

Site Process Instruction (Method Statement)
Prepared for:- *Quality Construction Co*

Note

This site process instruction includes the use of soil stabilisers in all backfill up to permanent reinstatement levels, i.e. : 60mm from the surface in bitumen macadam footpaths. Underside of existing in rigid and modular footpaths. All tests indicated as per N.R.S.W.A. suitability of materials field tests.

General Instruction

All operatives will be trained and conversant with the application of Perma-Soil Soil Stabiliser as stated below. All operatives will have one N.R.S.W.A. Qualified person in the team.

Perm-Soil / Soil Stabiliser Instructions

1. Material Sampling

Remove the surfacing material. The risings shall be sampled as the first few shovel full's are removed from the excavation and being placed on the site protection board or sheet, as per the training received from Perm-Soil U.K. Should the material type change during excavation repeat sections 2 & 3 below and amend the ratio of Perma-Soil as per section 4 below if necessary.

2. Determine Suitability of Material to be used as Backfill as per N.R.S.W.A. Training

- I. Granular
- II. Sand
- III. Clay etc.

(See Inspection Criteria IC/001)

3. Examine moisture content

- I. Dry
- II. Wet
- III. Very Wet

(See Inspection Criteria IC/002)

4. Establish Soil Stabiliser Ratio from Results of 2 and 3

- I. Normal ratio / cubic yd excavated approximately
Granular / Moist Spoil 1 x 25 kg bucket
- II. Clay / Wet Spoil 2 x 25 kg buckets

(See Inspection Criteria IC/003)

5. Mixing Procedure (For Small Excavations)

- I. Apply the required amount of Perma-Soil Soil Stabiliser to the spoil as it is being excavated and placed onto the site protecting boards or sheets, ensuring an even distribution, as demonstrated during the training received.
- II. Any materials over 3ins (75mm) is to be broken down into smaller pieces or removed from site.
- III. Allow time for the Soil Stabiliser to react with the spoil.
- IV. Treat sides of the excavation with Perm-Soil.

6. Establish when the material is ready for Compaction

Gather a small quantity of treated material in the hand and squeeze into a ball. Drop to the floor from waste height. The material should break into three or four pieces.

Note

Remains Solid Allow more time to cure, or add more Perma-Soil and repeat test.

Shatters Add small amount of Water.

(See Inspection Criteria IC/005)

7. Compaction and Backfill

All N.R.S.W.A. criteria to be followed, i.e. number of lifts, passes, other apparatus etc. Where soils are mainly clay in nature approximately two half cwt sacks of 803 stone can be mixed into the lift, to give added binding properties. (Based on a 1 cubic yard excavation).

(See Inspection Criteria IC/005)

8. Suitability for Reinstatement

When the final lift is complete a Clegg Hammer should be used, minimum reading of eighteen is required on fourth drop prior to reinstatement.

(See Inspection Criteria IC/006)

9. Unacceptable Clegg Reading

If the above in 8 is not achieved, then the immediate application of the wearing course must be postponed. This may require a return visit, effectively lengthening the curing period.

(See Inspection Criteria IC/006)

No operative will be expected to use Soil Stabilisers without specific training, and monitoring by an approved supervisor for a period of time to be determined by the instructor, i.e. the operative has understood and is conversant with the use of Soil Stabilisers and can achieve acceptable results.

QUALITY ASSURANCE
INSPECTION CRITERIA

<u>No.</u>	<u>Description</u>
001	Before any action is taken the type of soil must be determined. This will decide on the procedure.
002	Moisture content is not a precise science in the field. Experience, training and physical inspection is required to determine moisture.
003	General guidelines as detailed on the buckets or sacks, as well as training for stabiliser / spoil ratio must be established, to be considered with C/001 and C/002
004	A good explanation for mixing procedure is detailed in S.P.I.. If in doubt conduct "Usable Test".
005	Compaction to be observed / completed by a fully competent N.R.S.W.A. operative.
006	Under no circumstances should the final reinstatement be applied if the Clegg Hammer reading is not acceptable. The site must be made safe in accordance with N.R.S.W.A. and a return visit should be booked to complete the final reinstatement.