

CONSTRUCTION NOTES

FOR

PROPOSED NATURE RECOVERY CENTRE
PHASE 2

AT

**THE BUG FARM,
LOWER HARGLODD FARM, ST. DAVIDS
PEMBROKESHIRE**

FOR

DR S BEYNON

9438

NOVEMBER 2025

GENERAL NOTES

- 001** These drawings and notes and the copyright thereof are the sole property of the consultants and must not be reproduced without their written consent.
- 002** The contractor is to check all levels and dimensions on site before work commences, any discrepancies to be reported immediately to the consultants.
- 003** Work to figured dimensions in preference to scaling drawings.
- 004** All materials and workmanship to comply with current British Standards, Codes of Practice and relevant Agrément Certificates and Building Regulations.
- 005** These drawings and notes are for purposes of obtaining statutory consents only.
- 006** The finished buildings/properties will require receiving service maintenance in accordance with custom and practice and the manufacturer's recommendations.
- 007** The Architects drawings are to be read in conjunction with all Structural Engineers and all specialist consultants/manufacturers/suppliers drawings, specifications, SAP calculations etc.
- 008** Note: Any amendments to general specification in relation to materials etc, may have implications to SAP Rating, which may reduce DER/TER rating and failure to comply. Any changes must be highlighted to Architects or SAP assessor, for approval prior to changes being made.
- 009** These construction notes accompany drawings 9438 / LP01, E01 – E02, PSP01, BR01 – BR06.
- 010** Note: Accredited construction details to be complied with throughout the development/properties in all aspects where applicable to the structure/works – contractor to ensure all relevant details are implemented and check list confirmation carried out as the works progress. Available for viewing via www.planningportal.gov.uk
- 011** MATERIALS AND WORKMANSHIP: (REGULATION 7)
- Materials: Construction materials used within the building works shall be covered, comply and be used in accordance with the manufacturer's technical details.
- British Board of Agrément Certification (BBA), or the European construction Project standards (CE marked) or Kite-marked under the British Standard Institute scheme.
- 012** Workmanship: The methods of carrying out construction works on site shall be covered by the relevant British Codes of Practice, current Health & Safety standards and the current Building regulations approved documents requirement of testing of installations for compliance to satisfy the approved documents.
- 013** Demolition of existing structures to BS6187; Code of Practice for full and partial demolition.

100 SUBSTRUCTURE

- 101 Temporarily disconnect services during the course of dismantling and building works.
- 102 Carefully remove cladding and set aside for client use.
- 103 Solid ground floor build-up:
Min 75mm screed, vapour control layer, 150mm Celotex GA4000 insulation, vapour control layer, 100mm concrete slab, radon barrier to comply with **Basic Radon Protection**, 25mm sand blinding, 150 mm thick layer of type MOT 1 compacted hardcore to achieve U-value 0.18 W/m²/ K or better
- 104 Provisionally 75mm sand/cement screed. Lay 500-gauge (0.12 mm) polythene layer between the floor insulation and screed/slab to avoid grouting insulation boards. Polythene joints to be lapped 150mm and taped and at floor perimeter edges should be upturned to just below skirting level (minimum 38mm) and fixed behind the skirting board.

200 SUPERSTRUCTURE

- 201 Note – Accredited Construction Details and Enhanced Construction Details to be complied with in all respects where applicable to structure. Contractor to ensure all relevant details are implemented and check list confirmation carried out as works progress.
- 202 External wall construction to comprise 100mm rendered dense concrete block outer skin (min 7n/mm²) 100mm rigid insulation board, min 50mm clear cavity, stainless steel retaining wall ties at 750mm centers horizontally and 450mm centre's vertically and every course adjacent to openings and 100mm dense concrete block inner skin.
Wall cladding - New 213mm thick insulated box profile cladding (u-value 0.26W/m²) on 200x50 C24 purlins. 100x50mm timber stud inner skin infilled with insulation, ply on outside & ply / plasterboard inside.
[Refer to structural engineer drawing- Shearwater consulting engineers ltd- 208_01](#)
- 203 All dimensions shown on drawings to face of blockwork or timber stud where applicable.
- 204 Cavities at door/window openings to be closed by proprietary insulated finned cavity closers to suit cavity width. Cavities closed at wall-plate by proprietary insulated cavity closers.
- 205 Ventilate cavity by open perpends 10 x 75 mm minimum at 1.5 m maximum centres using proprietary plastic ventilators and also at cavity wall trays at abutment.
- 206 Lay proprietary weep holes through outer leaf at following locations: immediately above base of cavity, above cavity trays, stepped dpcs and external openings. Position at maximum 900 mm centres and provide not less than two No over each opening.
- 207 Roof structure to Structural Engineer's detail. Design drawings/calculations to timber and structural steel support to be provided by Structural Engineer before site fabrication. Detailed design drawings / calculations/specification etc to be provided to Building Control prior to commencement of this work. Purlins sizes to be 200x100mm C24.
[Refer to structural engineer drawing- Shearwater consulting engineers ltd- 208_01](#)

- 208** Aluminium trims fascias/soffits/verges and bargeboards.
- 209** Vertical chases in walls to be no deeper than 1/3 of wall thickness or leaf of cavity wall. Horizontal chases to be no deeper than 1/6 thickness of the wall or leaf of cavity wall. Chases should be positioned to avoid impairing stability of wall.
- 210** New 213mm thick insulated box profile roof on purlins against existing structural frame (u-value 0.20W/m²)
- 211** New 300mm wide lead or fibre glass laid to falls lined gutter and 100mm diameter downpipes including all necessary fixing brackets. Colour to be agreed.
- 212** Cover flashings Code 5 lead sheet in lengths not exceeding 1500 mm. Lap joints 100 mm and overlap upstand by minimum 75 mm. Secure with lead wedges into mortar joint or chase in masonry at 450 mm centres. Stepped flashings minimum 150 mm width and secured with lead wedges at every step.
- 213** Lead workmanship generally to BS 6915 and latest editions of 'The Lead Sheet Manual' and Updates published by the Lead Sheet Association. Provide a secure, free draining and weather tight installation with operatives trained in the application of lead. Finish all leadwork neatly with patination oil.
- 214** External doors to be timber with glazed panel. Client to decide weather doors are manually or electrically operated, supplied and fitted all in accordance with manufacturer's instructions and to the requirements of the British standards, double glazing CE marked and Kite marked. Colours to be agreed with Client. Fully draught proof door and frame complete with thresholds and weather strips. Any glazing in doors or adjacent side panels shall be safety glazing to BS 6206 1981 up to 1500mm above finished floor level. Glazing to all doors to achieve **U value of 1.6w/m² °C**. Semi glazed doors to achieve U value of 1.2w/m² °C.
- 215** Aluminium top hung windows to suit severe weather rating, fully weather stripped, double glazed (low "E" glass/Argon filled as necessary to achieve **minimum U value 1.4 W/m²k**) with trickle ventilators. All glazing below 800mm off FFL to be toughened/safety glass. Concrete sub-cills on DPC's throughout. Mdf window boards throughout. All openings to include Hyload insulated horizontal and vertical DPC's as necessary. All windows to have "U" value of 1.4w/m² °C.
- 216** 2 coats sand/cement smooth render to all external walls where applicable with masonry paint decoration or self-coloured render.
- 217** Structural beams to openings to location as shown on plans, to Engineer's spec notes.
- 218** Steel work to be surrounded by 12.5mm plasterboard or 15mm fireline board to provide 30 minute fire protection. Board to be screw fixed back to either timber framework or m/f -system. Voids to beam to be filled tight with rockwool mineral wool.

300 DRAINAGE BELOW GROUND

- 301** All SURFACE water drainage to soakaways as existing. See site plan.
- 302** Trenches for drains not to be excavated deeper than the foundations of the building.

400 MECHANICAL INSTALLATION

Note: If any plumbing works are carried out, then follow the standard specifications.

- 401** The plumbing works are to be carried out in accordance with the relevant Codes of Practice, Building Standard Specification, and Dwr Cymru/Welsh Water Authority requirements.
- 402** It is the Plumbing Contractors responsibility to ensure that the system as installed will give adequate hot and cold water. Contractor to connect to all fittings and appliances. Complete the design of the hot and cold water supply system to BS 6700 or BS EN 806-2. Calculate pipeline sizes to meet simultaneous demand for the building in accordance with BS 6700. Provide design drawings to Client before commencement, indicating all pipe runs, sizes, valves, fittings etc of the complete system. Provide as an 'as built' drawing upon completion.
- 403** All pipes in cold zones to be lagged with 25 mm polythene foam, properly fitted and secured. 110 mm uPVC soil and vent stacks fully boxed and wrapped in 25mm lagging to acoustic soil pipe with integral encapsulated acoustic insulation.
- 404** All pipework to be earthed and bonded in accordance with current IEE Regulations.
- 405** Hot and cold water risers brought up/down in accessible ducts/cupboards where possible. All waste pipes to run within floor zones where possible, as shown on plans. Allow for proprietary fixing bracket/hangers to underside of floors/beam and block floors to maintain 1 in 40 falls to waste pipes.
- 406** uPVC soil and vent pipework to BS EN 1329-1 or BS 4514 Kitemark certified as follows:
- 100mm diameter WC soil pipes laid to minimum 18mm/m fall for maximum 6m pipe length with removable trap to have 50mm deep seal.
 - 32mm diameter wash hand basin pipes laid to fall between 18-22mm/m for maximum 1.7m pipe length. 40mm wash hand basin waste pipes laid at 18 – 44mm/m fall for maximum pipe length of 3m.
 - 40mm sink, waste pipes laid to 18 – 90mm fall over maximum 3m pipe length. 50mm sink waste pipes laid to fall between 18 – 44mm for maximum length of 4m.
 - Wash hand basin, sink, dishwasher and wash machine waste pipes to all have removable trap with minimum 75mm deep seal.
 - Pipe connections into stack to be offset minimum 110mm for pipe diameters up to 65mm. Pipe diameters greater than 65mm to have minimum offsets of 200mm.
 - All swept connections into stack to be minimum 25mm radius or 45 degrees and pipes exceeding 75mm diameter to have minimum 50mm radius or 45 degree sweep.
 - Position head of soil and vent pipe at lead 3m away from any openings and 900 above windows.
 - Bends at base of soil stack to have 90 degree nominal rest bend with minimum radius of 200mm to centreline of the pipe. Stabilise bends by bedding in concrete without impairing couplings.
 - Height of invert of horizontal drain at base of stack below centreline of lowest branch pipe to be minimum 450mm.
- 407** Air admittance value to comply with BS EN 12380:2002 fitted to internal stacks where indicated on drawing. Air admittance valves where indicated to be fitted with ventilated boxing.
- 408** Cold Water Supply – A suitable supply of wholesome water is to be provided to any place where drinking water is drawn off; wholesome or softened water to any wash basin; and wholesome water to any sink in any area where food is provided.
- 409** Hot Water Supply and systems – a suitable supply of heated wholesome or

heated softened wholesome water is to be provided to :
Washbasin in or adjacent to a room containing a sanitary convenience;
Washbasin and any sink provided in any area where food is prepared.

- 410** All hot water to have inline blending valves fitted to limit hot water supply to a max of 48 degrees. M & E engineer/ contractor to give notice of methodology in writing following the guidance set out in Part G (Sanitation, hot water safety and water efficiency) into Building Control Dept within 5 days of completion of works.
- 411** All fixed building services to be energy efficient with effective controls which have been commissioned and tested. The building owner is to be provided with sufficient information to enable the building to be operated so as to use no more fuel and power than is reasonable.
- 412** Hot water system to resist the effects of temperature and pressure that may occur and be adequately supported. Any hot water system that has a hot water storage vessel shall prevent temperature of water stored exceeding 100°, ensure discharge from safety device is safely conveyed to be visible but not cause danger.
- 413** Heating to new section to be provided by under floor heating. Source of energy to be an existing wood chip boiler (Froling wood chip boiler t4 24-150) that feeds the existing complex. New section to be zoned off existing manifold.

500 ELECTRICAL INSTALLATION

- 501** All works to comply within all respects with the current edition of the Institution of Engineering and Technology (formerly IEE) Wiring regulations (BS 7671:2018) Regulations and Part P (Electrical Safety) of the Building Regulations 2006 including 2010 amendments. Installation of all electrical works to be carried out by an electrician, registered with an Electrical Self-Certification Scheme authorised by the Secretary of State, and complies with 18th Edition BS 7671:2018. Electrical Installation Completion Certificate to be provided upon completion of works by qualified Electrician.
- 502** Installation to be completed to the satisfaction of the Electricity Supply Authority and all other statutory acts relevant to the installation.
- 503** Test and commission the system in accordance with 18th Edition BS 7671:2018 requirements.
- 504** Mains operated self-contained, interconnected smoke alarms to BS EN 14605:2005 and heat alarms BS5446-2:2005 to be located as indicated on Engineers drawings. Minimum requirements to a Grade D1 Category LD2 standard to be provided to BS 5839-6:2019 – Part B 2006 incl. 2010 amendments Building Regulations.

Mains operated carbon monoxide alarms where indicated on drawings to BS EN 50291-1:2018, and installed to BS EN 50292:2013.
- 505** Numbers, positions and types of all electrical fittings etc, to be approved by the client.
- 506** Circuits to be protected by 30mA RCBO device.
- 507** All fixed internal and external lighting to be fitted with 100% low energy fittings
- 508** All switches, sockets etc to be within a zone of 450-1200 above floor level.

509 L3 Fire alarm system to BS 5839 – 1:2002

600 EXTERNAL WORKS

601 All landscaping to be protected at all times during the construction period.

602 Grassed/planted surfaces to Clients requirements.

603 Prior to reconnection to existing foul line, contractor/client to liaise with Welsh Water before commencement of works.