

Flood Risk Assessment:

Applicant: Mr Derek Smith date: 20/10/21

Address: Domestic Extension @ 1 barn Hey Crescent, Meols, Wirral, Merseyside, CH47 9RZ.

OS Grid Reference: SJ 23577 89484

The site address is No1 Barn Hey Crescent, Meols, Wirral, Merseyside CH47 9RN (East/north Location) 323577/389484). The current use of the site is a private residential dwelling. The proposed planning application is for a minor householder development for a rear extension (less than 250sqm) to the existing property. (So Application is 'FRA: STANDING ADVICE')

- The site is within Flood Zone 3 but benefits from flood defences - Grid Ref – SJ 23577 89484 (from ordnance survey map) (As identified on Environment Agency Flood Map).
- There is High Probability of risk of flooding from rivers and the sea and from surface water.
- There are flood defences protecting this area to 1 in. 100 (from river) & 1 in 200 or greater chance of flooding (from sea) - protection standard obtained from Environment Agency.
- The existing site level is 6.1m Above Ordnance Datum (AOD). (Level obtained from Environment Agency). Existing House ground floor levels are 6.25m AOD.
- In line with the Environment Agency's standing advice, the proposed floor levels are no lower than existing floor levels. The extension level will be the same as the existing house – 6.25m AOD.

FLOOD PROTECTION MEASURES

- Flood protection will be provided by the use of flood resistant construction methods for the first metre above floor level. Cavity wall construction with engineering brick outer face up one course higher than predicted flood level, close cell insulation and 3.5N concrete inner block. The extension will have an in situ 150mm thick concrete floor with a damp proof membrane of at least 1200 gauge lapped up side of inner block wall.
- Place fittings (e.g. electrics, sockets and fittings) will be raised as high as practical above floor to minimise the risk of being affected by flood water. All notifiable electrical installation work covered under Building Regulations Part P will be carried out by a competent person who is registered with an approved government scheme.
- Pipework to have closed cell insulation which are below the predicted flood level.
- Electrical services such as electrical sockets to be installed above flood level for ground floors to minimise damage to electrical services. Electric ring mains to be installed at first floor level with drops to ground floor sockets and switches.
- Heating systems: any new boiler units and ancillary devices to be installed above predicted flood level. Underfloor heating should be avoided on ground floors and controls such as thermostats to be placed above flood level. Conventional heating systems, e.g. hot water pipes are unlikely to be significantly affected by flood water unless it contains a large amount of salts.
- If relocated; water, electricity and gas meters to be positioned above predicted flood level.

- Communications wiring: wiring for telephone, TV, Internet and other services will also be raised above flood level for ground floors to minimise damage to services..
- Surface water will be discharged to the existing mains drainage arrangement as for the house.