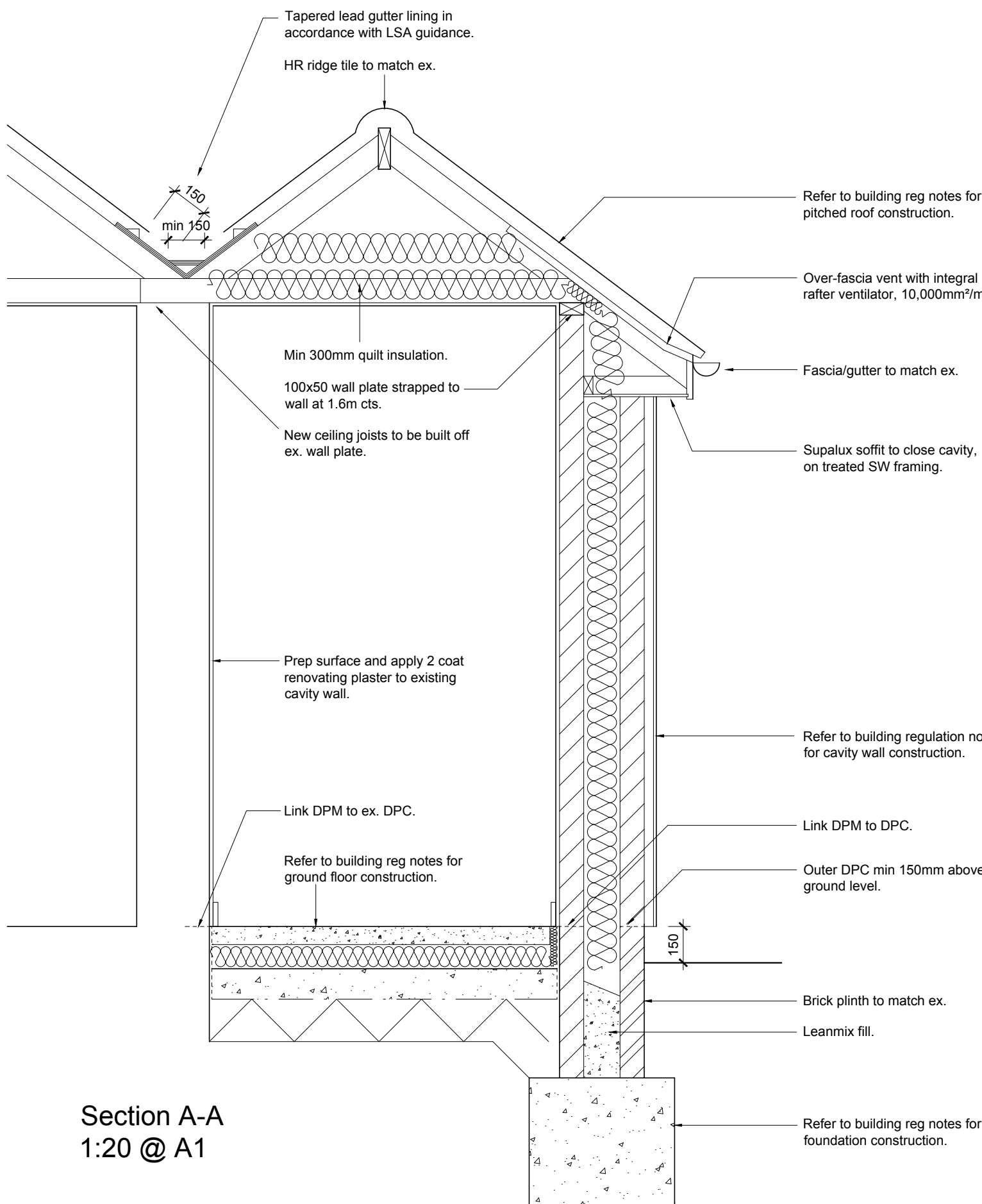
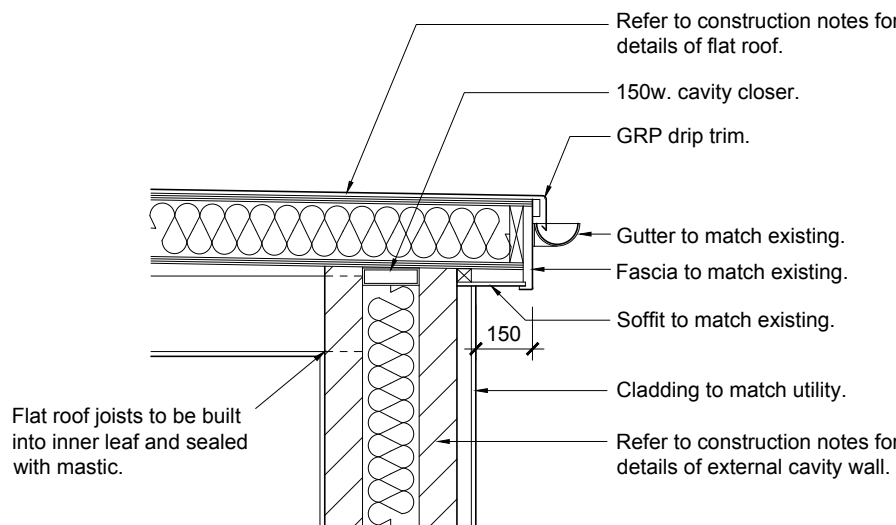




Section A-A
1:20 @ A1



Flat Roof Eaves Detail
1:20 @ A1

TO BE READ IN CONJUNCTION WITH STRUCTURAL CALCULATIONS AND SKETCHES.

RB1 - 178 x 102 UB 19 + 12mm M.S. plate 6mm F.W. welded to bott. flange (galvanised).

T1 - 3no. 47 x 195 C24 bolted together with M12's @ 400cts.

T2 - 3no. 47 x 195 C24 bolted together with M12's @ 400cts.

RB2 - Catnic Classic Box lintel BSD100 or 152 x 89 UB 16.

T3 - 2no. 47 x 147 C24 nailed together.

T4 - 152 x 89 UB 16.

RB3 - 2no. 47 x 147 C24 bolted together with M12's @ 400cts.

P1 - 90 x 90 SHS 4.0 thk post, hot rolled (galvanised).

RB4 - 178 x 102 UB 19 or 152 x 152 UC 23.

FRJ - 47 x 195 C24 flat roof joists @ 400cts.

CJ - 47 x 100 C24 ceiling joists @ 400cts.

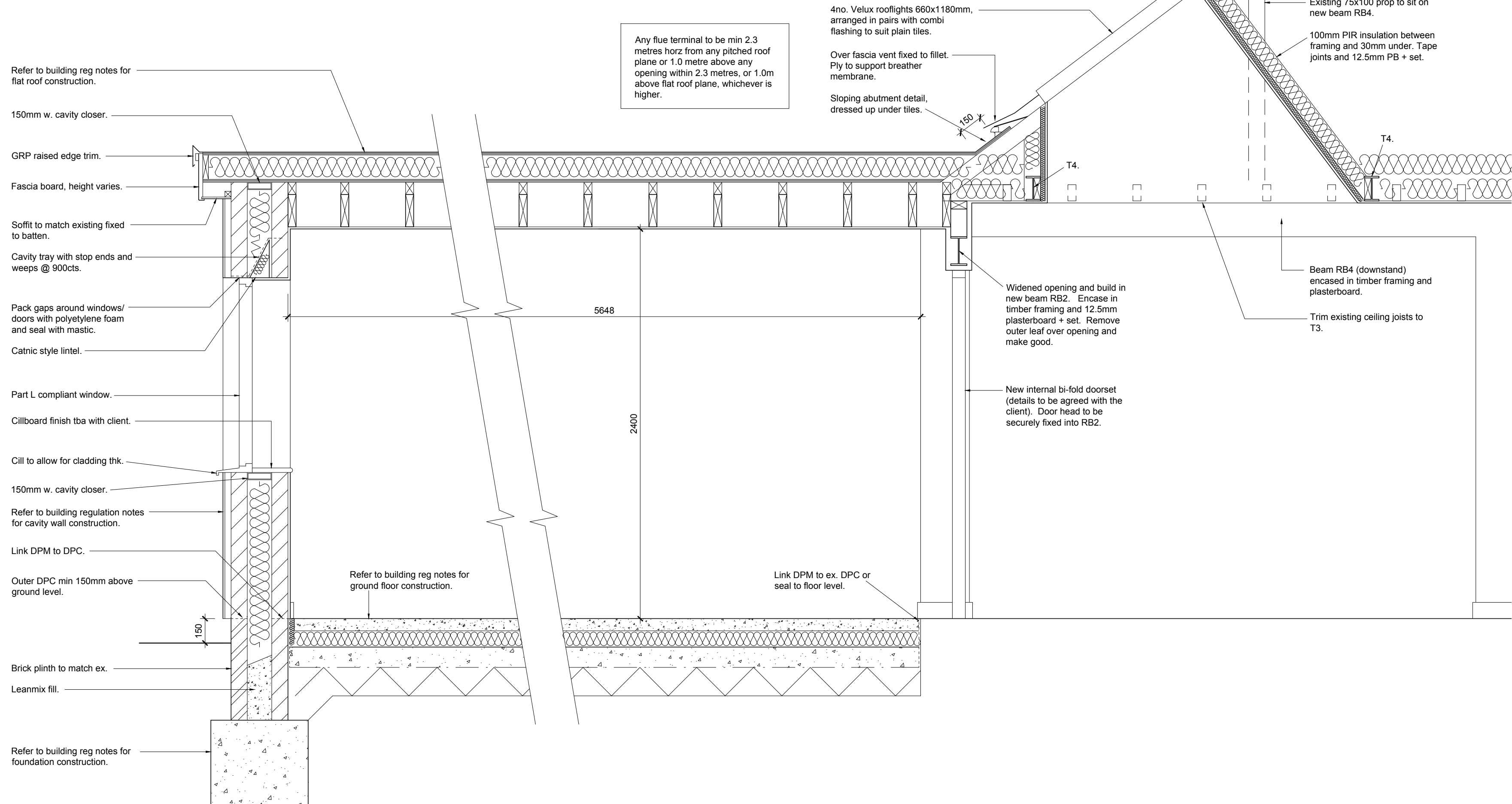
R - 47 x 100 C24 rafters @ 400cts.

Padstones:

PS1 - 250 x 100 x 150dp mass concrete.

PS2 - 1no. Engineering brick.

PS3 - 300 x 100 x 150dp mass concrete.



Section B-B
1:20 @ A1

BUILDING REGULATION NOTES :

TO BE READ IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DESIGN CALCULATION SHEETS + SKETCHES.

Preliminaries

The Contractor is responsible for all propping and the protection of the existing structure.

All assumed load bearing walls, foundations and structural elements are to be exposed and checked on site prior to the commencement of works.

All exposed structure is to be inspected by the Building Control Officer and verified as adequate. Any defects are to be reported to the Structural Engineer / Architect.

The contractor is to prepare safe methods of transporting and installation of all heavy items including beams and the large glazed screens etc.

Sub-structure:

600mm wide mass concrete foundations, C20 mix. Foundation depth to be min 1000mm deep or 300mm below root activity or 150mm below invert of adj. sewer, whichever is lower. Final depths to be agreed on site with Building Control. Foundations in excess of 2.5m deep are to be designed by a Structural Engineer. NO FOUNDATION TO BE WITHIN 500mm OF A SHARED SEWER.

New Ground Floor Slab: Reduce ground level and lay min 150mm consolidated and blinded hardcore. 1200g ren. 1200g rein. DPM installed and sealed in accordance with manu's details. 125mm C30 concrete slab reinforced with 1 layer A142 mesh. Min 100mm PIR floor insulation, 30mm insulation upstand to perimeter, min 500g VCL and 75mm screed. (U-value 0.15 W/m²K).

IMPORTANT NOTE: The specification is based upon the assumption that Radon protection is not required (refer to Radon report). Building Control to confirm. Client may wish to purchase radon monitoring kit and send off for results, to determine if any radon protection is required.

External Walls:

All blockwork below DPC to be medium density concrete blocks.

New External Walls 100mm med den. conc blocks with Cedral Click (tbc by client) cladding on 38x50/38x75 battens, installed in accordance with Cedral details. 150mm cavity, full fill 150mm Dittmer 32 cavity batts or equal approved (alternative 100mm PIR cavity board with 50mm residue cavity), 100mm med den. block inner leaf. Stainless steel Type 2 cavity ties at 750cts horz. 450cts vert, staggered on alternate courses and doubled up at openings and at eaves. 13mm lightweight plaster. (U-value 0.18 W/m²K).

Close cavity at window openings and at eaves level, with 150mm cavity closers. DPC min 150mm above ground level, sealed to DPM. Note if radon protection is required, then specification will change.

Mortar mix for work above DPC, designation (iii). Mortar mix for work below DPC, designation (i). Med density block work or face brickwork below DPC. Min 3.6N/mm² blockwork inner leaf above DPC in mortar designation (iii).

Install new beams where indicated by Engineer. Any new steel beams, lintels, plates in the external wall are to be galvanised. Provide separate cavity trays with weeps & stop ends (except under projecting eaves where a separate tray is not required).

New Flat Roof:

New Flat Roofs: Provide C24 flat roof joists at 400cts in accordance with Eng's details. Treated firings cut to T+60 fall. 18mm OSB3 T+60 deck. Employ specialist to install vapour control layer, 150mm PIR insulation overlaid with a 2nd layer of OSB3 board, sealed in preparation for cold applied liquid roof waterproofing system by specialist including matting, trims etc. 12.5mm plasterboard ceiling + skim. (U-value 0.15 W/m²K).

Roof to be strapped down to wall at max 1.6m cts with 2.5x30mm GMS vert straps, min 1.0m long. Straps to be P+S to inner leaf with at least one fixing within 150mm bottom of strap. Horz GMS straps at 1.0m cts between walls and floor/roof members. Where joists are parallel to wall, fix strap to min 3no. timbers with solid nogginns between and solid blocking between last timber and external wall.

Fascia / soffit / gutter detail to match existing.

New Pitched Roof:

Provide C24 rafters and ceiling joists at 400cts in accordance with Eng's details. Tyvek roof membrane, treated roofing battens and plain tiling to match ex. 300mm mineral wool insulation. 12.5mm plasterboard ceiling + skim. (U-value 0.15 W/m²K).

Provide over-fascia vents with integral rafter ventilators, 10,000mm²/m, with vents on at least two opposing sides.

Provide layboards and blend roof into existing. All leadwork, including valley gutter lining, to be in accordance with Lead Sheet Association guidance.

Roof to be strapped down to wall at max 1.6m cts with 2.5x30mm GMS vert straps, min 1.0m long. Straps to be P+S to inner leaf with at least one fixing within 150mm bottom of strap.

Doors / Windows / Carpentry:

Employ FENSA registered company to complete design and fit new aluminium/upvc Part L compliant door and windows (final design TBC with client). Provide toughened glass in critical locations. Trickle vents in head. 10,000mm² to habitable rooms, 4000mm² elsewhere. Open plan kitchen diners need min 3no. vents 10,000mm² each. (min U-value 1.3 W/m²K to meet Average U-value Calculation).

Trim openings in roof in accordance with Eng's details and install Part L compliant 1200x1500mm Velux flat glass lanterns with integral insulated kerb, all in accordance with manu's details. (min U-value 1.1 W/m²K to meet Average U-value Calculation).

Trim openings in pitched roof over kitchen in accordance with Eng's details and install Part L compliant 660x1180mm Velux rooflights with comb flashings to suit plain ties. Construct insulated light shafts with PIR insulation between framing and 2nd layer inside. Tape joints with foil tape to create VCL and apply 12.5mm plasterboard + set.

LEGEND:

	47 x 100 C24 studwork (internal)	PS	= Padstone to Eng's details
	47 x 147 C24 studwork (perimeter)	SVP	= Soil vent pipe
	Med den conc Blockwork	RWP	= Rainwater downpipe
	Aircrete Blockwork	LF	= Lead flashing
	Brickwork	CT	= Cavity tray
	Existing wall	BiG	= Back inlet gully
	Walls to be demolished	SD	= Smoke detector
	Structural member (beam, joists etc)	HD	= Heat detector
	MJ - Make existing cavity continuous with new cavity wall. Inner leaf to be tied into existing with S/S furk connectors. Facework to be tooth bonded.	OD	= Optical detector
	Direction of extg joists/rafters.	EF	= Extractor Fan
	Direction of new joists/rafters.	MG	= Make good
	FD = 30min Fire rated doorset	R	= Rafter
	FD30S = 30min FR doorset with intu + S/S	DR	= Double Rafter
		CJ	= Ceiling joists
		RS	= Restraint strap (floor)
		JH	= Joist hanger
		SS	= Soil stack
		AAV	= Air admittance valve
		PSC	= Prestressed concrete

General Notes:
No dimensions to be scaled from drawing except for planning purposes.
The contractor should check all dimensions on site.

Note: the new kitchen velux rooflights are not included within the Average U-value calculation. Instead, the new rooflights must meet the minimum standard of Approved Document Part L, Table 4.2, and will not increase the total glazed area to exceed 25% of the floor area of the dwelling in accordance with AD Part L, para 10.5a.

Provide new skirtings & architraves, final profile to match extg style or TBC by the client.

Finishes:

Reinstate all plasterboard surfaces affected by the works and skim. New wall, ceiling and floor finishes to be agreed with Client.

Extent of wall tiling to be agreed with Client.

Mechanical & Electrical Services:

Employ Heating Engineer to complete design of alterations to heating and H+H water systems, to suit new layout. Boiler to be relocated. New radiators to be fitted with TRV's. It is the Engineer's responsibility to ensure compliance with Building Regulations.

Employ Electrical Engineer to complete design of alterations to electrical system, in accordance with BS 7671 (IEE regulations) and new AD Part P. Engineer to liaise with client and agree type & final position of electrical fittings. All faceplates to be flush type.

Ventilation system based upon background trickle vents and intermittent fans. Employ Electrical Engineer to complete design and install individual fans. To bathrooms, provide mechanical extract fan 15 litres/sec linked to air sensor controller. To Kitchen provide extractor fan 30 litres/sec (located over hob). To Utility Room provide extractor fan 30 litres/sec.

Electrical Engineer to provide smoke detection in accordance with BS 5839-6:2019 Grade D category LD2. Detectors to be interlinked and fitted with battery backup. Provide optical detector in rooms with open fires. Heat detectors to kitchens.

Kitchen / Bathrooms:

Details of new Kitchen and utility room to be agreed with the client. Final kitchen design to be completed by others. Work to be liaised with main contract including finishes.

Plumbing Services:

The builder is to locate the existing foul drains within the site. Assume connection to private drain. No internal manholes will be permitted. Refer to Approved Document Part H with regard to building adjacent to existing drains. Builder to allow for adapting or maintaining and protecting foul drainage on site. Final details to be agreed on site in conjunction with Building Control. Any connection to public sewer will require a licence agreement with Southern Water.

Rainwater: Provide uPVC gutters and downpipes to match existing. All new downpipes to be connected to new soakaways, min 5m away from building, designed to either BRE Digest 365 or CIRIA Report 156. Contractor to carry out percolation test to determine final size to the satisfaction of Building Control. Soakaways to be constructed in plastic soakaways crates wrapped in geotextile membrane, 100mm coarse sand bed and surround with outer layer of geotextile membrane to prevent ingress of fines. Provide adequate cover in selected dug material (nom. 400mm cover, final depth to be agreed on site).

Provide trap sizes and seal depth in accordance Approved Document Part H1, Table 1. Common appliances are:
Wash basin/bidet - 32mm dia, 75mm deep seal
Bath/shower - 40mm dia, 50mm deep seal
Urinal/sink/washing/dishwasher - 40mm dia, 75mm seal
WC Pan - 100mm dia, 50mm deep seal

Provide access for cleaning blockages. Do not discharge into open hoppers. A branch pipe discharging into a gully should terminate between the grating or sealing plate and the top of the water seal. Unventilated branch pipes are limited to those stated in Table 2 & Diagram 3, H1. Ventilation of branch pipes is not required if the length and slope do not exceed those shown in Table 2 or Diagram 3, H1. 42. 1100 soil vent pipe to be terminated to durg type air admittance valve, set above highest overflow level.

Provide access and rodding point near base of stack for cleaning purposes.

External Works:

Take up old paving to allow for construction of new extension.

Carefully demolish existing conservatory and utility. Break up old ftns/slab and clear away material arising.

Reinstate paving to suit new layout. Final design details of external works to be agreed with the client.

Remove all waste material arising and leave site in tidy condition.

Rev E 18.09.26 Minor amendments.
Rev D 10.09.25 Lantern omitted.
Rev C 21.08.25 Engineer's details added.
Rev B 08.08.25 Amended to suit new layout.
Rev A 19.06.25 Amended to suit new layout.

Revision Date Amendment

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Drawing Title
Detailed Sections

Drawn pd Date May 25

Scale 1:20 @ A1 (1:40 @ A1)

Drawing Number
0444 / 102

Revision
E

0m 1.0m 2.0m