**Specification – Concrete slab extension for shed**

Council of the Isles of Scilly wishes to contract a single provider to construct at the Porthmellon Waste Site an extension to an existing concrete slab for a shed and to provide drainage.

The existing concrete slab is adjacent to a large shed. The new shed will be larger than the existing concrete slab, so the slab needs to be extended to accommodate this. The slab also will be extended to provide solid access for vehicles from the shed to the edge of an existing unsurfaced track.

The layout for the new concrete slab and drainage is contained in the illustration underneath (Figure 1).

The new concrete slab wraps around the existing concrete slab on 3 sides, with a section to the north, east and south. The new concrete slab will be 0.1 m thick to match the existing. It should be underlain by impermeable membrane and founded on appropriate material to match the existing.

The new sections of reinforced concrete slab should be keyed into the existing slab with dowel bars 32 to 38 mm diameter, 460 mm long (ie, 230 mm deep drilled and epoxied into the old slab and 230 mm deep set in the new slab), spaced at 305 mm centres along the slab edge.

The concrete slab will experience vehicle traffic by fork-lift trucks and front-end loaders and loading of heavy equipment on the slab. The concrete reinforcing spacing must be chosen to suit these loads.

At the southern edge of the slab a D400 drainage channel must be fitted to drain stormwater from the concrete slab and roof runoff to a B125 pipe on the eastern side of the shed. The B125 pipe will drain to the adjoining leat at the northern side of the shed foundation slab.

An existing hole 200 mm in diameter, 100 mm deep already present in the southwest corner of the existing slab must be filled with concrete and smoothed off to the level of the surrounding existing slab.

An existing bore inspection hatch situated about 1 m northeast of the existing slab must be incorporated into the new slab in such a manner that the hatch continues to be available for use from inside the shed, once constructed.

