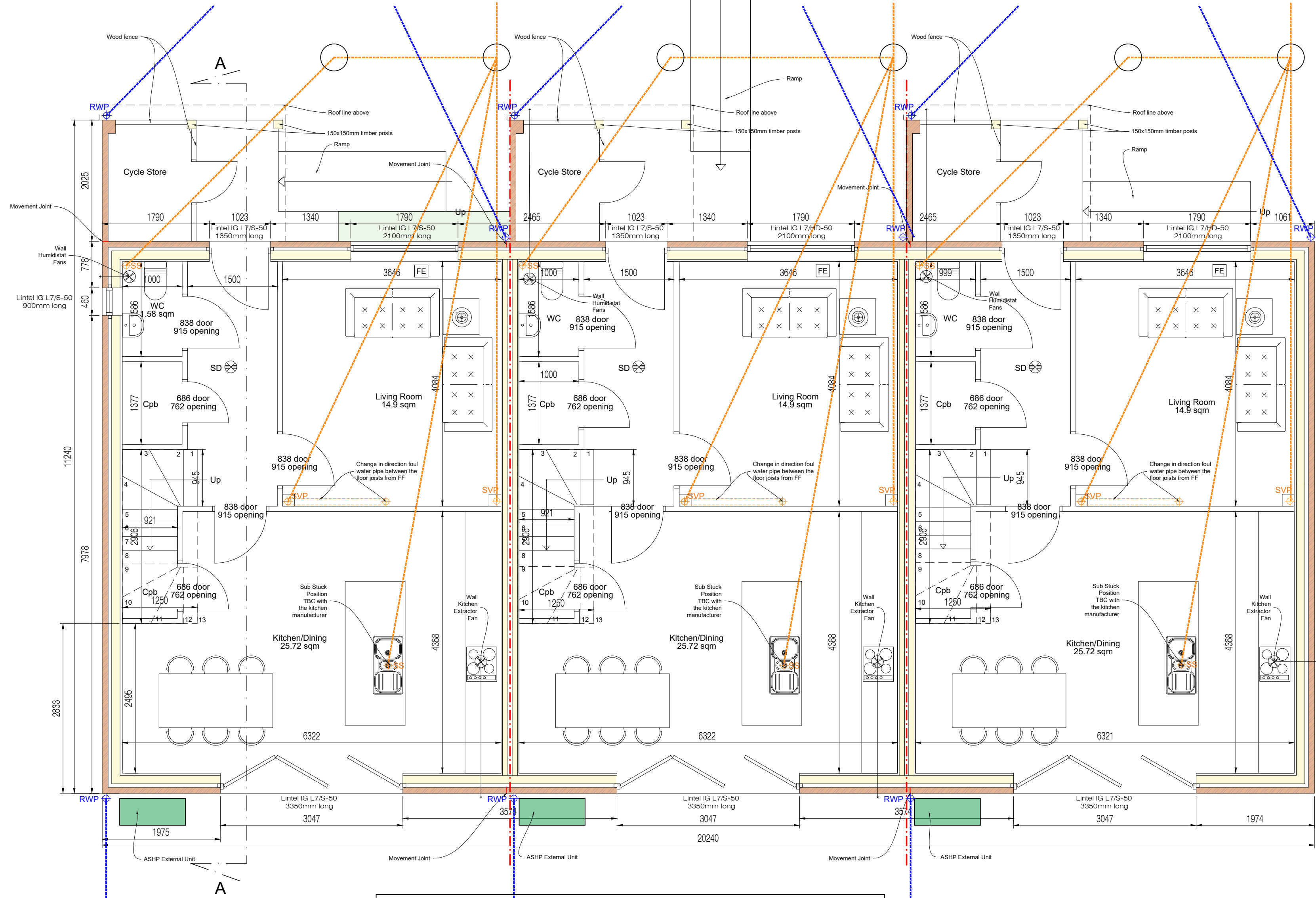


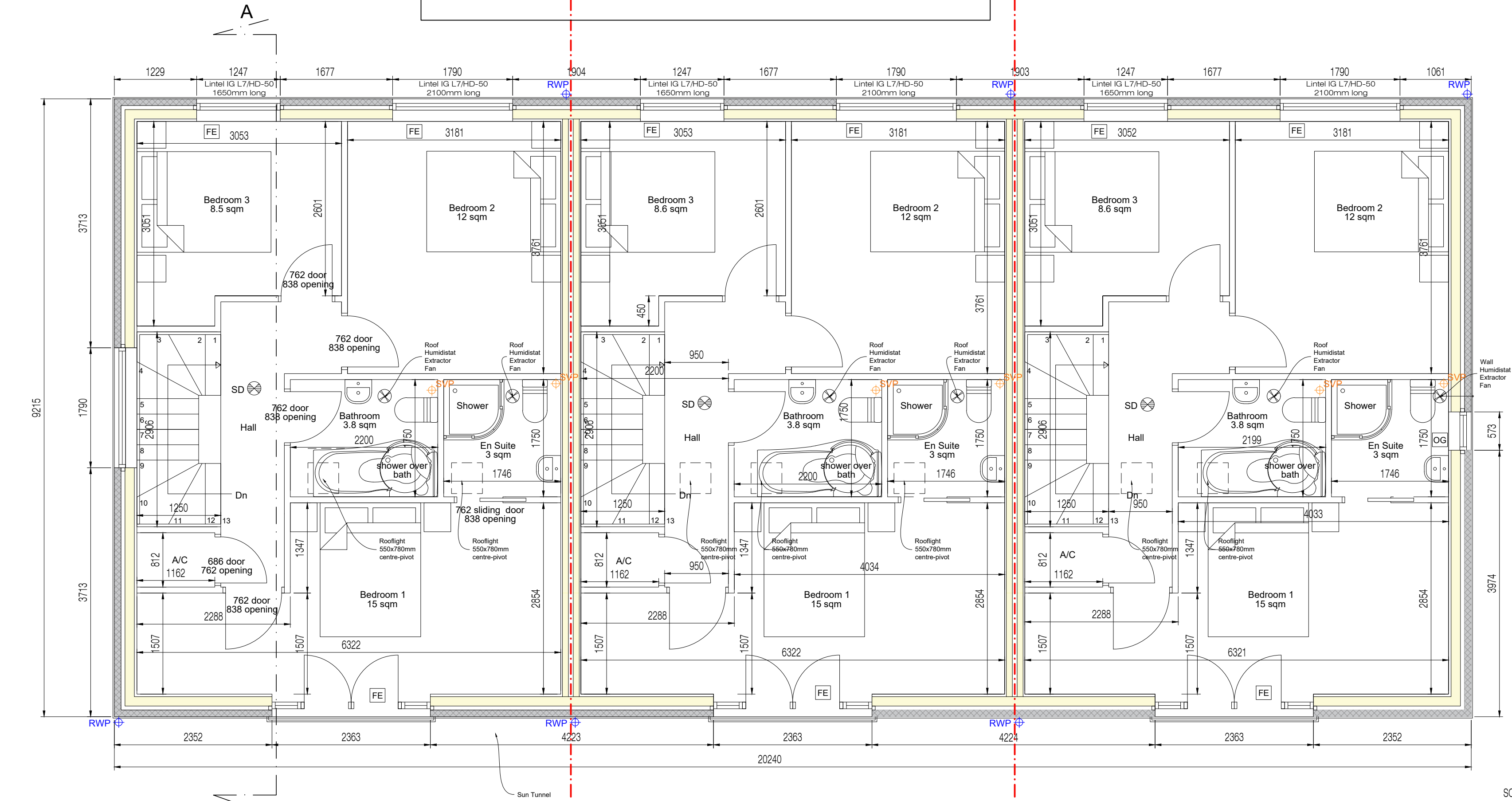


Proposed Ground Floor Plan 1:50 @ A1

to be read in conjunction with Structural Engineers calculations and design

KEY:

- OG Obscured glass
- FE Fire escape window
- CM Indicates carbon monoxide detector linked to main electricity
- SD Indicates smoke detector linked to main electricity supply with battery backup & provided with separate fuse at distribution board
- HD Indicates heat detector linked to main electricity
- Ventilation
- 140mm Load Bearing Studwall
- Brickwork
- Cladding
- Blockwork
- Non Load Bearing Studwall
- Insulation
- New Foul drainage route
- Rainwater drainage route
- Beam/lintel to Engineers detail
- SS Stub Stack
- SVP Soil Vent Pipe
- RM Rising Water Main
- Comms Telephone/Cable Connection



Proposed First Floor Plan 1:50 @ A1



AIR SOURCE HEAT PUMPS (ASHPs)
New Heating system to include a air source heat pump with underfloor heating pipe at ground floor level and radiator at the floors above. External unit, internal unit & hot water cylinder to be install as indicated in the floor plan and as per manufacturer details.
External pipework between the dwelling and the ground heat exchanger should be insulated following the TIMSA guidance.
Pipe sizes should be in accordance to manufacturer's recommendations.
The load-bearing capacity of surface to take the heat pump, hot water cylinder and thermal store (where fitted) equipment to be assessed and access for maintenance should be provided.
Increase the rating of the mains electrical power supply if required to accommodate the electrical current drawn by the heat pump.
Fix permanent labels and flow arrows to pipework, valves, etc.
Where the heat pump is to be backed up by another heat source, the control of that source must be interlocked to ensure that it can never operate as the priority or 'lead' device.
Ensure that the system is commissioned properly and tested for correct operation by a member of the Microgeneration Certification Scheme.
All electrical work to be undertaken by a Part P registered Electrician i.e. NAPIT, ELECSA and NICEIC.
Installation to be BS EN 14511: Air conditioners, liquid chilling packages and heat pumps with electrically driven compressors for space heating and cooling (4 parts), BSI 20.
Provide operating instructions and maintenance recommendations for the homeowner.
Health and safety Care should be taken to address all issues, including: the risk of Legionnaires' disease.
SYSTEM CONTROLS AND ZONING
Domestic hot water circuits to have:
- Time control that is independent of space heating circuits.
- Electronic temperature control.
Each room or agreed zone should be provided with thermostatic room controls.
Systems are to be designed to maintain an internal temperature of 22°C during normal room occupation with an external ambient temperature of -5°C and the requisite air changes taken into consideration for each room type.
Dwellings with a floor area of 150m² or greater to have a minimum of two independently controlled heating circuits.
LIMITING HEAT LOSSES AND GAINS
In accordance with Table 4.4 Approved Document L
Insulation to be provided to:
- Primary circulation pipes for domestic hot water.
- Primary circulation pipes for heating circuits where they pass outside the heated living space and voids.
- Pipes connected to hot water storage vessels for at least 1m from the point at which they connect to the vessel.
- Secondary circulation pipework.

FOUL WATER DRAINAGE
The proposed bathroom appliances are to be served by a new internal soil pipes to terminate 900mm above any windows or rooflight by passing between rafters and be vented to external air. Note that the polystyrene packaging usually doubles up as the product insulation, therefore do not discard. The soil pipe should terminate with an anti-bird cage positioned at least 900mm above the head of any window/door opening that is within 3m. The kitchen appliances are to be connected to a soil pipe installed in the floor and fitted with a proprietary reducer.
Offsets in discharge stacks should be avoided wherever possible but if necessary they should be formed in strict accordance with BS EN 12056 Appendix N.D. 3.5, i.e. the minimum radius should be (internal diameter x 2) and there should be no connections within the offset zone.
The minimum trap sizes and seal depths are as follows:
Appliance Trap size Ø Seal depth
Washbasin, bidet (1)(3)(4) 32mm 75mm
Sink, washing machine, dishwasher (1)(3)(4) 40mm 75mm
Bath, shower (1)(3)(4)(5) 40mm 50mm
Toilet 100mm 50mm
Note 1: Combined wastes are to be increased to 50mm Ø.
Note 2: 1.7m max for 32mm Ø pipe, 3m max for 40mm Ø.
Note 3: 3m max for 40mm Ø pipe, 4m max for 50mm Ø.
Note 4: Waste pipes exceeding their maximum lengths must be fitted with an anti-siphon trap such as the Hepworth Vx valve.
Note 5: The hot water supply to a bath in a new dwelling is to be fitted with an in-line blending valve limiting the water temperature to 48°C.
The proposed soil pipes are to be connected to the existing inspection chamber sited on the existing run. 110mm Hepworth PlastiDrain or similar approved drainage to be used below ground, bedded and surrounded on 100mm deep shingle, at a gradient not exceeding 1:40. Granular material to be graded from 5mm up to a maximum of 10mm. If ground cover is less than 300mm the drain must be protected by a reinforced concrete cover slab with a flexible filler and at least 75mm of granular material between the top of the pipe and the underside of the flexible filler below the slabs.
Where drains pass beneath the oversite they should be encased in concrete. Movement joints formed with compressible board should be provided at each socket or sleeve joint as shown in the detail drawing. See detail drawings for protection to pipes laid at shallow depths, for where pipes penetrate walls & pipes for pipe joints encased in concrete.
If the extension/new build is to cover new or existing inspection chambers then the lids are to comprise mechanically fixed and sealed covers. When the works are to be built over live sewers then the drains should be tested and assessed to ensure good working conditions prior to foundations being laid. Drainage is to be replaced if there is any doubt.
Where the proposed extension/new build covers redundant inspection chambers the chambers are to be removed or capped off and the sewers grubbed.
Inspection chamber sizes to be as follows:
Maximum depth Access Point Size Ø
0.6m or less Polypropylene Insp. Chamber (PPIC) 300mm
1.2m or less Polypropylene Insp. Chamber (PPIC) 450mm
For inverts between 1.2 – 2m provide Hepworth Wavin 315mm Ø reduced access PPIC and for inverts between 2 – 3m provide Hepworth Wavin 683mm Ø reduced access PPIC inspection chamber fitted in strict accordance with manufacturer's instructions.
Note that chamber bases only allow one branch inlet each side of the centre channel. Corrugated shaft to be cut to length. Proprietary lids in FRP or GRP to BS EN 124, in order to prevent metal theft.

Lintels
For uniformly distributed loads and standard 2 storey domestic loadings only
Lintel widths are to be equal to wall thickness. All lintels over 750mm sized internal door openings to be 65mm deep pre-stressed concrete plank lintels. 150mm deep lintels are to be used for 900mm sized internal door openings. Lintels to have a minimum bearing of 150mm on each end. Any existing lintels carrying additional loads are to be exposed for inspection at commencement of work on site. All pre-stressed concrete lintels to be designed and manufactured in accordance with BS 8110, with a concrete strength of 50 or 40 N/mm² and incorporating steel strands to BS 5896 to support loadings assessed to BS 5977 Part 1.
For other structural openings provide proprietary insulated steel lintels suitable for spans and loadings in compliance with Approved Document A and lintel manufactures standard tables. Stop ends, DPC trays and weep holes to be provided above all externally located lintels.

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All dimensions and levels are subject to a thorough and accurate on-site check by the contractor prior to the commencement of any construction work.
All sizes of structural components are to be verified by a structural engineer.
Electrical contractors must be members of the national inspection council for electrical installation & contracting (NICEIC) & the electrical contractors association.
Mechanical installation or modification to be in accordance with the latest edition of the CIBSE guide as produced by the chartered institute of building services engineers and to current BS specification.
All works are to comply with the latest revision of the British standards.
The client or appointed agent should advise of any known buried services and drainage location or restrictive covenants.
Build-over agreements and party wall concerns are the responsibility of the client if applicable.
This drawing should be read in conjunction with all other documents relating to the works.
Do not scale from the drawing for construction or design purposes.

REVISION NOTES		
REV	DESCRIPTION	DATE

STAGE	
☐ PRE APPLICATION	
☐ LAWFUL DEVELOPMENT	
☐ PLANNING APPLICATION	
☐ CONDITIONS	
☒ BUILDING CONTROL	
☐ AS-BUILT	

PROJECT	
Proposed terrace of three 3-bed dwellings	

DRAWING NUMBER	OAK-367-BR-02
DATE	12/12/2024
SCALE	varies@ A1
SHEET NUMBER	2 of 3
REVISION	B

CLIENT	
Land North Of 2 Millers Close, Picknag Road, Barley, Hertfordshire	

DRAWING TITLE	
Proposed Plans	