

Deerbolt Cottage, Riley Green. Hoghton. PR50SL

Historic Stonemasonry ~ Restoration Consultants & Stonemason Craftsmen

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Description of Proposed Works

Elevations: front, rear, rear side upper - Remove sand cement pointing. Manufacture, supply and apply- suitable lime mortar to close match existing fabric lime mortar

Summary Method Statement Bespoke lime mortar repointing to stonework

Manufacture, Supply

Bespoke Lime Mortar Natural Hydraulic Lime Mortar (Moderately Hydraulic)

- Samples of existing fabric lime mortar pointing/jointing compressional strength tested N/mm2
- b) Samples of existing fabric lime mortar pointing/jointing materials extracted, crushed and centrifuged to calculated volumised separates: sharp sands, river sands, fine sharp sands
- c) Separates and volumes used to reconstruct a similar lime mortar in strength texture and colour
- d) Automated, precision quantities manufacture of specialist, washed, dry blended fine and medium grain separates: sharp sands and pozzolan, supply of S.E. lime BS EN 459-1:2015. Ratio sharp sands:lime = 2.5:1
- e) Three day 50Kg cycle paddle mixing to bespoke lime mortar code F.3.5N/mm2 NhL at 28 days, Light oatmeal colouration upon final setting and natural physical and chemical weathering. 90 days to reach full compressional strength of 3.5N/mm2, against local fine Bowland sandstone, estimated current compressional strength over 60 samples: 15 to 20 N/mm2

Pointing Removal

Existing Building Sand & Portland cement pointing

Note 1

Existing sand cement pointing current field test hand held penetrometer readings compressional strength Range Readings of between >40 and >60 N/mm2

- a) Removal by hand tools: lump hammer and small scutch/blade chisels
- b) Removal to approximately twice width of mortar joint, as appropriate
- c) Galleting of stonework with Bowland sandstone walling stone where joints are excessively wide
- d) Wash stonework with moderate pressurised water spray and clean joints of debris using same.
- e) Take penetrometer readings to establish compressional strength of existing fabric lime mortar
- f) Fine spray existing fabric lime mortar at regular intervals to reactivation of current existing fabric lime mortar

Pointing Application

Natural Hydraulic Lime Mortar (Moderately Hydraulic) Code F.3.5N/mm2 NhL

- g) Repoint joints with F3.5N NhL using fine hand pointing tooling.
- h) Compression jointing of lime mortar by fine hand pointing tooling
- i) Finish pointed, compressed lime mortar by tamping into joints with coconut churn brush.
- j) Fine mist newly applied lime mortar at regular intervals throughout works, paying particular attention to changing ambient temperatures and humidity.
- k) Hessian walls for 20 days/longer as needed to newly pointed stonework joints as work progresses, paying particular attention to changing ambient and at stonework temperature and humidity.

Notes 2

- Mortar fleece sheeting to scaffolding to deflect sunlight and retain humidity
- Hessian applied to cover stonework, during initial set and 14 days thereafter/longer, paying particular attention to changing ambient temperature and humidity
- Observe, as appropriate, English Heritage Guidelines HEAG144 Repointing Brick and Stone Walls



IMAGES





