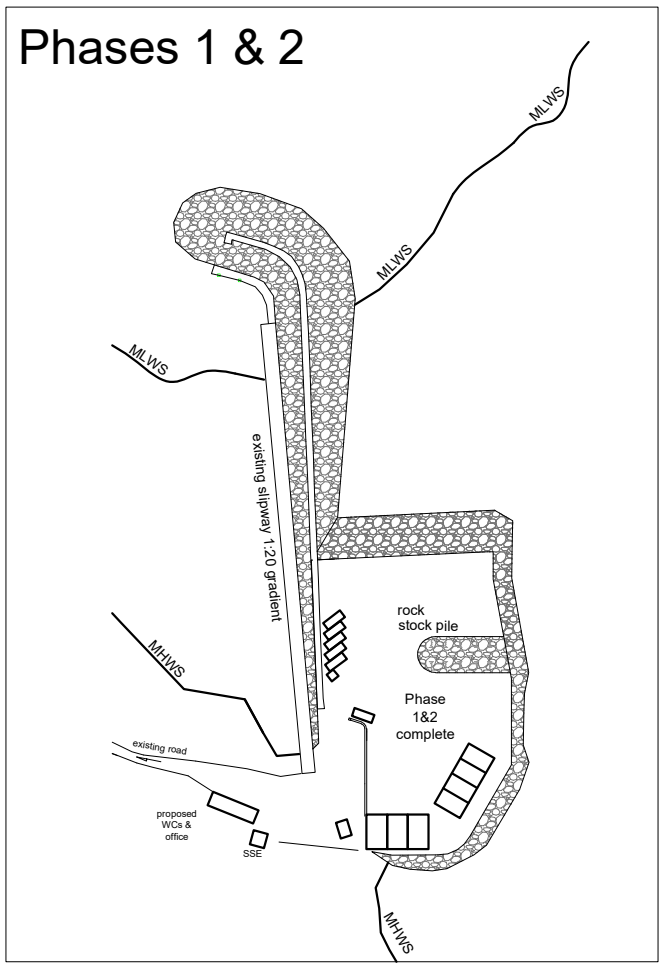
Staffin Harbour Project

Breakwater Construction Method Statement Rev 01 5/11/24

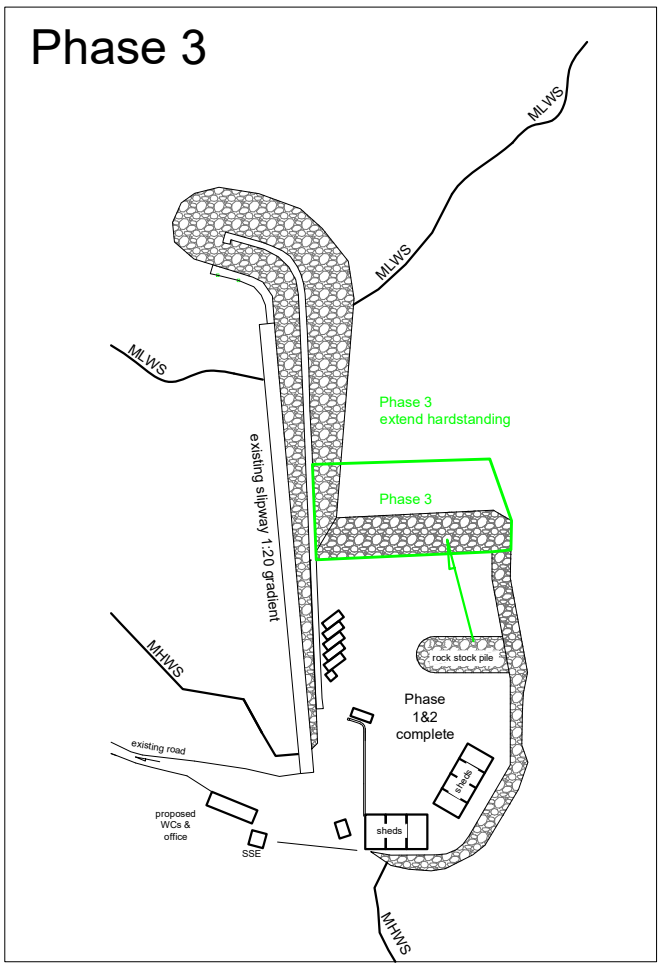
Construction phases 1 to 7

Phases 1 & 2



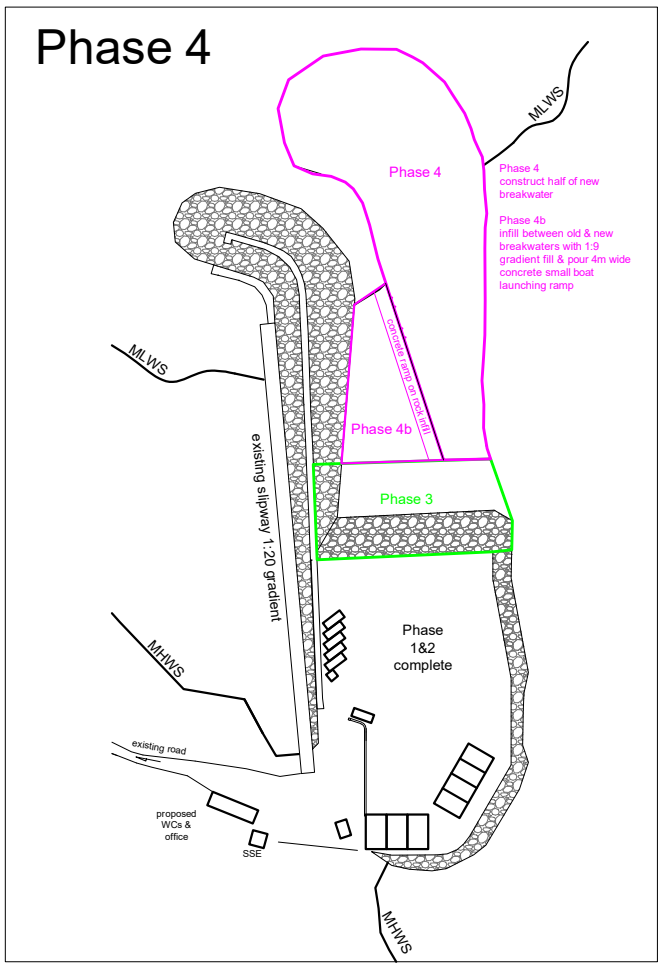
Existing harbour at 30/9/2024

Phase 3



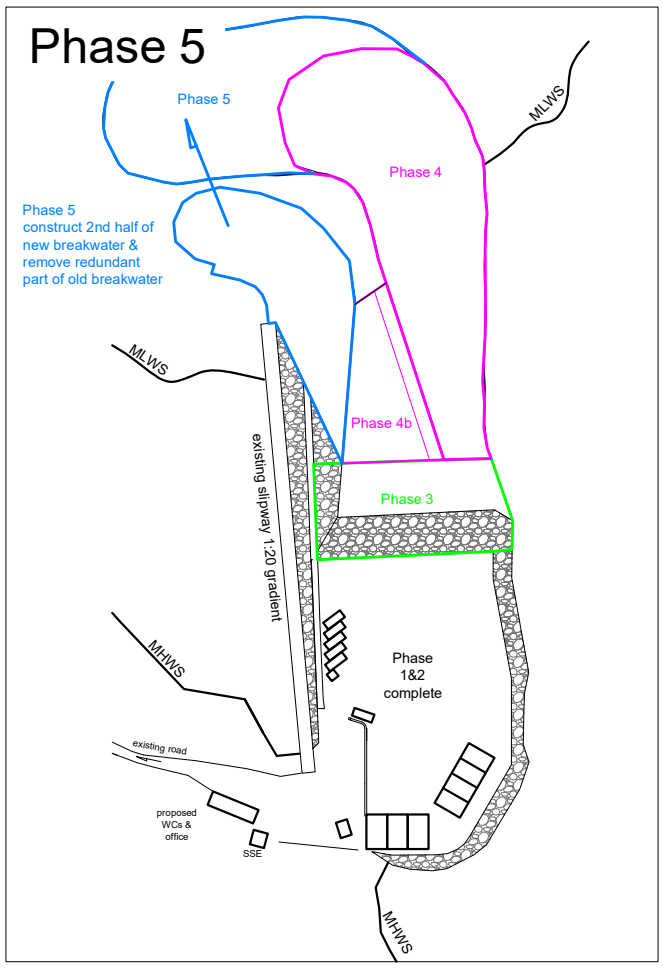
Hard standing extended to maximise area for storage and to prepare for later stages.
Rock armour bund placed around outer edges at low tide prior to infill with smaller materials & fines.

Phase 4



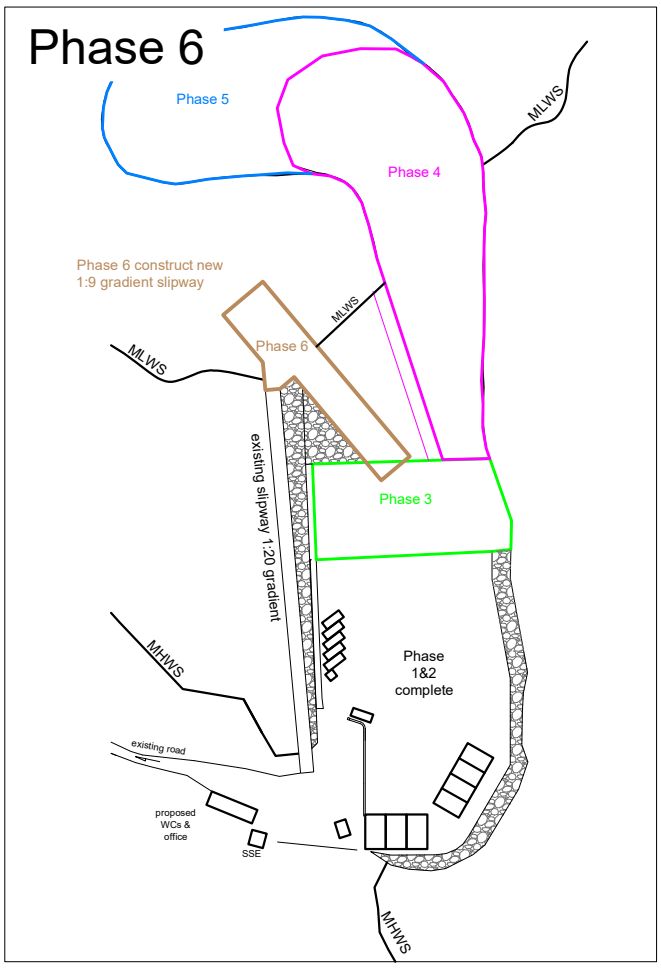
Build first half of new breakwater to protect existing breakwater from increased risk of sea level rise & storm damage. Rock armour bund placed around outer edges prior to infill with smaller materials & fines. Rock breaking to form toe trench only carried out in calm weather to minimise agitation and spreading of fine materials.
Infill between breakwaters at 1:9 gradient rock fill to prepare for new slipway (phase 6) and form small 1:9 gradient concrete launching ramp for small boats.

Phase 5



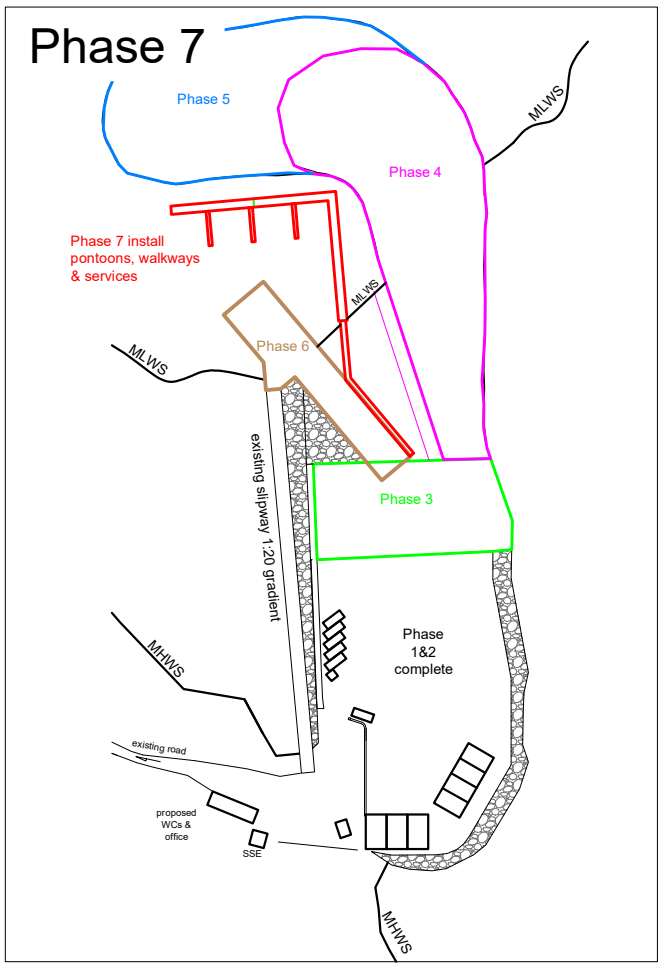
Build second half of new breakwater and dismantle old breakwater, reuse all materials in new breakwater.
New breakwater will shelter vulnerable dismantling works from northerly storms and reduce risk of washout of fine materials as they are removed from old breakwater.
Rock armour bund placed around outer edges prior to infill with smaller materials & fines. Underwater rock breaking to form toe trench only carried out in calm weather to minimise agitation and spreading of fine materials.

Phase 6



Build new concrete slipway in shelter of new breakwater. New slipway connected to existing slipway. Breakwater will reduce risk of washout during slipway construction & protect completed works from storms. Lower end of new slipway (from +2m CD down to 0m CD) to be pre-cast concrete units to avoid wet concrete below MLWN.

Phase 7



Install floating pontoons with precast concrete mooring blocks & chains & access walkways in shelter of new breakwater for secure mooring of boats with all weather shelter and safe crew access on & off boats.
Breakwater will protect completed works from storms & predicted sea level rise.

Notes;
The proposed works must be constructed in accordance with Marine licence ref MS00010741, and planning permission ref 24/01031/FUL and any plans or programmes approved. See attached BWCMS & CEMD for full details. All works to be monitored by ECOW.
Weather, swell & tide forecast monitoring to be carried out every week using multiple sources such as www.windy.com, www.xcweather.co.uk, www.willyweather.co.uk, amongst other sources and reported to main contractor & site manager weekly. Any north or east swell forecast with period > 10 seconds to be highlighted and measures taken to minimise risk of washout of fine materials in & above tidal zone, i.e. placing of rock armour over exposed fill material for duration of northerly swell with period > 10 seconds. Note northerly & easterly swell may continue for considerable time after wind has abated.

Drg. No. JG5739	Rev: 01	Date: 5.11.2024	Drawn JG	Chk'd MH