LAND PAC

BS 2010/003

BENEFIT STATEMENT

Costing Analysis

MARKET SECTOR

Multiple Industries

APPLICATION

Deep In-situ and Thick Lift Compaction

PROJECT PHASE

Design and Construction Phases

costing review following deep in-situ and thick lift impact compaction

STATEMENT REVIEW

This statement is not applicable to a single project but the costing analysis could easily be linked to most projects and applications.

Example 1

ORIGINAL CONSTRUCTION METHOD DESIGN

The design request is as follows:

- Clear and Grub.
- Excavate to 1m below surface to stockpile.
- Level and compact in-situ surface.
- Reintroduce stockpiled material in 200mm layers.

ALTERNATIVE CONSTRUCTION METHODOLOGY

The alternatuive construction method is as follows:

- Clear and Grub.
- Compact directly on the surface without any excavation with a 25kJ Impact Compactor with a minimum of 30 roller passes.
- Compact with a smooth drum vibratory roller, minimum of 4 roller passes.

UP TO 70% COST SAVINGS.

Example 2

ORIGINAL CONSTRUCTION METHOD DESIGN

The design request is as follows:

- Clear and Grub.
- Excavate to 2m below surface to stockpile.
- Level and compact in-situ surface.
- Reintroduce stockpiled material in 200mm layers.

ALTERNATIVE CONSTRUCTION METHODOLOGY

The alternatuive construction method is as follows:

- Clear and Grub.
- Excavate to 1m below surface.
- Compact the in-situ with a 25kJ Impact Compactor with a minimum of 30 roller passes.
- Re-introduce the stockpiled material in a single 1000mm layer and treat with a 25kJ Impact Compactor with a minimum of 20 roller passes.
- Compact with a smooth drum vibratory roller, minimum of 4 roller passes.

UP TO 52% COST SAVINGS.

SUMMARY

- Reduction in excavation costs and time.
- Reduction in material to be stockpiled.
- Reduction in compacting layers.
- Reduction in water requirements.
- Time and Cost Savings.