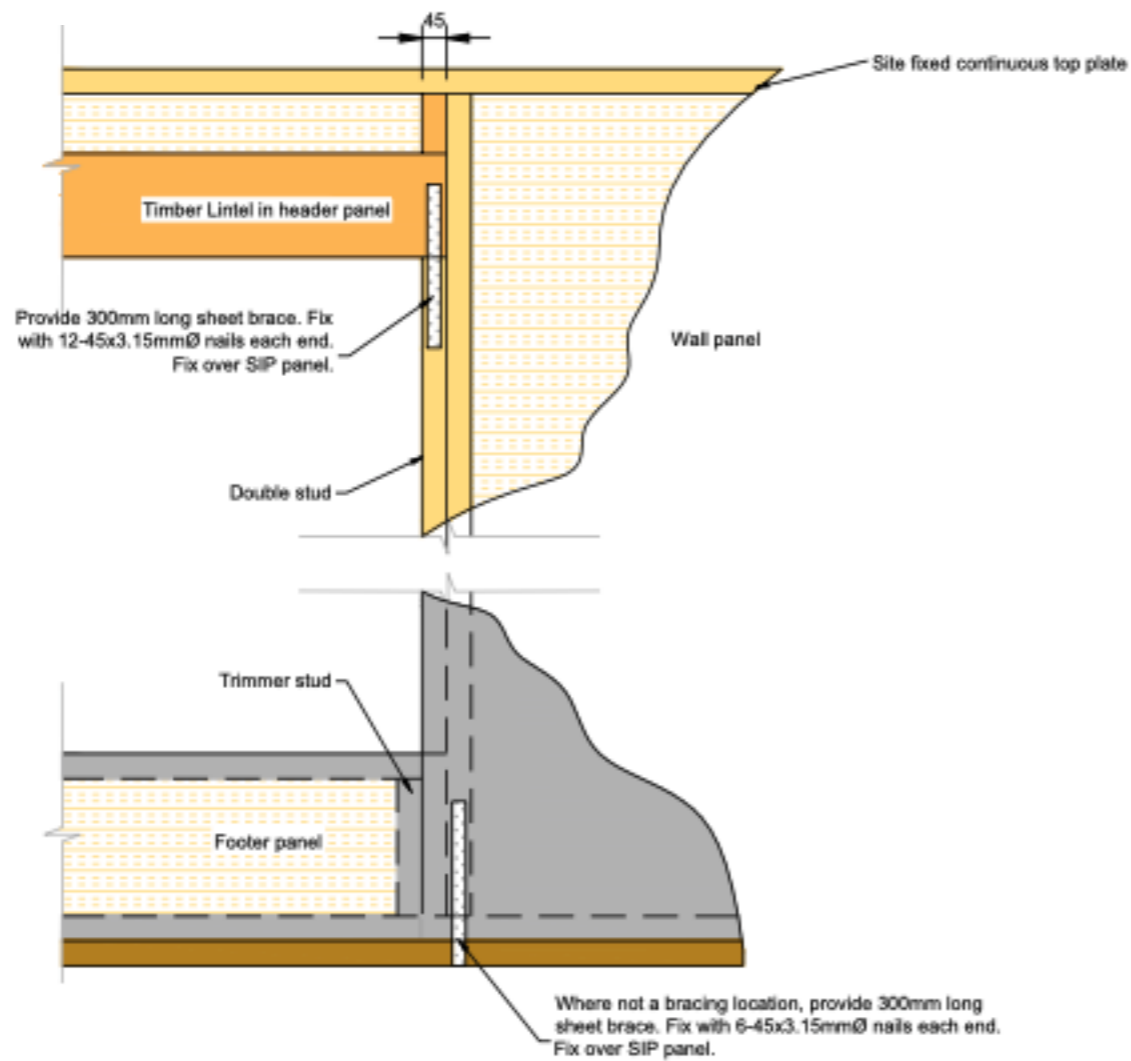
For fixing of Jack Studs refer to Jack Stud to Top Plate & Lintel Fixing brochure

Stud numbers indicative only. Refer Table 8.5 NZS 3604:2011

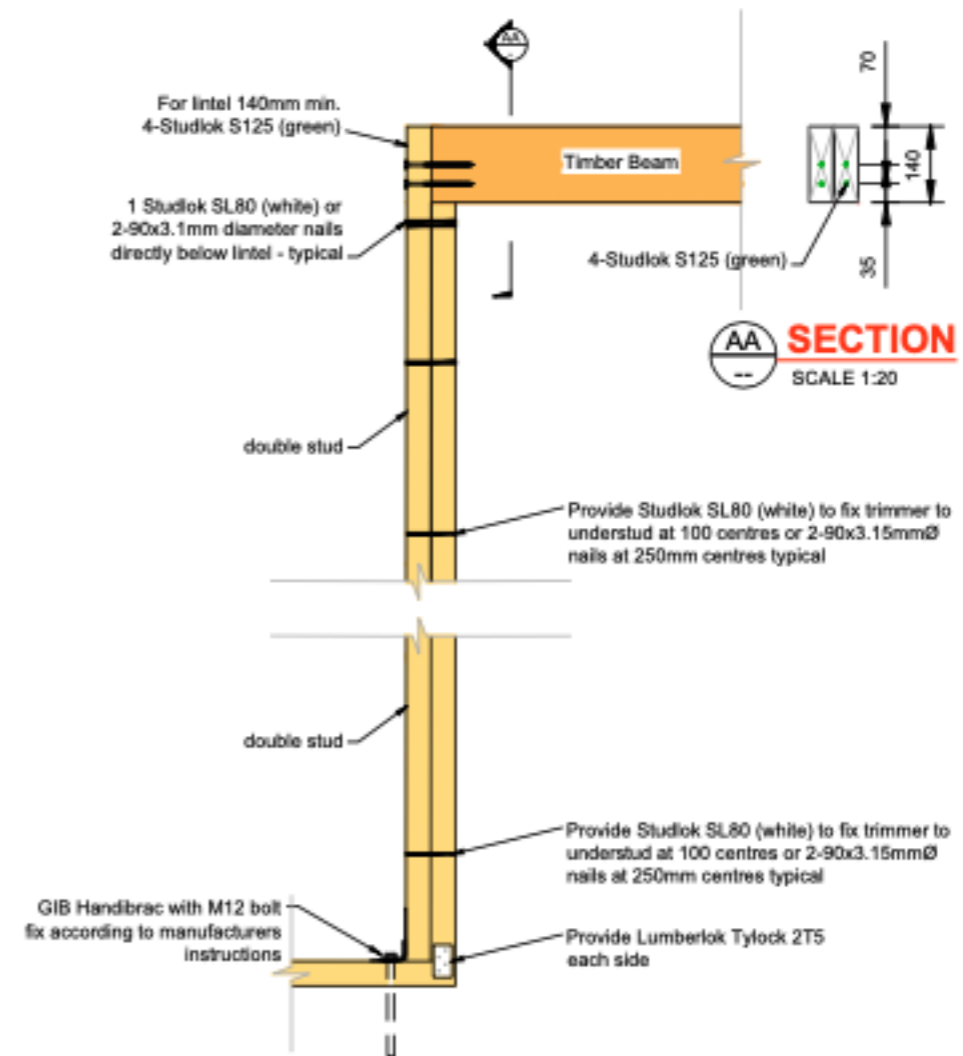


NOTE: STUD-LOK TYPE F 4.0kN fixing can be used for TYPE E 1.4kN fixing

8 WALLS



12 **NZSIP STANDARD LINTEL C1**
SCALE 1:20



13 **TYPICAL B1 TO DS CONNECTION**
SCALE 1:20

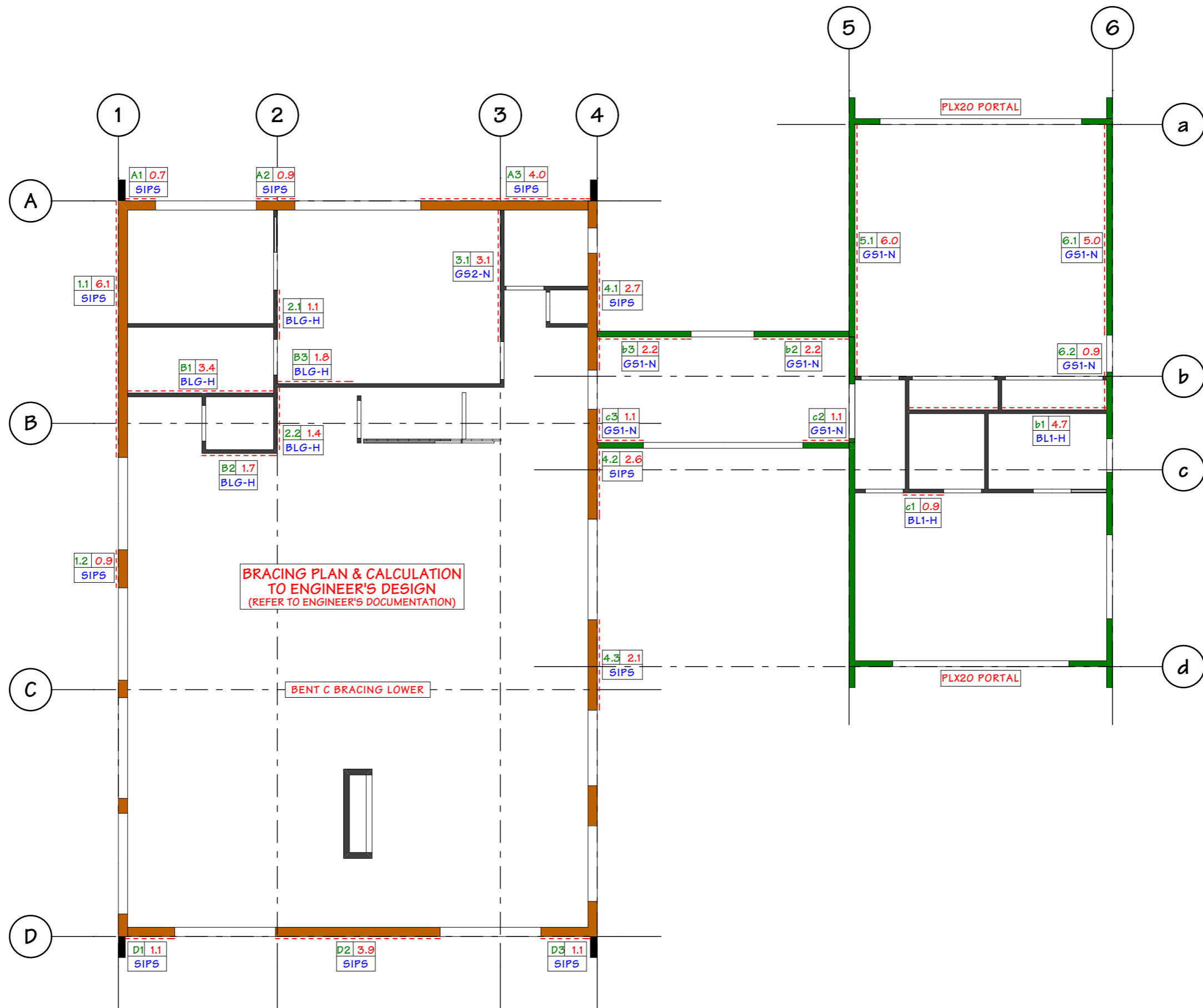
WALL BRACE LEGEND

A2	0.6
G51-N	

A2 LINE LABEL
G51-N BRACE TYPE
0.6 BRACE LENGTH

WALL BRACING TO BE READ IN CONJUNCTION WITH WALL BRACING CALCULATIONS

BRACING DONE IN ACCORDANCE WITH GIB EZYBRACE SYSTEM TABLE 1: 10mm GIB PLASTERBOARD RATINGS



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
GROUND FLOOR BRACING PLAN

LEGAL DESCRIPTION:
LOT: 1-2
DP: 316193
ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

NOTES:
- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work.
- All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
10 DEC 24
AMENDMENT DATE:
241210.1820
VERSION:
WD-01

DESIGNER:
HTC
DRAWN:
JON
CHECKED:
JON

SCALE:
1:100
JOB#:
23071
SHEET:
18
73

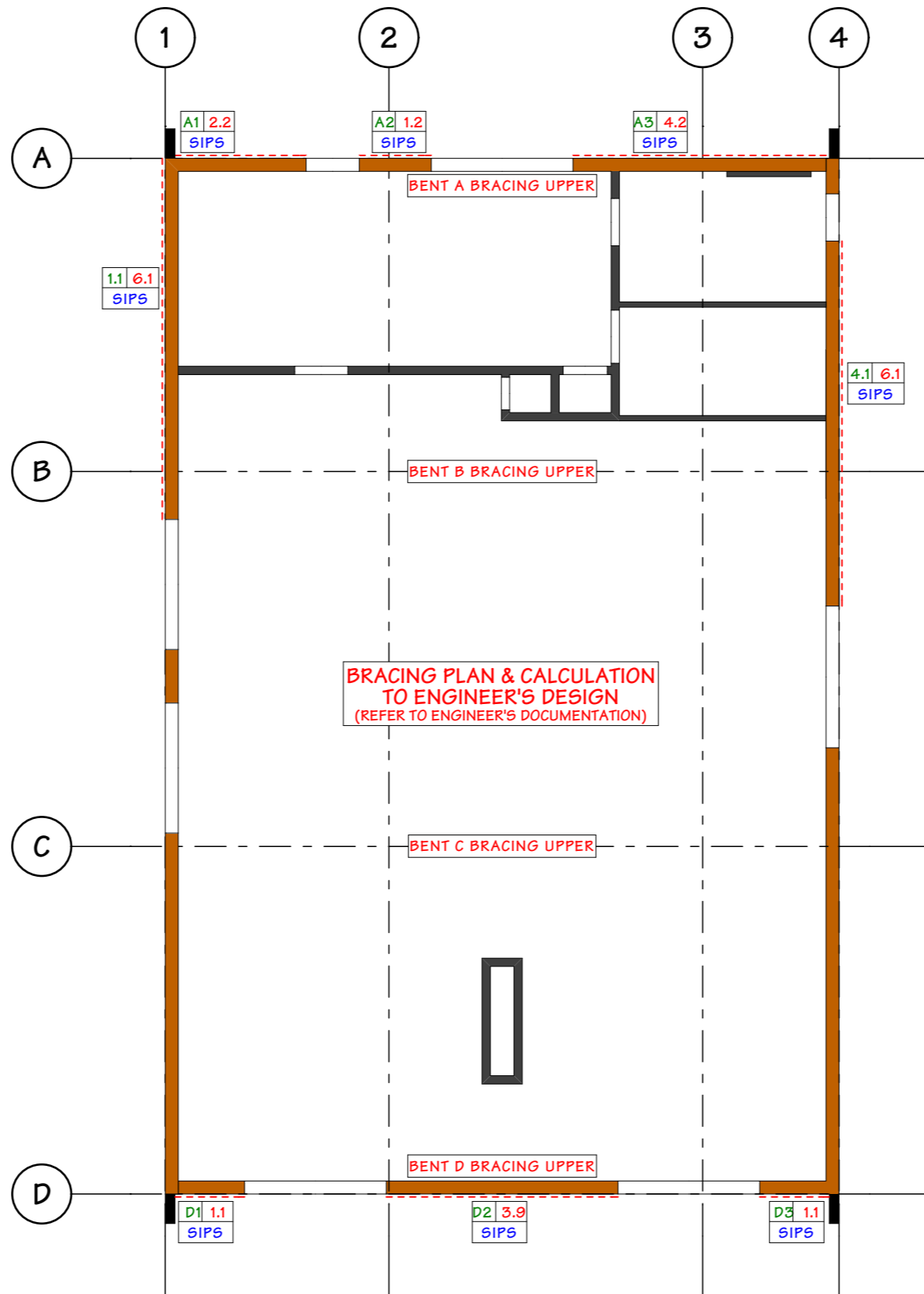
WALL BRACE LEGEND

A2	0.6
G51-N	

A2 LINE LABEL
G51-N BRACE TYPE
0.6 BRACE LENGTH

WALL BRACING TO BE READ IN CONJUNCTION WITH WALL BRACING CALCULATIONS

BRACING DONE IN ACCORDANCE WITH GIB EZYBRACE SYSTEM TABLE 1: 10mm GIB PLASTERBOARD RATINGS



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
FIRST FLOOR BRACING PLAN

LEGAL DESCRIPTION:
LOT: 1-2
DP: 316193
ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

NOTES:
- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work.
- All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
10 DEC 24
AMENDMENT DATE:
241210.1820
VERSION:
WD-01

DESIGNER:
HTC
DRAWN:
JON
CHECKED:
JON

SCALE:
1:100
JOB#:
23071
SHEET:
19
73

GIB EzyBrace® Bracing Software



Lower Level Across Resistance Sheet

Job Name: Williams House

									Wind	EQ
									Demand	
									2701	1319
									Achieved	
Line	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Wind (BUs)	EQ (BUs)	2932	2813
									109%	213%
A	1	0.70	0	2.4	SIPS 0.6	NZSIPS	72	73		
	2	0.90	0	2.4	SIPS 0.6	NZSIPS	93	94		
	3	4.00	0	2.4	SIPS 1.2	NZSIPS	456	408		
External Length = 11									621 OK	574 OK
B	1	3.40	0	2.4	BLG-H	GIB®	510	496		
	2	1.70	0	2.4	BLG-H	GIB®	255	248		
	3	1.80	0	2.4	BLG-H	GIB®	270	263		
									1035 OK	1007 OK
C	1	11.00	0	2.4	Bent C Lower	Bent C	605	605		
									605 OK	605 OK
D	1	1.10	0	2.4	SIPS 0.6	NZSIPS	113	114		
	2	3.90	0	2.4	SIPS 1.2	NZSIPS	445	398		
	3	1.10	0	2.4	SIPS 0.6	NZSIPS	113	114		
External Length = 11									671 OK	627 OK

GIB EzyBrace® Version 12/18a

GIB EzyBrace® Bracing Software



Lower Level Along Resistance Sheet

Job Name: Williams House

										Wind	EQ
										Demand	
										1457	1319
										Achieved	
Line	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Wind (BUs)	EQ (BUs)		2311	2098
										159%	159%
1	1	6.10	0	2.4	SIPS 1.2	NZSIPS	695	622			
	2	0.90	0	2.4	SIPS 0.6	NZSIPS	93	94			
External Length = 18.4										788 OK	716 OK
2	1	1.10	0	2.4	BLG-H	GIB®	165	156			
	2	1.40	0	2.4	BLG-H	GIB®	210	204			
										375 OK	361 OK
3	1	3.10	0	2.4	GS2-N	GIB®	304	267			
										304 OK	267 OK
4	1	2.70	0	2.4	SIPS 1.2	NZSIPS	308	275			
	2	2.60	0	2.4	SIPS 1.2	NZSIPS	296	265			
	3	2.10	0	2.4	SIPS 1.2	NZSIPS	239	214			
External Length = 18.4										844 OK	755 OK

GIB EzyBrace® Version 12/18a



JOB TITLE:

NATASHA WILLIAMS

DRAWING TITLE:

BRACING CALCULATIONS 2

LEGAL DESCRIPTION:

LOT: 1-2
DP: 316193
ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

NOTES:

- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work.
- All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:

10 DEC 24

AMENDMENT DATE:

241210.1820

VERSION:

WD-01

REV NO:

00

DESIGNER:

HTC

DRAWN:

JON

CHECKED:

JON

SCALE:

1:100

JOB#:

23071

SHEET:

21

73

GIB EzyBrace® Bracing Software



Upper Level Across Resistance Sheet

Job Name: Williams House

Timber Floor Limit of 120 BUs/m Applied

									Wind	EQ
									Demand	
									1623	519
									Achieved	
Line	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Wind (BUs)	EQ (BUs)	1994 123%	1897 366%
A	1	2.20	0	3	SIPS 1.2	NZSIPS	201	180		
	2	1.20	0	4	SIPS 1.2	NZSIPS	82	73		
	3	4.20	0	3	SIPS 1.2	NZSIPS	383	343		
	4	11.00	0	4	Bent C Upper	Bent C	220	220		
External Length = 11									886 OK	816 OK
B	1	11.00	0	4	Bent C Upper	Bent C	220	220	220 OK	220 OK
C	1	11.00	0	4	Bent C Upper	Bent C	220	220	220 OK	220 OK
D	1	1.10	0	3	SIPS 0.6	NZSIPS	91	92		
	2	3.90	0	4	SIPS 1.2	NZSIPS	267	239		
	3	1.10	0	3	SIPS 0.6	NZSIPS	91	92		
	4	11.00	0	4	Bent C Upper	Bent C	220	220		
External Length = 11									668 OK	642 OK

GIB EzyBrace® Version 12/18a

GIB EzyBrace® Bracing Software



Upper Level Along Resistance Sheet

Job Name: Williams House

Timber Floor Limit of 120 BUs/m Applied

									Wind	EQ
									Demand	
									790	519
									Achieved	
Line	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Wind (BUs)	EQ (BUs)	1391 176%	1244 240%
1	1	6.10	0	2	SIPS 1.2	NZSIPS	695	622		
	External Length = 18.4									
2	1	0.00							Check	Check
3	1	0.00							Check	Check
4	1	6.10	0	2	SIPS 1.2	NZSIPS	695	622		
	External Length = 18.4									

GIB EzyBrace® Version 12/18a



JOB TITLE:

NATASHA WILLIAMS

DRAWING TITLE:

BRACING CALCULATIONS 3

LEGAL DESCRIPTION:

LOT: 1-2
DP: 316193
ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

NOTES:

- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work.
- All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:

10 DEC 24

AMENDMENT DATE:

241210.1820

VERSION:

WD-01

REV NO:

00

DESIGNER:

HTC

DRAWN:

JON

CHECKED:

JON

SCALE:

1:100

JOB#:

23071

SHEET:

22

73



Demand Calculation Sheet

Job Details

Name: Peter Williams - Garage Guestroom
 Street and Number: 353 Dustan rd
 Lot and DP Number: Lot 2 DP316193
 City/Town/District: Alexandra
 Designer: AVH
 Company: Potius BSL
 Date: Wednesday, 6 November 2024

Building Specification

Number of Storeys: 1
 Floor Loading: 2 kPa
 Foundation Type: Slab

Single

Cladding Weight: Heavy
 Roof Weight: Light
 Room in Roof Space: No
 Roof Pitch (degrees): 31
 Roof Height above Eaves (m): 2.2
 Building Height to Apex (m): 5.3
 Ground to Lower Floor (m): 0.3

Average Stud Height (m): 3.0
 Building Length (m): 14
 Building Width (m): 6.3
 Building Plan Area (m²): 87

Building Location

Wind Zone = High

Earthquake Zone 2

Soil Type: D & E (Deep to Very Soft)
 Annual Prob. of Exceedance: 1 in 500 (Default)

Bracing Units required for Wind

	Along	Across
Single Level	419	803

Bracing Units required for Earthquake

	Along & Across
Single Level	597

GIB EzyBrace® Version 12/18a



Single Level Across Resistance Sheet

Job Name: Peter Williams - Garage Guestroom

Wind	EQ
Demand	
803	597
Achieved	
1333	1230
166%	206%

Line	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Wind (BUs)	EQ (BUs)	1333	1230
a	1	4.60	0	2.7	PLX 360	Prolam	135	168		
	External Length = 6.3								135 OK	168 OK
b	1	4.70	0	2.7	BL1-H	GIB®	535	434		
	2	2.20	0	2.4	GS1-N	GIB®	152	132		
	3	2.20	0	2.4	GS1-N	GIB®	152	132		
External Length = 6.0								838 OK	698 OK	
c	1	0.90	0	2.7	BL1-H	GIB®	91	82		
	2	1.10	0	2.4	GS1-N	GIB®	74	66		
	3	1.10	0	2.4	GS1-N	GIB®	74	66		
External Length = 6.0								238 OK	213 OK	
d	1	4.60	0	3.0	PLX 360	Prolam	121	151		
	External Length = 6.3								121 OK	151 OK

GIB EzyBrace® Version 12/18a



Single Level Along Resistance Sheet

Job Name: Peter Williams - Garage Guestroom

Wind	EQ
Demand	
419	597
Achieved	
725	634
173%	106%

Line	Element	Length (m)	Angle (degrees)	Stud Ht. (m)	Type	Supplier	Wind (BUs)	EQ (BUs)	725	634
5	1	6.00	0	2.7	GS1-N	GIB®	368	320		
	External Length = 14								368 OK	320 OK
6	1	5.00	0	2.7	GS1-N	GIB®	307	267		
	2	0.90	0	2.7	GS1-N	GIB®	50	47		
External Length = 14								357 OK	314 OK	

GIB EzyBrace® Version 12/18a



JOB TITLE:

NATASHA WILLIAMS

DRAWING TITLE:

BRACING CALCULATIONS 4

LEGAL DESCRIPTION:

LOT: 1-2
 DP: 316193
 ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

NOTES:

- Subject to council approval
 - All measurements to be confirmed on site by the contractor prior to the commencement of work.
 - All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:

10 DEC 24

AMENDMENT DATE:

241210.1820

VERSION:

WD-01

REV NO:

00

DESIGNER:

HTC

DRAWN:

JON

CHECKED:

JON

SCALE:

1:100

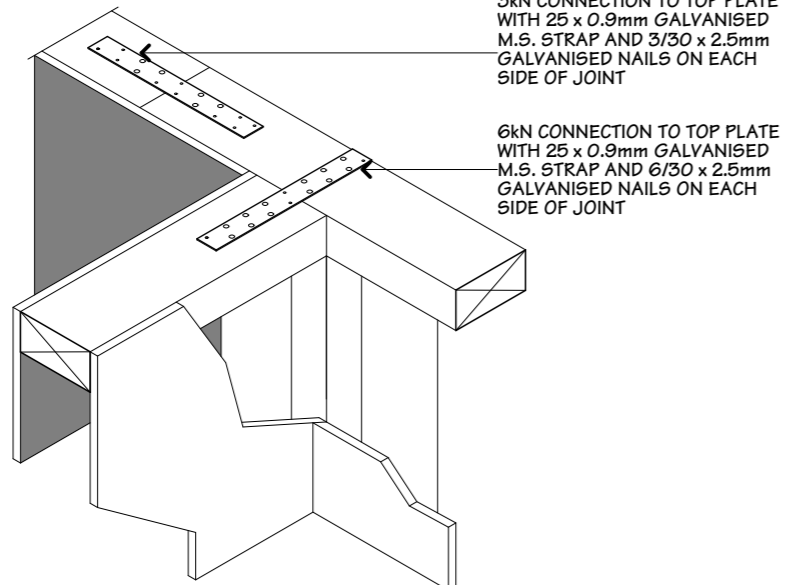
JOB#:

23071

SHEET:

23

73

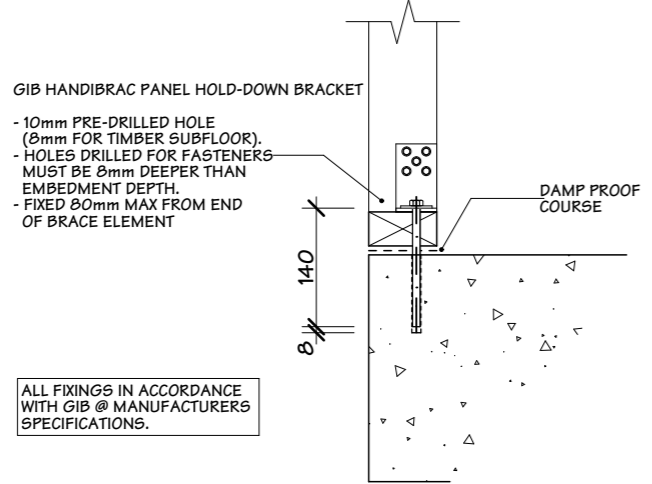


3kN CONNECTION TO TOP PLATE WITH 25 x 0.9mm GALVANISED M.S. STRAP AND 3/30 x 2.5mm GALVANISED NAILS ON EACH SIDE OF JOINT

6kN CONNECTION TO TOP PLATE WITH 25 x 0.9mm GALVANISED M.S. STRAP AND 6/30 x 2.5mm GALVANISED NAILS ON EACH SIDE OF JOINT

TOP PLATE CONNECTIONS

NOTE: WHERE BRACES DO NOT EXCEED 100 BU'S A 3kN CONNECTION AS SHOWN IS REQUIRED. WHERE BRACES EXCEED 100 BU'S A 6kN CONNECTION IS REQUIRED.



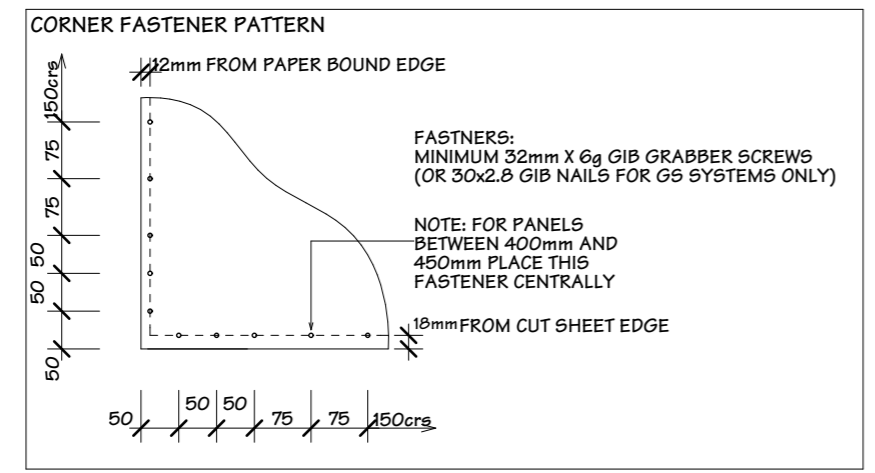
GIB HANDIBRAC PANEL HOLD-DOWN BRACKET

- 10mm PRE-DRILLED HOLE (8mm FOR TIMBER SUBFLOOR).
- HOLES DRILLED FOR FASTENERS MUST BE 8mm DEEPER THAN EMBEDMENT DEPTH.
- FIXED 80mm MAX FROM END OF BRACE ELEMENT

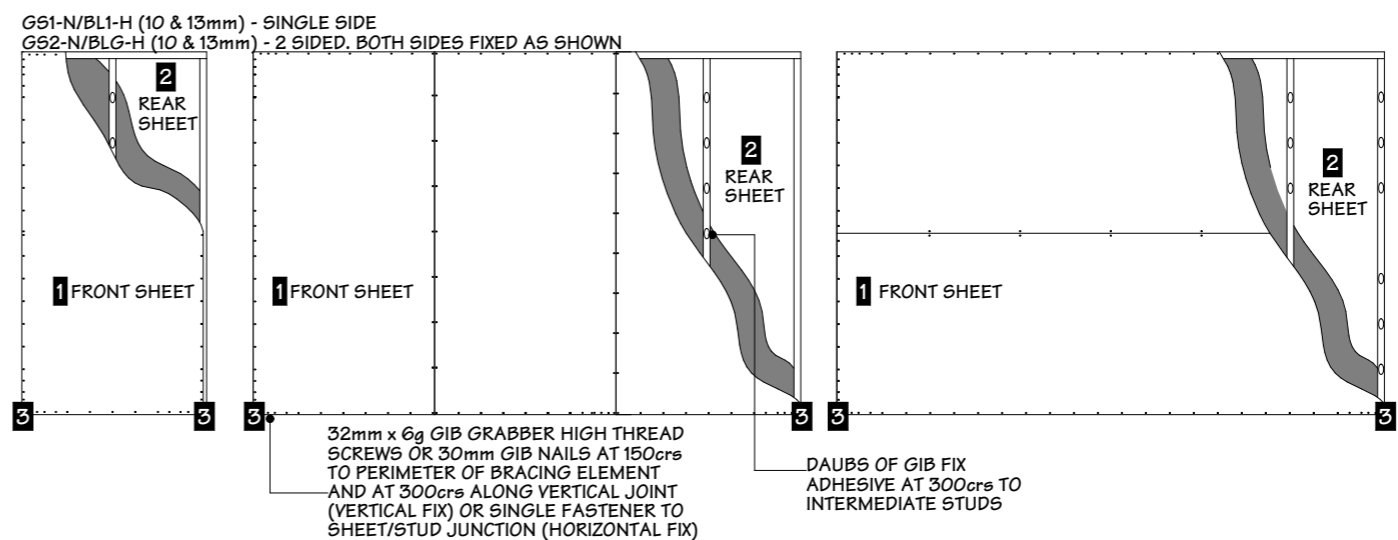
15kN BRACING HOLDDOWN DETAIL GIB HANDIBRAC
SCALE 1:10

PANEL HOLD DOWNS FOR GIB BRACELINE PANELS CONCRETE FLOOR EXTERNAL/INTERNAL WALL

NOTE: GIB G51-N AND G52-N DO NOT REQUIRE SPECIFIC CONNECTIONS AT BRACE ENDS

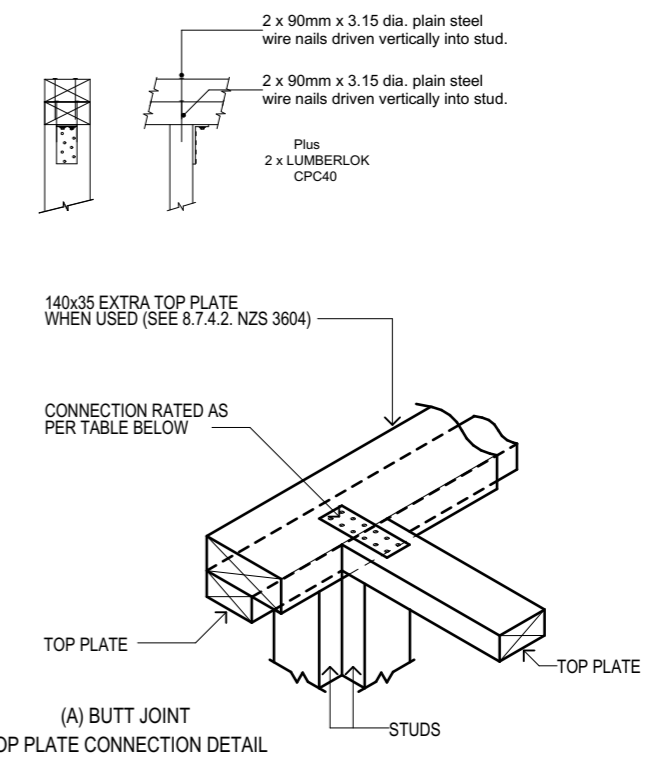
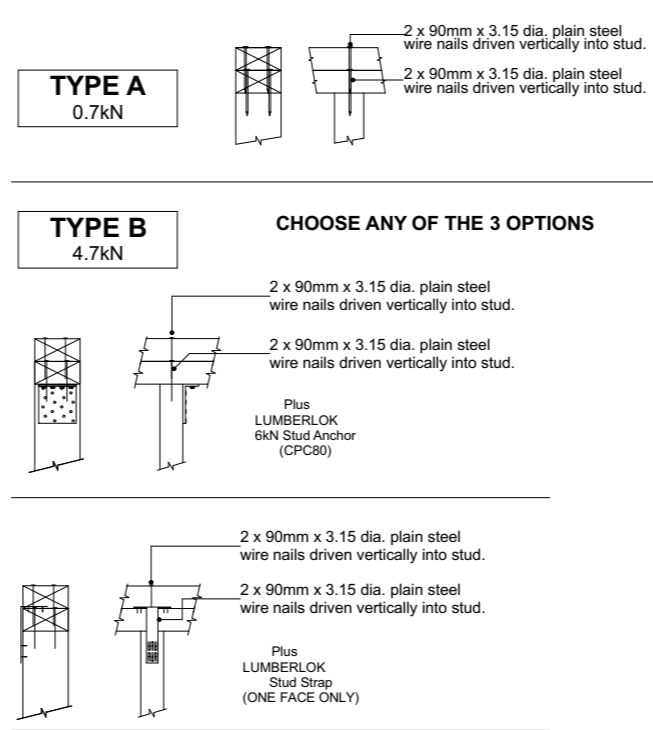


FASTENER LAYOUT



SYSTEM	LINING ONE SIDE (1)		LINING OPPOSITE SIDE (2)		PANEL HOLD DOWN (3)	FASTENER SPACING
	LINING	FASTENERS	LINING	FASTENERS		
G51-N G52-N G5P-H	ANY 10mm OR 13mm GIB PLASTERBOARD	30mm GIB NAILS, OR MINIMUM 32mm X 6g GIB GRABBER HIGH THREAD SCREWS	NOT REQUIRED	NOT REQUIRED	NOT REQUIRED	GIB PLASTERBOARD: CORNER FASTENING PATTERN AS ILLUSTRATED BELOW FASTENERS AT 150mm TO BRACING ELEMENT PERIMETER AND: - AT 300mm CENTRES TO INTERMEDIATE SHEET JOINTS FOR VERTICAL FIXING, OR - AT STUD/SHEET JUNCTION FOR HORIZONTALLY FIXED ELEMENTS, AND - GIBFIX ADHESIVE DAUBS AT 300mm CENTRES TO INTERMEDIATE FRAMING
BL1-H BLG-H BLP-H	10mm OR 13mm BRACELINE	32mm x 6g GIB GRABBER HIGH THREAD SCREWS GIB BRACELINE NAILS MAY BE USED FOR 10mm BRACELINE ONLY	NOT REQUIRED	NOT REQUIRED	YES	PLYWOOD: FASTENERS AT 150mm CENTRES AROUND THE PERIMETER OF EVERY SHEET AND AT 300mm CENTRES TO INTERMEDIATE STUDS. PLACE FASTENERS NO CLOSER THAN 7mm FROM SHEET EDGES. PLASTERBOARD CORNER FASTENER PATTERN DOES NOT APPLY TO PLYWOOD

LUMBERLOK STUD TO TOP PLATE FIXING TYPES



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
BRACE FIXING DETAILS

LEGAL DESCRIPTION:
LOT: 1-2
DP: 316193
ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

NOTES:
- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work.
- All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

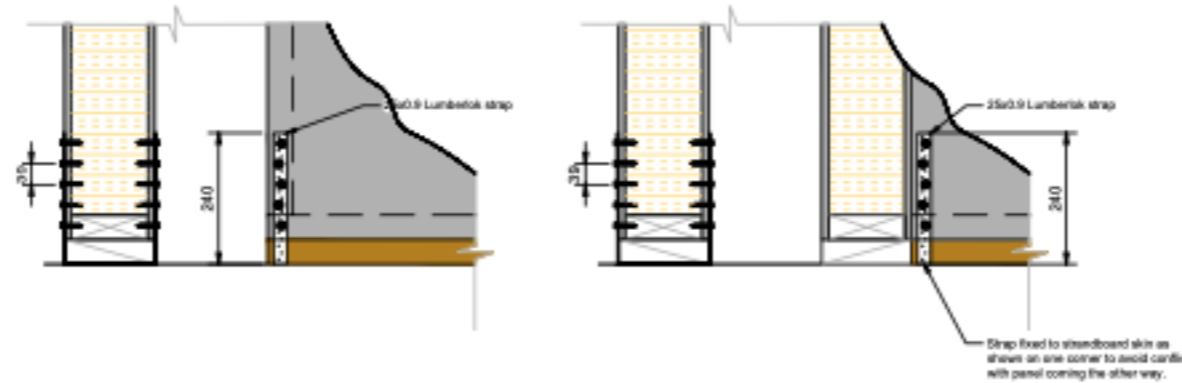
DATE OF ISSUE:
10 DEC 24
AMENDMENT DATE:
241210.1820
VERSION:
WD-01

DESIGNER:
HTC
DRAWN:
JON
CHECKED:
JON

SCALE:
1:10
JOB#:
23071
SHEET:
24

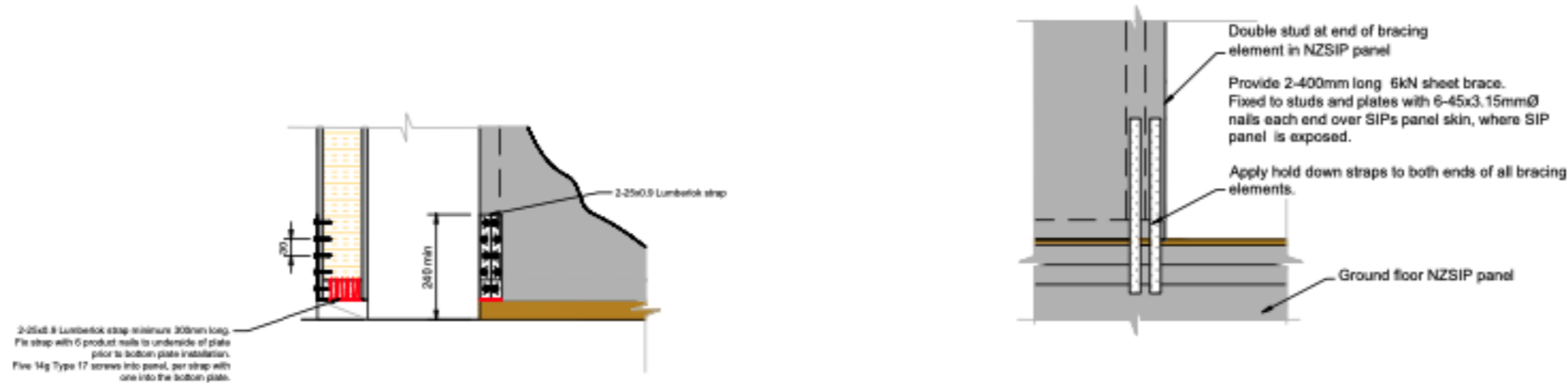
GENERAL NOTES

1. The information contained within the document is copyright and may not be used for any other purpose than that it was provided for without the written permission of the Healthy Home Cooperation.
2. Verify all dimensions on site.
3. Do not scale these drawings.
4. The designs on these plans are based on the project brief and client instructions. They are part of a design package that may include calculations and reports. The package shall be read together.



14 STANDARD NZSIP BRACING DETAILS

SCALE 1:20
 Also see SIP207
 Note: Hold down bolts to be M12 screw bolt 190mm long at 600 centres.

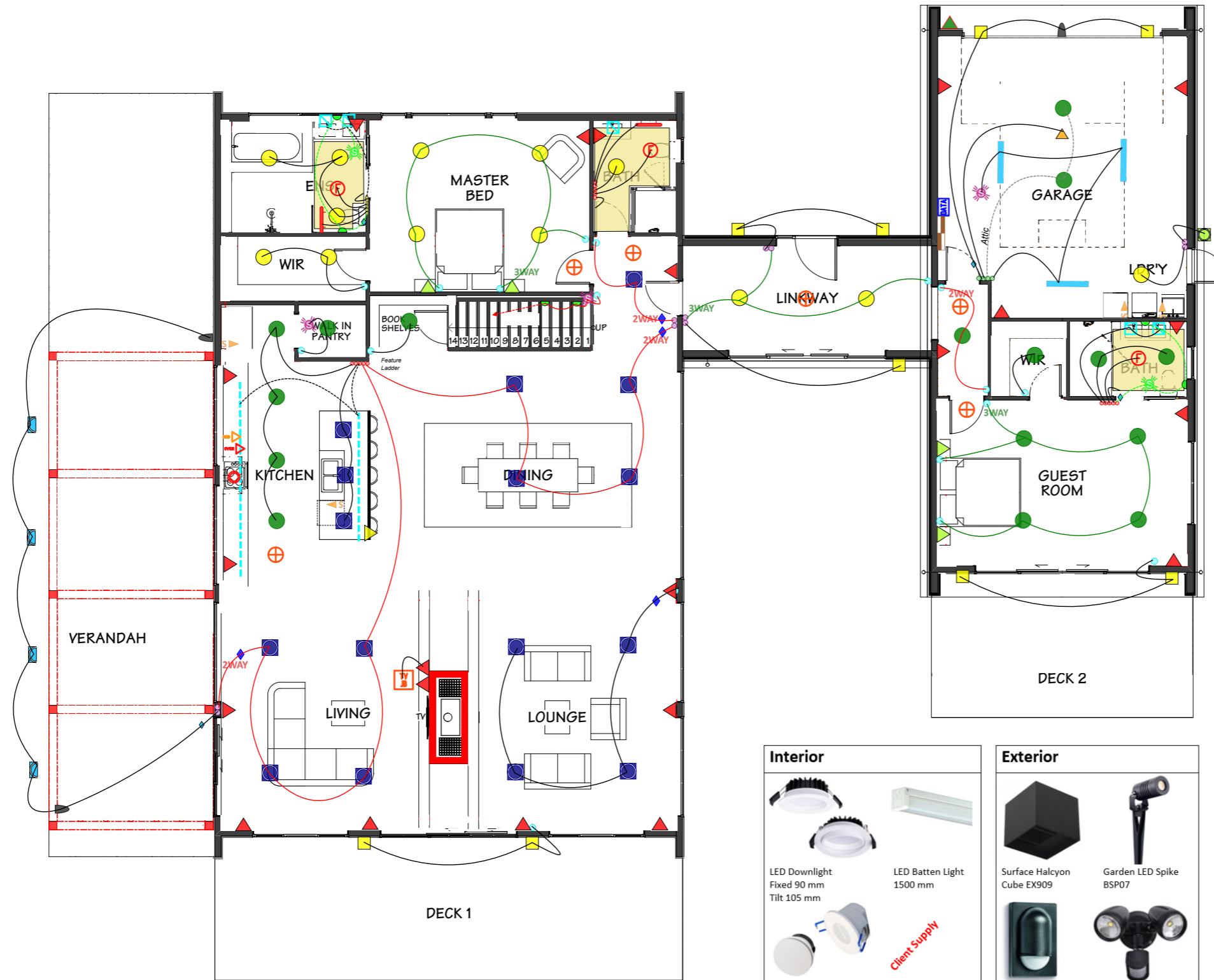


15 ALTERNATIVE NZSIP BRACING DETAIL

SCALE 1:20
 Where SIP panels are exposed. Otherwise, refer to NZSIP Standard Detail SIP207.

16 MIDFLOOR BRACING ELEMENT FIXING

SCALE 1:20
 Where SIP panels are exposed. Otherwise, refer to NZSIP Standard Detail SIP402.



Barn - PW & FO	
	Metered Switchboard 1 EA
	Kinetic Home Hub 1 EA
	High Wall TV 1 EA
	Data Outlet 6 EA
	Power Appliances 5 EA
	Power - Floor Box 1x DPP Only 1 EA
	Exterior - Power Single 1 EA
	Power Double 22 EA
	Power - Double USB C 4 EA
	Power Auto Garage Door 1 EA
	Power Kitchen Island 1 EA
	Wall Oven 1 EA
	Hob - Induction 1 EA
	Extraction Fan - Vynco 3 EA
	Hood Duct Install Only 1 EA
	Heated Towel Rail, Wire & Install Only 2 EA
	Mirror LED Light - Client Supply 5 EA
	HWC 1 EA
	Two-Way Switching 4 EA
	Three-Way Switching 3 EA
	Switch Single 18 EA
	Switch Double 5 EA
	Switch Four Gang 1 EA
	Switch Five Gang 3 EA
	Switch Six Gang 1 EA
	Auto Manual Rotary Switch 4 EA
	Dimmer 4 EA
	Ambius d/I LED (90 mm) - Fixed 13 EA
	Ambius d/I LED (105 mm) - Tilt 16 EA
	Pendant Light - Client Supply 16 EA
	Stair/-hall - Halcyon LED Mini 35 mm R950 6 EA
	Stair/-hall - Recessed Sensor (60 mm) 2 EA
	LED Strip Lighting - 5 m HPM 7.83 m
	LED Fluro 3 EA
	Exterior - Surface Mount LED Cube 2x3W, Halcyon - EX909 9 EA
	Exterior - Surface Mount Sensor Steinel 3 EA
	Exterior - Sensor Recessed (60 mm), White 3 EA
	Exterior - Double LED Sensor Spot Light 1 EA
	Garden Spike - BSP07 4 EA
	Cavius Smoke Alarm - Wireless 6 EA

Interior	Exterior

Undertile Heating	
	Undertile Heating - Master Ensuite 2.33 m ²
	Undertile Heating - Guest Bath 2.53 m ²
	Undertile Heating - Bathroom 3.43 m ²

Barn Project
353 Dunstan Road Alex

Electrical Plan: Ver 1 - 20 August 2024

Interior



LED Downlight
Fixed 90 mm
Tilt 105 mm

LED Batten Light
1500 mm


Halcyon Mini 35 mm &
Sensor 60 mm

Towel Rail

Legrand Switches

Client Supply

Exterior



Surface Halcyon
Cube EX909

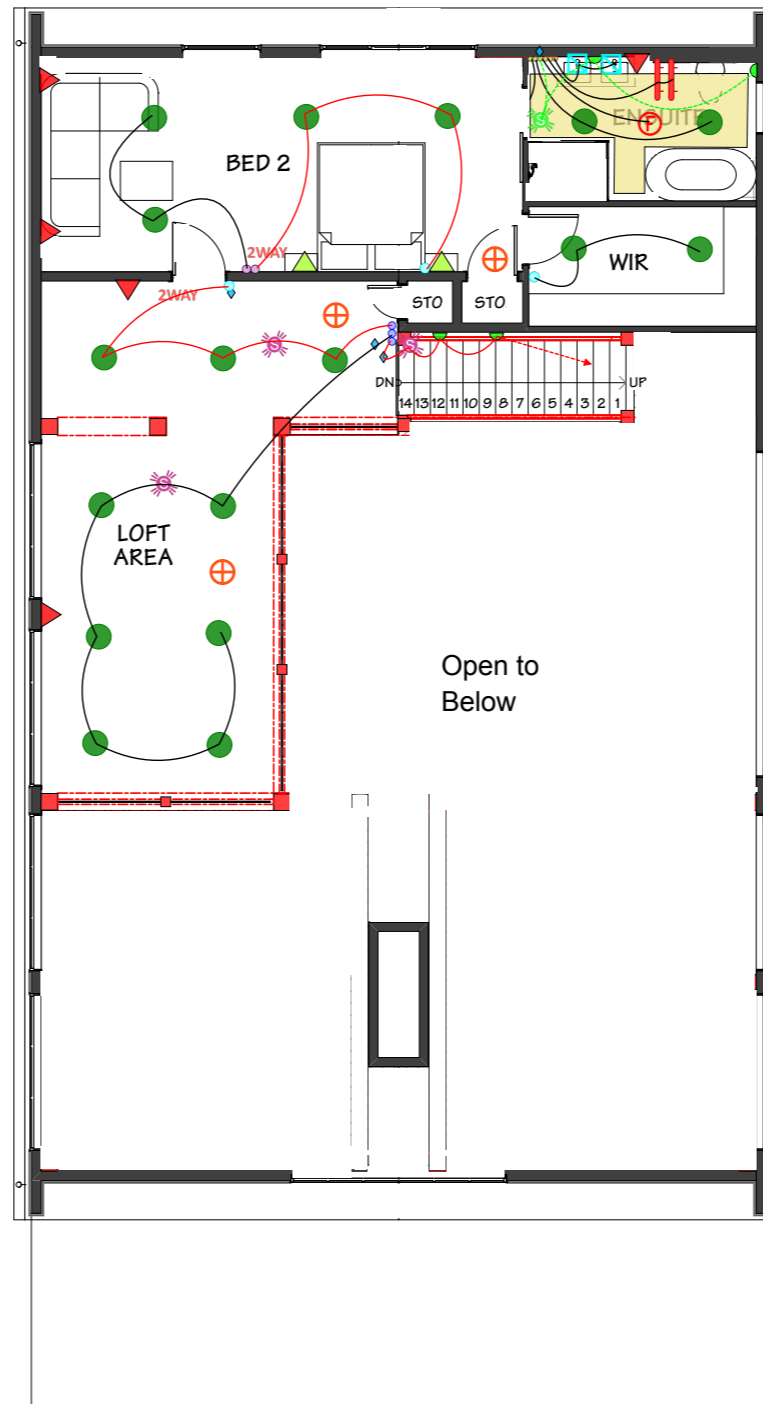
Garden LED Spike
BSP07

Steinel Surface
Sensor

Sensor Spot Light

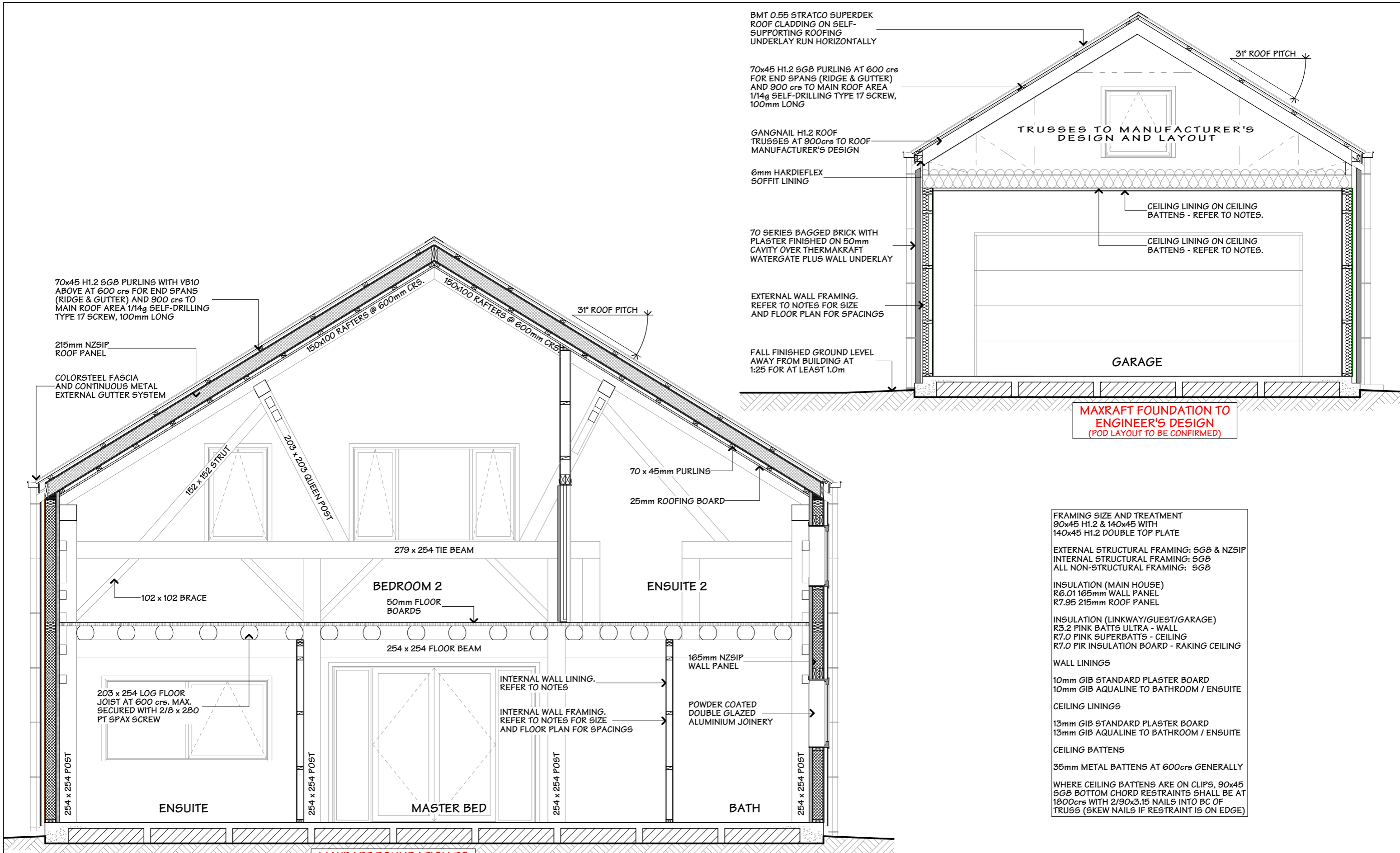
Exterior Powerpoint

Vynco Extraction Fan



Barn - PW & FO		
	Power Double	5 EA
	Power - Double USB C	2 EA
	Extraction Fan - Vynco	1 EA
	Heated Towel Rail, Wire & Install Only	2 EA
	Mirror LED Light - Client Supply	2 EA
	Two-Way Switching	2 EA
	Switch Single	3 EA
	Switch Double	1 EA
	Switch Triple	1 EA
	Switch Six Gang	1 EA
	Auto Manual Rotary Switch	4 EA
	Ambius d/l LED (105 mm) - Tilt	17 EA
	Stair/Hall - Halcyon LED Mini 35 mm R950	4 EA
	Stair/Hall - Recessed Sensor (60 mm)	1 EA
	Exterior - Sensor Recessed (60 mm), White	3 EA
	Cavius Smoke Alarm - Wireless	3 EA

Undertile Heating	
	Undertile Heating - Ensuite 3.89 m ²



BMT 0.55 STRATCO SUPERDEK
 ROOF CLADDING ON SELF-SUPPORTING ROOFING UNDERLAY RUN HORIZONTALLY

70x45 H1.2 SGB PURLINS AT 600 c/s FOR END SPANS (RIDGE & GUTTER) AND 900 c/s TO MAIN ROOF AREA 1/14g SELF-DRILLING TYPE 17 SCREW, 100mm LONG

GANGNAIL H1.2 ROOF TRUSSES AT 900c/s TO ROOF MANUFACTURER'S DESIGN

6mm HARDIFLEX SOFFIT LINING

70 SERIES BAGGED BRICK WITH PLASTER FINISHED ON 50mm CAVITY OVER THERMAKRAFT WATERGATE PLUS WALL UNDERLAY

EXTERNAL WALL FRAMING. REFER TO NOTES FOR SIZE AND FLOOR PLAN FOR SPACINGS

FALL FINISHED GROUND LEVEL AWAY FROM BUILDING AT 1:25 FOR AT LEAST 1.0m

TRUSSES TO MANUFACTURER'S DESIGN AND LAYOUT

CEILING LINING ON CEILING BATTENS - REFER TO NOTES.

CEILING LINING ON CEILING BATTENS - REFER TO NOTES.

GARAGE

MAXRAFT FOUNDATION TO ENGINEER'S DESIGN (POD LAYOUT TO BE CONFIRMED)

70x45 H1.2 SGB PURLINS WITH VB10 ABOVE AT 600 c/s FOR END SPANS (RIDGE & GUTTER) AND 900 c/s TO MAIN ROOF AREA 1/14g SELF-DRILLING TYPE 17 SCREW, 100mm LONG

215mm NZSIP ROOF PANEL

COLORSTEEL FASCIA AND CONTINUOUS METAL EXTERNAL GUTTER SYSTEM

31° ROOF PITCH

150x100 RAFTERS @ 600mm CRS.

150x100 RAFTERS @ 600mm CRS.

152 x 152 STRUT

203 x 203 QUEEN POST

70 x 45mm PURLINS

25mm ROOFING BOARD

279 x 254 TIE BEAM

BEDROOM 2

50mm FLOOR BOARDS

ENSUITE 2

102 x 102 BRACE

254 x 254 FLOOR BEAM

203 x 254 LOG FLOOR JOIST AT 600 c/s. MAX. SECURED WITH 2/18 x 280 PT SPAX SCREW

INTERNAL WALL LINING. REFER TO NOTES

INTERNAL WALL FRAMING. REFER TO NOTES FOR SIZE AND FLOOR PLAN FOR SPACINGS

165mm NZSIP WALL PANEL

POWDER COATED DOUBLE GLAZED ALUMINIUM JOINERY

254 x 254 POST

ENSUITE

254 x 254 POST

MASTER BED

254 x 254 POST

BATH

254 x 254 POST

FRAMING SIZE AND TREATMENT
 90x45 H1.2 & 140x45 WITH 140x45 H1.2 DOUBLE TOP PLATE

EXTERNAL STRUCTURAL FRAMING: SGB & NZSIP
 INTERNAL STRUCTURAL FRAMING: SGB
 ALL NON-STRUCTURAL FRAMING: SGB

INSULATION (MAIN HOUSE)
 R6.01 165mm WALL PANEL
 R7.95 215mm ROOF PANEL

INSULATION (LINKWAY/GUEST/GARAGE)
 R3.2 PINK BATTS ULTRA - WALL
 R7.0 PINK SUPERBATTS - CEILING
 R7.0 PIR INSULATION BOARD - RAKING CEILING

WALL LININGS
 10mm GIB STANDARD PLASTER BOARD
 10mm GIB AQUALINE TO BATHROOM / ENSUITE

CEILING LININGS
 13mm GIB STANDARD PLASTER BOARD
 13mm GIB AQUALINE TO BATHROOM / ENSUITE

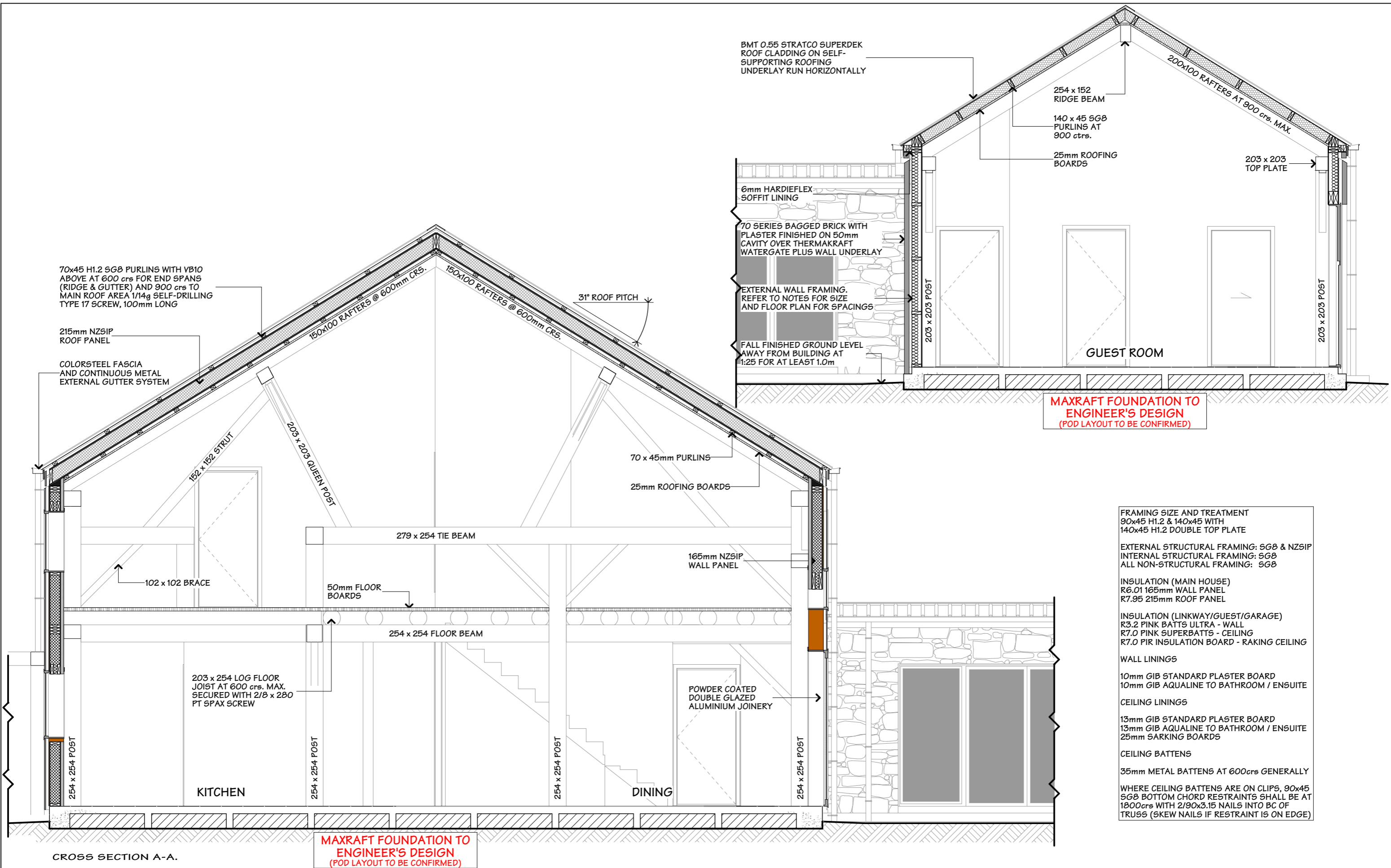
CEILING BATTENS
 35mm METAL BATTENS AT 600c/s GENERALLY

WHERE CEILING BATTENS ARE ON CLIPS, 90x45 SGB BOTTOM CHORD RESTRAINTS SHALL BE AT 1800c/s WITH 2/90x3.15 NAILS INTO BC OF TRUSS (SKEW NAILS IF RESTRAINT IS ON EDGE)

CROSS SECTION A-A.

MAXRAFT FOUNDATION TO ENGINEER'S DESIGN (POD LAYOUT TO BE CONFIRMED)

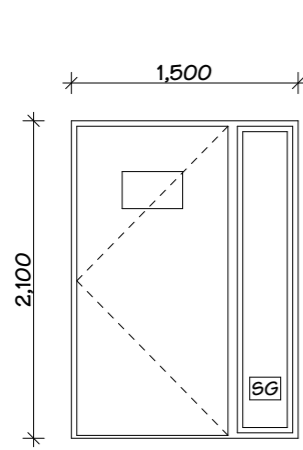
	JOB TITLE:	DRAWING TITLE:	LEGAL DESCRIPTION:	NOTES:	DATE OF ISSUE:	DESIGNER:	SCALE:	SHEET:
	NATASHA WILLIAMS	SECTION A-A	LOT: 1-2 DP: 316193 ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA	- Subject to council approval - All measurements to be confirmed on site by the contractor prior to the commencement of work. - All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.	10 DEC 24	HTC	1:50	
					AMENDMENT DATE:	DRAWN:	JOB#:	
					241210.1820	JON	23071	
					VERSION:	CHECKED:		
					WD-01	JON		
					REV NO:			
					00			



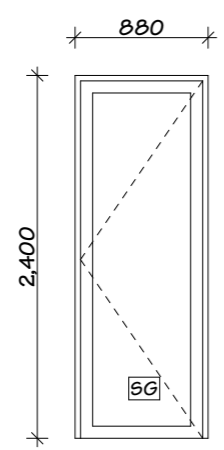
'SG' - INDICATES SAFETY GLAZING
IN ACCORDANCE WITH NZS
4223 PART 3:2016

* - INDICATES OBSCURED

BLUE HATCH INDICATES
WINDOWS WITH EXTERNAL
BLINDS



D 01



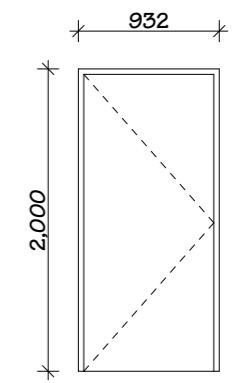
D 02



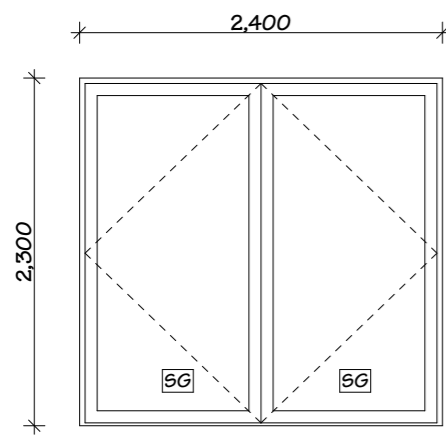
D 03



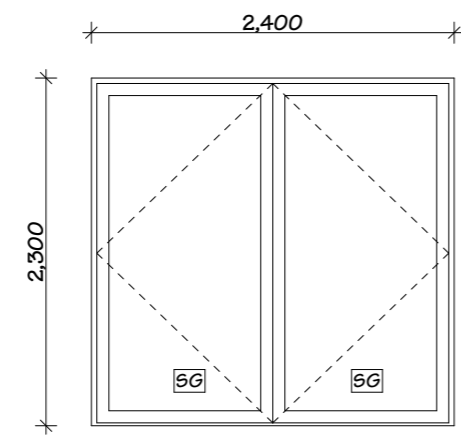
D 04



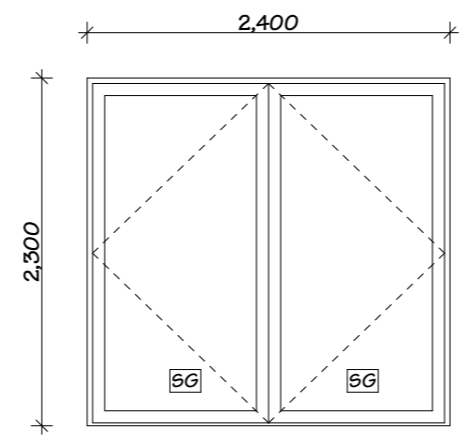
D 05



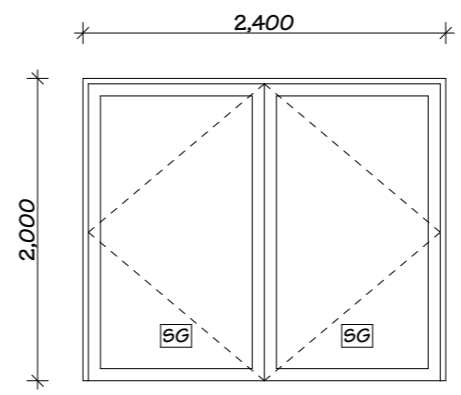
D 06



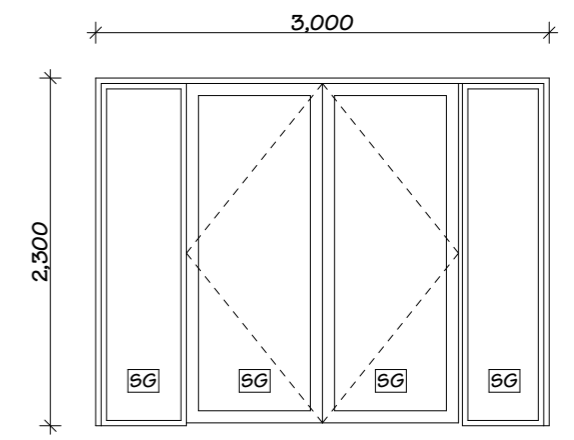
D 07



D 08



D 09



D 10



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
DOOR SCHEDULE

LEGAL DESCRIPTION:
LOT: 1-2
DP: 316193
ADDRESS: 353 DUNSTAN
ROAD, ALEXANDRA

NOTES:
- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work.
- All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
10 DEC 24
AMENDMENT DATE:
241210.1820
VERSION:
WD-01

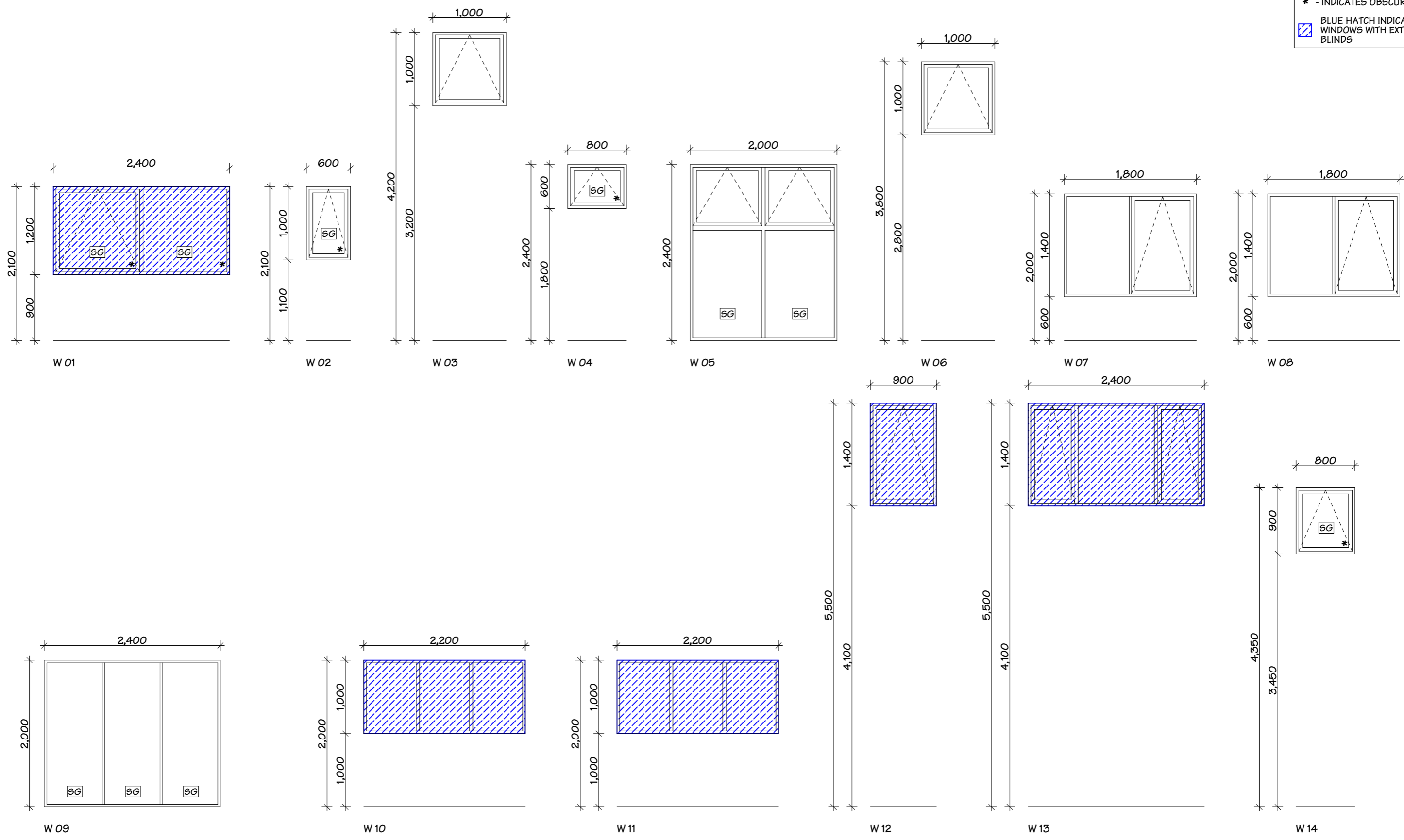
DESIGNER:
HTC
DRAWN:
JON
CHECKED:
JON

SCALE:
1:50
JOB#:
23071
SHEET:
30
/73

'SG' - INDICATES SAFETY GLAZING
IN ACCORDANCE WITH NZS
4223 PART 3:2016

* - INDICATES OBSCURED

BLUE HATCH INDICATES
WINDOWS WITH EXTERNAL
BLINDS



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
WINDOW SCHEDULE - SHEET 1

LEGAL DESCRIPTION:
LOT: 1-2
DP: 316193
ADDRESS: 353 DUNSTAN
ROAD, ALEXANDRA

NOTES:
- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work.
- All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
10 DEC 24
AMENDMENT DATE:
241210.1820
VERSION:
WD-01

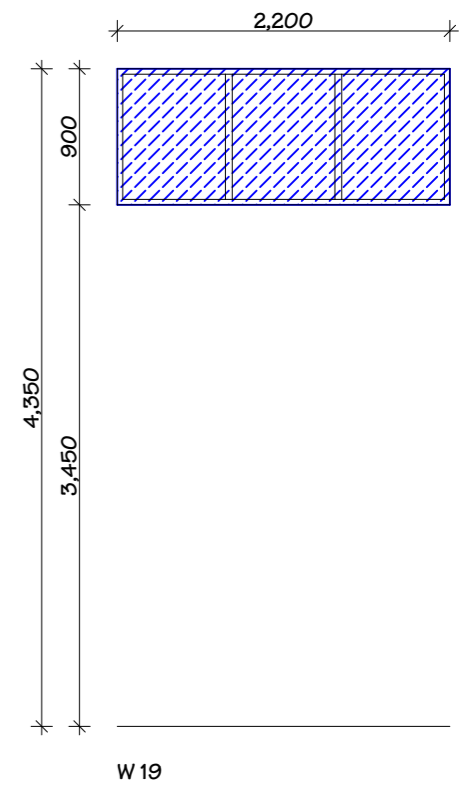
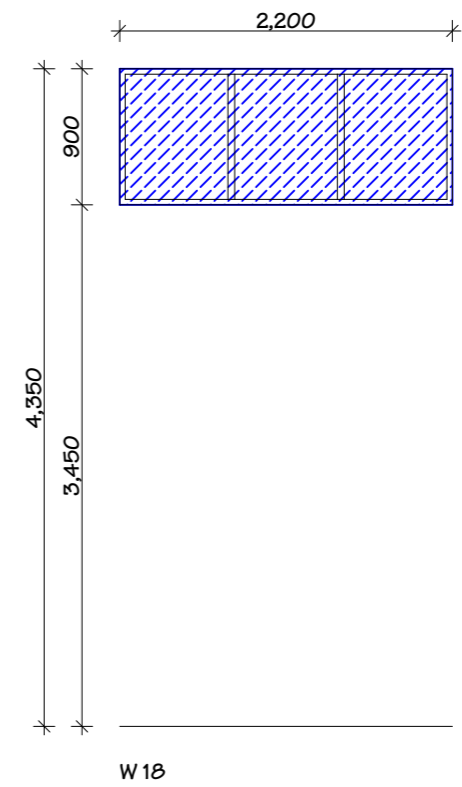
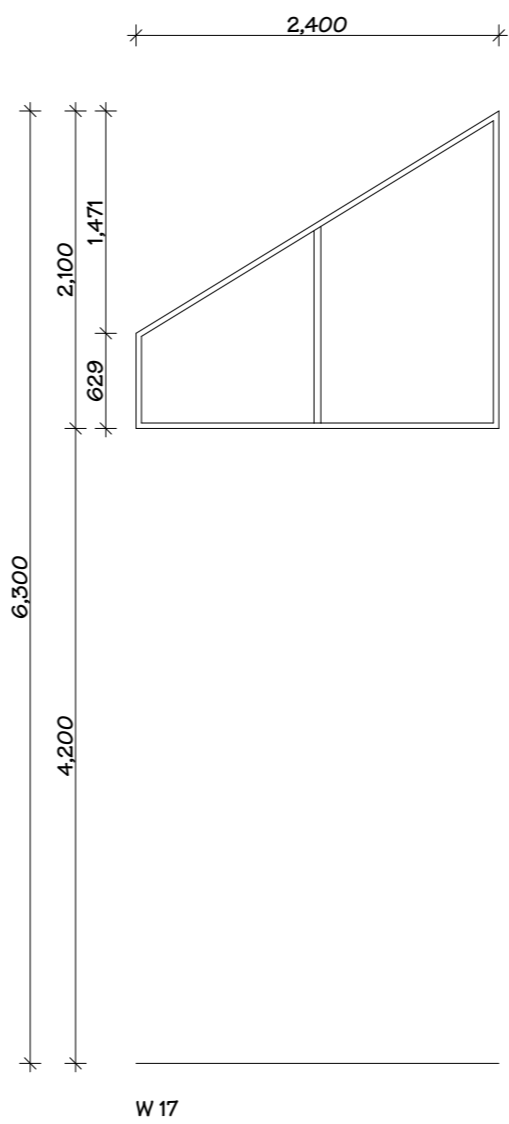
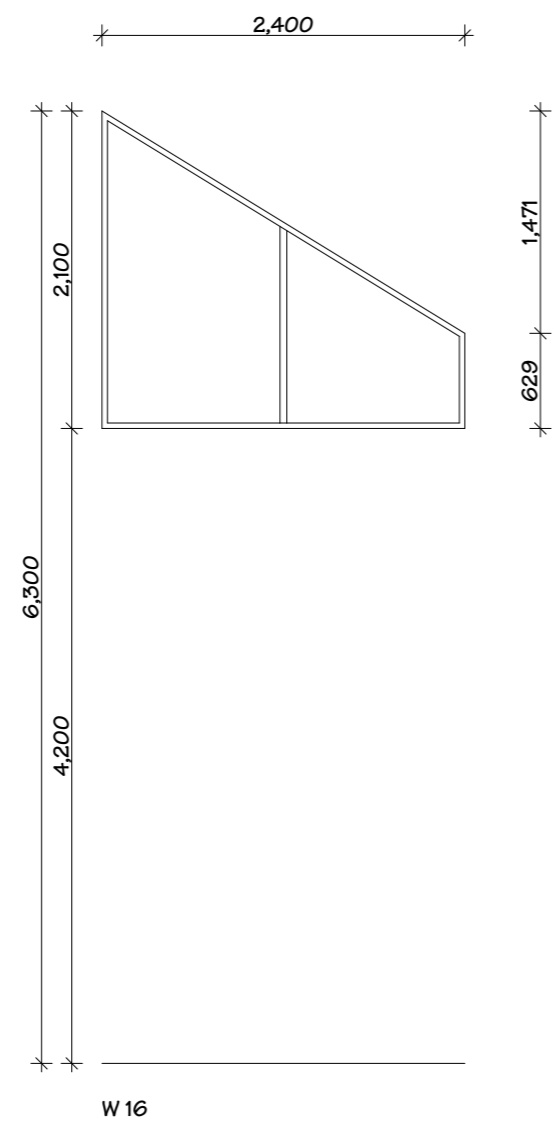
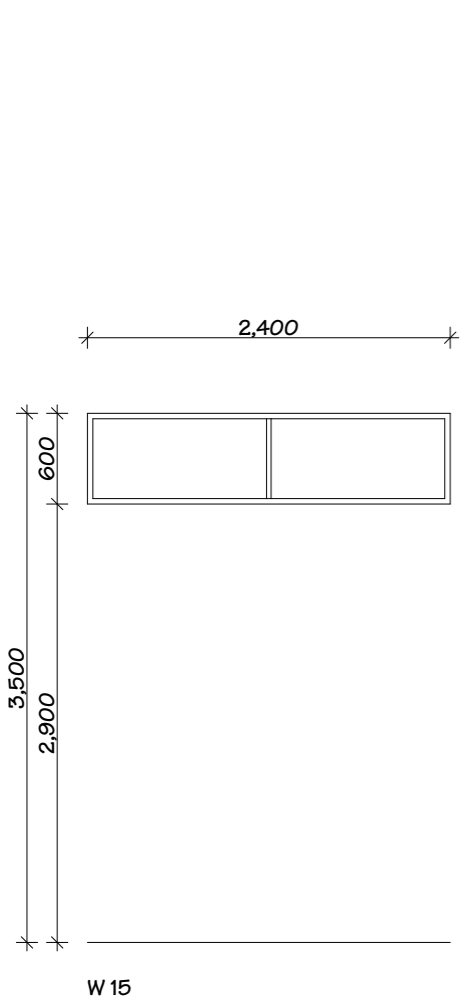
DESIGNER:
HTC
DRAWN:
JON
CHECKED:
JON

SCALE:
1:50
JOB#:
23071
SHEET:
31
73

'SG' - INDICATES SAFETY GLAZING
IN ACCORDANCE WITH NZS
4223 PART 3:2016

* - INDICATES OBSCURED

BLUE HATCH INDICATES
WINDOWS WITH EXTERNAL
BLINDS



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
WINDOW SCHEDULE - SHEET 2

LEGAL DESCRIPTION:
LOT: 1-2
DP: 316193
ADDRESS: 353 DUNSTAN
ROAD, ALEXANDRA

NOTES:
- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work.
- All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
10 DEC 24
AMENDMENT DATE:
241210.1820
VERSION:
WD-01

DESIGNER:
HTC
DRAWN:
JON
CHECKED:
JON

SCALE:
1:50
JOB#:
23071
SHEET:
32
73



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
3D VIEWS

LEGAL DESCRIPTION:
LOT: 1-2
DP: 316193
ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

NOTES:
- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work.
- All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
10 DEC 24
AMENDMENT DATE:
241210.1820
VERSION:
WD-01

DESIGNER:
HTC
DRAWN:
JON
CHECKED:
JON

SCALE:
1:140.61,
1:391.67,
1:625.49
23071

SHEET:
33
/73



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
3D VIEWS

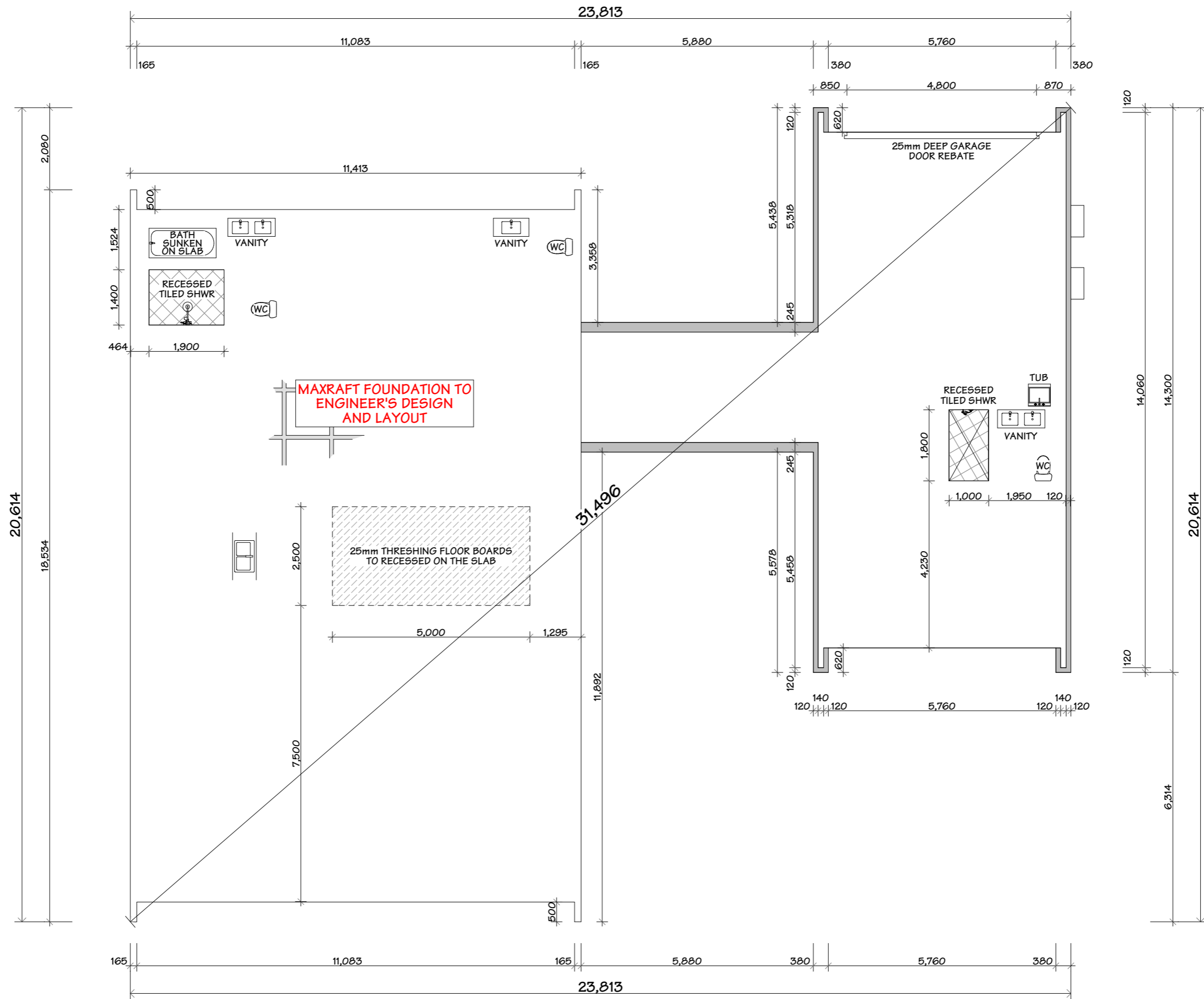
LEGAL DESCRIPTION:
LOT: 1-2
DP: 316193
ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

NOTES:
- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work.
- All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
10 DEC 24
AMENDMENT DATE:
241210.1820
VERSION:
WD-01

DESIGNER:
HTC
DRAWN:
JON
CHECKED:
JON

SCALE:
1:467.03,
1:469.39
JOB#:
23071
SHEET:
34
73



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
FOUNDATION PLAN

LEGAL DESCRIPTION:
LOT: 1-2
DP: 316193
ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

NOTES:
- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work.
- All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
10 DEC 24
AMENDMENT DATE:
241210.1820
VERSION:
WD-01

DESIGNER:
HTC
DRAWN:
JON
CHECKED:
JON

SCALE:
1:100
JOB#:
23071
SHEET:
35
73

Table 1 – Requirements for wood-based building components to achieve a 50-year durability performance (continued)

Ref No.	Wood-based building components	Species or type ⁽¹⁾	Grade or Standard ref.	In-service moisture range %	Level of treatment ⁽²⁾ to NZS 3640 or AS/NZS 1604 ⁽³⁾	See clause
E Members not exposed to weather or ground atmosphere and in dry conditions (see section 110)						
1E.1	All roof trusses, including gable end trusses, roof, ceiling and eaves framing, purlins and battens excluding skillion roof framing, and sarking described in 1D.1	Radiata pine	Structural grades	20 % or less	H1.1	-
		Douglas fir	Structural grades		None	
		Larch	Structural grades		None	
		Cypress species ⁽⁶⁾	Structural grades sapwood		H1.1	
		Cypress species ⁽⁶⁾	Structural grades heart		None	
1E.2	All midfloor framing excluding boundary joists but including associated ceiling framing	Kiln dried and gauged Radiata pine	Structural grades	18 % or less	None	105.5
		LVL	AS/NZS 4357	18 % or less	None	104.4.2
1E.3	Unlined buildings except those not allowed in 110.2(f)					

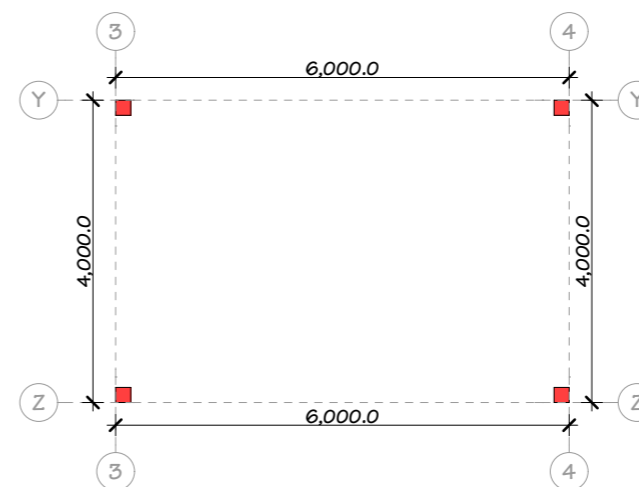
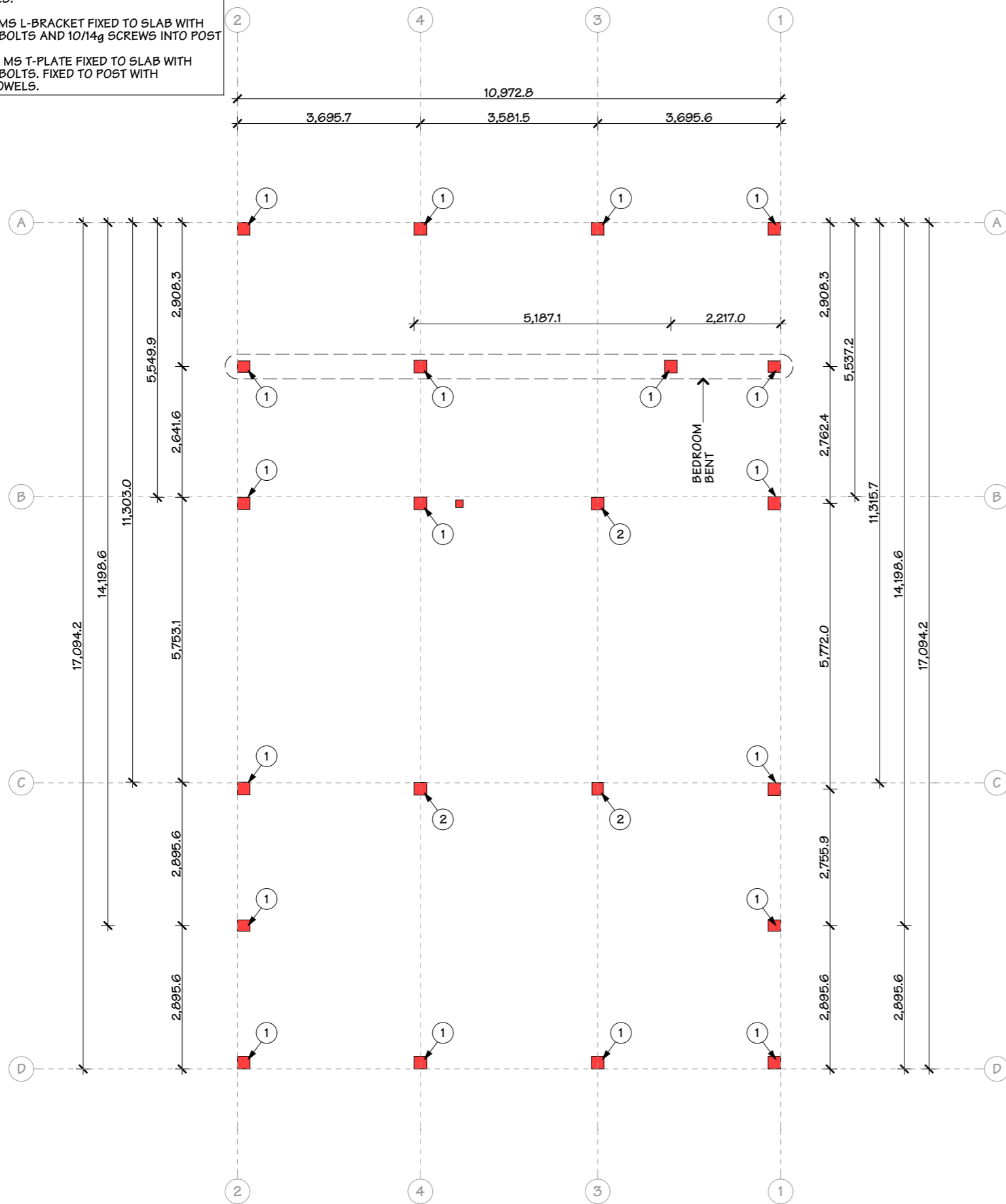
HTC TIMBER MEMBERS	SPECIES	GRADE	TREATMENT
RAFTERS	BEECH	SG8	UT
UNDERPURLING	BEECH	SG8	UT
EAVE GIRT	BEECH	SG8	UT
STRUTT	BEECH	SG8	UT
TIE BEAM - FLOOR BEAM	BEECH	SG8	UT
COLUMNS - POST	BEECH	SG8	UT
QUEEN POST	BEECH	SG8	UT
BRACES	BEECH	SG8	UT
LOG FLOOR JOIST	BEECH	SG8	UT
FLOORING	BEECH	SG8	UT

NOTES:
REQUIREMENTS FOR WOOD BASE BUILDING COMPONENTS TO ACHIEVE A 50-YEAR DURABILITY, PLEASE REFER TO NZS3602:2003 TABLE 1

NOTE:
- ALL TIMBERS ARE TO BE HERITAGE TIMBERS, EXCEPT FOR THE RAFTERS, WHICH WILL BE OAK.
ENGINEER TO RECOMMEND FIXINGS, ETC.
- TIMBER DIMENSIONS ARE APPROXIMATE BASED ON THEIR IMPERIAL (FEET & INCHES EQUIVALENTS).

CONNECTION DETAILS:

- 1 - 140 x 100 x 6mm MS L-BRACKET FIXED TO SLAB WITH 2/M12 x 100 SCREW BOLTS AND 10/14g SCREWS INTO POST
- 2 - 150 x 230 x 6mm MS T-PLATE FIXED TO SLAB WITH 2/M12 x 100 SCREW BOLTS. FIXED TO POST WITH 2/Ø7mm x 153mm DOWELS.



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
POST LAYOUT PLAN

LEGAL DESCRIPTION:
LOT: 1-2
DP: 316193
ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

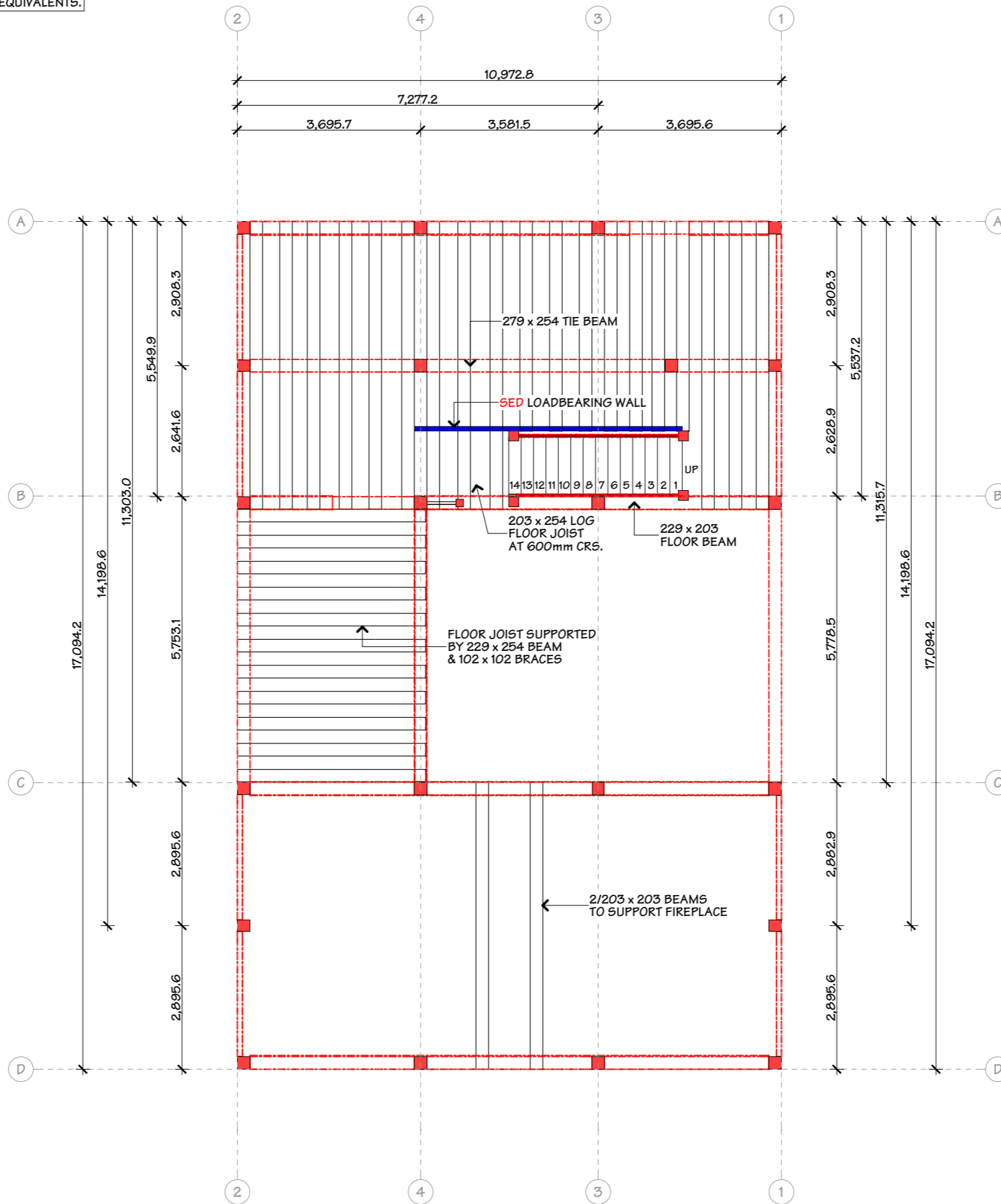
NOTES:
- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work.
- All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
10 DEC 24
AMENDMENT DATE:
241210.1820
VERSION:
WD-01

DESIGNER:
HTC
DRAWN:
JON
CHECKED:
JON

SCALE:
1:100, 1:1
JOB#:
23071
SHEET:
36
73

NOTE:
 - ALL TIMBERS ARE TO BE HERITAGE TIMBERS, EXCEPT FOR THE RAFTERS, WHICH WILL BE OAK.
 ENGINEER TO RECOMMEND FIXINGS, ETC.
 - TIMBER DIMENSIONS ARE APPROXIMATE BASED ON THEIR IMPERIAL (FEET & INCHES EQUIVALENTS).



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
MID-FLOOR FRAMING LAYOUT

LEGAL DESCRIPTION:
 LOT: 1-2
 DP: 316193
 ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

NOTES:
 - Subject to council approval
 - All measurements to be confirmed on site by the contractor prior to the commencement of work.
 - All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

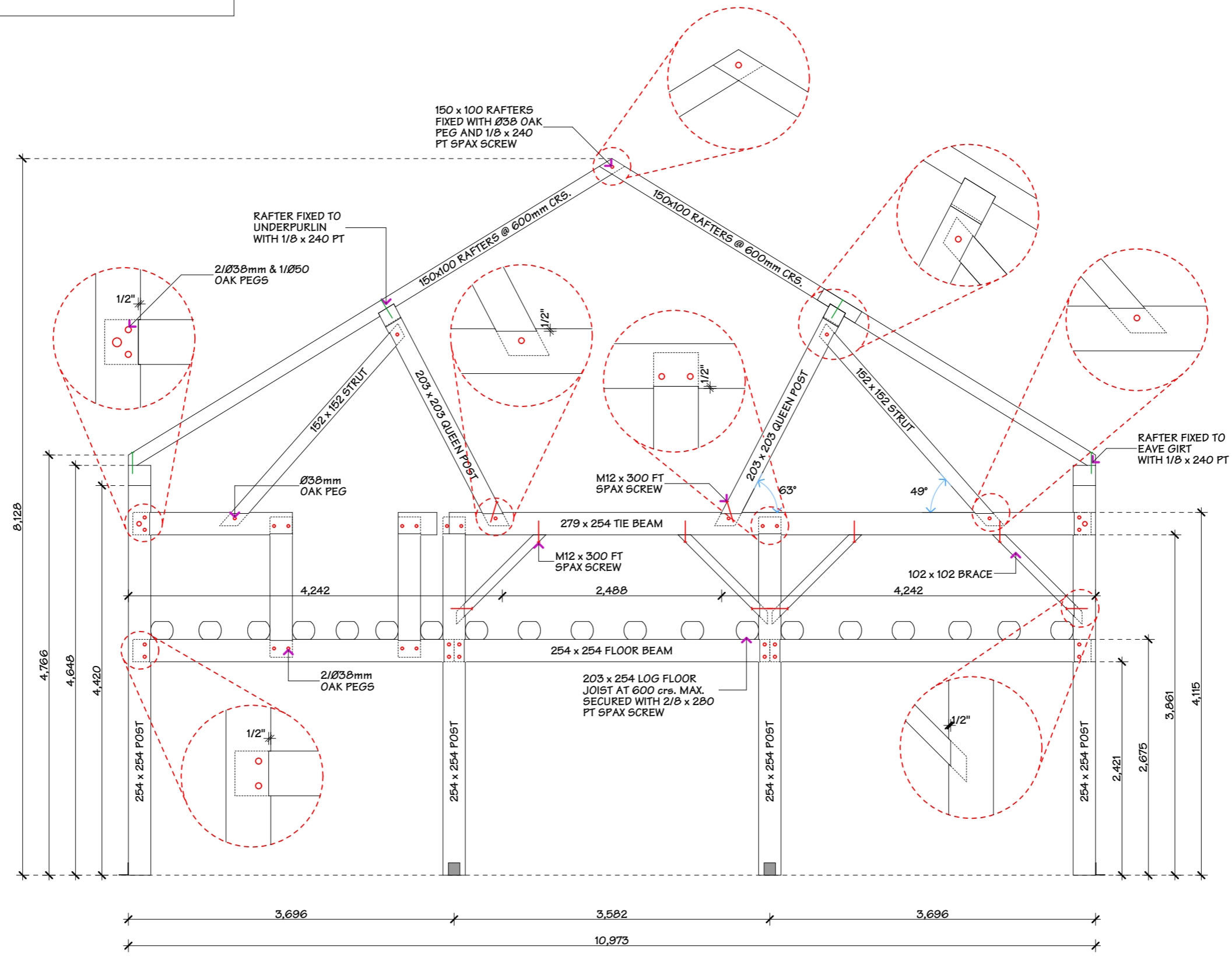
DATE OF ISSUE:
 10 DEC 24
 AMENDMENT DATE:
 241210.1820
 VERSION:
 WD-01

DESIGNER:
 HTC
 DRAWN:
 JON
 CHECKED:
 JON

SCALE:
 1:100
 JOB#:
 23071
 SHEET:
37
 73

NOTE:
 - ALL TIMBERS ARE TO BE HERITAGE TIMBERS, EXCEPT FOR THE RAFTERS, WHICH WILL BE OAK.
 ENGINEER TO RECOMMEND FIXINGS, ETC.
 - TIMBER DIMENSIONS ARE APPROXIMATE BASED ON THEIR IMPERIAL (FEET & INCHES EQUIVALENTS).

FIXINGS



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
BENT A

LEGAL DESCRIPTION:
 LOT: 1-2
 DP: 316193
 ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

NOTES:
 - Subject to council approval
 - All measurements to be confirmed on site by the contractor prior to the commencement of work.
 - All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
 10 DEC 24

AMENDMENT DATE:
 241210.1820

VERSION:
 WD-01

REV NO:
 00

DESIGNER:
 HTC

DRAWN:
 JON

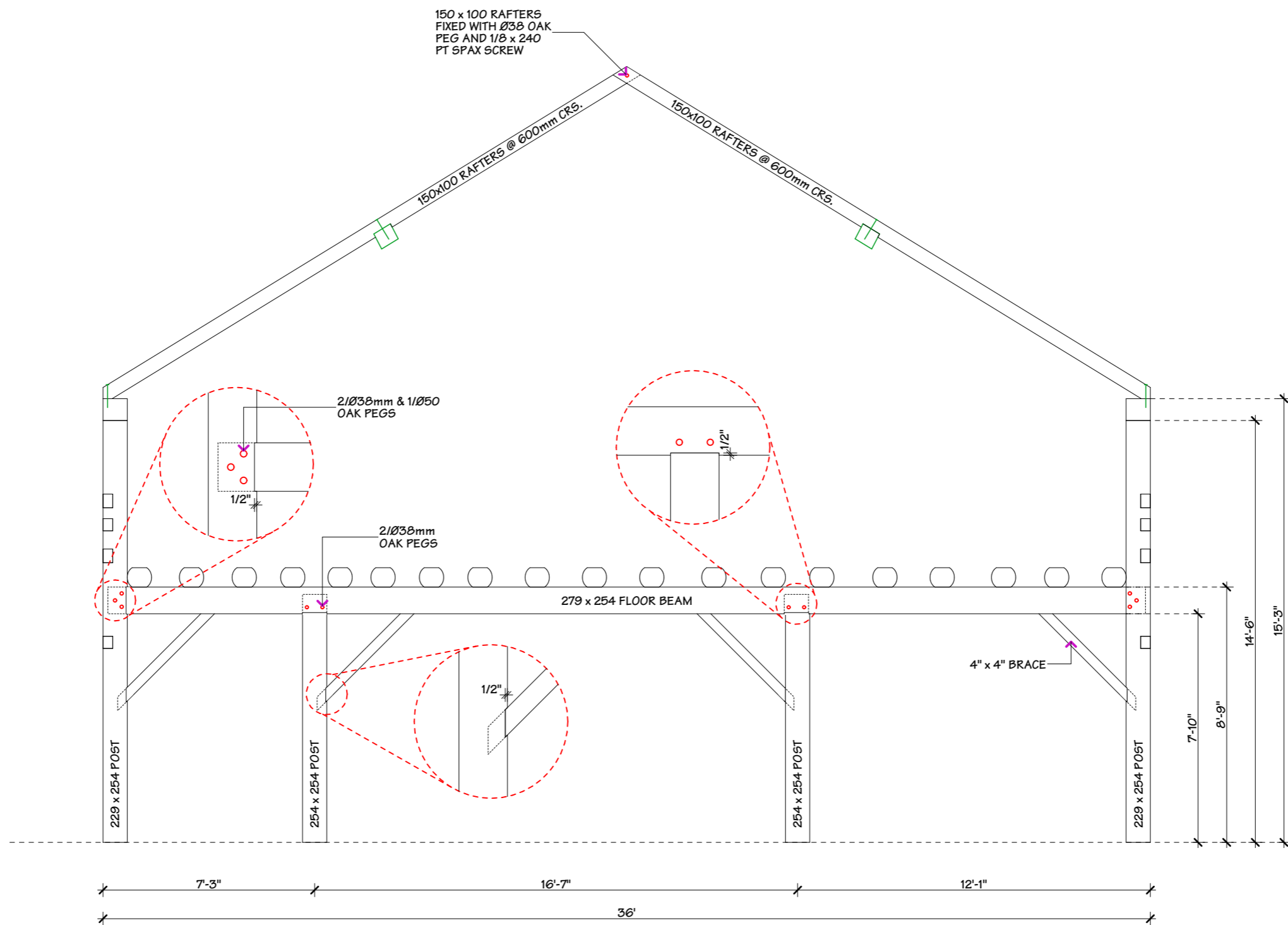
CHECKED:
 JON

SCALE:
 1:50

JOB#:
 23071

SHEET:
38
 / 73

NOTE:
 - ALL TIMBERS ARE TO BE HERITAGE TIMBERS, EXCEPT FOR THE RAFTERS, WHICH WILL BE OAK.
 ENGINEER TO RECOMMEND FIXINGS, ETC.
 - TIMBER DIMENSIONS ARE APPROXIMATE BASED ON THEIR IMPERIAL (FEET & INCHES EQUIVALENTS).



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
BEDROOM BENT

LEGAL DESCRIPTION:
 LOT: 1-2
 DP: 316193
 ADDRESS: 353 DUNSTAN
 ROAD, ALEXANDRA

NOTES:
 - Subject to council approval
 - All measurements to be confirmed on site by the contractor prior to the commencement of work.
 - All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
 10 DEC 24

AMENDMENT DATE:
 241210.1820

VERSION:
 WD-01

REV NO:
 00

DESIGNER:
 HTC

DRAWN:
 JON

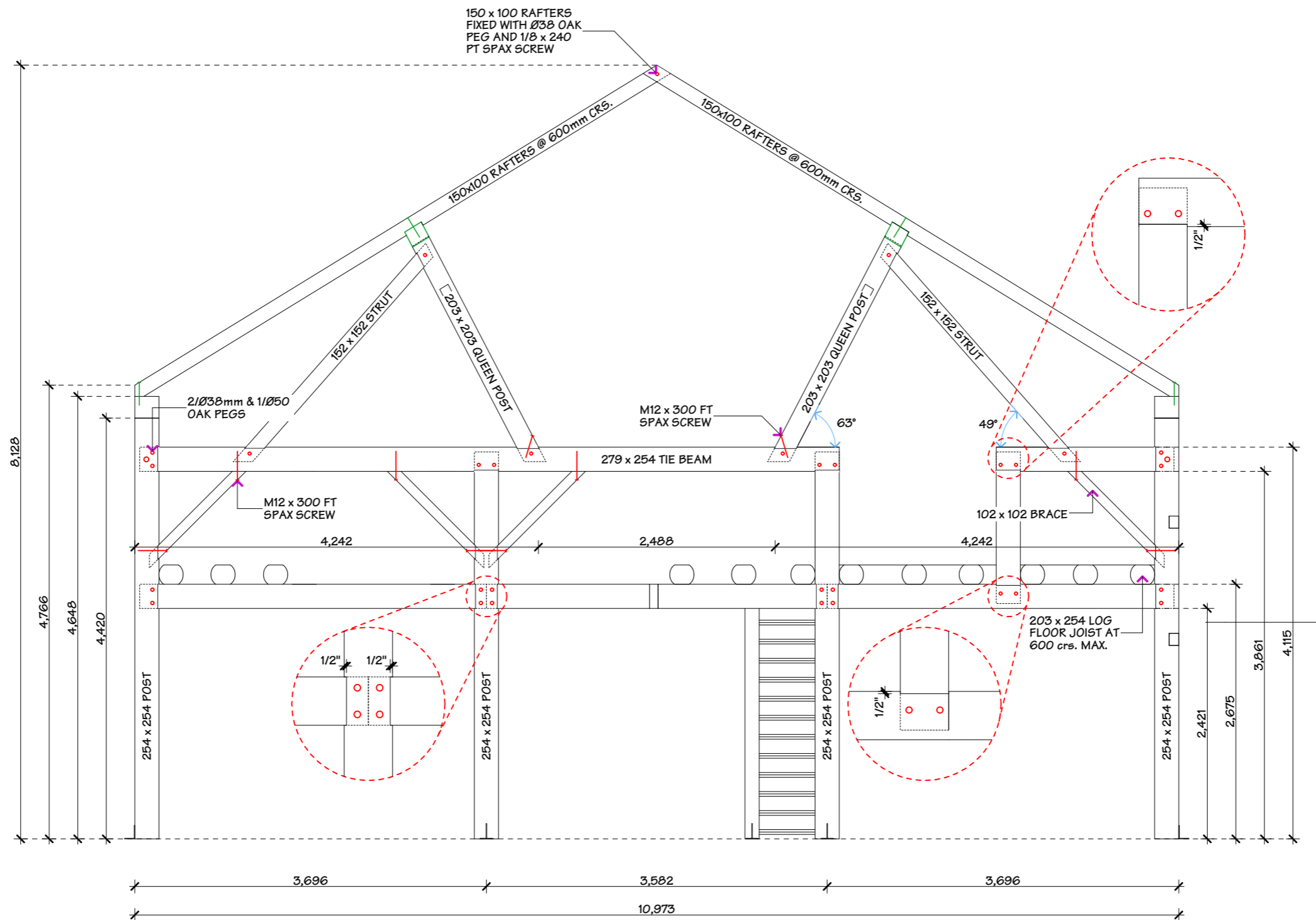
CHECKED:
 JON

SCALE:
 1:50

JOB#:
 23071

SHEET:
39
 / 73

NOTE:
 - ALL TIMBERS ARE TO BE HERITAGE TIMBERS, EXCEPT FOR THE RAFTERS, WHICH WILL BE OAK.
 ENGINEER TO RECOMMEND FIXINGS, ETC.
 - TIMBER DIMENSIONS ARE APPROXIMATE BASED ON THEIR IMPERIAL (FEET & INCHES EQUIVALENTS).



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
BENT B

LEGAL DESCRIPTION:
 LOT: 1-2
 DP: 316193
 ADDRESS: 353 DUNSTAN
 ROAD, ALEXANDRA

NOTES:
 - Subject to council approval
 - All measurements to be confirmed on site by the contractor prior to the commencement of work.
 - All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
 10 DEC 24

AMENDMENT DATE:
 241210.1820

VERSION:
 WD-01

REV NO:
 00

DESIGNER:
 HTC

DRAWN:
 JON

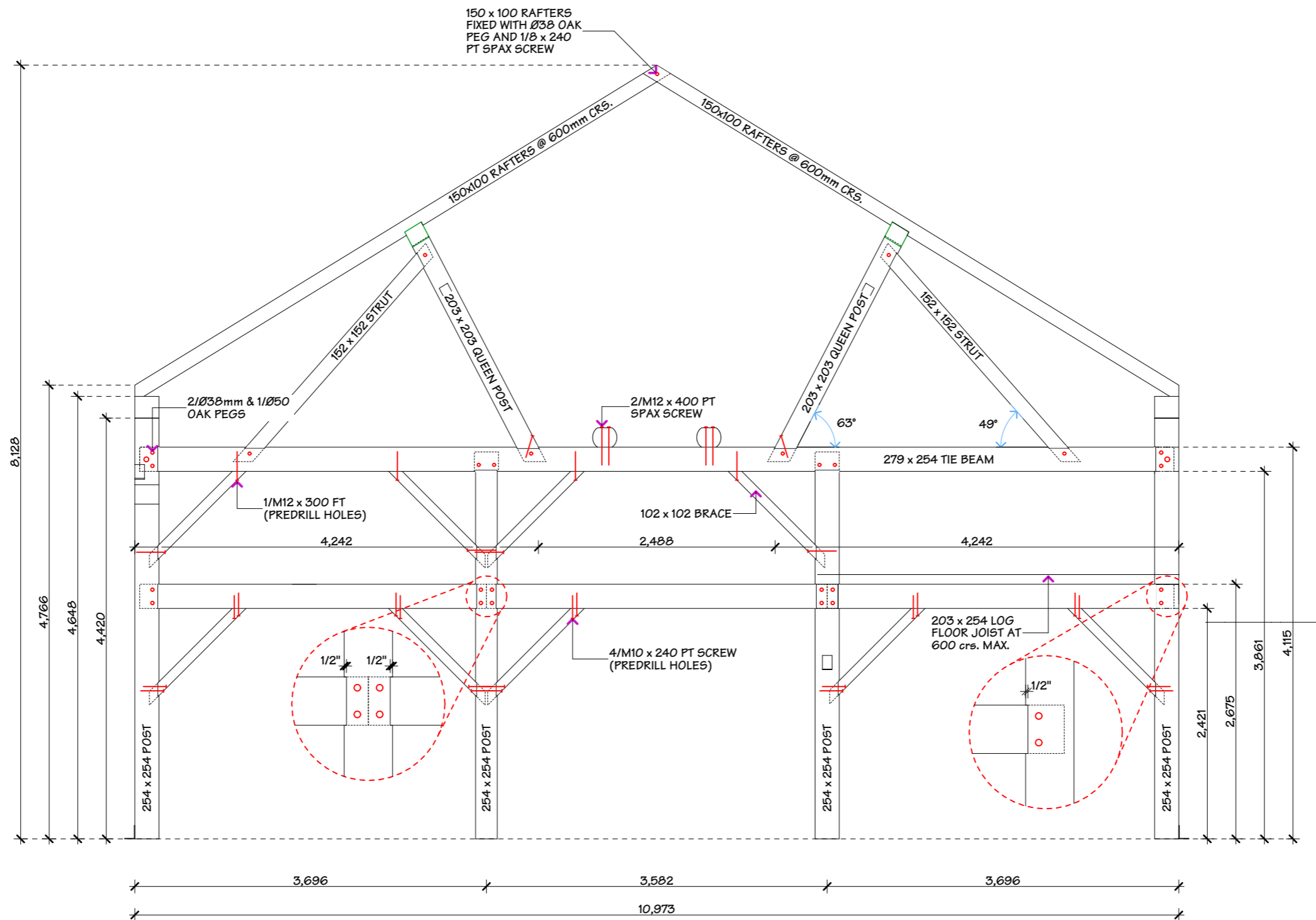
CHECKED:
 JON

SCALE:
 1:50

JOB#:
 23071

SHEET:
40
 73

NOTE:
 - ALL TIMBERS ARE TO BE HERITAGE TIMBERS, EXCEPT FOR THE RAFTERS, WHICH WILL BE OAK.
 ENGINEER TO RECOMMEND FIXINGS, ETC.
 - TIMBER DIMENSIONS ARE APPROXIMATE BASED ON THEIR IMPERIAL (FEET & INCHES EQUIVALENTS).



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
BENT C

LEGAL DESCRIPTION:
 LOT: 1-2
 DP: 316193
 ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

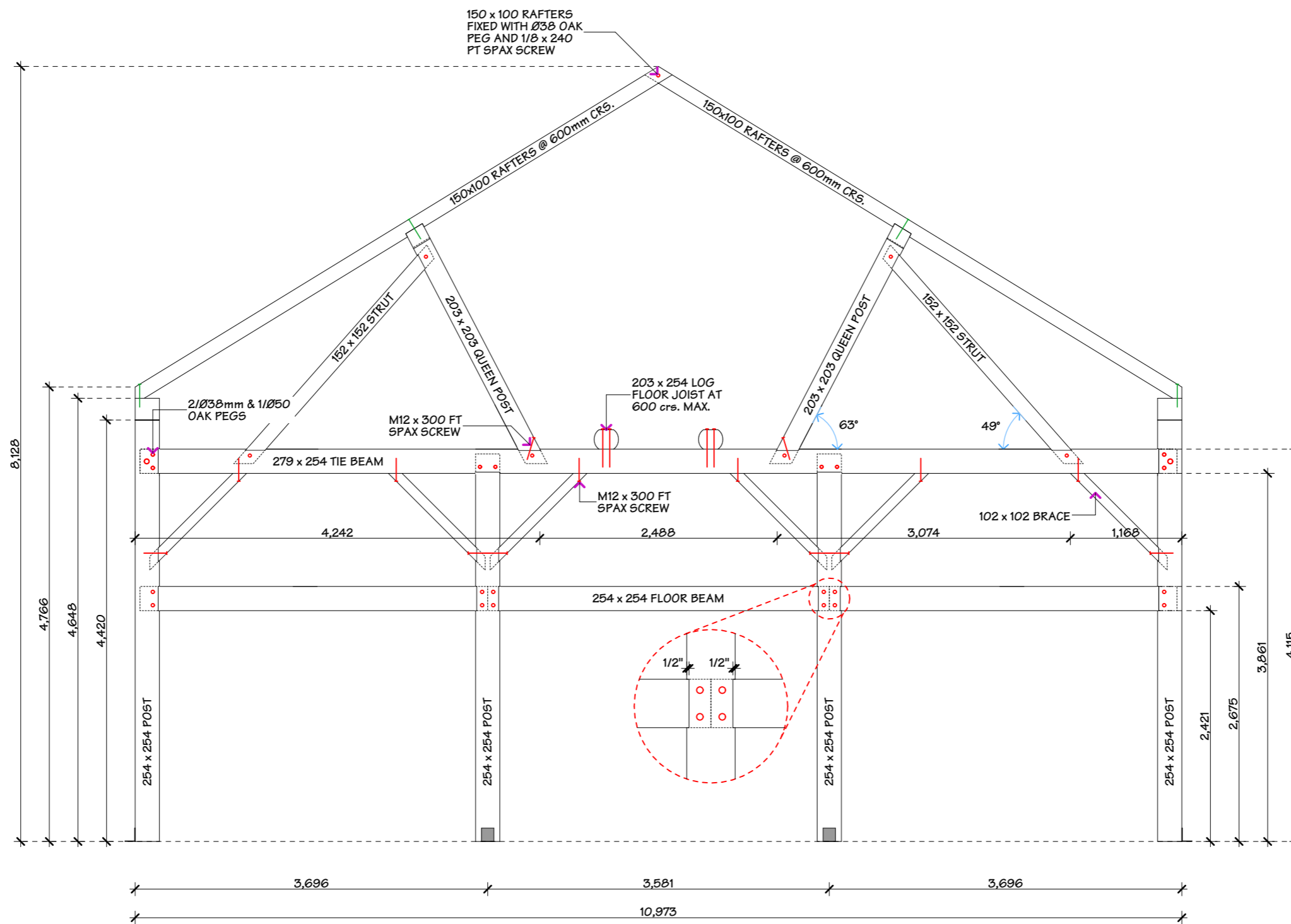
NOTES:
 - Subject to council approval
 - All measurements to be confirmed on site by the contractor prior to the commencement of work.
 - All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
 10 DEC 24
 AMENDMENT DATE:
 241210.1820
 VERSION:
 WD-01

DESIGNER:
 HTC
 DRAWN:
 JON
 CHECKED:
 JON

SCALE:
 1:50
 JOB#:
 23071
 SHEET:
41
 73

NOTE:
 - ALL TIMBERS ARE TO BE HERITAGE TIMBERS, EXCEPT FOR THE RAFTERS, WHICH WILL BE OAK.
 ENGINEER TO RECOMMEND FIXINGS, ETC.
 - TIMBER DIMENSIONS ARE APPROXIMATE BASED ON THEIR IMPERIAL (FEET & INCHES EQUIVALENTS).



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
BENT D

LEGAL DESCRIPTION:
 LOT: 1-2
 DP: 316193
 ADDRESS: 353 DUNSTAN
 ROAD, ALEXANDRA

NOTES:
 - Subject to council approval
 - All measurements to be confirmed on site by the contractor prior to the commencement of work.
 - All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
 10 DEC 24

AMENDMENT DATE:
 241210.1820

VERSION:
 WD-01

REV NO:
 00

DESIGNER:
 HTC

DRAWN:
 JON

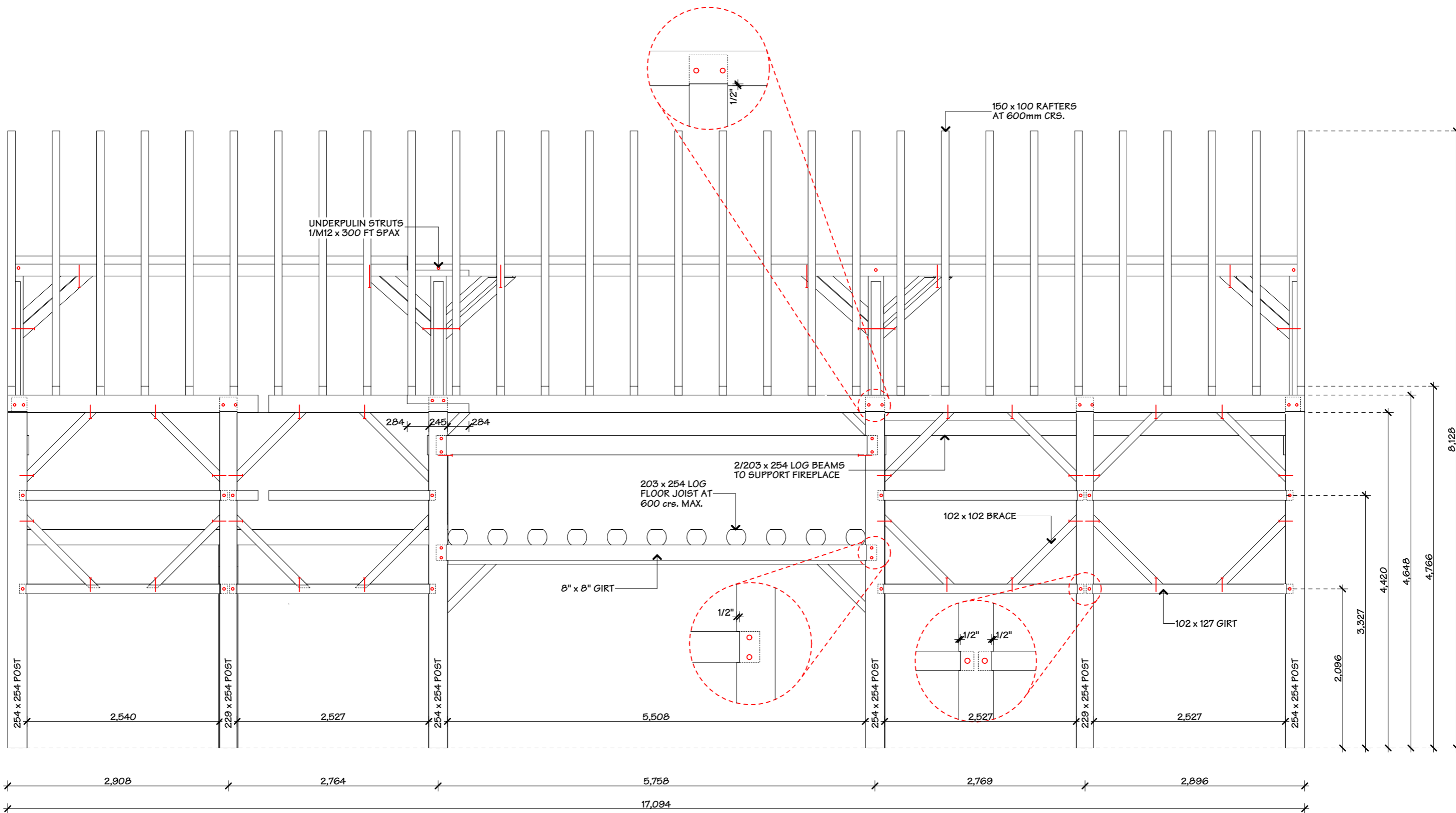
CHECKED:
 JON

SCALE:
 1:50

JOB#:
 23071

SHEET:
42
 73

NOTE:
 - ALL TIMBERS ARE TO BE HERITAGE TIMBERS, EXCEPT FOR THE RAFTERS, WHICH WILL BE OAK.
 ENGINEER TO RECOMMEND FIXINGS, ETC.
 - TIMBER DIMENSIONS ARE APPROXIMATE BASED ON THEIR IMPERIAL (FEET & INCHES EQUIVALENTS).



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
ELEVATION 2

LEGAL DESCRIPTION:
 LOT: 1-2
 DP: 316193
 ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

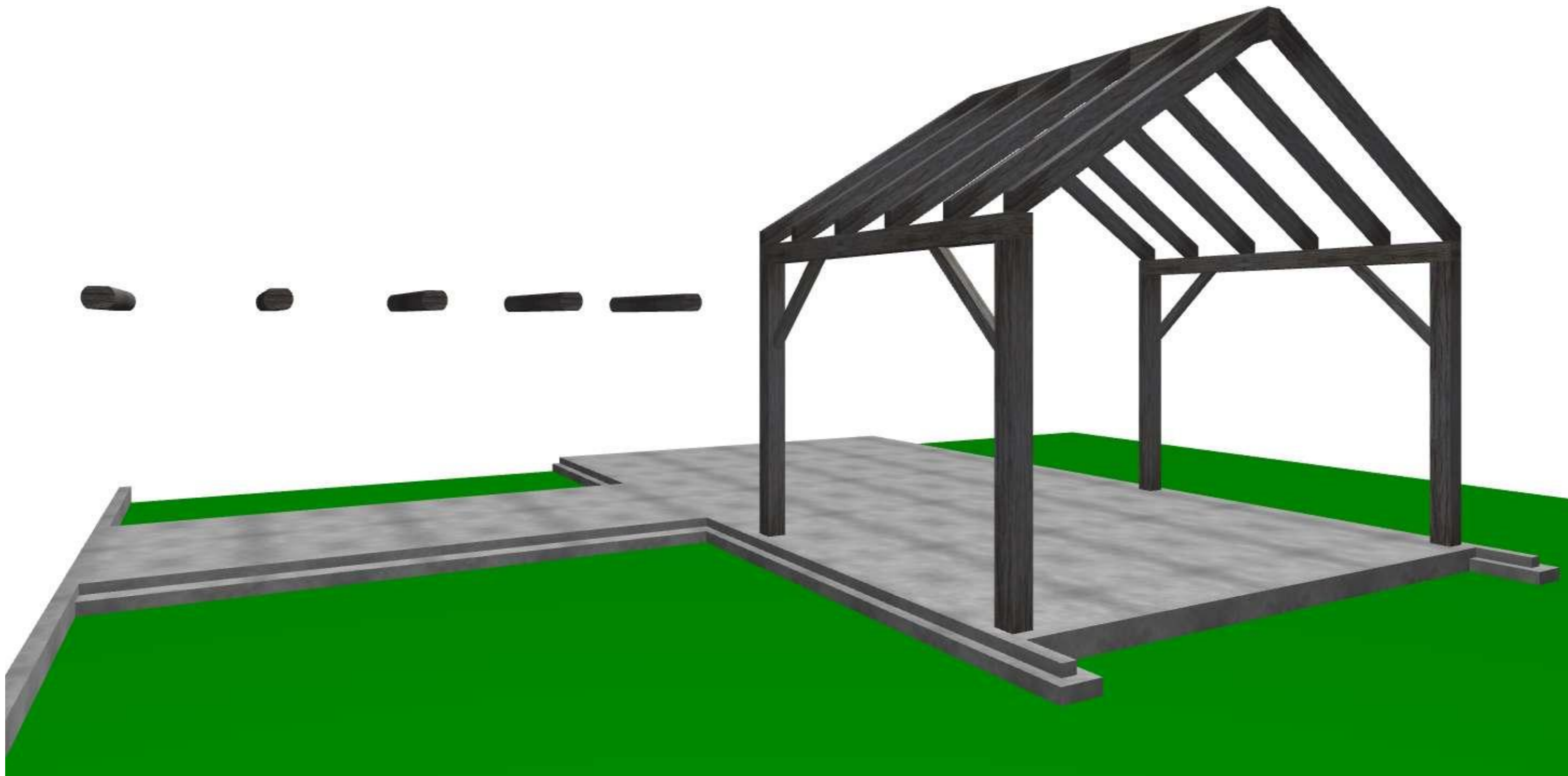
NOTES:
 - Subject to council approval
 - All measurements to be confirmed on site by the contractor prior to the commencement of work.
 - All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
 10 DEC 24
 AMENDMENT DATE:
 241210.1820
 VERSION:
 WD-01

DESIGNER:
 HTC
 DRAWN:
 JON
 CHECKED:
 JON

SCALE:
 1:50
 JOB#:
 23071
 SHEET:
44
 73

NOTE:
 - ALL TIMBERS ARE TO BE HERITAGE TIMBERS, EXCEPT FOR THE RAFTERS, WHICH WILL BE OAK.
 ENGINEER TO RECOMMEND FIXINGS, ETC.
 - TIMBER DIMENSIONS ARE APPROXIMATE BASED ON THEIR IMPERIAL (FEET & INCHES EQUIVALENTS).



JOB TITLE:

NATASHA WILLIAMS

DRAWING TITLE:

3D VIEW

LEGAL DESCRIPTION:

LOT: 1-2
 DP: 316193
 ADDRESS: 353 DUNSTAN
 ROAD, ALEXANDRA

NOTES:

- Subject to council approval
 - All measurements to be confirmed on site by the contractor prior to the commencement of work.
 - All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:

10 DEC 24

AMENDMENT DATE:

241210.1820

VERSION:
 WD-01

REV NO:
 00

DESIGNER:

HTC

DRAWN:

JON

CHECKED:
 JON

SCALE:

1:127.90

JOB#:

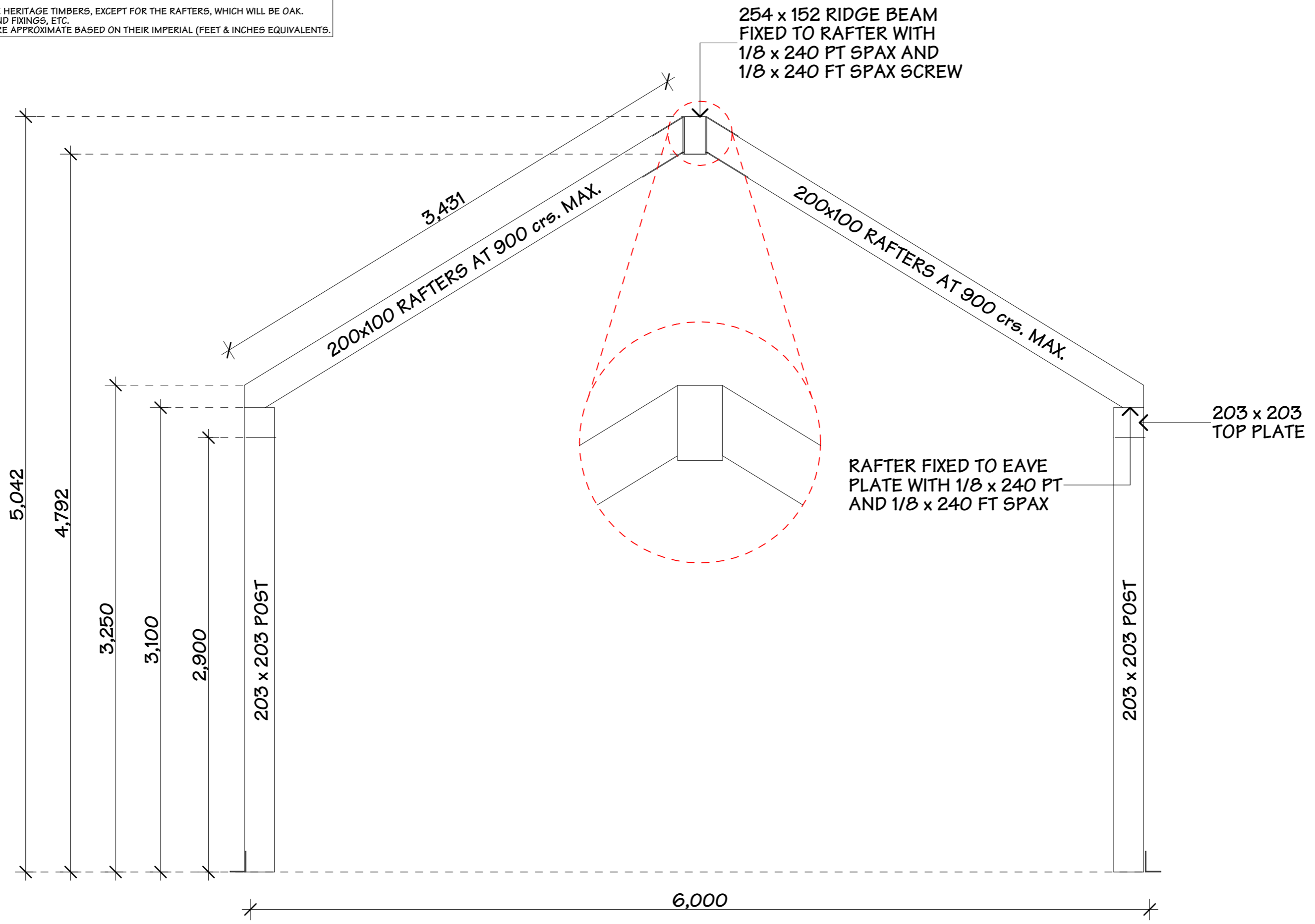
23071

SHEET:

45

73

NOTE:
 - ALL TIMBERS ARE TO BE HERITAGE TIMBERS, EXCEPT FOR THE RAFTERS, WHICH WILL BE OAK.
 ENGINEER TO RECOMMEND FIXINGS, ETC.
 - TIMBER DIMENSIONS ARE APPROXIMATE BASED ON THEIR IMPERIAL (FEET & INCHES EQUIVALENTS).



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
BENT Y & Z

LEGAL DESCRIPTION:
 LOT: 1-2
 DP: 316193
 ADDRESS: 353 DUNSTAN
 ROAD, ALEXANDRA

NOTES:
 - Subject to council approval
 - All measurements to be confirmed on site by the contractor prior to the commencement of work.
 - All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
 10 DEC 24

AMENDMENT DATE:
 241210.1820

VERSION:
 WD-01

REV NO:
 00

DESIGNER:
 HTC

DRAWN:
 JON

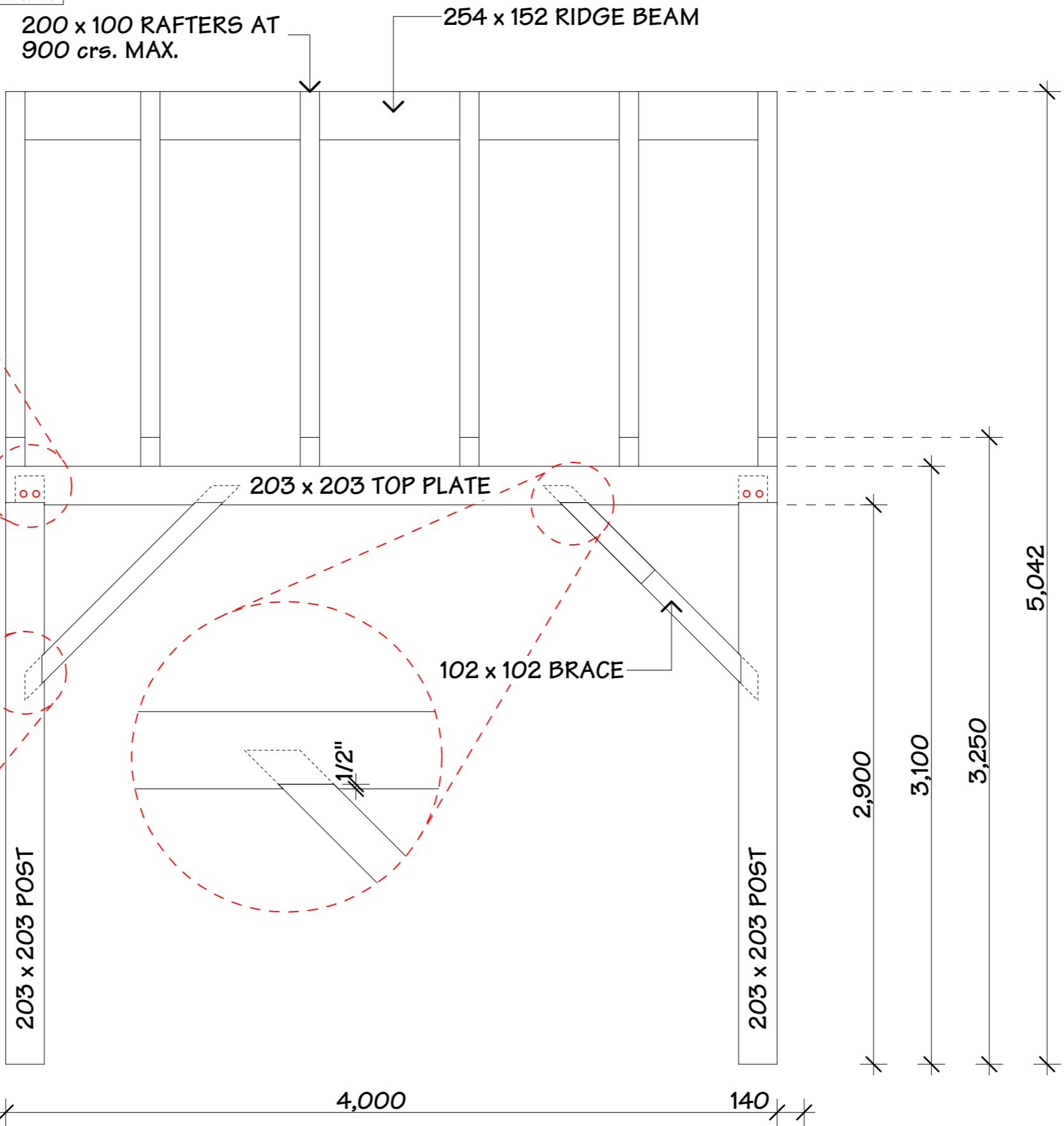
CHECKED:
 JON

SCALE:
 1:25

JOB#:
 23071

SHEET:
46
 /73

NOTE:
 - ALL TIMBERS ARE TO BE HERITAGE TIMBERS, EXCEPT FOR THE RAFTERS, WHICH WILL BE OAK.
 ENGINEER TO RECOMMEND FIXINGS, ETC.
 - TIMBER DIMENSIONS ARE APPROXIMATE BASED ON THEIR IMPERIAL (FEET & INCHES EQUIVALENTS).



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
ELEVATION 3

LEGAL DESCRIPTION:
 LOT: 1-2
 DP: 316193
 ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

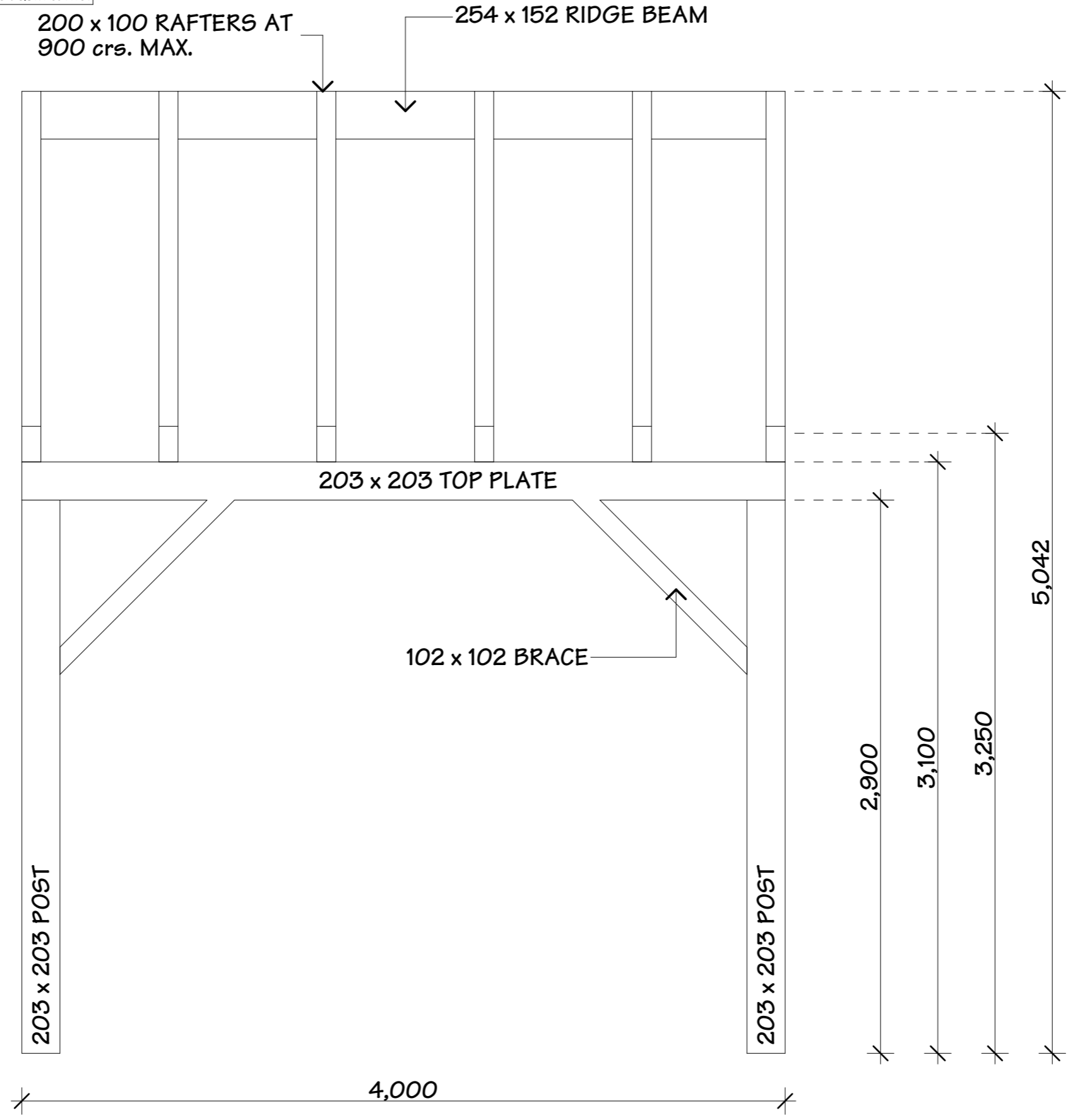
NOTES:
 - Subject to council approval
 - All measurements to be confirmed on site by the contractor prior to the commencement of work.
 - All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
 10 DEC 24
 AMENDMENT DATE:
 241210.1820
 VERSION:
 WD-01

DESIGNER:
 HTC
 DRAWN:
 JON
 CHECKED:
 JON

SCALE:
 1:25
 JOB#:
 23071
 SHEET:
47
 73

NOTE:
 - ALL TIMBERS ARE TO BE HERITAGE TIMBERS, EXCEPT FOR THE RAFTERS, WHICH WILL BE OAK.
 ENGINEER TO RECOMMEND FIXINGS, ETC.
 - TIMBER DIMENSIONS ARE APPROXIMATE BASED ON THEIR IMPERIAL (FEET & INCHES EQUIVALENTS).



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
ELEVATION 4

LEGAL DESCRIPTION:
 LOT: 1-2
 DP: 316193
 ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

NOTES:
 - Subject to council approval
 - All measurements to be confirmed on site by the contractor prior to the commencement of work.
 - All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
 10 DEC 24

AMENDMENT DATE:
 241210.1820

VERSION:
 WD-01

REV NO:
 00

DESIGNER:
 HTC

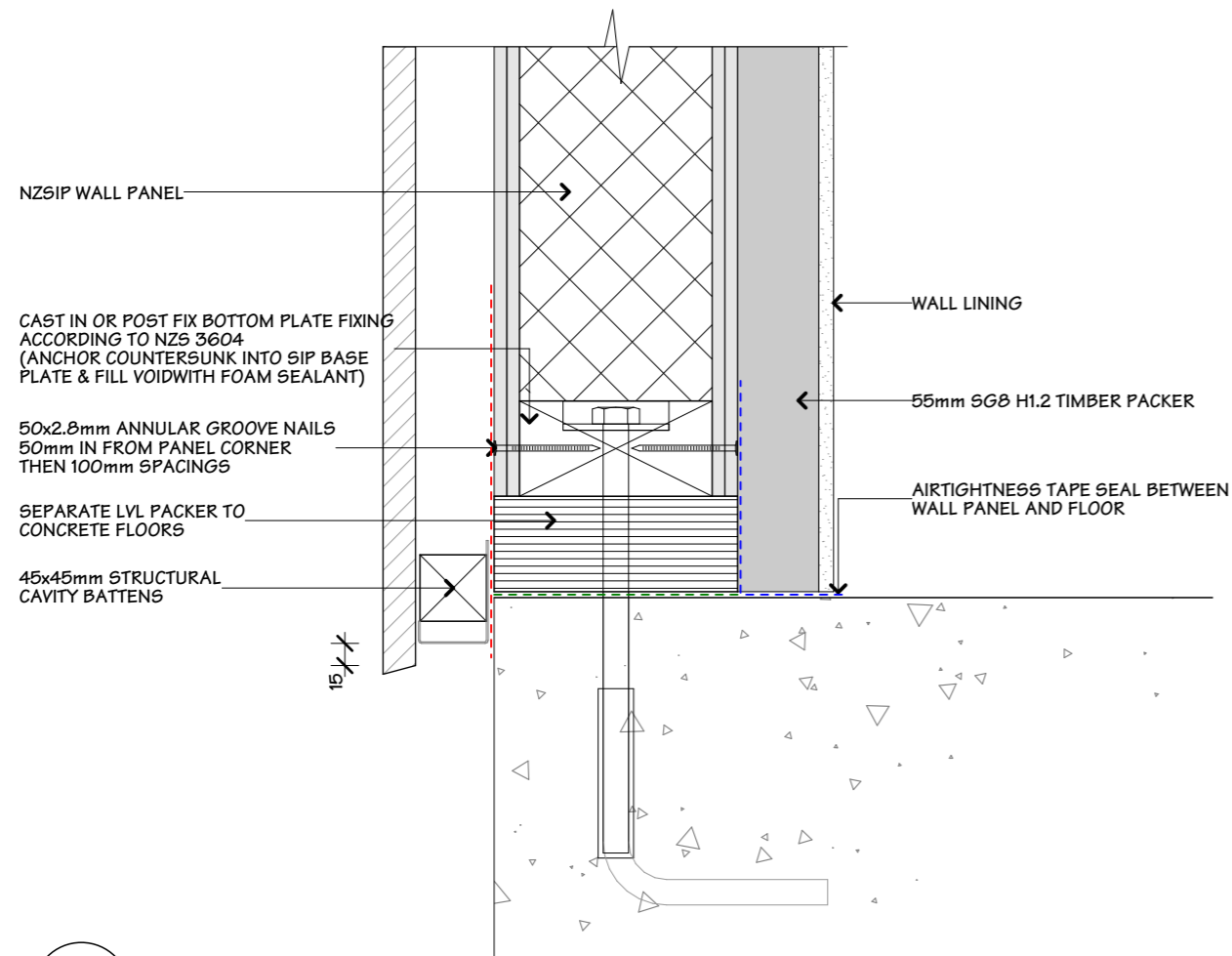
DRAWN:
 JON

CHECKED:
 JON

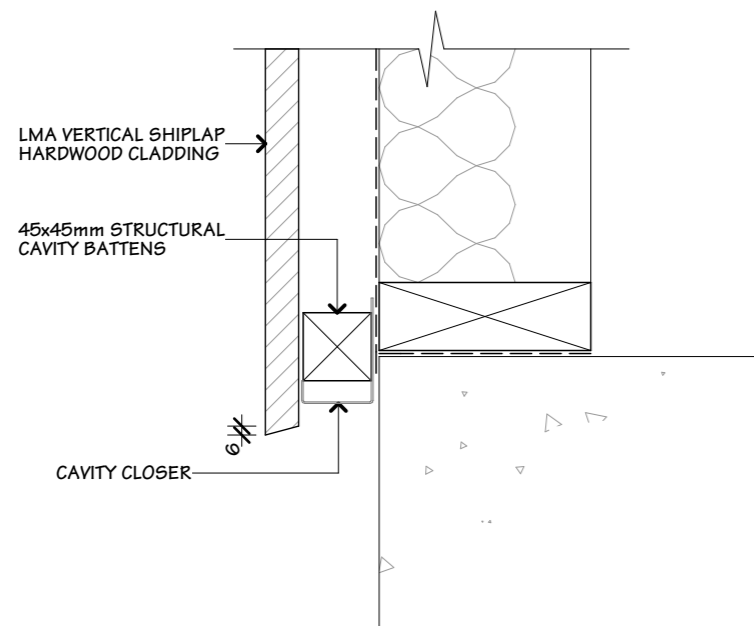
SCALE:
 1:25

JOB#:
 23071

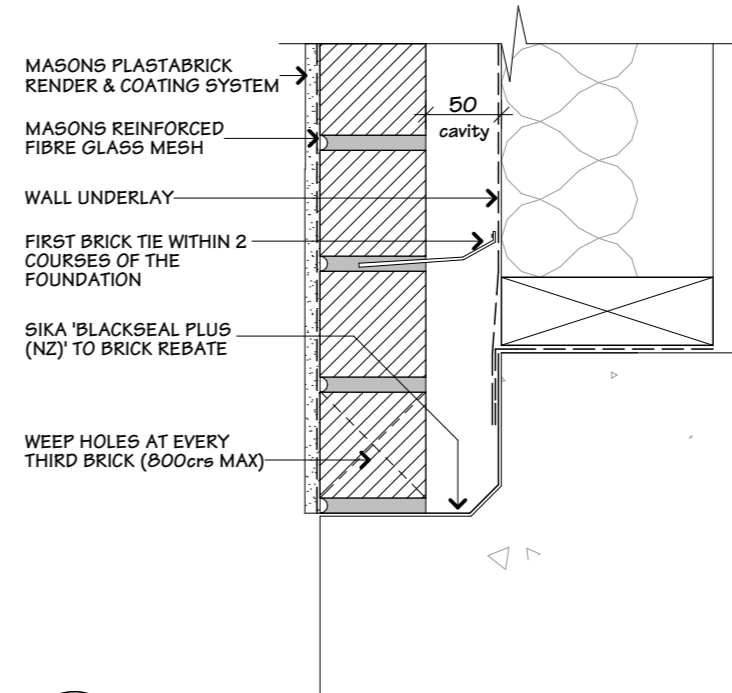
SHEET:
48
 /73



01
--
NZSIP FOOTING DETAIL - CONCRETE FLOOR
SCALE 1:5



02
--
LMA VERTICAL SHIPLAP HARDWOOD CLADDING BASE DETAIL
SCALE 1:5



03
--
BRICK VENEER BASE DETAIL
NZBC E2/A51
SCALE 1:5

WALL TIES TO BRICK VENEER: USE EH BRICK TIES

WALL TIES AND THEIR FIXING SPACINGS AND EMBEDMENT SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF NZS 4210.

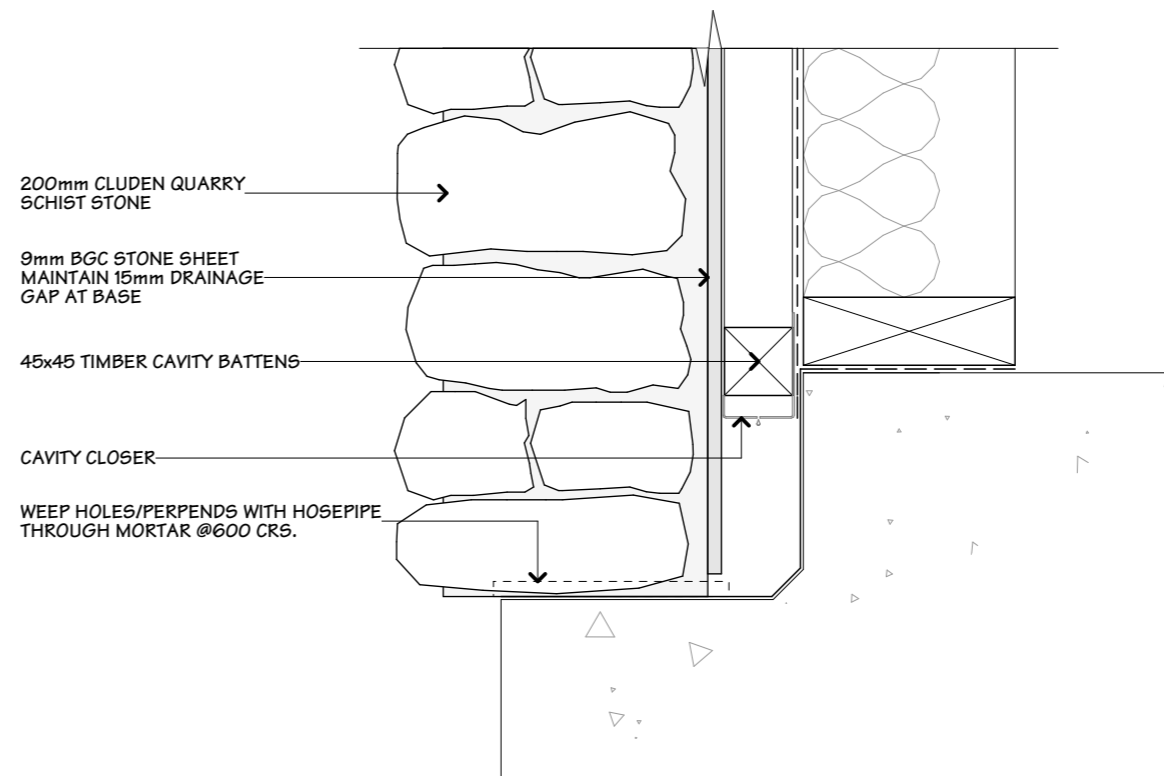
SPACINGS SHALL BE AT 600crs HORIZONTALLY AND 400mm VERTICALLY, OR ANY ACCEPTED ALTERNATIVE. WALL TIES SHALL BE WITHIN 300mm OF ALL OPENINGS.

FIRST BRICK TIE TO BE PLACED WITHIN THE BOTTOM 2 COURSES OF THE FOUNDATION. WHERE A BOND BREAKER HAS BEEN USED BRICK TIES TO BE PLACED WITHIN THE FIRST 2 COURSES (2 ROWS OF TIES) ABOVE THE BREAKER.

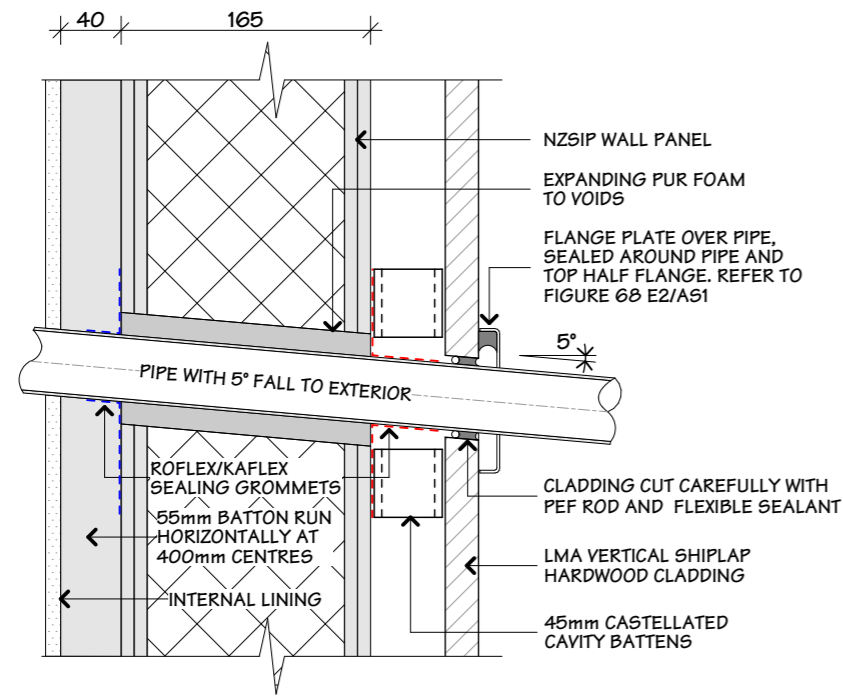
WALL TIES SPACED AS PER NOTES ABOVE, WITH A MINIMUM OF 5 SCREW FIXED TIES/m² OF BRICK VENEER.

TIE LENGTHS 50mm CAVITY:
70 SERIES VENEER = 85mm
90 SERIES VENEER = 105mm

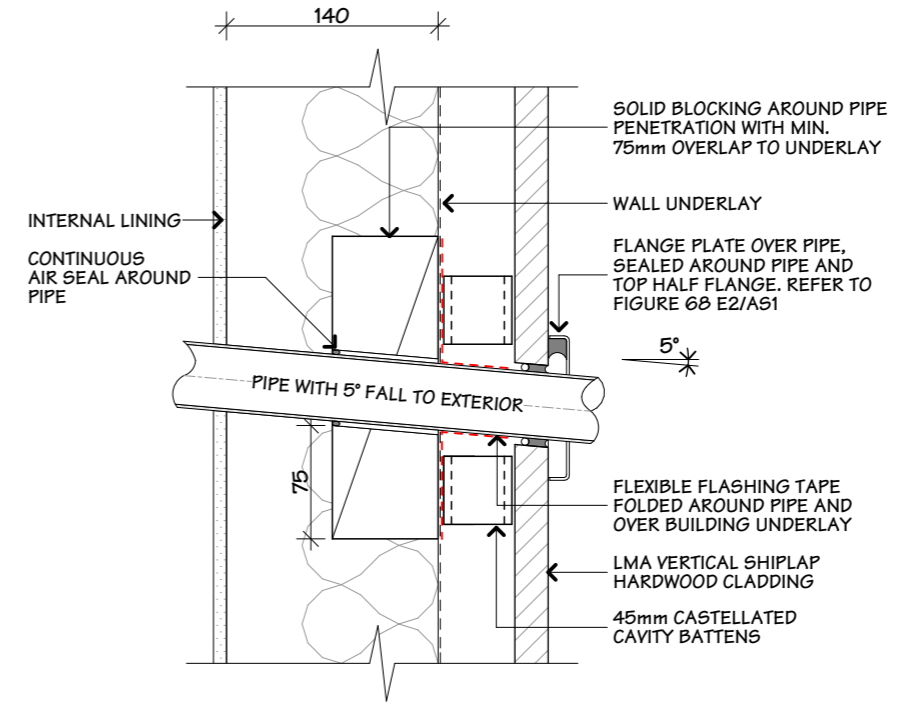
470 g/m² GALVANISED COATING OR 304 STAINLESS STEEL.
316 or 316L STAINLESS STEEL REQUIRED FOR SEA SPRAY ZONES



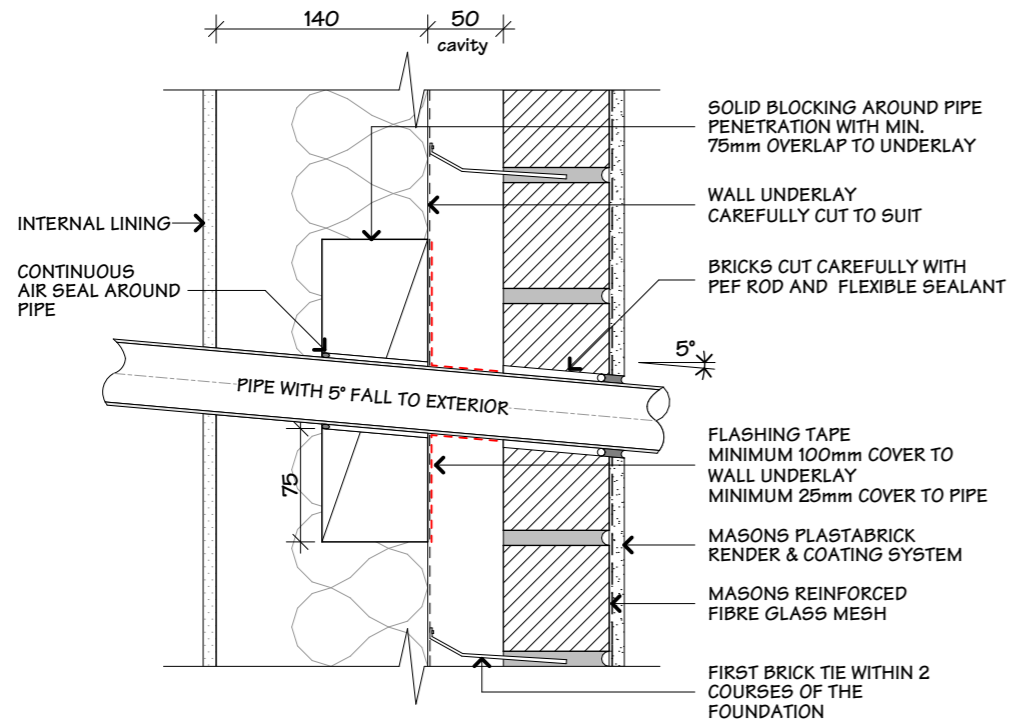
04
--
200mm SCHIST STONE CLADDING BASE DETAIL
SCALE 1:5



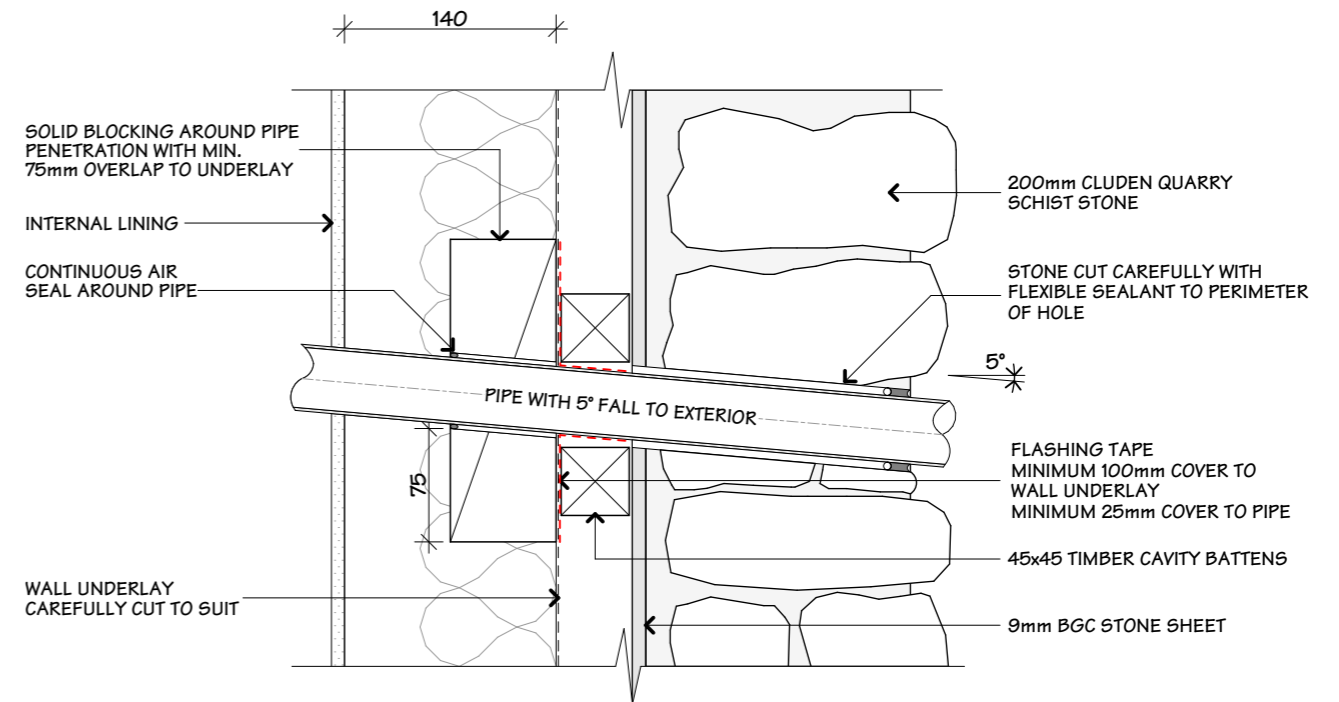
01 LMA VERTICAL SHIPLAP ON 165 NZSIP PANEL PIPE PENETRATION DETAIL
SCALE 1:5



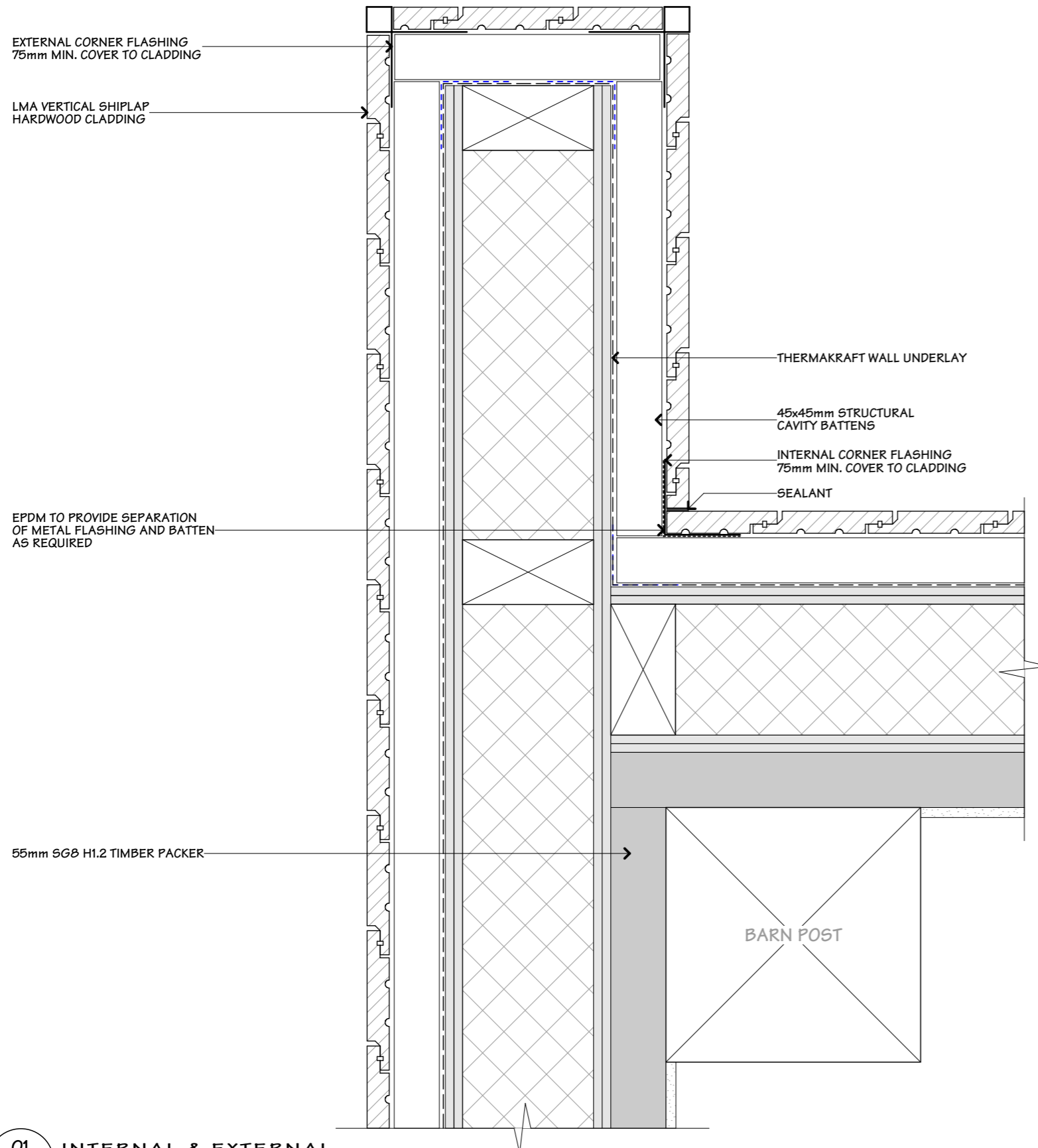
03 LMA VERTICAL SHIPLAP ON 140 WALL PIPE PENETRATION DETAIL
SCALE 1:5



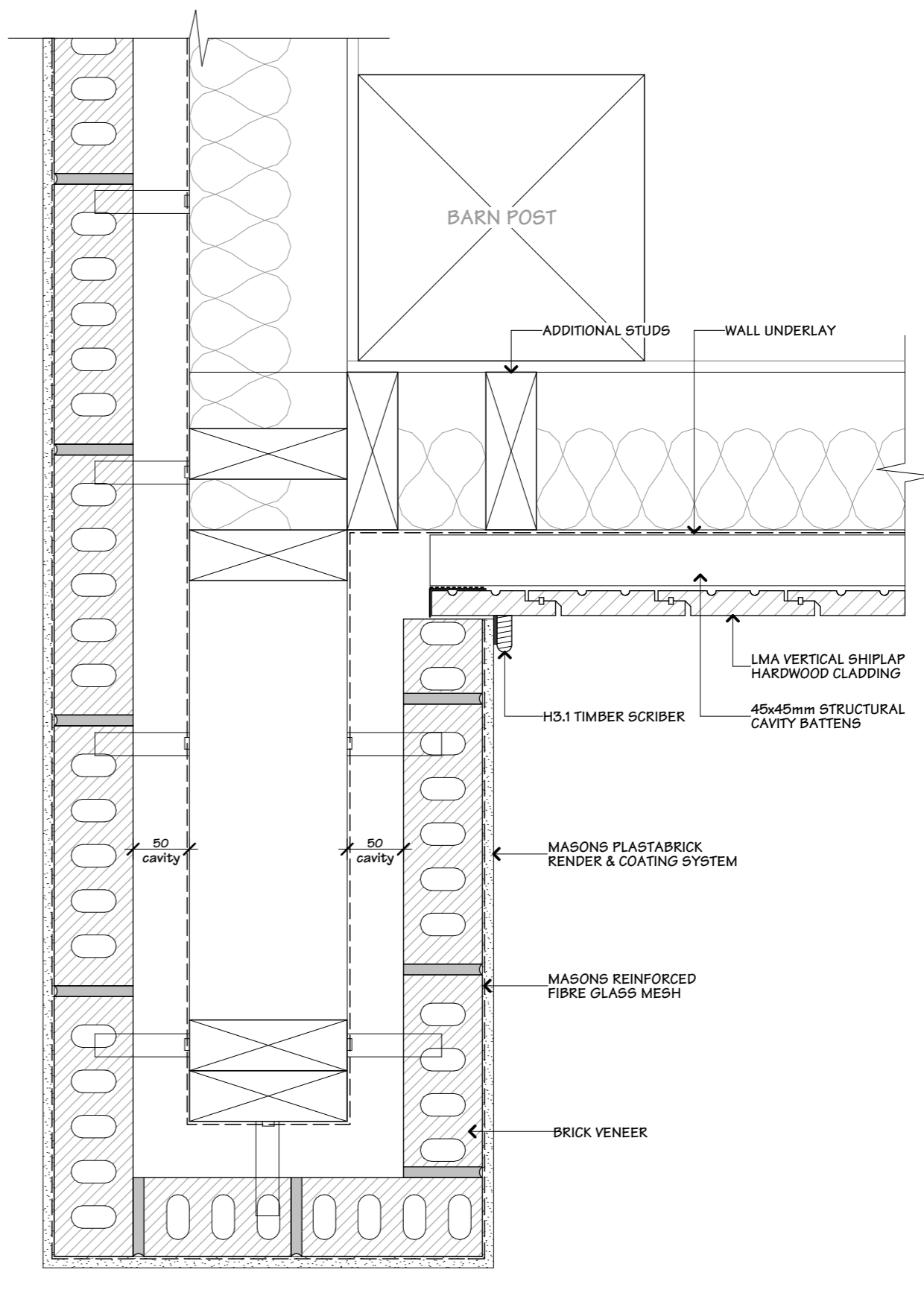
02 BRICK VENEER ON 140 WALL PIPE PENETRATION DETAIL
SCALE 1:5



04 SCHIST STONE ON 140 WALL PIPE PENETRATION DETAIL
SCALE 1:5



01 INTERNAL & EXTERNAL CORNER JUNCTION DETAIL
SCALE 1:5



02 BRICK VENEER / LMA VERTICAL SHIPLAP HARDWOOD CLADDING INTERNAL CORNER DETAIL
SCALE 1:5



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
CORNER JUNCTION DETAILS

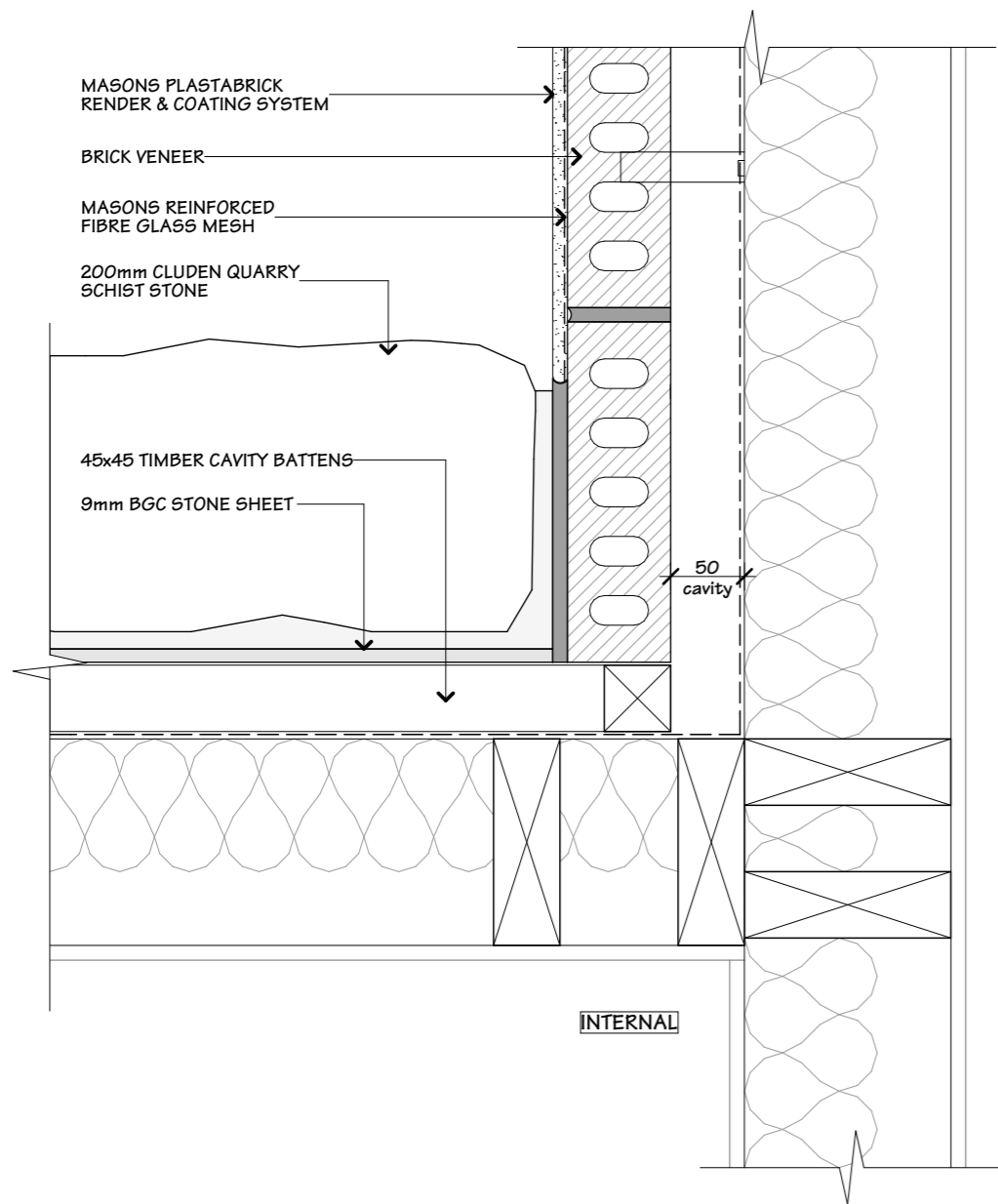
LEGAL DESCRIPTION:
LOT: 1-2
DP: 316193
ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

NOTES:
- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work.
- All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

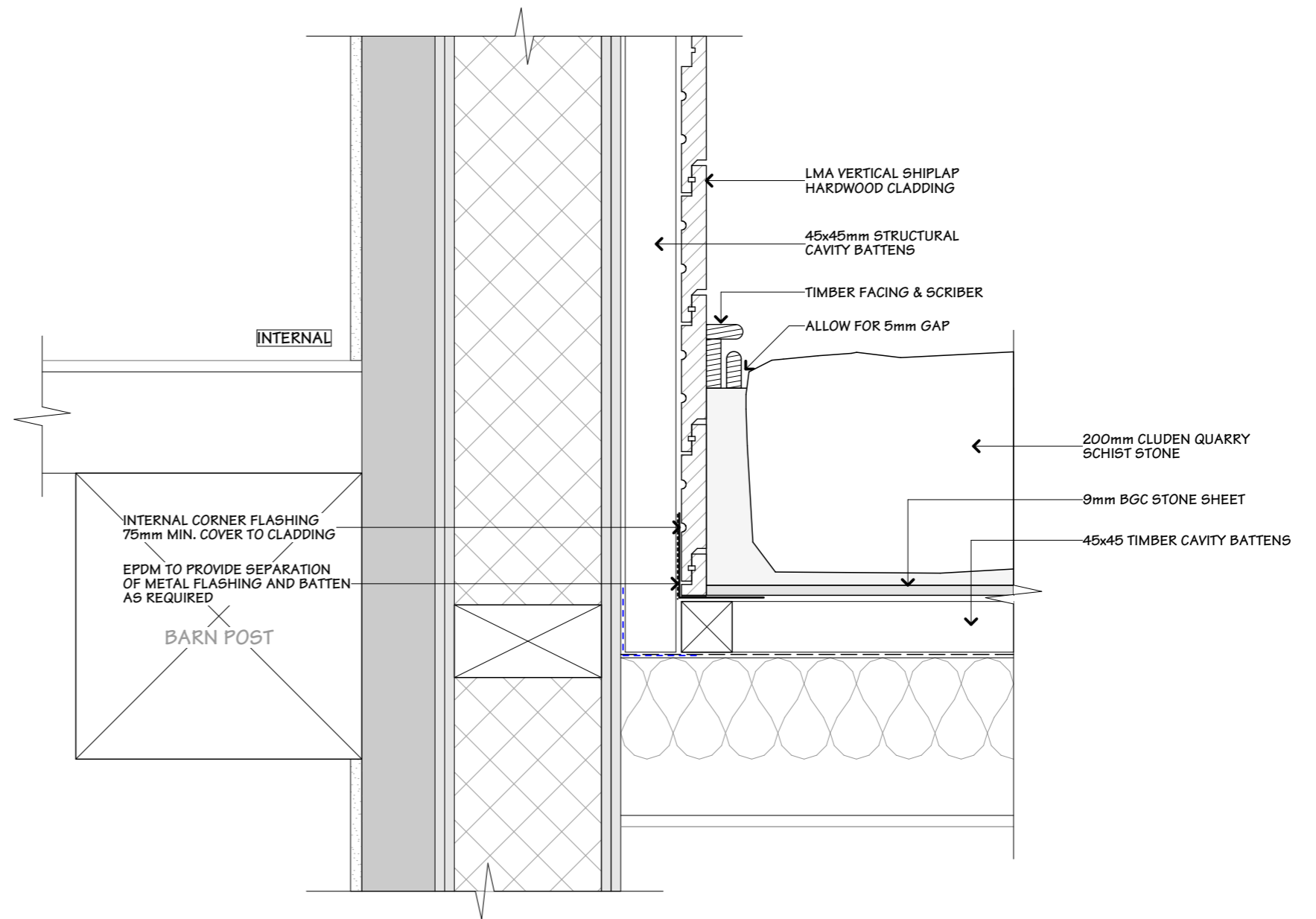
DATE OF ISSUE:
10 DEC 24
AMENDMENT DATE:
241210.1820
VERSION:
WD-01

DESIGNER:
HTC
DRAWN:
JON
CHECKED:
JON

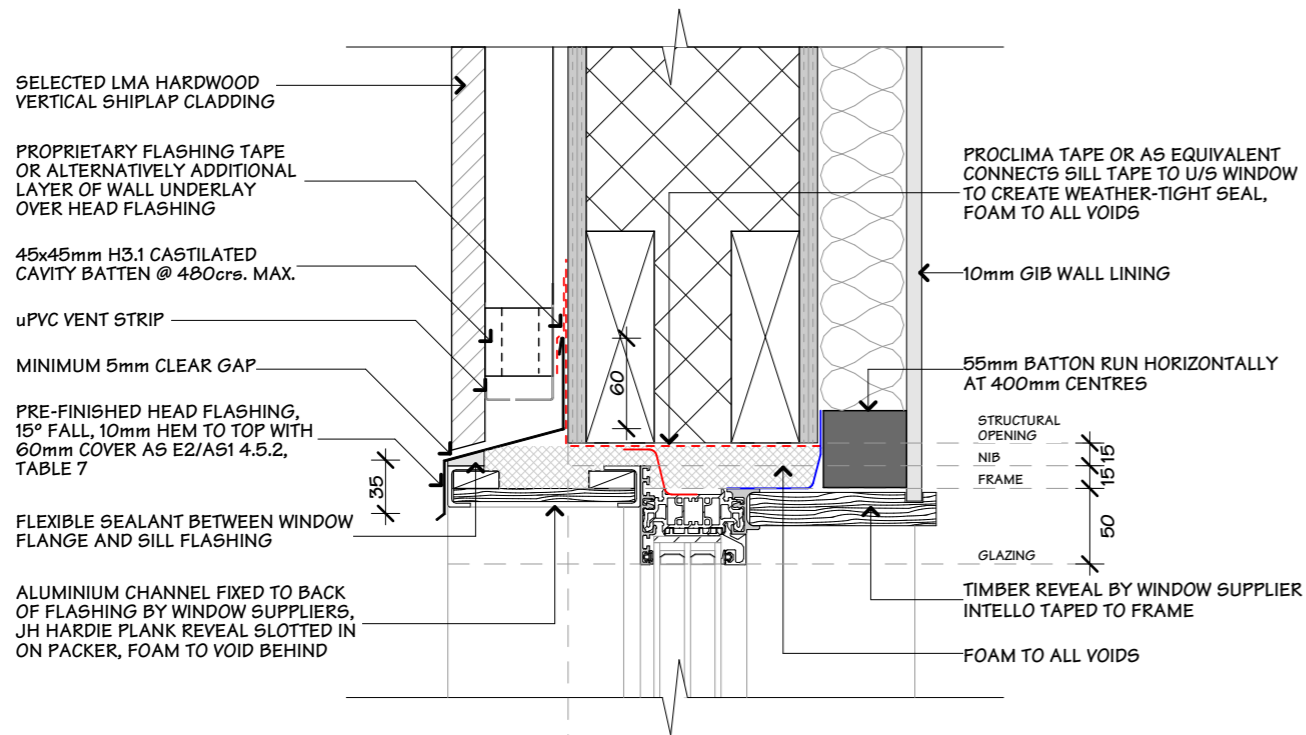
SCALE:
1:5
JOB#:
23071
SHEET:
51
73



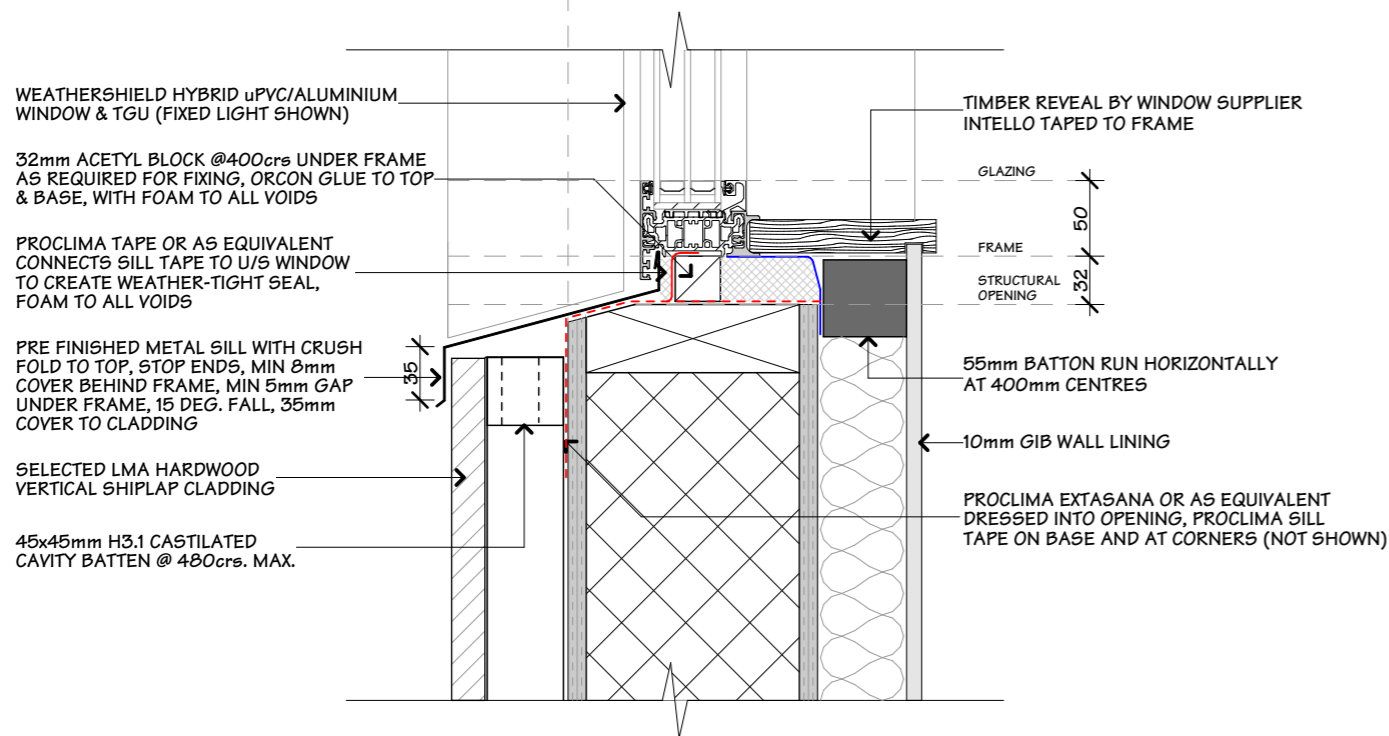
01 BRICK VENEER/200mm SCHIST STONE
INTERNAL CORNER JUNCTION DETAIL
SCALE 1:5



02 SCHIST STONE/LMA HARDWOOD
INTERNAL CORNER JUNCTION DETAIL
SCALE 1:5

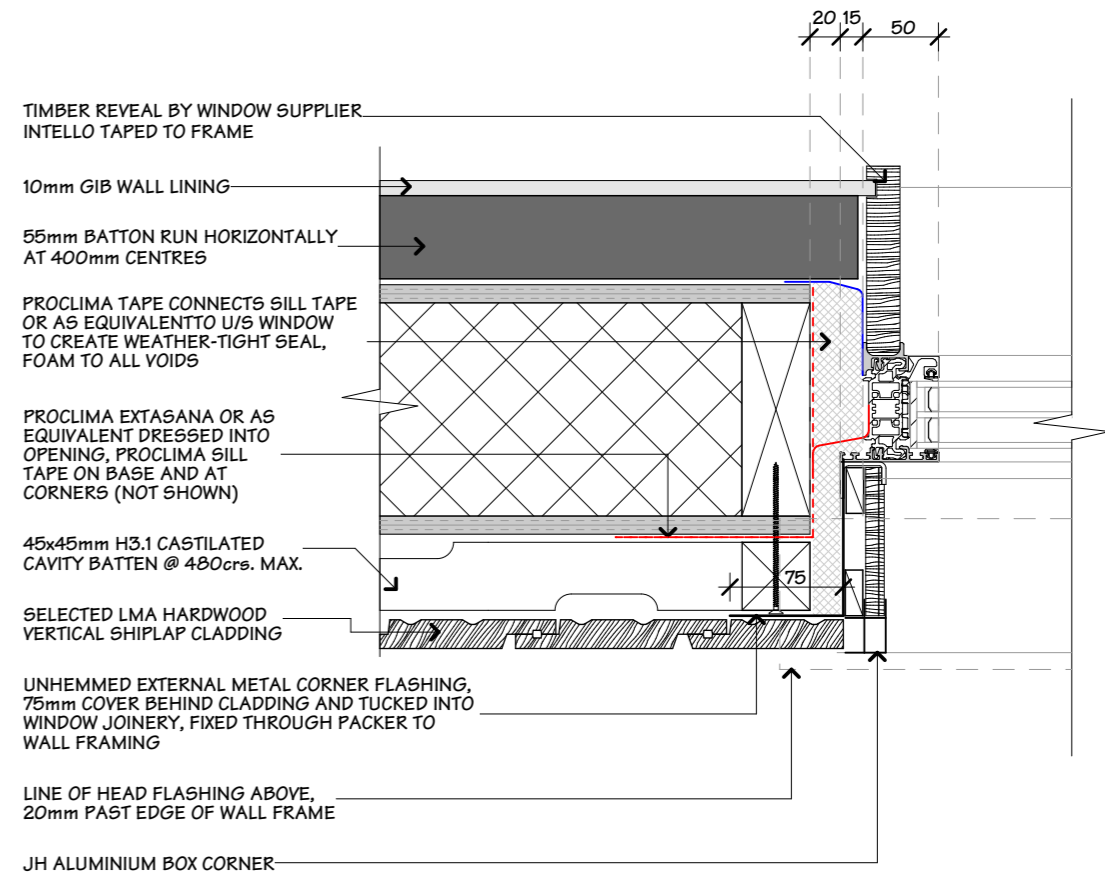


01 LMA VERTICAL SHIPLAP CLADDING WINDOW HEAD DETAIL
SCALE 1:5

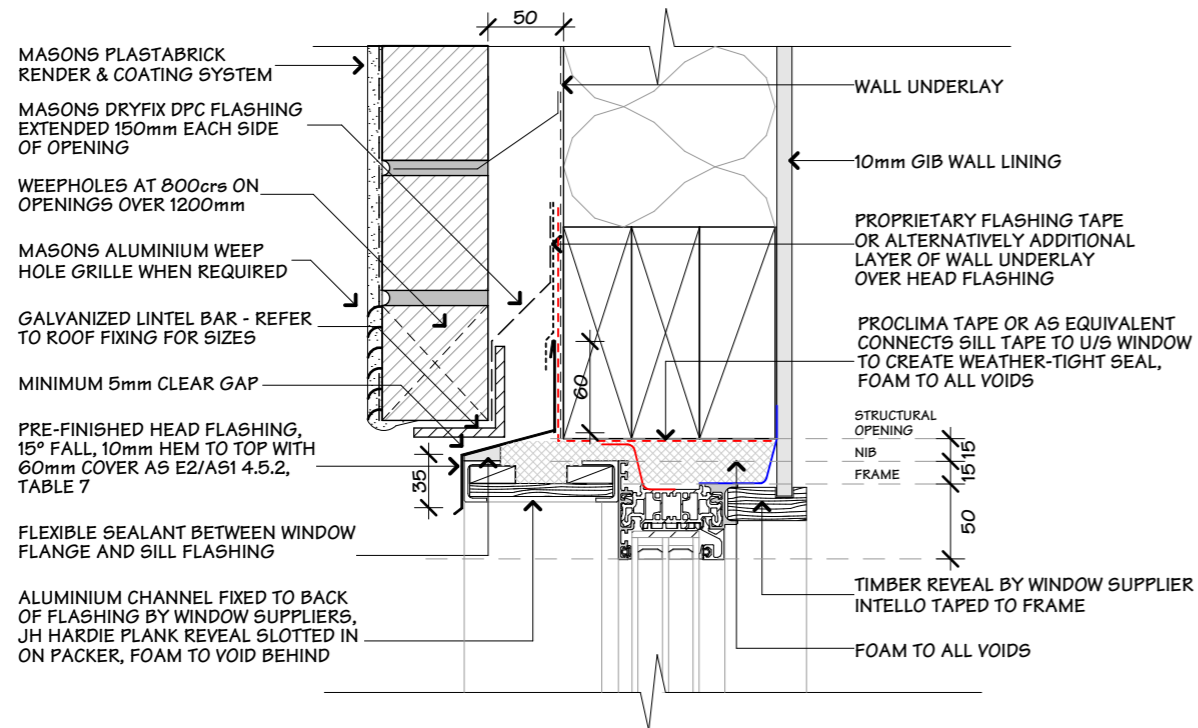


02 LMA VERTICAL SHIPLAP CLADDING WINDOW SILL DETAIL
SCALE 1:5

NOTE:
JAMB & HEAD DETAILS
-DETAILS ALSO APPLY TO LOW THREASHOLD INWARD OPENING AND OUTWARD OPENING PATIO DOORS

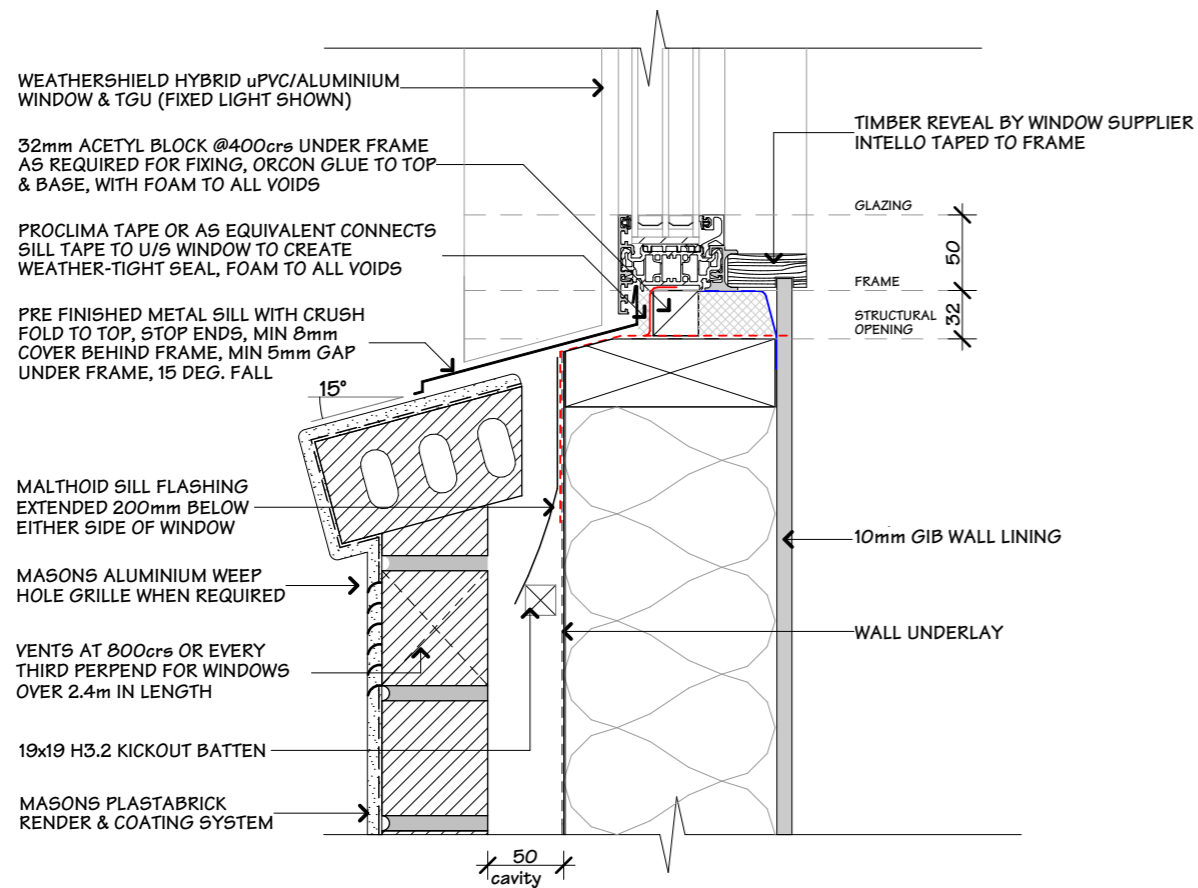


03 LMA VERTICAL SHIPLAP CLADDING WINDOW JAMB DETAIL
SCALE 1:5

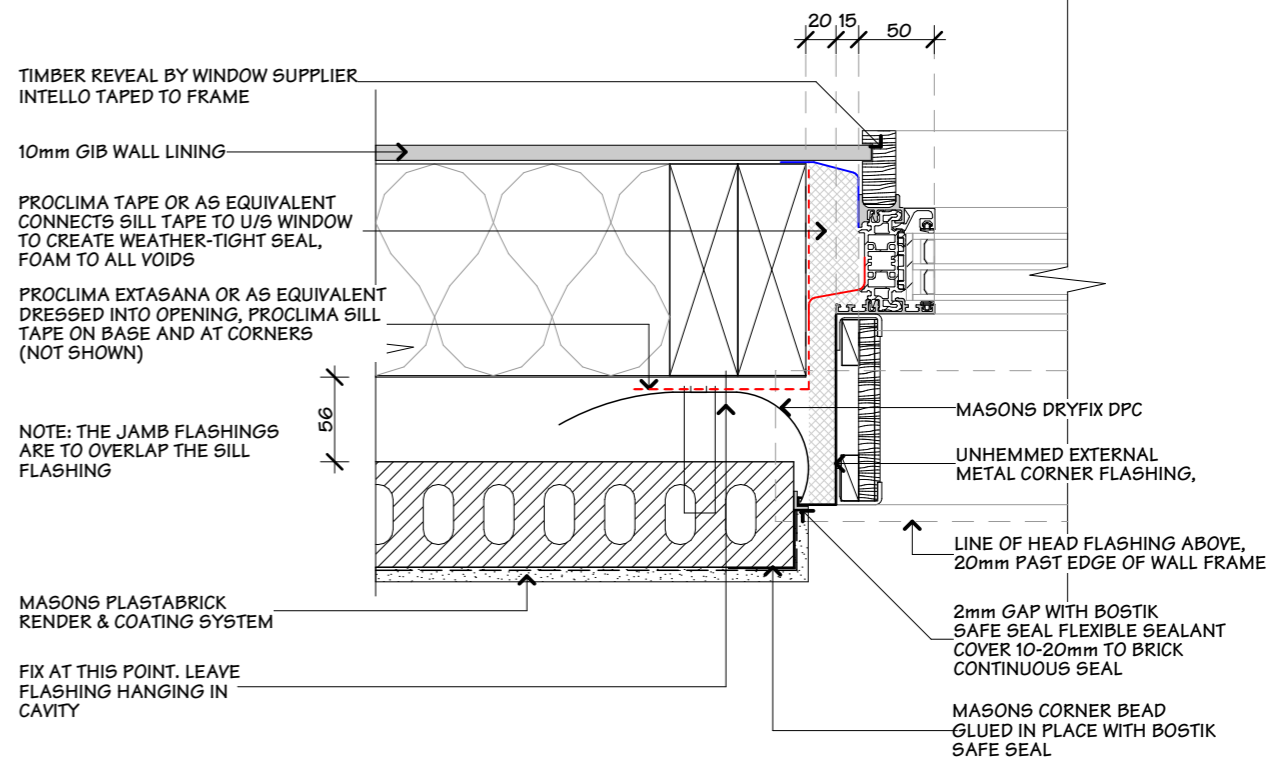


NOTE:
JAMB & HEAD DETAILS
 -DETAILS ALSO APPLY TO LOW THRESHOLD INWARD OPENING AND OUTWARD OPENING PATIO DOORS

01 BRICK VENEER CLADDING WINDOW HEAD DETAIL SCALE 1:5



02 BRICK VENEER CLADDING WINDOW SILL DETAIL SCALE 1:5



03 BRICK VENEER CLADDING WINDOW JAMB DETAIL SCALE 1:5



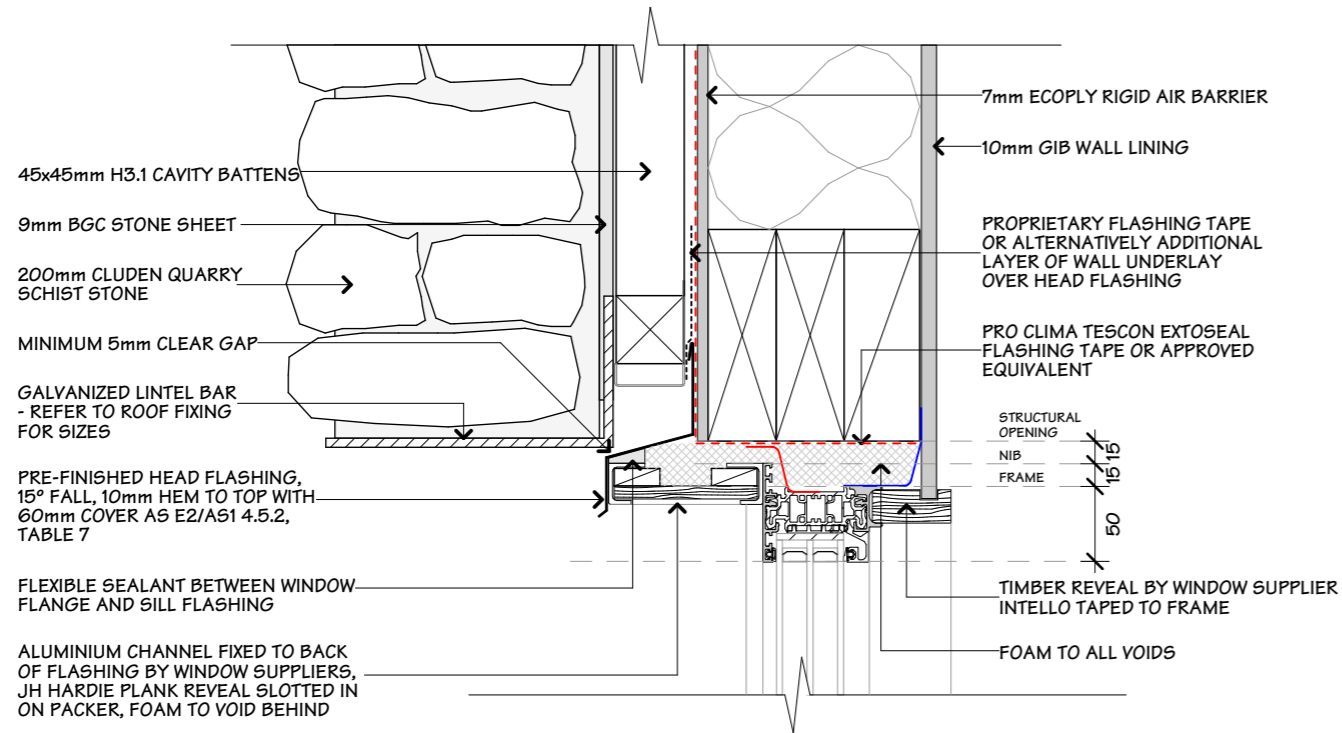
JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
JOINERY DETAILS

LEGAL DESCRIPTION:
 LOT: 1-2
 DP: 316193
 ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

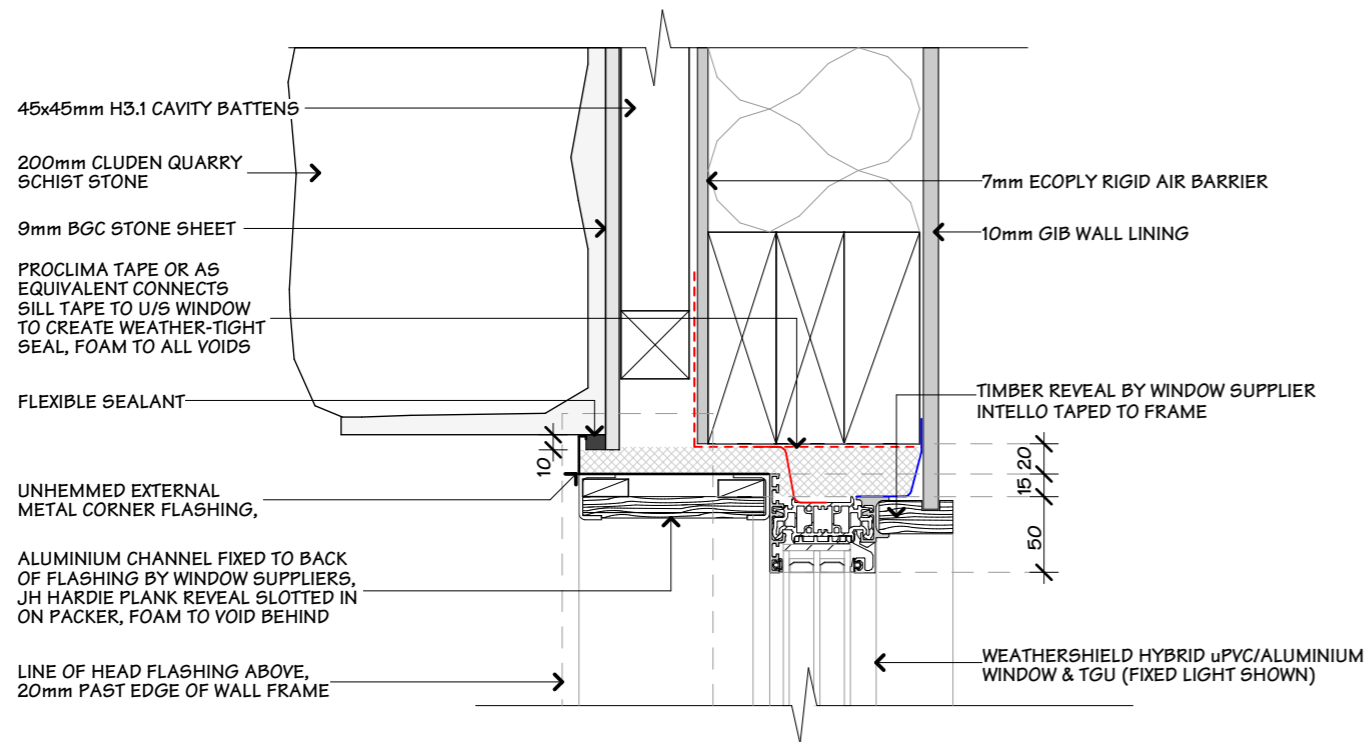
NOTES:
 - Subject to council approval
 - All measurements to be confirmed on site by the contractor prior to the commencement of work.
 - All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE: 10 DEC 24		DESIGNER: HTC	SCALE: 1:5	SHEET: 54
AMENDMENT DATE: 241210.1820		DRAWN: JON		
VERSION: WD-01	REV NO: 00	CHECKED: JON	JOB#: 23071	

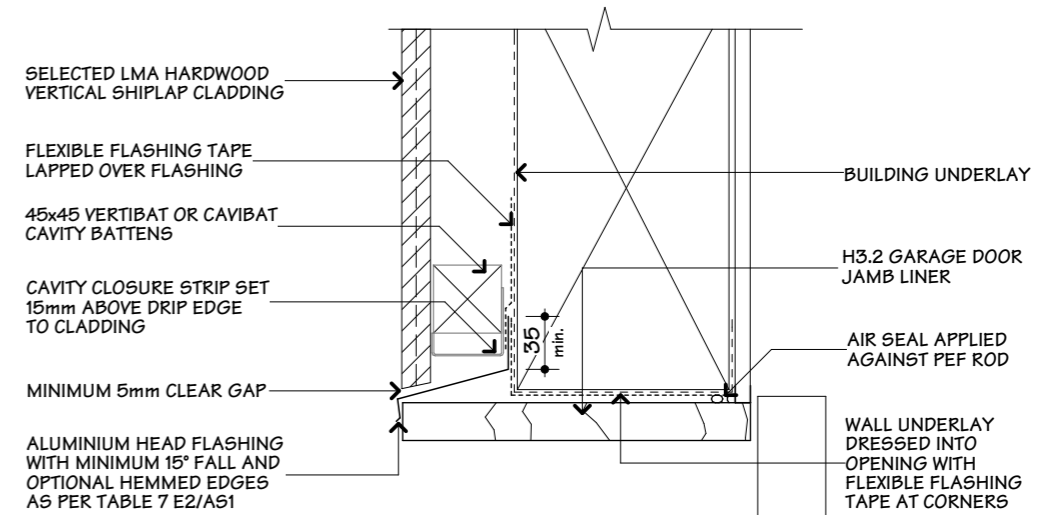


01
SCHIST STONE CLADDING
DOOR/WINDOW HEAD DETAIL
SCALE 1:5

NOTE:
JAMB & HEAD DETAILS
-DETAILS ALSO APPLY TO LOW THRESHOLD INWARD
OPENING AND OUTWARD OPENING PATIO DOORS

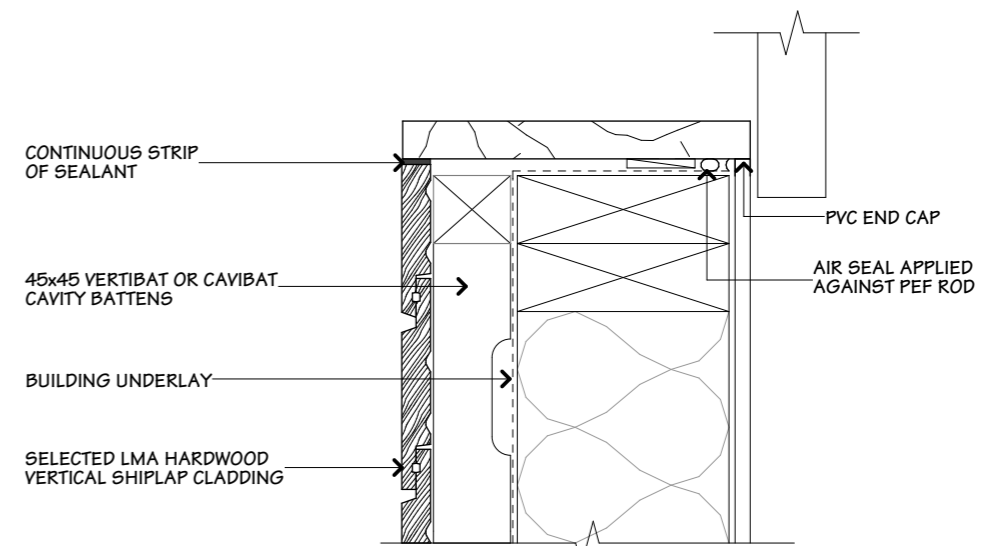


02
SCHIST STONE CLADDING
DOOR/WINDOW JAMB DETAIL
SCALE 1:5

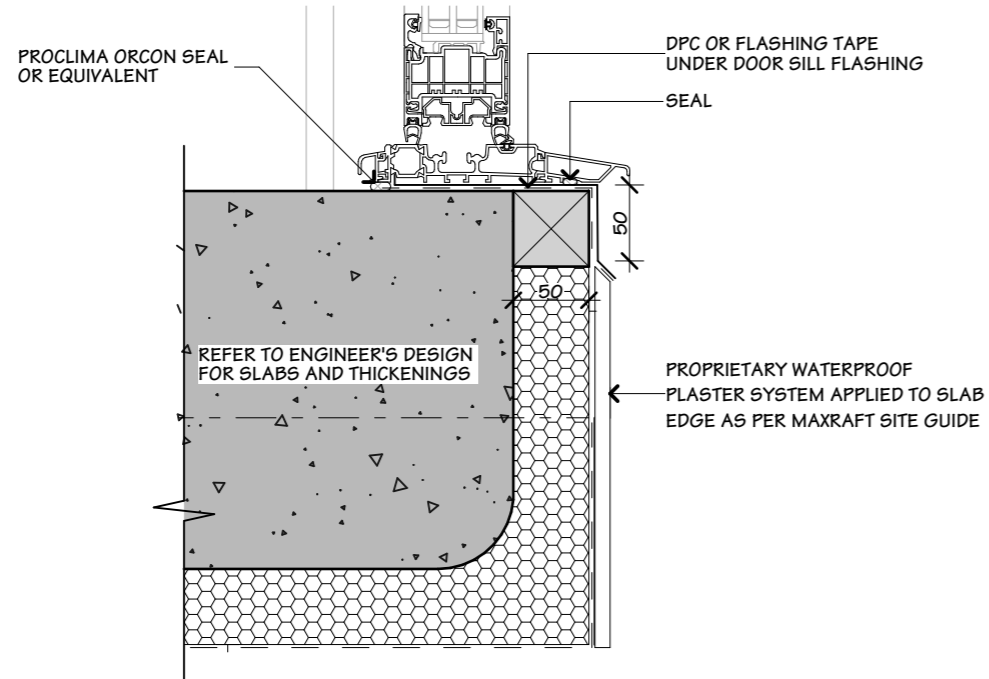


03
LMA VERTICAL SHIPLAP CLADDING
GARAGE DOOR HEAD
SCALE 1:5

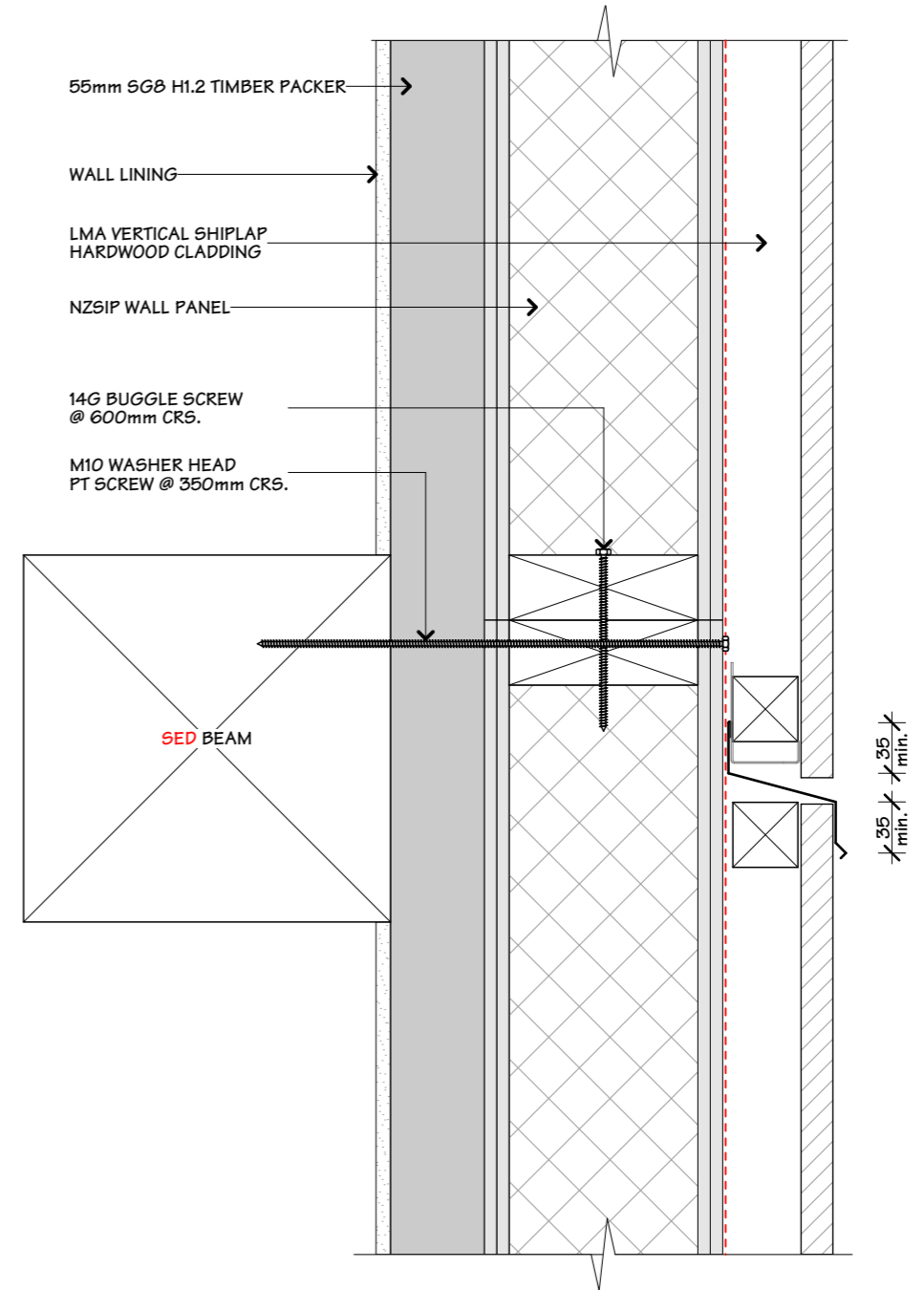
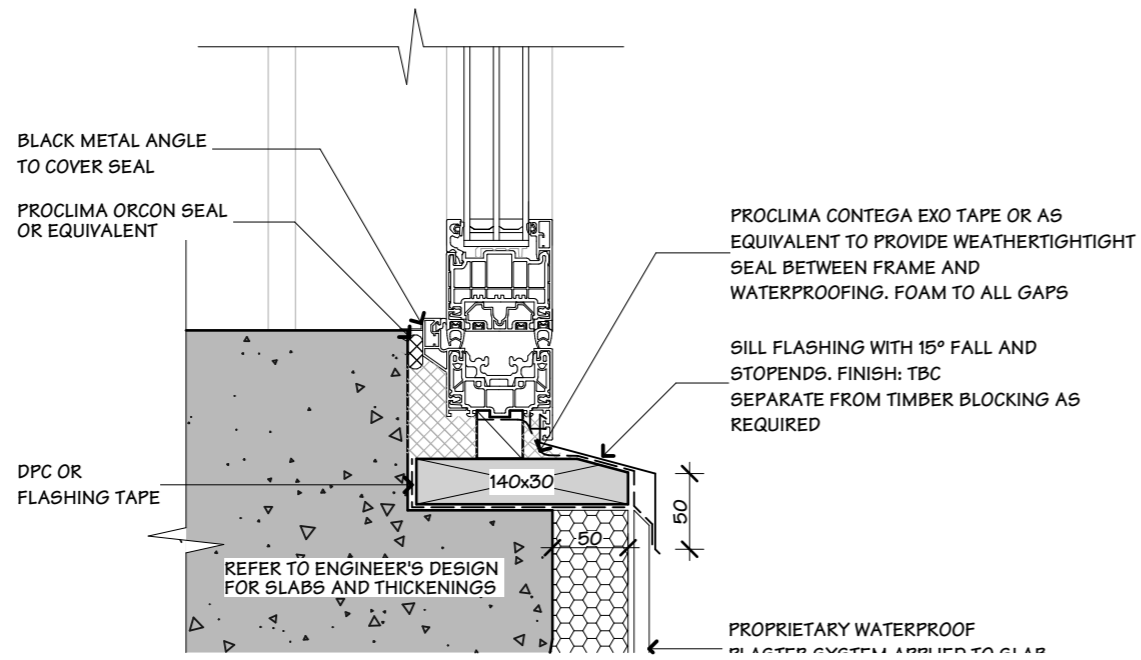
* HEAD FLASHING TO HAVE EITHER:
35mm VERTICAL UPSTAND WITH
A 10mm HEM AT TOP
OR:
60mm VERTICAL UPSTAND

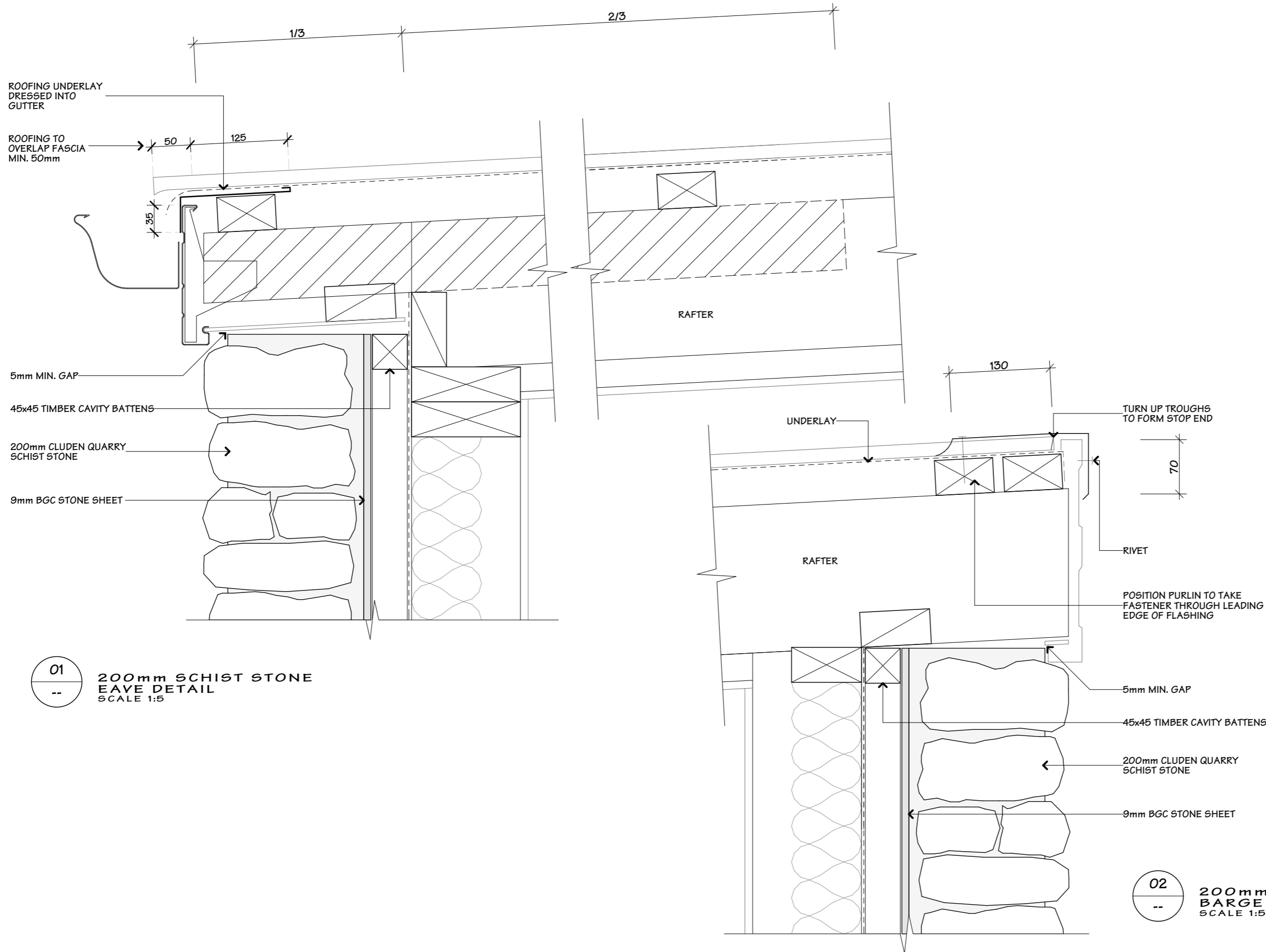


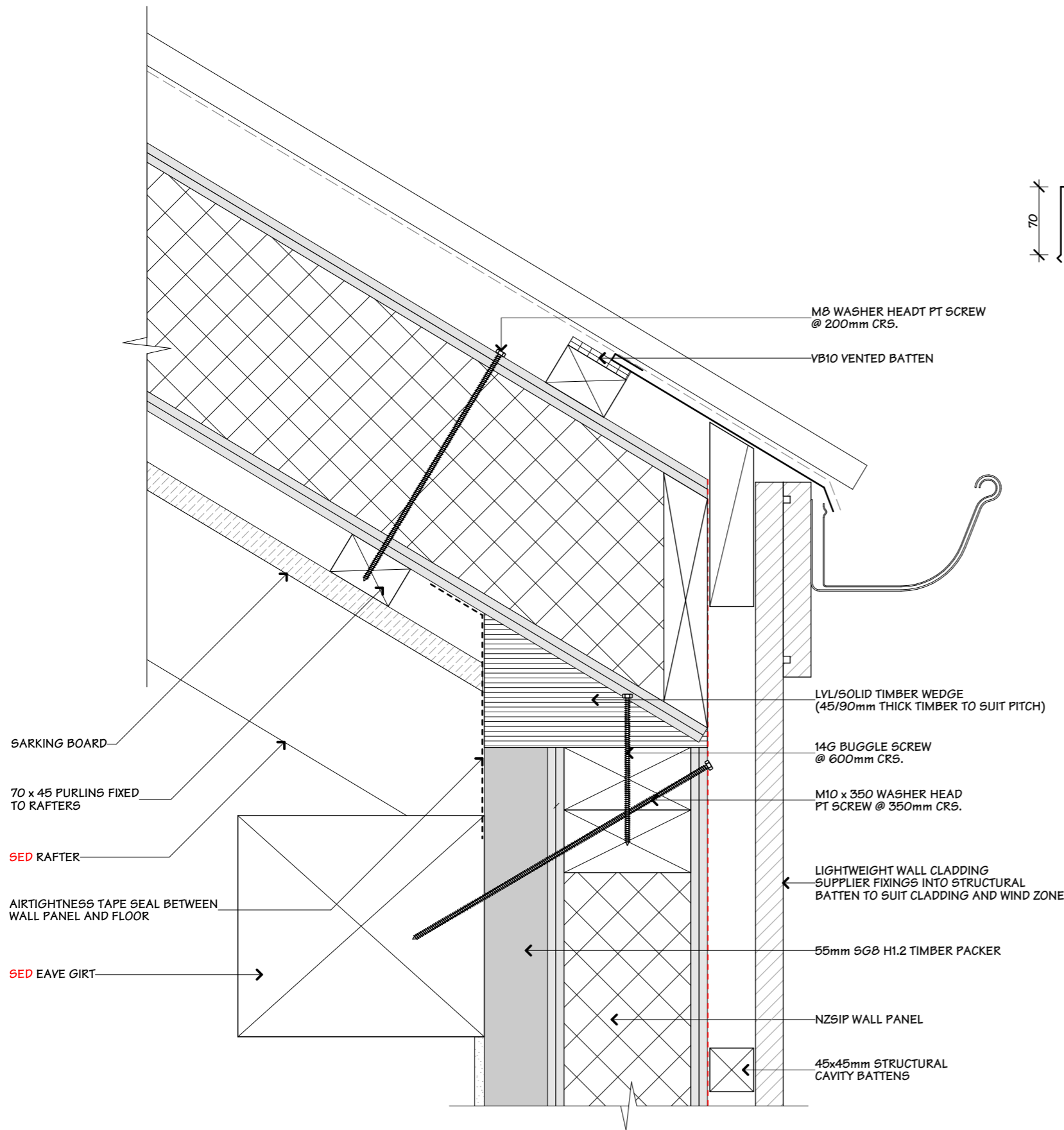
04
LMA VERTICAL SHIPLAP CLADDING
GARAGE DOOR JAMB
SCALE 1:5



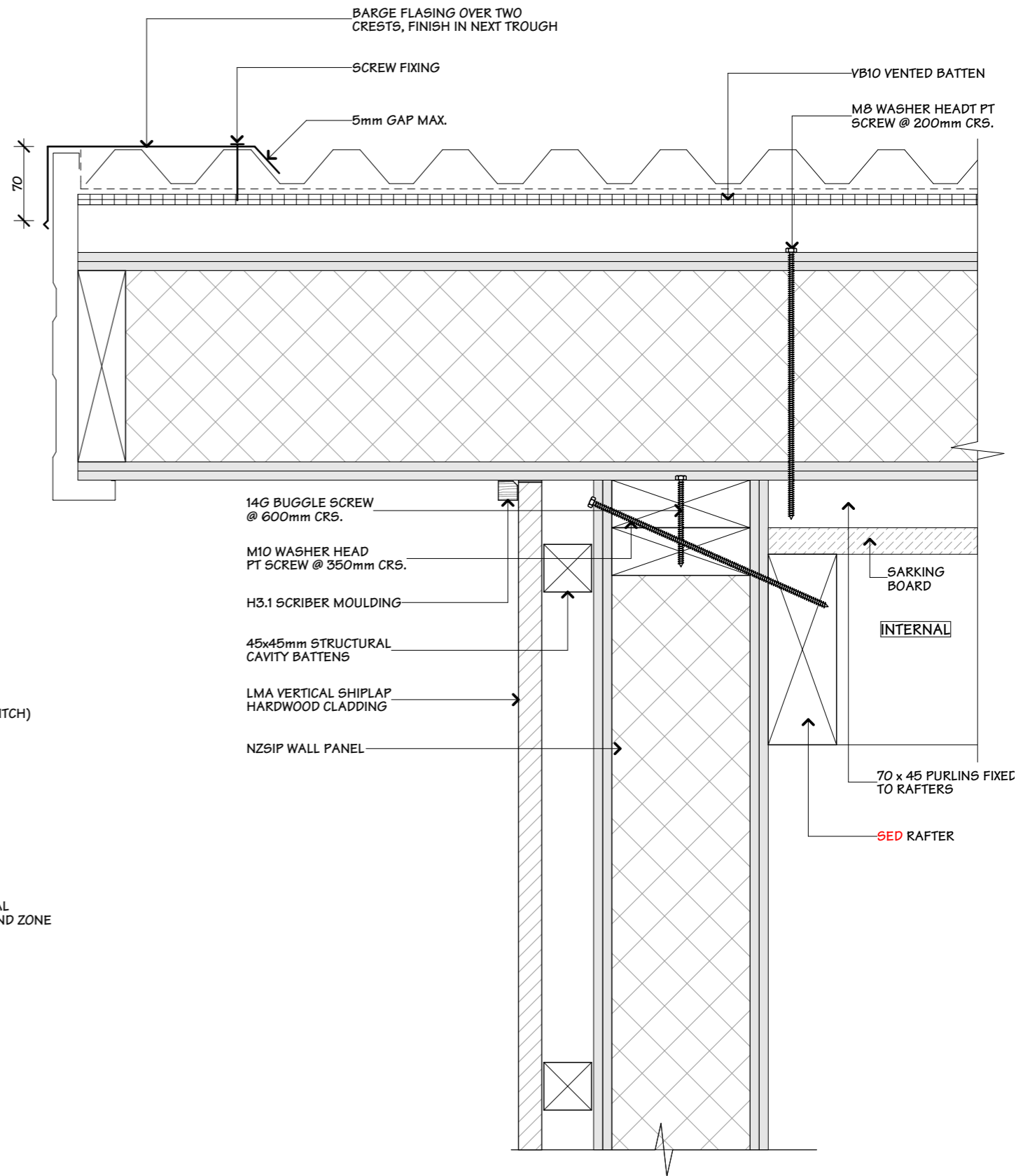
01 TYPICAL DOOR SILL DETAIL
SCALE 1:5







01 LMA VERTICAL SHIPLAP ON NZSIP PANEL
HARDWOOD EAVE DETAIL
SCALE 1:5



02 LMA VERTICAL SHIPLAP ON NZSIP PANEL
HARDWOOD GABLE DETAIL
SCALE 1:5



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
**VERTICAL SHIPLA EAVE & BARGE
DETAILS**

LEGAL DESCRIPTION:
LOT: 1-2
DP: 316193
ADDRESS: 353 DUNSTAN
ROAD, ALEXANDRA

NOTES:
- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work.
- All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
10 DEC 24
AMENDMENT DATE:
241210.1820
VERSION:
WD-01

DESIGNER:
HTC
DRAWN:
JON
CHECKED:
JON

SCALE:
1:5
JOB#:
23071
SHEET:
58
73

TRUSS TO TOP PLATE CONNECTION.
(REFER TO ROOF
MANUFACTURER'S DESIGN)

WALL UNDERLAY CONTINUES
UP BEYOND SOFFIT LINING

ROOFING TO OVERLAP
FASCIA MIN. 50mm

SNOW STRAP
-REFER TO NOTES

ROOFING UNDERLAY
DRESSED INTO GUTTER

4.5mm HARDIEFLEX SOFFIT LINING

MASONS PLASTABRICK
RENDER & COATING SYSTEM

MASONS REINFORCED
FIBRE GLASS MESH

BRICK VENEER

50
cavity

01
--
BRICK VENEER EAVE DETAIL
SCALE 1:5

0.55mm BMT COLORSTEEL
RIDGE FLASHING

M10 x 300 WASHER HEAD
PT SCREW @ 350mm CRS.

70x45 SGB H1.2 ROOF PURLIN
Ø8x75 CSK SQUARE DRIVE SCREW FIXINGS
PURLIN & FIXING SPACINGS TO BE IN
ACCORDANCE WITH WIND ZONE. REFER TO
TABLES IN TECH MANUAL.

VB10 VENTED BATTEN

NZSIP ROOF PANEL

70 x 45 PURLING FIXED
TO RAFTERS

SARKING BOARD

SED RAFTER

02
--
**NZSIP PANEL ROOFING
RIDGE DETAIL**
SCALE 1:5



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
EAVE & RIDGE DETAILS

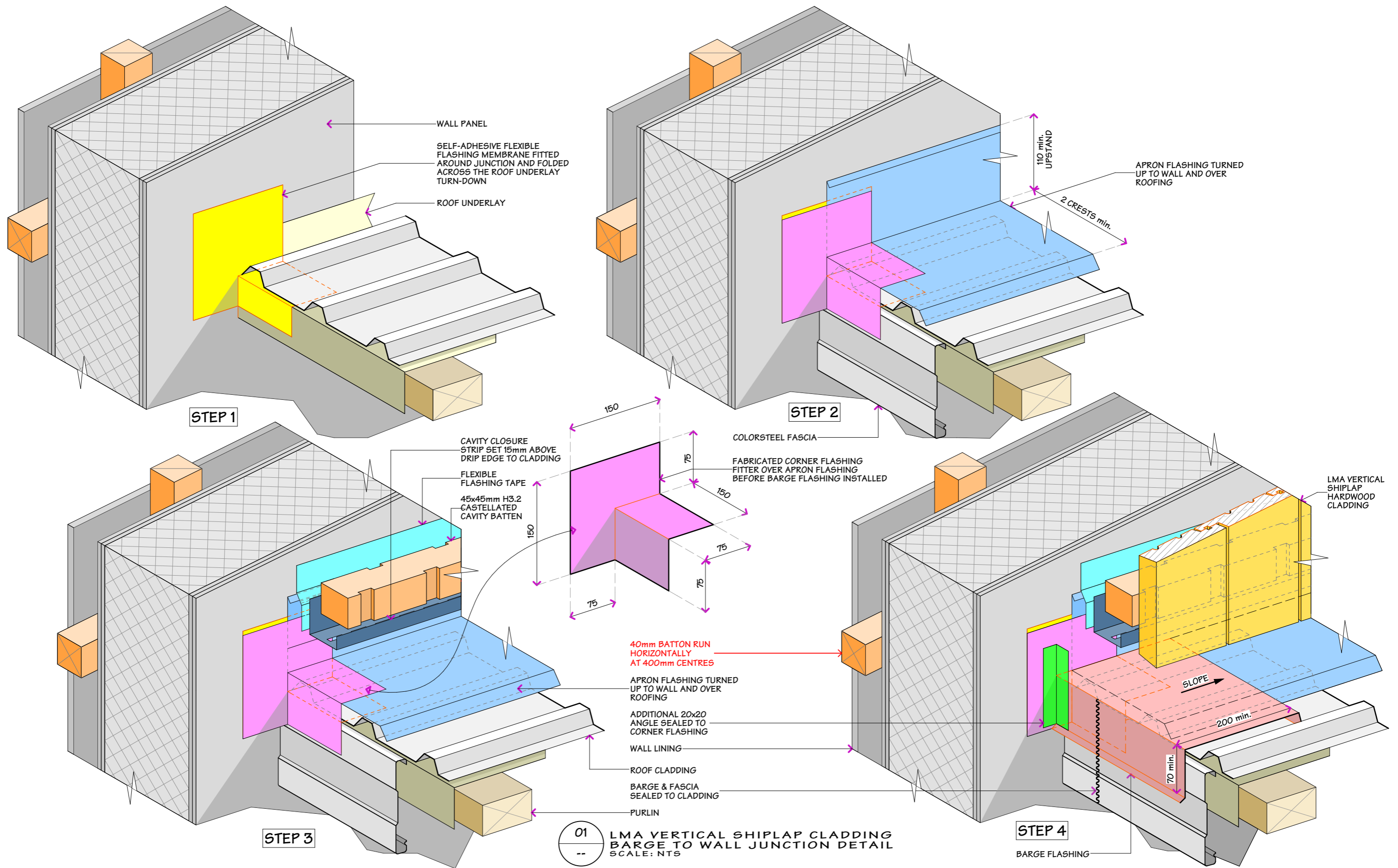
LEGAL DESCRIPTION:
LOT: 1-2
DP: 316193
ADDRESS: 353 DUNSTAN
ROAD, ALEXANDRA

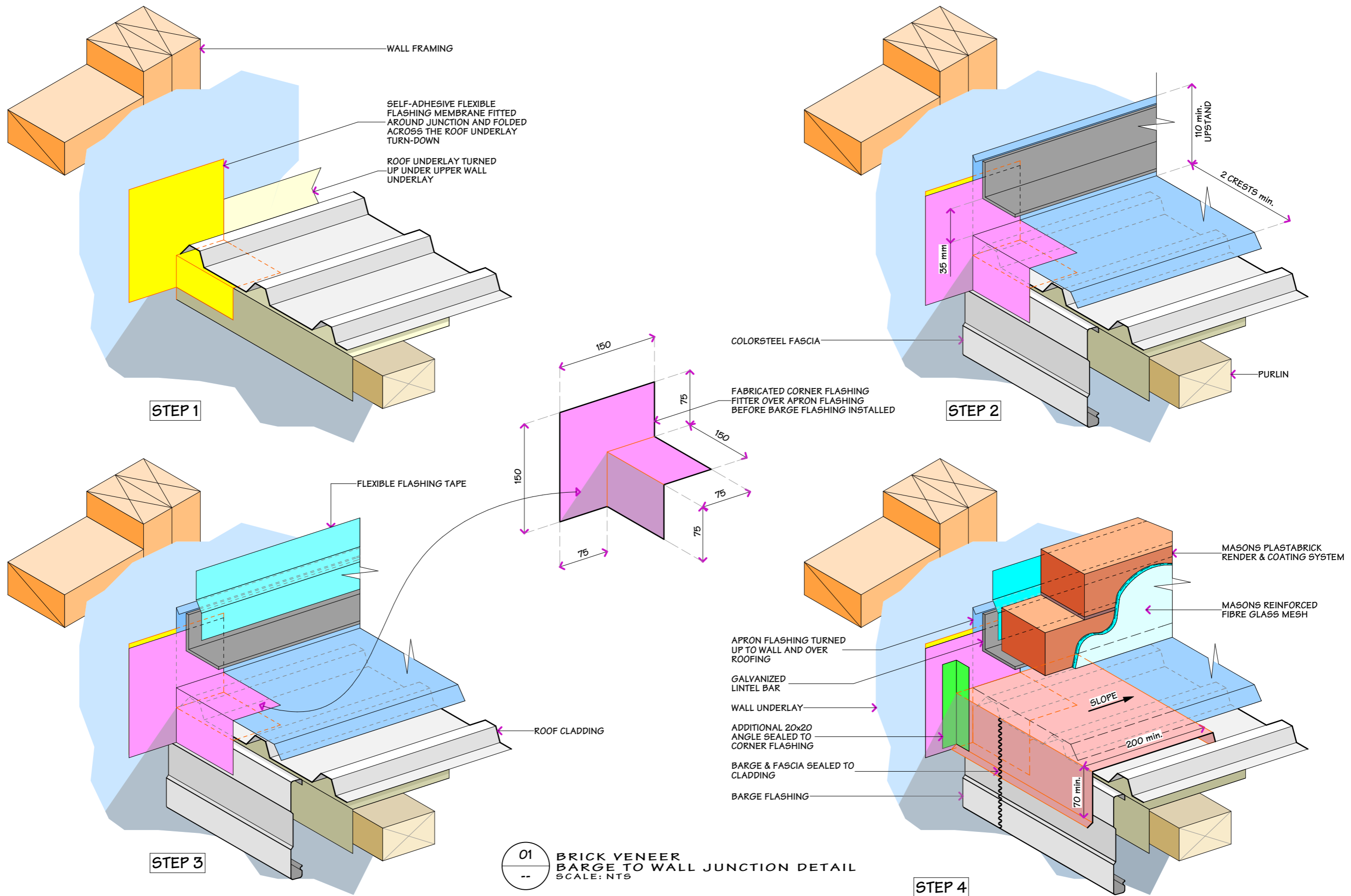
NOTES:
- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work.
- All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

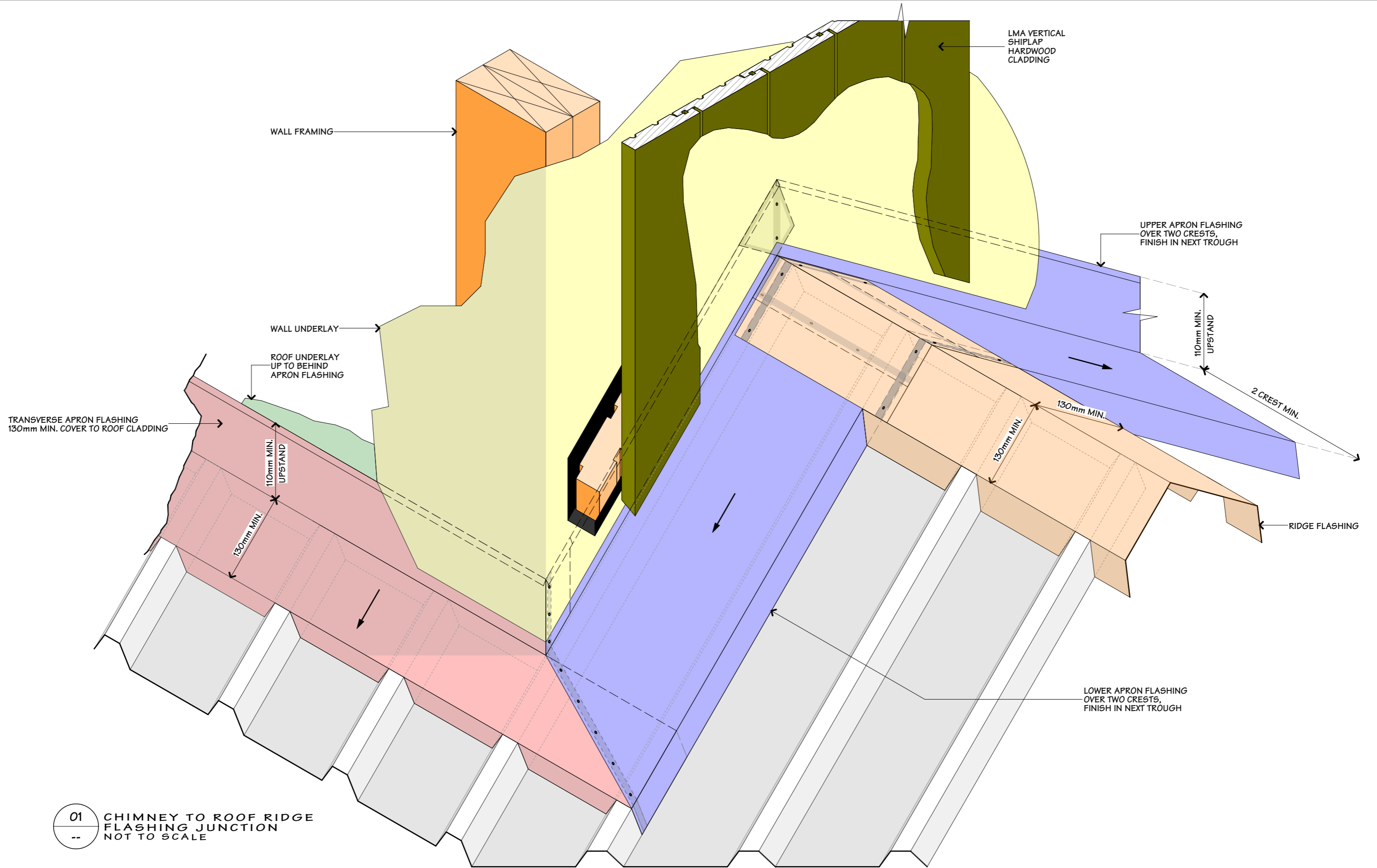
DATE OF ISSUE:
10 DEC 24
AMENDMENT DATE:
241210.1820
VERSION:
WD-01

DESIGNER:
HTC
DRAWN:
JON
CHECKED:
JON

SCALE:
1:5
JOB#:
23071
SHEET:
59
73







01 CHIMNEY TO ROOF RIDGE FLASHING JUNCTION
 -- NOT TO SCALE



JOB TITLE:
 NATASHA WILLIAMS

DRAWING TITLE:
 CHIMNEY DETAILS

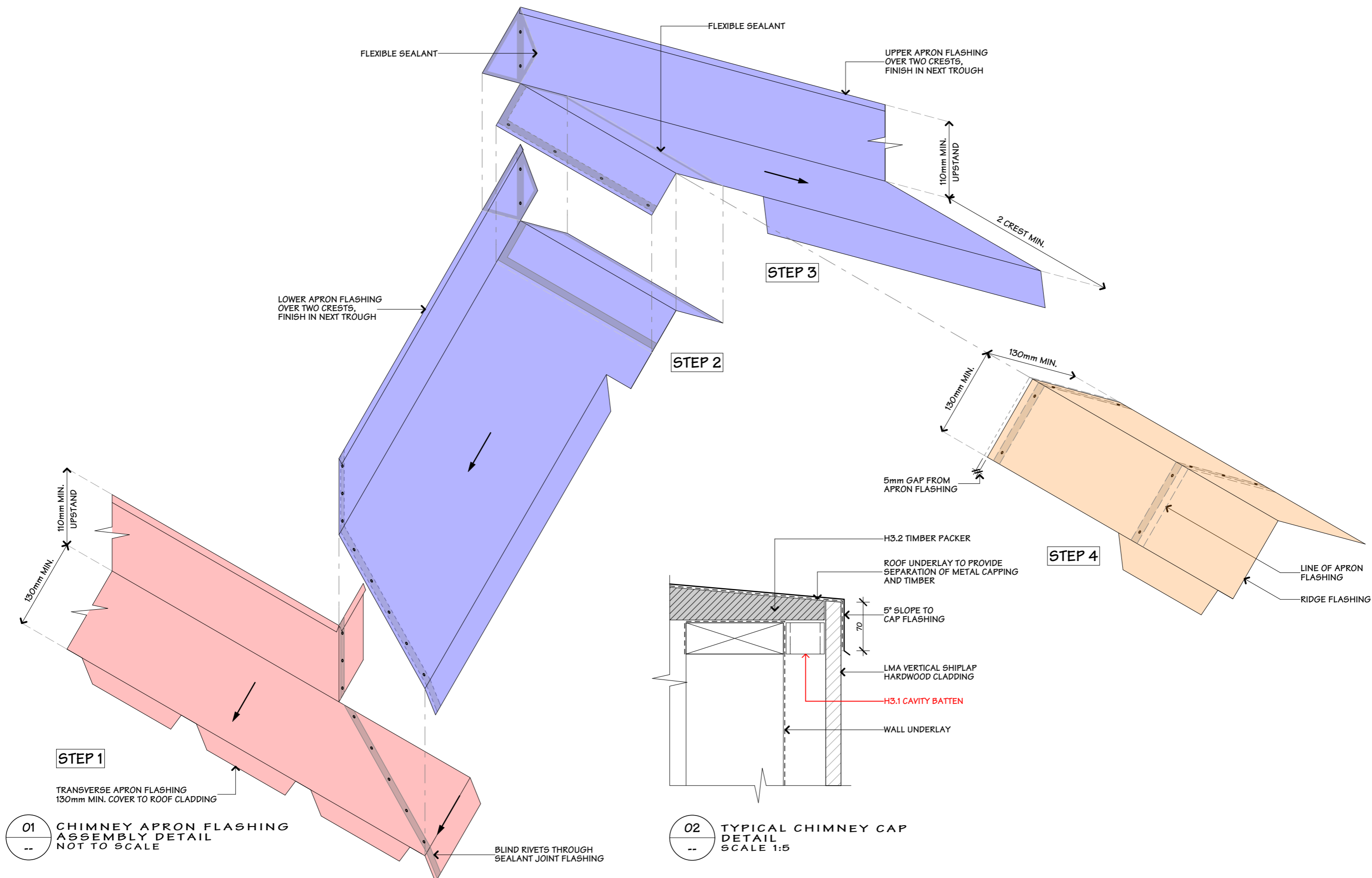
LEGAL DESCRIPTION:
 LOT: 1-2
 DP: 316193
 ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

NOTES:
 - Subject to council approval
 - All measurements to be confirmed on site by the contractor prior to the commencement of work.
 - All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
 10 DEC 24
 AMENDMENT DATE:
 241210.1820
 VERSION:
 WD-01

DESIGNER:
 HTC
 DRAWN:
 JON
 CHECKED:
 JON

SCALE:
 1:5
 JOB#:
 23071
 SHEET:
 62 / 73



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
CHIMNEY FLASHING DETAILS

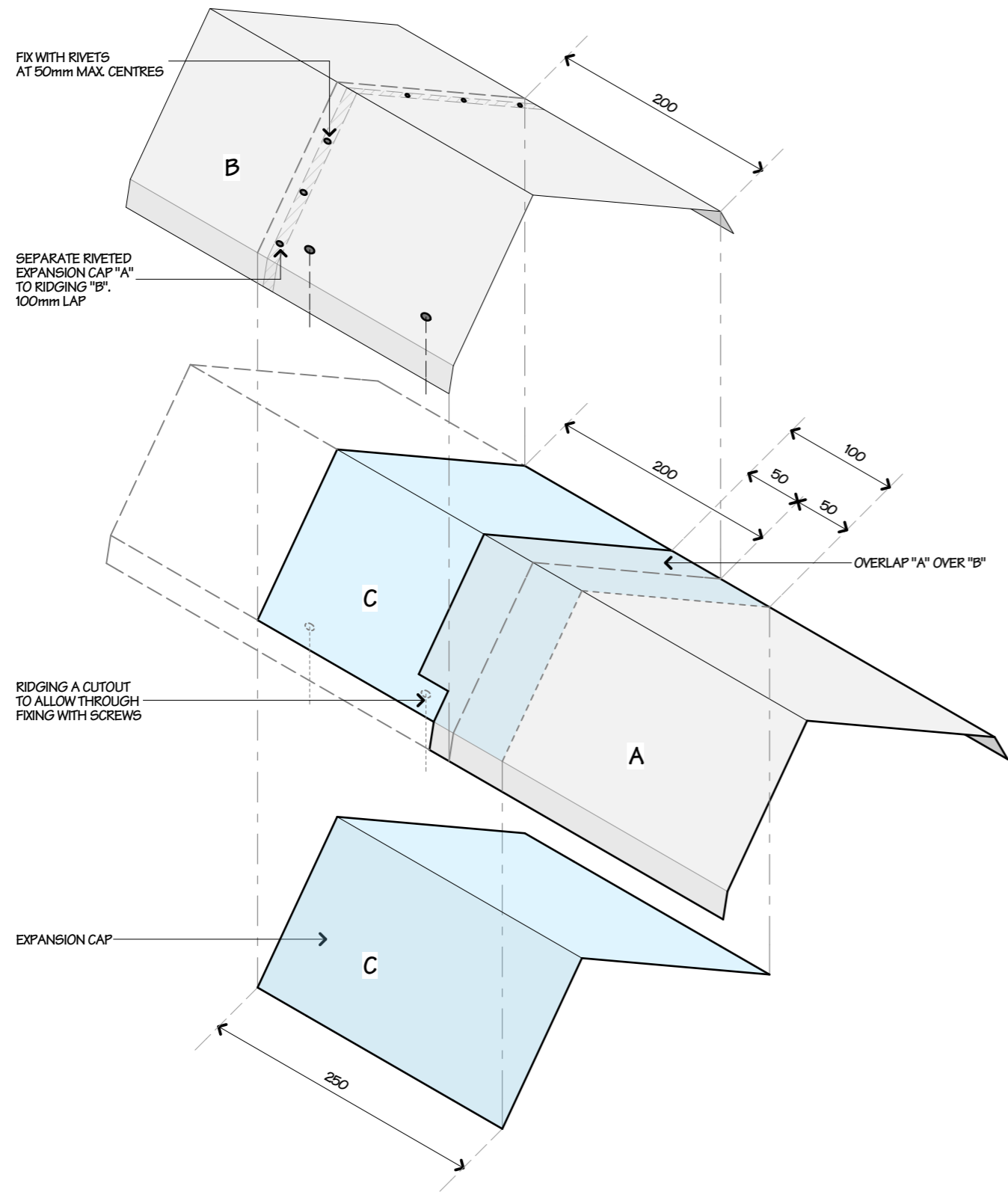
LEGAL DESCRIPTION:
 LOT: 1-2
 DP: 316193
 ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

NOTES:
 - Subject to council approval
 - All measurements to be confirmed on site by the contractor prior to the commencement of work.
 - All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

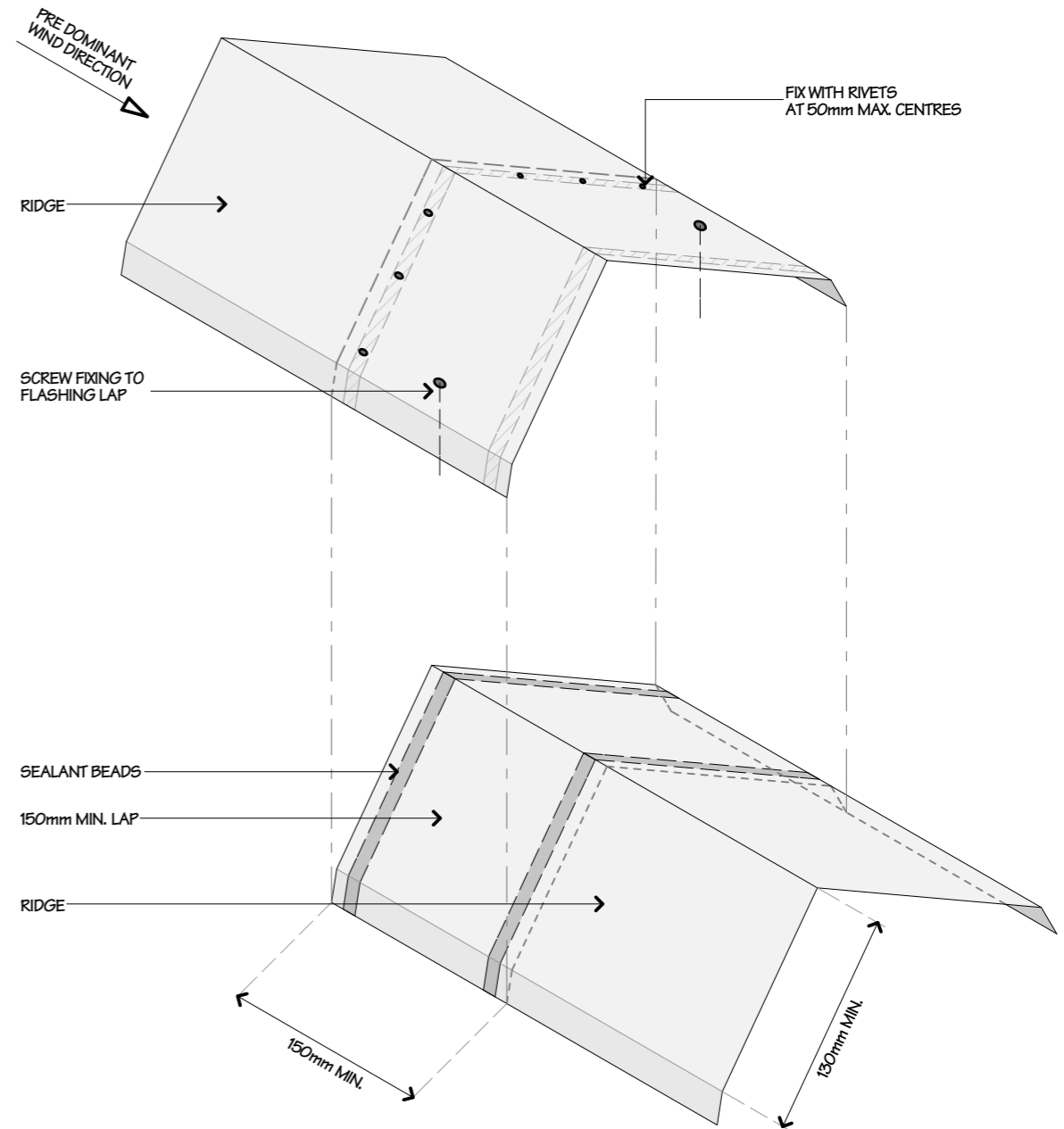
DATE OF ISSUE:
 10 DEC 24
 AMENDMENT DATE:
 241210.1820
 VERSION:
 WD-01

DESIGNER:
 HTC
 DRAWN:
 JON
 CHECKED:
 JON

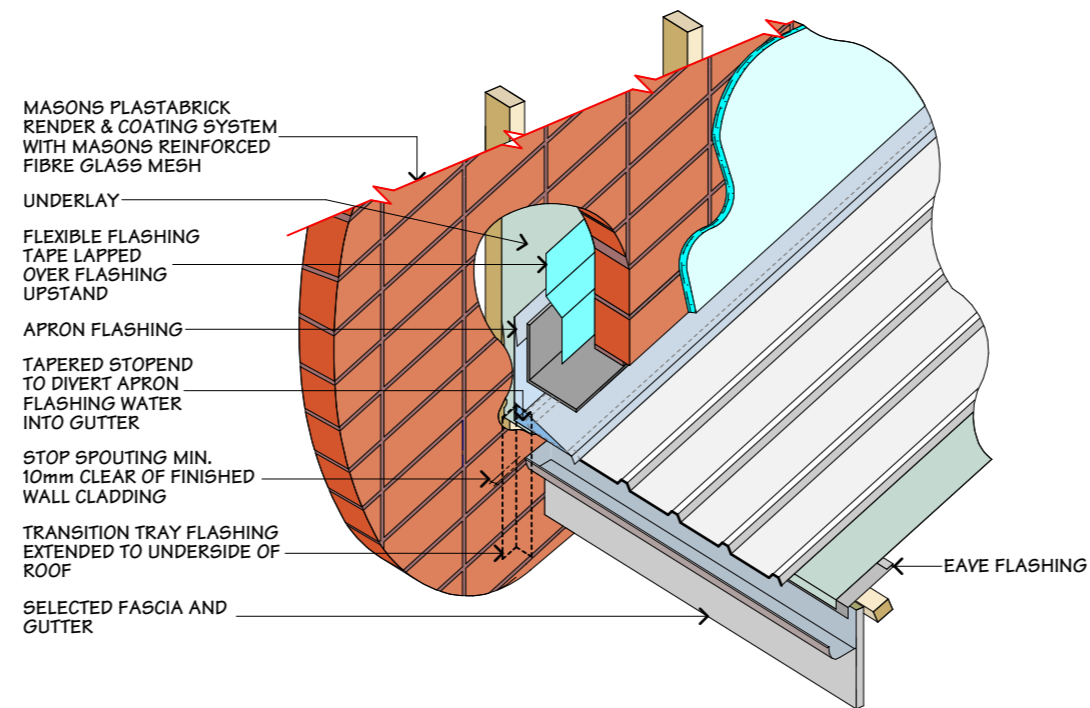
SCALE:
 1:5
 JOB#:
 23071
 SHEET:
63
 /73



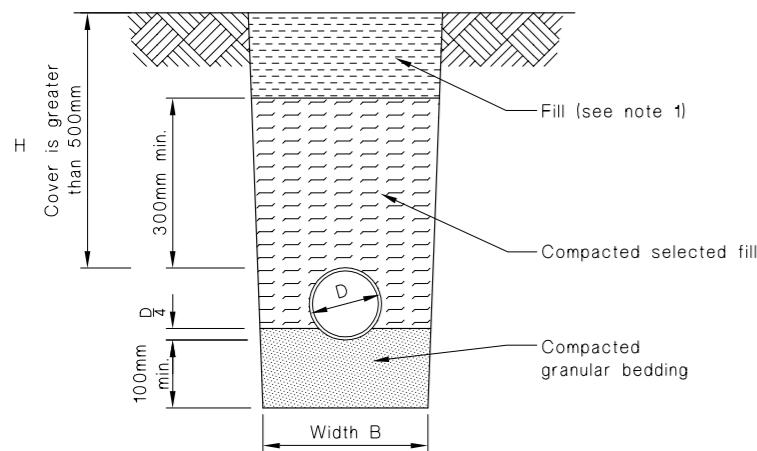
01 EXPANSION JOINTS (TO ALLOW THERMAL MOVEMENT)
SCALE: 1:5



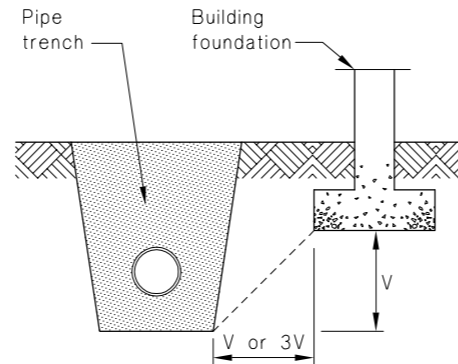
02 NON-MOVEMENT CONTROL JOINTS
SCALE: 1:5



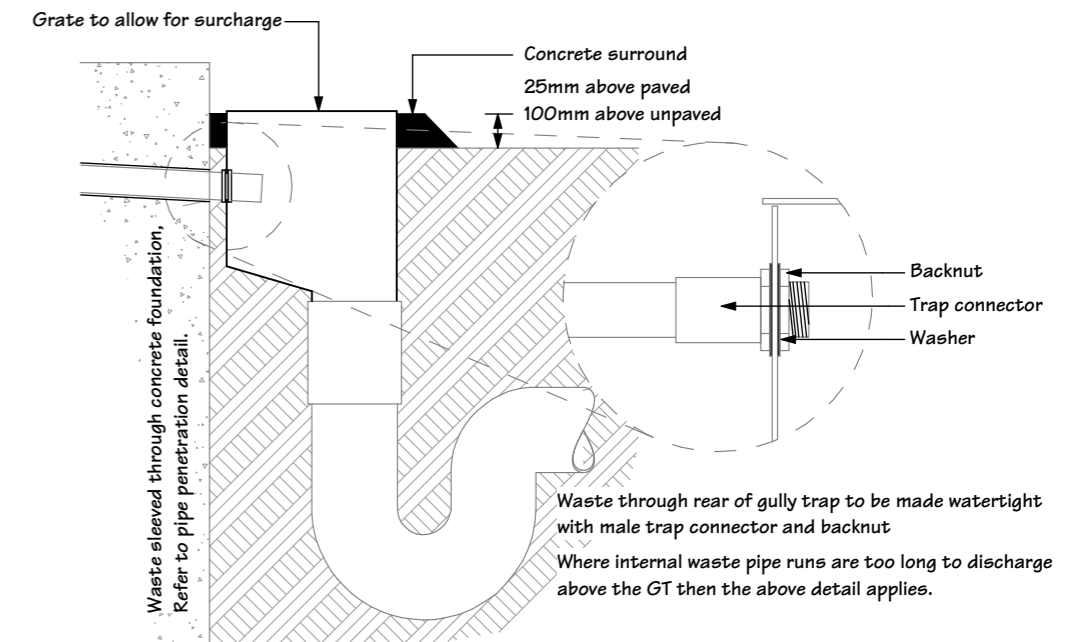
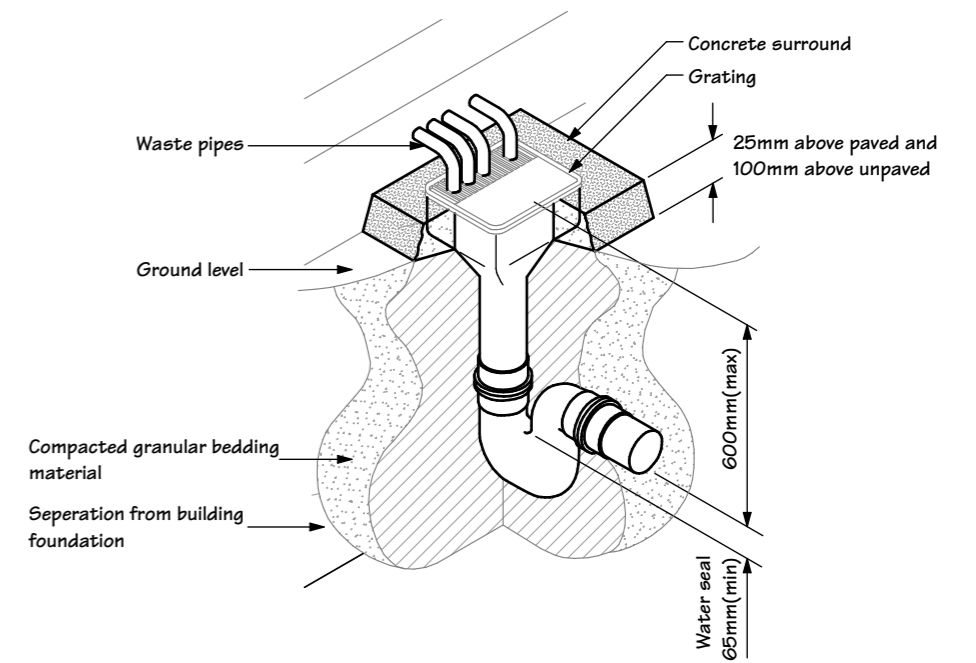
01 BRICK VENEER
 GUTTER TO WALL JUNCTION DETAIL
 -- NOT TO SCALE



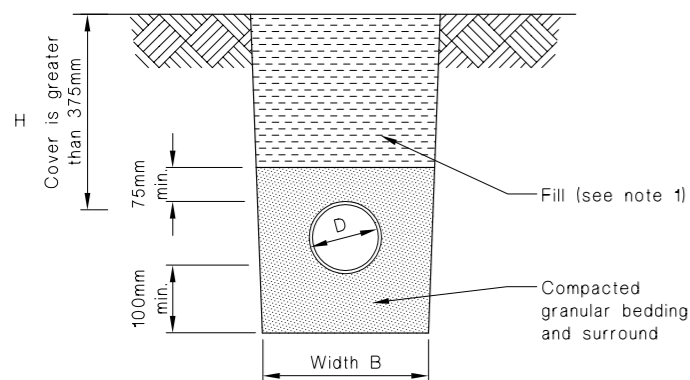
(a) Bedding type 'B' of NZS 7643
Cover greater than 500mm



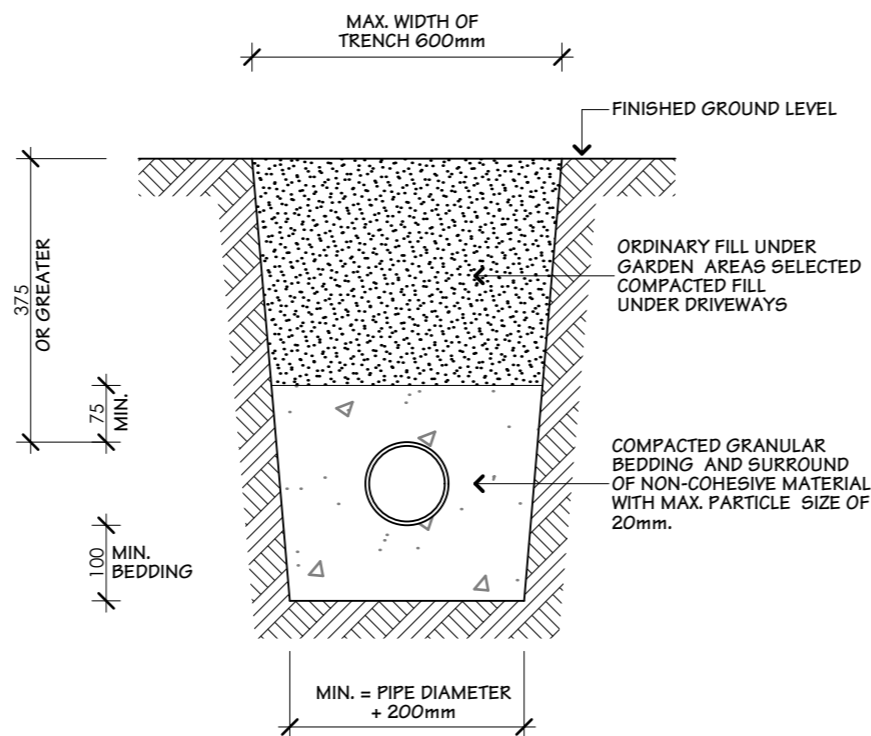
Minimum horizontal separation shall be V or 3V dependant on length of time trench open, see Paragraph 5.6.1



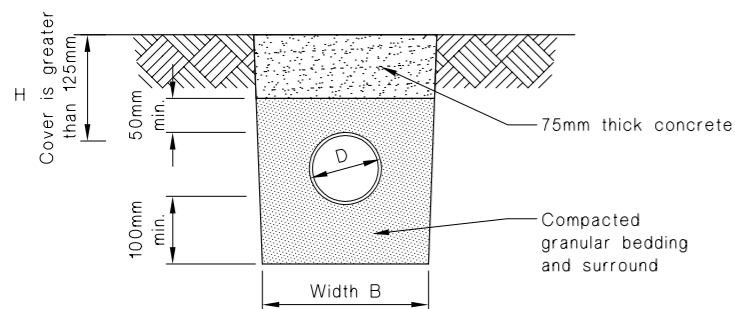
02
--
GULLY TRAP DETAIL
SCALE: NTS



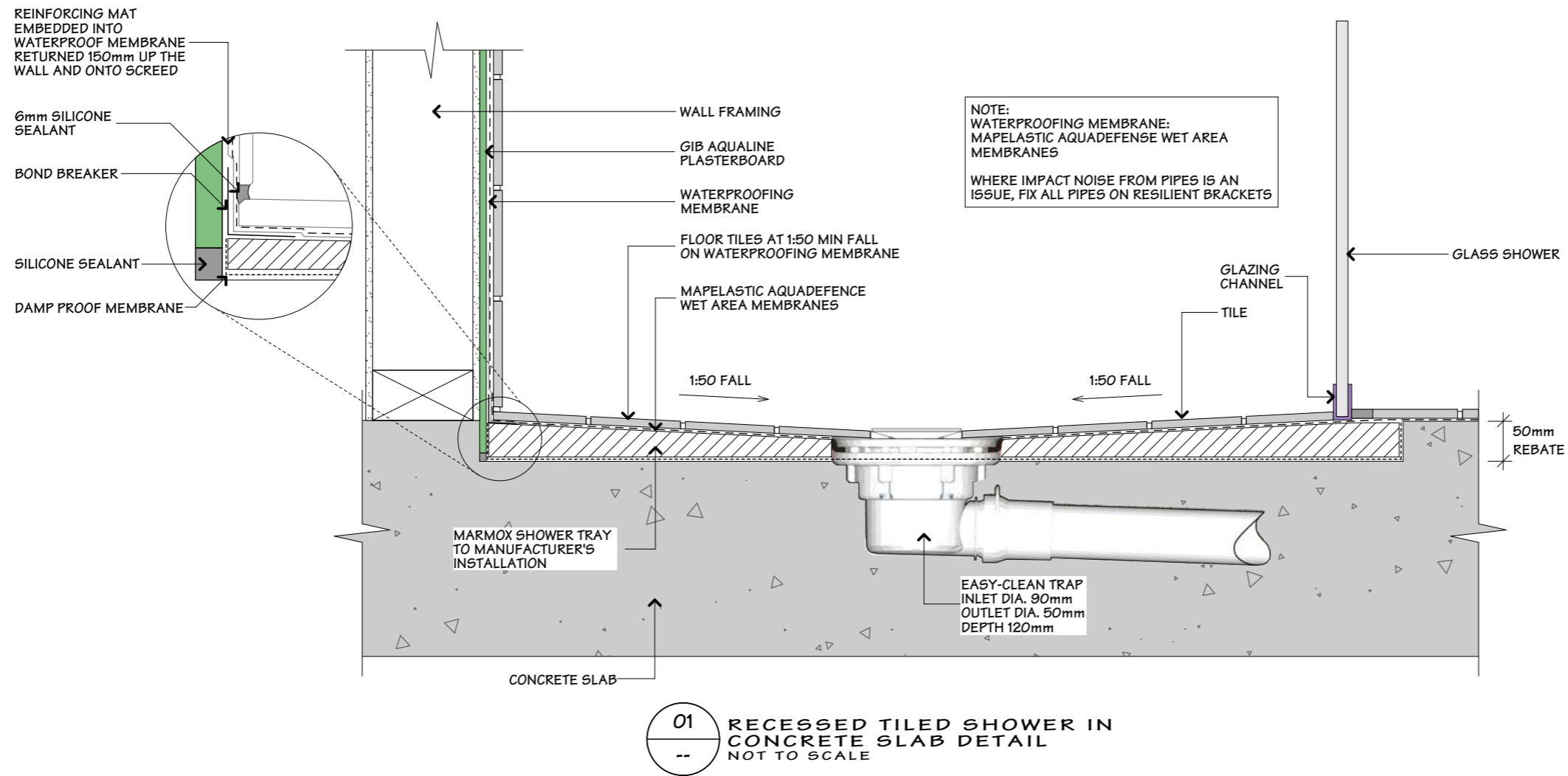
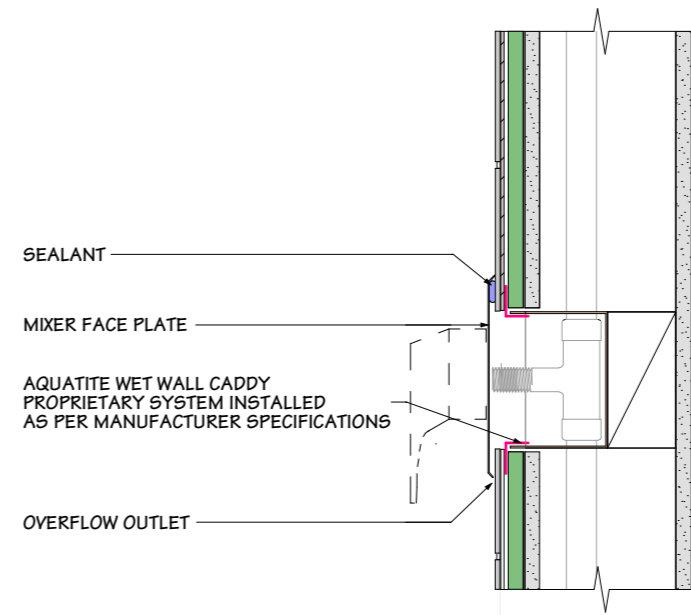
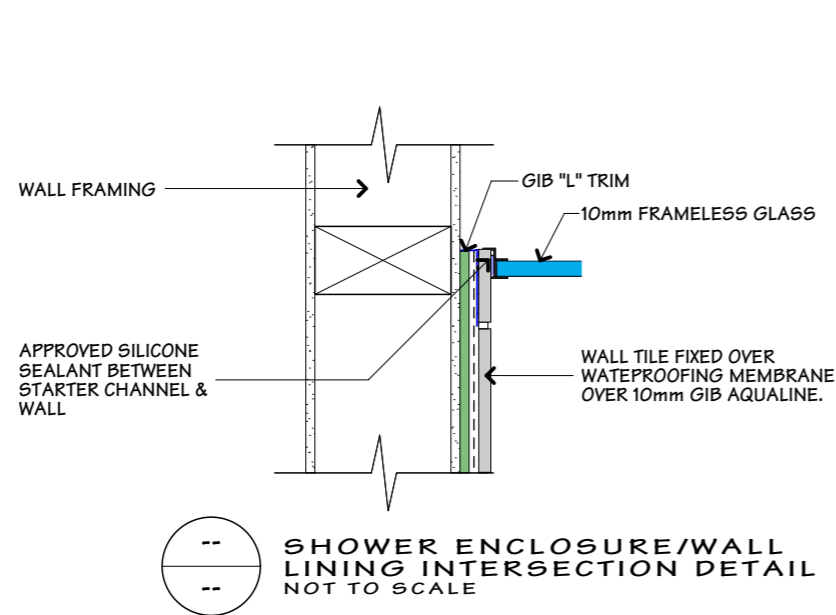
(b) Bedding type 'D' of NZS 7643
Cover greater than 375mm



01
--
BEDDING AND BACKFILLING WHERE COVER OVER DRAIN IS 375mm OR GREATER
SCALE 1:20



(c) Cover between 125mm and 375mm



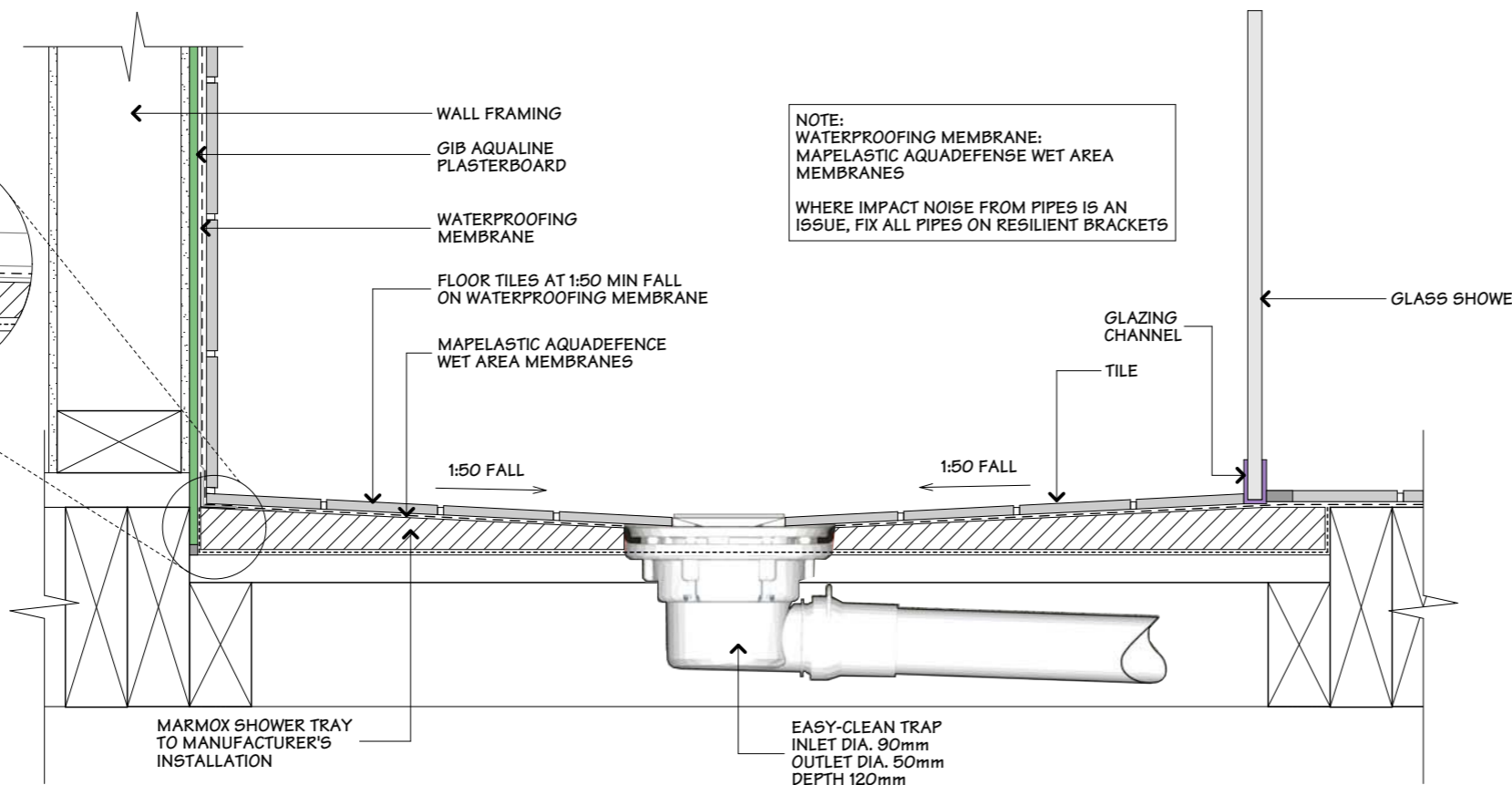
REINFORCING MAT EMBEDDED INTO WATERPROOF MEMBRANE RETURNED 150mm UP THE WALL AND ONTO SCREED

6mm SILICONE SEALANT

BOND BREAKER

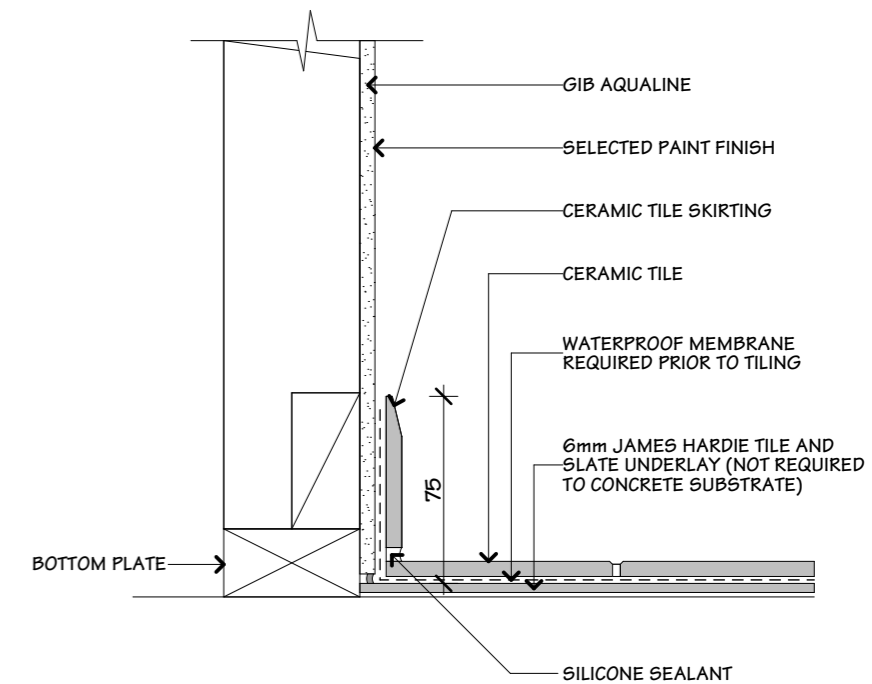
SILICONE SEALANT

DAMP PROOF MEMBRANE



NOTE:
WATERPROOFING MEMBRANE:
MAPELASTIC AQUADEFENSE WET AREA MEMBRANES
WHERE IMPACT NOISE FROM PIPES IS AN ISSUE, FIX ALL PIPES ON RESILIENT BRACKETS

01 RECESSED TILED SHOWER IN CONCRETE SLAB DETAIL NOT TO SCALE



02 TILE FLOOR TO WALL JUNCTION FOR CONTAINMENT SCALE 1:10 (200MM 1:2)



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
WET AREA DETAILS

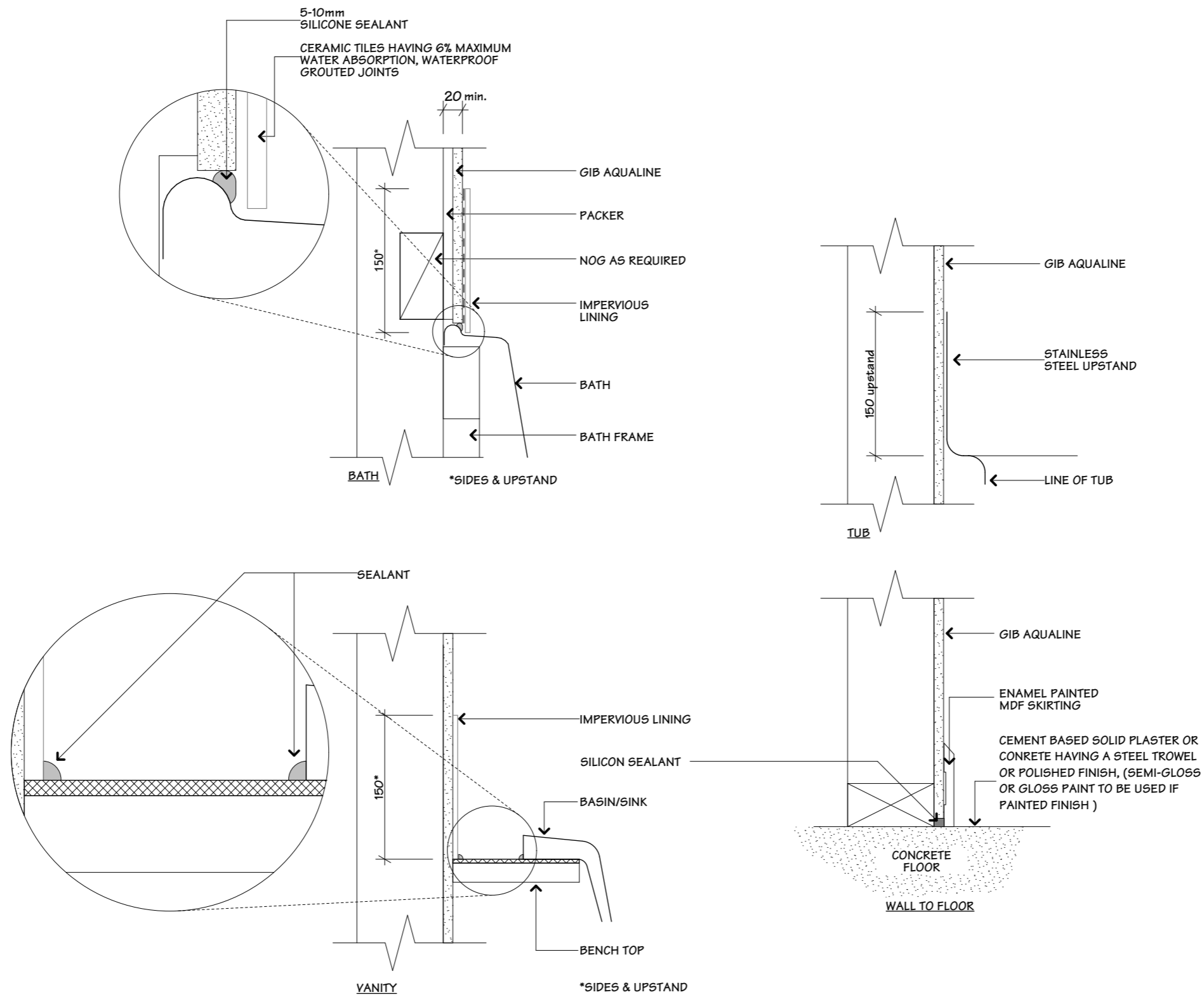
LEGAL DESCRIPTION:
LOT: 1-2
DP: 316193
ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

NOTES:
- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work.
- All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
10 DEC 24
AMENDMENT DATE:
241210.1820
VERSION:
WD-01

DESIGNER:
HTC
DRAWN:
JON
CHECKED:
JON

SCALE:
1:5
JOB#:
23071
SHEET:
68 / 73



01 TYPICAL WET AREA JUNCTIONS (ZOOM 1:2)
 NZBC E3/A51
 SCALE 1:10

FIGURE 8 NZBC G12/A51
MAINS PRESSURE STORAGE WATER HEATER SYSTEM (UNVENTED)

FIGURE 8 NZBC G12/A51
MAINS PRESSURE STORAGE WATER HEATER SYSTEM (UNVENTED)

NOTE:

1. TEMPERATURE AND PRESSURE RELIEF VALVE DRAIN MATERIAL TO BE COPPER - TO BE INSTALLED IN ACCORDANCE WITH NZS 3501

2. DELIVERED HOT WATER TEMPERATURE AT ANY SANITARY FIXTURE, USE FOR PERSONAL HYGIENE SHALL NOT EXCEED 55° C AS PER G12/A51 - WATER SUPPLIES 6.14.1 MAXIMUM TEMPERATURE

NZBC G12/A51

6.14.3 Legionella bacteria

Irrespective of whether a mixing device is installed, the storage water heater control thermostat shall be set at a temperature of not less than 60°C to prevent the growth of Legionella bacteria.

7.2 Protection from freezing

7.2.1 Where there is the likelihood of freezing, hot and cold water supply systems shall be protected in the following manner:

- a) Piping outside the building thermal envelope shall be insulated,
- b) Piping buried in the ground shall be insulated or insulated below a level affected by freezing, and
- c) Storage water heater vent pipes shall be insulated (see Figure 17).

7.2.2 In climates where freezing temperatures are likely for a period of greater than 24 hours an expansion control valve is required in addition to vent pipe insulation (see Figure 17)

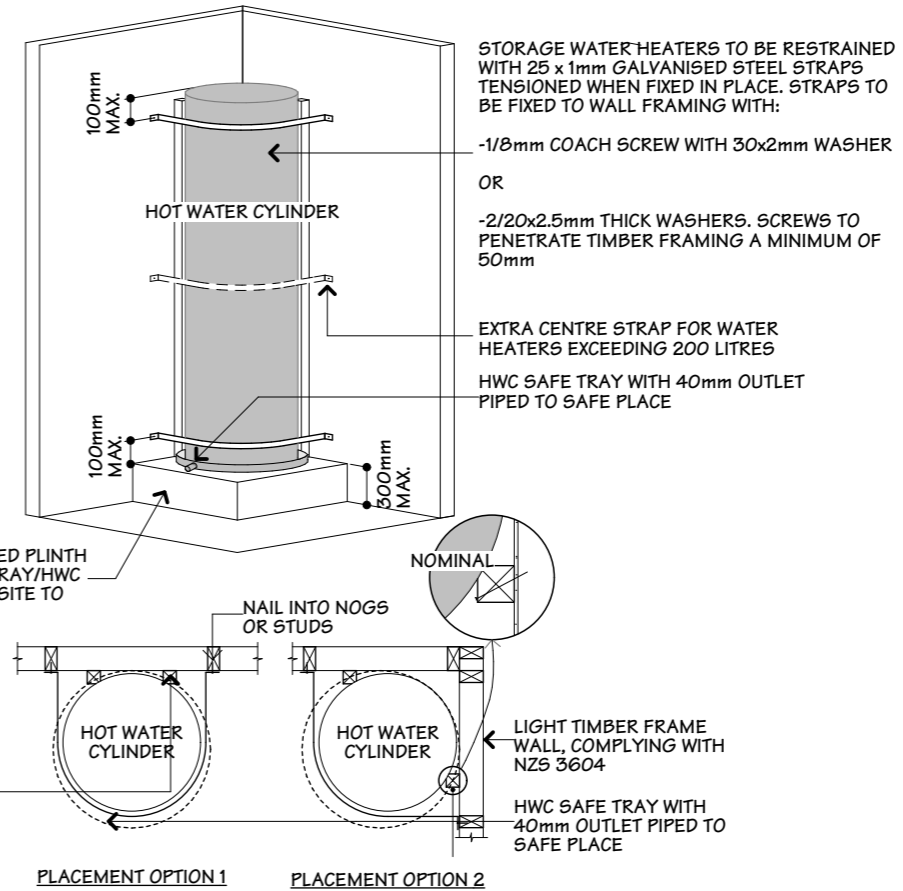
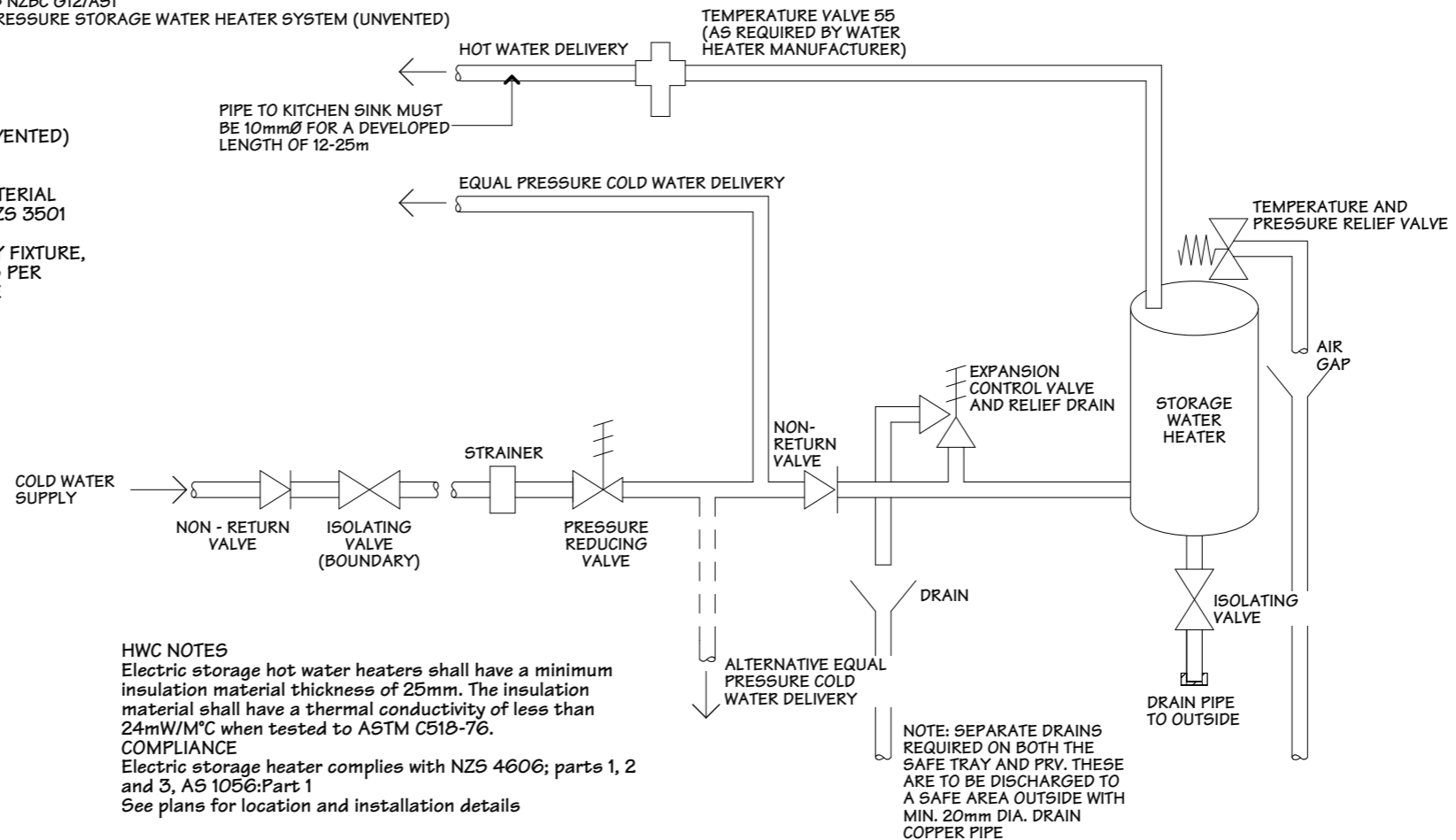
TABLE 4 NZBC G12/A51
TEMPERING VALVE AND NOMINAL PIPE DIAMETERS

	LOW PRESSURE (i.e. HEADER TANK SUPPLY OR LOW PRESSURE)	LOW AND MEDIUM PRESSURE UNVENTED (VALVE VENTED) AND OPEN VENTED	MAINS PRESSURE
PRESSURE OF WATER AT TEMPERING VALVE (kPa)	20-30	30-120	OVER 300
METRES HEAD (m)	2-3	>3-12	OVER 30
MINIMUM TEMPERING VALVE SIZE	25mm	20mm	15mm
PIPES TO TEMPERING VALVE	25mm (SEE NOTE 3)	20mm	20mm (15mm OPTIONAL) (SEE NOTE 1)
PIPES TO SHOWER	20mm	20mm (SEE NOTE 4)	20mm (SEE NOTE 5) (15mm OPTIONAL) (SEE NOTE 1)
PIPES TO SINK/LAUNDRY (SEE NOTE 2)	20mm	20mm	15mm
PIPES TO BATH (SEE NOTE 2)	20mm	20mm	15mm
PIPES TO BASINS (SEE NOTE 2)	15mm	15mm	10mm

NOTES:

- 1. IF SUPPLIED BY SEPERATE PIPE FROM STORAGE WATER HEATER TO A SINGLE OUTLET.
- 2. THIS TABLE IS BASED ON MAXIMUM PIPE LENGTHS OF 20 METRES.
- 3. 2m MAXIMUM LENGTH FROM WATER HEATER OUTLET TO TEMPERING VALVE.
- 4. 15mm IF DEDICATED LINE TO SHOWER.
- 5. 10mm IF DEDICATED LINE TO SHOWER.

01 MAINS PRESSURE HWC & SEISMIC RESTRAINT
-- NZBC G12/A51
SCALE 1:10



NOTE:
 -SPASHBACK MATERIAL TO BE NON-COMBUSTIBLE
 -SPECIFIC MATERIAL TO BE CONFIRMED BY CLIENT

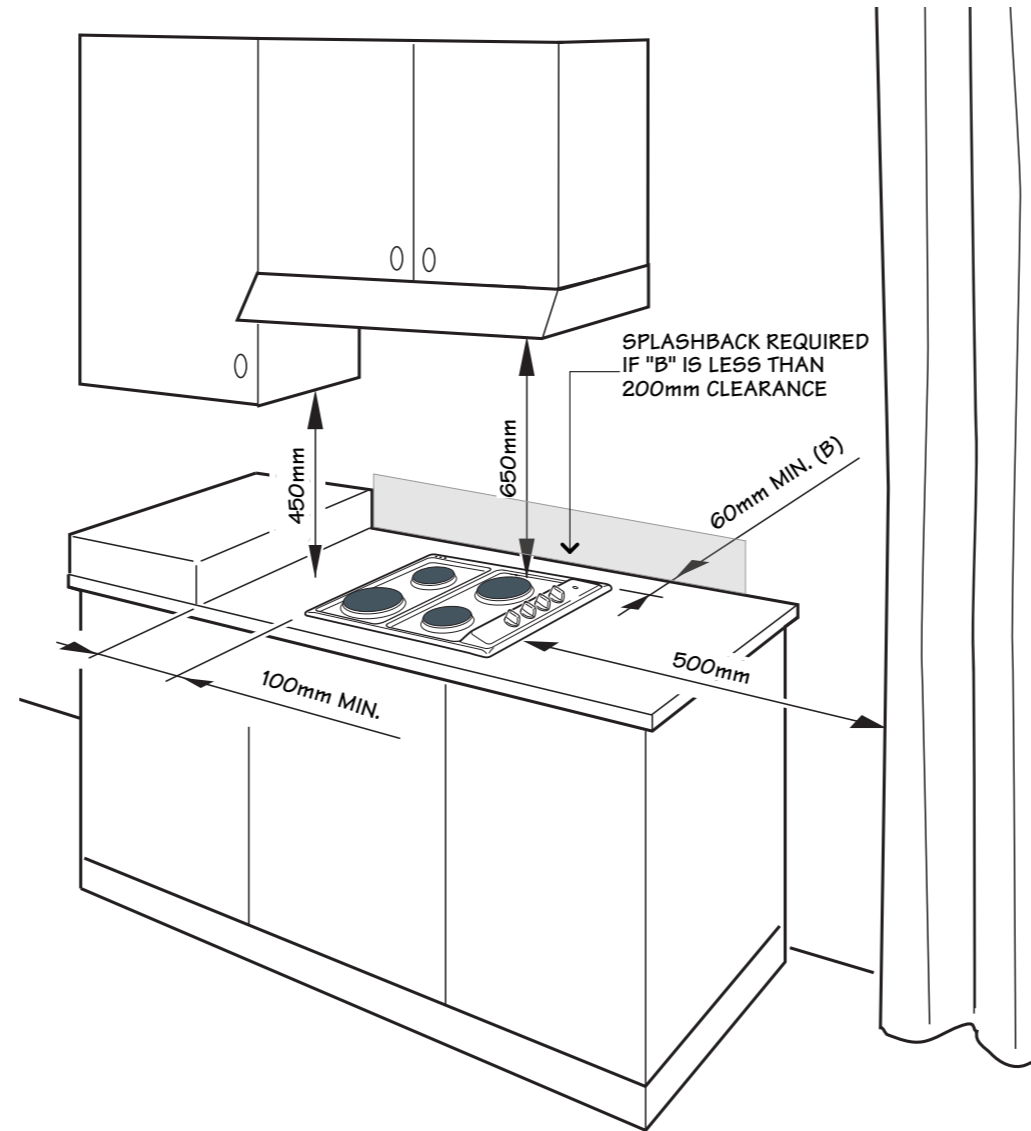
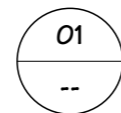
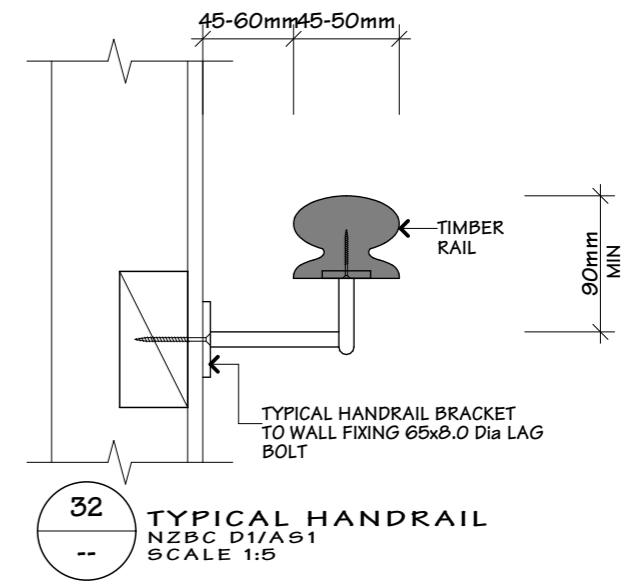
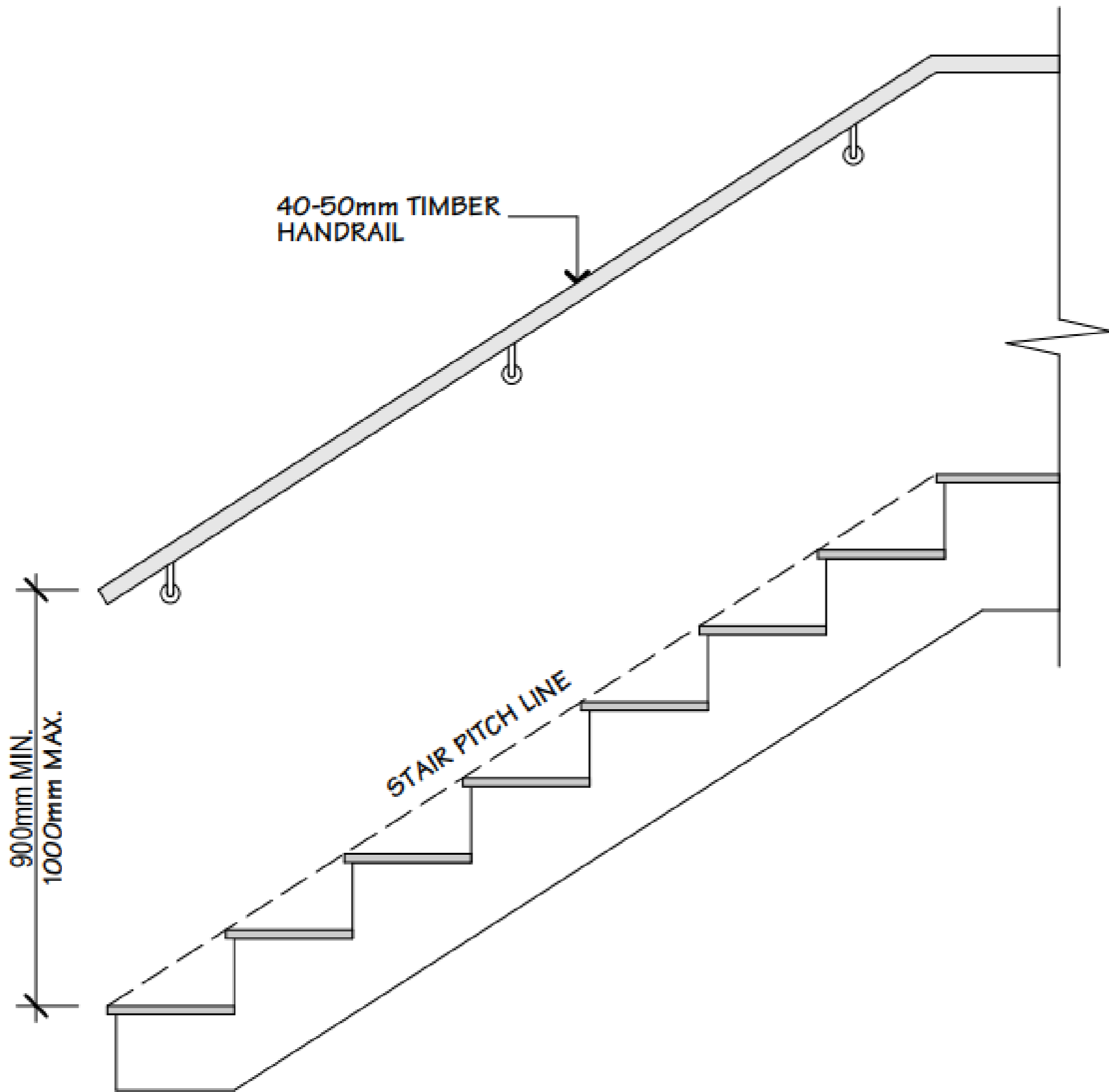


Fig. 2 CE604 models clearances



CLEARANCES TO COMBUSTIBLE SURFACES FOR ELECTRIC COOKTOP



32 TYPICAL HANDRAIL
 NZBC D1/A51
 SCALE 1:5



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
STAIR & HANDRAIL DETAILS

LEGAL DESCRIPTION:
 LOT: 1-2
 DP: 316193
 ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

NOTES:
 - Subject to council approval
 - All measurements to be confirmed on site by the contractor prior to the commencement of work.
 - All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
 10 DEC 24
 AMENDMENT DATE:
 241210.1820
 VERSION:
 WD-01

DESIGNER:
 HTC
 DRAWN:
 JON
 CHECKED:
 JON

SCALE:
 1:5
 JOB#:
 23071
 SHEET:
72
 /73

BRANZ H1/AS1 5th Edition Calculation Method Spreadsheet - Results

Version: 12 September 2024

Client	Natasha Williams
Project name	Natasha Williams Barn Home
Address	353 Dunstan Road, Alexandra
Designer	Heritage Timbercraft
Date	07 December 2024

Territorial Authority	Central Otago District	Climate Zone	6
When submitted	After 2 November 2023	Application	Housing

Proposed Building		
Element	Area (m ²)	Proposed Building Heat Loss (W/K)
Slab Floors	259.8	113.4
Other Floors	0.0	0.0
Roof	259.8	34.9
Skylights	0.0	0.0
Walls	421.0	84.6
Glazing (walls & doors) (18.0% of total wall area)	92.4	110.0
Doors (opaque)	0.0	0.0
	1033.0	Total 342.8

Reference Building		
Element	Area (m ²)	Reference Building Heat Loss (W/K)
Slab Floors	259.8	1.7
Other Floors	0.0	3.0
Total Roof (includes skylight area)	259.8	6.6
Walls (70% of total wall area)	359.4	2.0
Glazing allowance (30% of total wall area)	154.0	0.50
	1033.0	Total 679.9

Comparison of proposed building against the reference building PASS

Element type	Description	Embed heating?	Area (m ²)	Construction R-value (m ² .K/W)	Heat Loss (W/K)	Errors	
1	Slab Floors	SED Maxraft Foundation	No	259.8	2.29	113.4	
2	Roof	215 NZSIP Roof Panel with	No	200.1	7.95	25.2	
3	Roof	Rafter Frame with Metal	No	43.0	6.08	7.1	
4	Roof	Truss Frame with Metal	No	16.7	6.30	2.6	
5	Walls	165mm NZSIP Wall Panel	No	321.3	6.46	49.7	
6	Walls	140mm Wall with Schist	No	30.6	2.88	10.6	
7	Walls	140mm Wall with Brick	No	45.4	2.84	16.0	
8	Walls	140mm Wall with Vertical	No	23.8	2.89	8.2	
9	Glazing (walls & doors)	W01		2.9	0.84	3.4	
10	Glazing (walls & doors)	W02		0.6	0.84	0.7	
11	Glazing (walls & doors)	W03		1.0	0.84	1.2	
12	Glazing (walls & doors)	W04		0.5	0.84	0.6	
13	Glazing (walls & doors)	W05		4.8	0.84	5.7	
14	Glazing (walls & doors)	W06		1.0	0.84	1.2	
15	Glazing (walls & doors)	W07		2.5	0.84	3.0	
16	Glazing (walls & doors)	W08		2.5	0.84	3.0	
17	Glazing (walls & doors)	W09		4.8	0.84	5.7	
18	Glazing (walls & doors)	W10		2.2	0.84	2.6	
19	Glazing (walls & doors)	W11		2.2	0.84	2.6	
20	Glazing (walls & doors)	W12		1.3	0.84	1.5	

BRANZ H1/AS1 5th Edition Calculation Method Spreadsheet - Results

Version: 12 September 2024

Client	Natasha Williams
Project name	Natasha Williams Barn Home
Address	353 Dunstan Road, Alexandra
Designer	Heritage Timbercraft
Date	07 December 2024

Territorial Authority	Central Otago District	Climate Zone	6
When submitted	After 2 November 2023	Application	Housing

21	Glazing (walls & doors)	W13	3.4	0.84	4.0
22	Glazing (walls & doors)	W14	0.7	0.84	0.9
23	Glazing (walls & doors)	W15	1.4	0.84	1.7
24	Glazing (walls & doors)	W16	2.5	0.84	3.0
25	Glazing (walls & doors)	W17	2.5	0.84	3.0
26	Glazing (walls & doors)	W18	2.0	0.84	2.4
27	Glazing (walls & doors)	W19	2.0	0.84	2.4
28	Glazing (walls & doors)	D01	3.2	0.84	3.8
29	Glazing (walls & doors)	D02	2.1	0.84	2.5
30	Glazing (walls & doors)	D03	10.1	0.84	12.0
31	Glazing (walls & doors)	D04	8.0	0.84	9.5
32	Glazing (walls & doors)	D06	5.5	0.84	6.6
33	Glazing (walls & doors)	D07	5.5	0.84	6.6
34	Glazing (walls & doors)	D08	5.5	0.84	6.6
35	Glazing (walls & doors)	D09	4.8	0.84	5.7
36	Glazing (walls & doors)	D10	6.9	0.84	8.2
37					
38					
39					
40					
41					
42					
43					
44					
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					
61					
62					
63					
64					
65					
66					
67					
68					



JOB TITLE:
NATASHA WILLIAMS

DRAWING TITLE:
H1 Calculation

LEGAL DESCRIPTION:
LOT: 1-2
DP: 316193
ADDRESS: 353 DUNSTAN ROAD, ALEXANDRA

NOTES:
- Subject to council approval
- All measurements to be confirmed on site by the contractor prior to the commencement of work.
- All construction to comply with the NZBC/NZS:3604, alongside with all standards alike.

DATE OF ISSUE:
10 DEC 24
AMENDMENT DATE:
241210.1820
VERSION:
WD-01

DESIGNER:
HTC
DRAWN:
JON
CHECKED:
JON
SCALE:
1:1
JOB#:
23071

SHEET:
73
/ 73

Appendix C – McGregor's APA

Written Persons Approval for Resource Consent



1 Dunorling Street
PO Box 122, Alexandra 9340
New Zealand

+64 3 440 0056
info@codc.govt.nz
www.codc.govt.nz

(Form 8A)

Section 95E(3), Resource Management Act 1991

Email to: resource.consent@codc.govt.nz

Post to: The Chief Executive
Central Otago District Council
PO Box 122
Alexandra 9340

TO BE COMPLETED BY THE PERSON(S) REQUESTING APPROVAL

Applicant Name: Natasha Williams

Type of resource consent (circle all appropriate): Land-use / subdivision

Proposed activity:

Family Accommodation

Location of site:

353 Dunstan Road, Alexandra, 9391

CONTACT DETAILS OF AFFECTED PARTY

Full Name/s: *(name of person giving written approval)* Gordon Reid McGregor & Julie Rosalyn McGregor

gjmcgregor347@hotmail.com

Email

Phone

Address of the property *(I am the owner of the following property)*: 347 Dunstan Rd, RD1, Alexandra 9391

The full name of all other owners of the property: *(owners of the affected property)*

I have authority to sign on behalf of all the other owners of the property:

Yes

No other owners

NOTES

Conditional written approvals cannot be accepted.

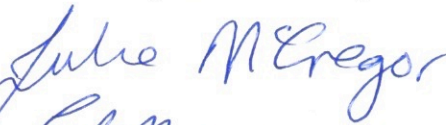

There is no obligation to sign this form, and no reasons need to be given.

If this form is not signed, the application may be notified with an opportunity for submissions.

If signing on behalf of a trust or company, please provide additional written evidence that you have signing authority.

DECLARATION

- I have sighted all the attached plans and supporting information for the above activity.
- I have read the full application for resource consent, the Assessment of Environmental Effects, and any site plans as follows
- In signing this written approval, I understand that the consent authority must decide that I am no longer an affected person, and the consent authority must not have regard to any adverse effects on me.
- I understand that I may withdraw my written approval by giving written notice to the consent authority before the hearing, if there is one, or, if there is not, before the application is determined.

Signature

17-1-25
17-1-25

Date

If you have any questions, please contact the Central Otago District Council by phoning 03 440 0056 or email resource.consent@codc.govt.nz