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FLOOD MITIGATION STATEMENT – Rear Ground-Floor Extension and New First Floor @ 130 Old Fort Road, Shoreham-by-Sea, West Sussex, BN43 5HL

The houses, front garden and most of the rear garden are within Flood Zone 1; a small part of the rear garden is within Flood Zone 3. See accompanying flood map. Because of the small part of the property being within Flood Zone 3, the planning application requires the Standing Advice on mitigating flood risk in construction to be followed.

Flood mitigation measures should therefore be included in the development.

The Proposed Development

The proposed development is a single-storey ground-floor rear extension and addition of a first floor to the existing bungalow.

Mitigation Measures in the Construction

1. New ground floor and foundations – any concrete blocks used in the foundations will be sealed with an impermeable material or encased in concrete to prevent water movement from the ground into the wall construction. The floor will be a suspended concrete floor with a reinforced concrete slab at least 150mm thick and complying with structural requirements for uplift forces. The DPM will be of at least 1200 gauge polythene and the insulation will be a rigid closed-cell material.
2. Floor level – the proposed floor level of the new extension will match that of the existing house, which is approximately 540mm above ground level at the front (roadside) of the house and 660mm above ground level at the rear (seaside) of the house.
3. New external walls – new external walls will be constructed from engineering bricks to a maximum of 600mm above new floor level. The walls will have either a part-filled cavity to allow easy drying of the walls, with insulated plasterboard internally fitted horizontally to enable easy removal if it gets wet; or a fully filled cavity with quick-drying insulation and standard plasterboard internally fitted horizontally to enable easy removal if it gets wet.
4. Windows and doors – all windows and doors will be sealed to the fabric of the building and French doors should have strong enough glazing to withstand the pressure of flood water. The door threshold will be as high as possible.
5. Any air bricks ventilating the underfloor void to the new extension will have removable flood barriers. All barriers will be supplied and fitted by specialist contractors to ensure that they are fitted properly. An alternative to air brick covers would be to fit Smart Airbricks, which allow air into the property but not water.
6. Sewage backflow protection – the existing soil pipe, and any new soil pipes, will have backflow-prevention devices fitted to prevent flood water rising up through sanitary appliances.

7. Repointing damaged brickwork – all existing damaged brickwork will be repointed to prevent water ingress via joints, and any spalled brickwork will be replaced.
8. Flood-resilient construction materials – lime-based plaster or cement render will be used on existing ground-floor walls as this is more resistant to damage from water than gypsum plaster and also drys out more quickly in the event of a flood. New external walls and studwork walls will have plasterboard fixed horizontally rather than vertically to enable easy replacement of boards in the event of flooding.
9. Flood-resilient fixtures and finishes – plastic and / or steel fixtures and fittings will be used wherever possible to decrease the need for replacement after a flood event. Appliances will be set as high as practicable above floor level, and any under-counter ovens will be set on plinths. Kitchen units and worktops should be sealed to each other to prevent any penetration of water behind fittings. Kitchen units should have a gap behind them to aid drainage and drying. Ground floors will be finished with ceramic or stone tiles with skirting boards made of the same material.
10. Services – all services will be mounted above predicted flood levels. Any pipework below predicted flood level will have closed-cell insulation around it. All services entries into the building will be sealed with expanded foam or closed-cell material.