

Presentment by Peter J Clark BSc. FICE. FCGI. Consulting Engineer.

To The Verderers on 19.10.2016

Concerning works both proposed and already carried out as part of the HLS

This presentment addresses the physical impossibility of the Verderers satisfactorily accomplishing the works proposed to be carried out by their agents on the Latchmore Brook.

The project depends on importing hoggin and other materials to be used to raise the level of ground adjacent to the brook, and to redirect parts of the brook over such ground. There are very strong reasons to advise that this work will fail, with the imported materials being washed away by the very strong flood flows which occur regularly on this stream.

The ground through which the stream flows has been consolidated by a heavy overburden of material which is long since gone. It is extremely densely packed, very strong, and highly resistant to erosion.

In contrast, the proposed cap material cannot be constructed to a strength and density and resistivity sufficient to prevent it from being washed away. This will result in loss of any value the Verderers may have hoped to gain from the expenditure of a great deal of public funds, and will leave behind scars on the fabric of the New Forest which will take hundreds of years to heal.

The reasons why the cap will be too weak are as follows;

Clay in the ground has been consolidated by a high overburden pressure applied over a very long period, in conditions which have allowed pore water to drain out. Reworked clay used as a construction material, as in this application, is a quite different material. It has lost its strength and durability.

Hoggin is a mixture of gravel and fines. It is not graded and it is not a consistent mix and this means that even in ideal conditions it does not lend itself to compaction, when it is used in the way specified in this project. The structure will be porous. The fines will be held too loosely and will be washed away.

The problem on these sites is compounded by the variability of the ground underlying the fill - and by the equipment which has been provided to attempt compaction.

Within the budgets available there is no way that the problems described can be overcome, and it is my strongest advice to the Verderers that they should not persist with this scheme which is doomed to failure.