The Repair of Stone Walls

Moisture

As with rubble walls and brick walls, surfaces should be examined for evidence of water penetration, usually leaks or damp ground. These should be corrected before other work begins. (See guidelines for rubble masonry and brick as well.)

Outward-leaning Walls

If a wall is leaning outward or shows other signs of falling, the wall may be tied using stainless steel ties and anchors. Otherwise, the foundation should be reinforced, often to the point of providing a new concrete footing. In some cases the wall may have to be rebuilt. If this is done, care must be taken to duplicate the original appearance of the wall.
Cleaning and Repointing

Stone walls rarely need to be cleaned, but often need repointing. If the mortar between the stones is loose, this should be removed with a chisel and fresh mortar put in its place. Modern Portland cement should not be used for this purpose, as it is too hard for the soft limestone around it.

Efforts should be made to duplicate the finish of existing stone walls. As with brick repointing, joints should be raked out to 2 1/2 times their width and packed with an appropriate mortar. Concave joints are usually preferable. Do not feather edge as in the top example.

A coat of lime wash can help to protect the surface of stone structures such as these.

Proportioning

A) 1 part white Portland cement; 5 parts lime; 9-10 parts sand, recommended mix. A higher lime content is also possible and in many cases desirable.

B) Sample areas should be tested and examined by the architect or supervisor prior to settling on the final mix. (See the guideline for brick walls for more complete instructions.)

Following repointing, a thin coat of lime wash is highly recommended. This coat, being composed of the same material as the wall, will not affect its appearance, but will help to protect from rain and pollution.

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