DALE STREET – METHODOLOGY
PLANNING CONDITION REFERENCE 7B

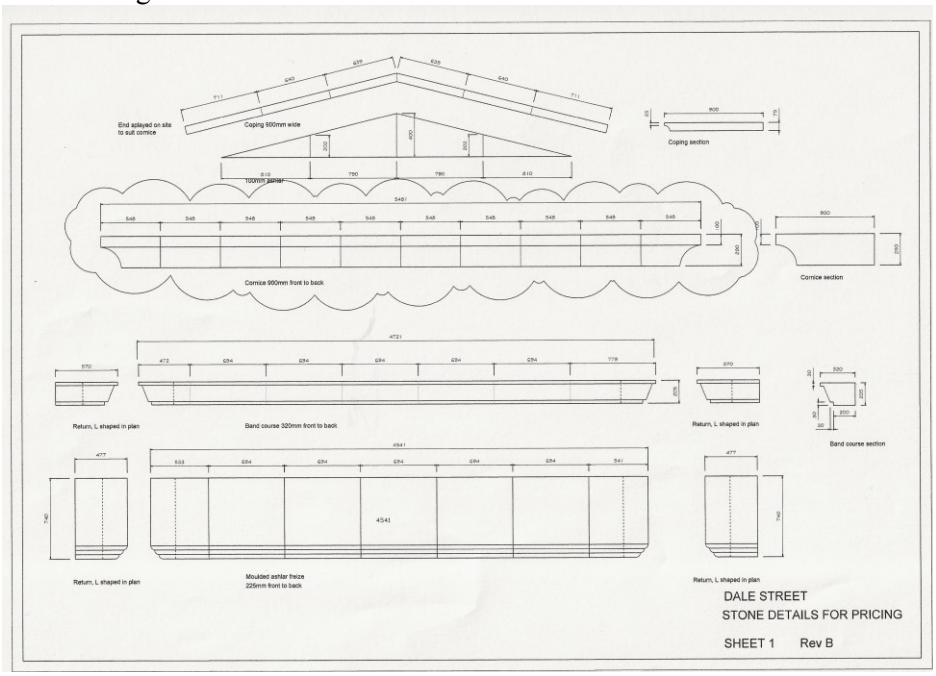
Stonework Methodology

Material Specification – Arenisca De Quintanar



REFERENCE 1 – Pediment Stonework

The top of the existing façade is to be finished by means of constructing the new stonework pediment as per drawing reference 6017. The pediment stonework is to be split into manageable sizes as per the image below which will be fixed into the main building by means of detailing as agreed by the schemes appointed structural engineer.



Reference 1 – Pediment Sizing Detailing

REFERENCE 2 – String Courses



Reference 2 – Replace Missing Stone String Course

All areas of existing stonework will be cleaned down with a doff cleaner and de-frazing tool so that all loose material will be removed. Once all loose material has been removed the process of pointing and making good may commence.

The Missing Band / String course is to be laid on a Natural Ironstone lime mortar bed on top of the new brickwork lining through with the old existing stonework. Once in place all joints will be finger trowel pointed with Saint Asty Lime Mortar / Leighton buzzard sand to achieve a consistent finish and blended in with the existing pointing.

REFERENCE 3 – Buttress's



Reference 3 – Replace complete buttress to match existing

The above buttress located to the left hand side of the existing facade will be mirror imaged on the right as seen on drawing reference 6017. All brickwork recessed panels will be achieved following the character of the existing brickwork and all flemish bond brickwork will mirror each other so that all existing features follow through.

REFERENCE 4 – Stone Descaling



Reference 4 (1) – Descale Stone

All areas of existing stonework will be cleaned down with a doff cleaner and de-frazing tool so that all loose material will be removed. Once all loose material has been removed then the process of pointing and making good will begin. All joints will be finger trowel pointed with Saint Asty Lime Mortar / Leighton buzzard sand to achieve a consistent finish and blend in with the existing pointing.



Reference 4 (2) – Descale Stone

Where sections of the stonework have started to de-laminate or weather badly, the shape of any mouldings can be brought back into definition by light masonry tooling and reworking. Any tool marks should be rubbed out with progressively finer carborundum stones. Wooden or metal straight edges should be used to ensure masonry lines do not deviate too much from the original. Areas of flat ashlar that are descaled must have the bottom joint weather struck to prevent rainwater pooling on the bottom edge.

REFERENCE 5 – Stone Indents



Reference 5 (1) – Stonework Indents

All indents in stonework will be cut back and a new piece of stonework formed and dressed to match the existing mouldings. Once this has been achieved the new stone work will then be dowelled with stainless steel fixings and resined into position. The face will then be sanded and polished to an appropriate finish. The brickwork will be toothed back and all new brickwork installed to match the existing this will be inserted to form the new column detail which will form the vertical datum up the building so that all new interfaces abut the façade as per the architect's front façade elevation drawing.



Reference 5 (2) – Stone Indents

All areas of existing stonework will be cleaned down with a doff cleaner and de-frazing tool so that all loose material will be removed. Once all loose material has been removed then the process of pointing and making good will begin all joints will be finger trowel pointed with Saint Asty Lime Mortar / Leighton buzzard sand to achieve a consistent finish and blend in with the existing pointing.



Reference 5 (3) – Stone Indents

All Indents in Stonework will be cut back and a new piece of stonework formed and dressed to match the existing mouldings. Once this has been achieved the new stone work will be dowelled with stainless steel dowels and resined into position once set the face will then be sanded and polished. The brickwork will be toothed back and all new brickwork installed to match the existing this will be inserted to form the new column detail which will form the vertical datum up the building so that all new interfaces abut the façade as per FCHs front façade layout.



Reference 5 (4) – Stonework Indents



Reference 5 (5) – Stonework Indents



Reference 5 (6) – Stonework Indents



Reference 5 (7) – Indent in Stonework

All Indents in Stonework will be cut back and a new piece of stonework formed and dressed to match the existing mouldings. Once this has been achieved the new stonework will be dowelled with stainless steel dowels and resined into position. The face will then be sanded and polished. There will also be some fine indents throughout the façade that will be filled with a mortar repair and sanded.

Indenting should only be undertaken by experienced stonemasons. Operatives should be fully aware of the constraints imposed when working on listed buildings.

Where stone indents are required the damaged areas should be cut out cleanly, paying particular attention to squaring reveals as these will be used for packing and pointing the new indents. Damage to adjacent blocks must be avoided. Mouldings on string courses and cornices must match the original exactly and not be copied from weathered masonry. Depending on the location of the indent, different strategies will be employed for fitting. Ashlar blocks for example, must have at least 75mm bed width and can be fixed using lime mortar with slate packing's. Moulded and under hanging sections may require the additional support of non-ferrous fixings (note, any drilling into new or existing stone work must be carried out with great care).

The thickness, length and quantity of any fixings must be adequate to support the load it is retaining. All dowelling must be permanently fixed with a two-part polyester resin suitable for the location. Stone indents to be finished true and in line with the surrounding masonry with joints similar in width to the surrounding blocks. Joints to be packed tightly with slate and finished with the appropriate pointing mortar. Any mortar splashes to indents and adjacent masonry must be removed immediately and the whole area left clean and tidy.

REFERENCE 6 – Rework Voussoir



Reference 6 (1) – Rework Voussoir



Reference 6 (2) – Rework Voussoir

All areas of existing stonework will be cleaned down with a doff cleaner and de-frazing tool so that all loose material will be removed. Once all loose material has been removed then the process of pointing and making good will begin all joints will be finger trowel pointed with Saint Asty Lime Mortar / Leighton buzzard sand to achieve a consistent finish and blend in with the existing pointing.

REFERENCE 7 – Rework Ashlar Face



Reference 7 (1) – Rework Flat Ashlar Face



Reference 7 (2) – Reworking Ashlar Face

Reworking the ashlar face will be carried out by the means of a two-part mortar repair material which will be applied and sanded to an acceptable finish in appearance and colour to the existing stonework.

All areas of existing stonework will be cleaned down with a doff cleaner and de-frazing tool so that all loose material will be removed. Once all loose material has been removed then the process of pointing and making good will begin. All joints will be finger trowel pointed with Saint Asty Lime Mortar / Leighton buzzard sand to achieve a consistent finish and blend in with the existing pointing.



Reference 7 (3) – Rework Flat Ashlar Face



Reference 7 (4) – Rework Flat Ashlar Face

All Indents or broken pieces of stone will be cut back and a new piece of stonework formed and dressed to match the existing mouldings. Once this has been achieved the new stone work will be dowelled with stainless steel dowels and resined into position once set the face will then be sanded and polished.

REFERENCE 8 – Existing Metalwork



Reference 8 (1) – Existing Metalwork Removal



Reference 8 (2) – Existing Metalwork Removal



Reference 8 (3) – Existing Metalwork Removal

Once all metalwork has been removed we will clean down all areas and cut and fill the indents left behind with a new piece of stonework which will be dowelled if necessary or resined into position. This will then be sanded and blended in with a two-part repair mortar so that the appearance/colour is of a suitable finish.

All metalwork including fixings attached to the existing stonework is to be removed as part of the repair works the entrance façade. All necessary remedial works are to be carried out to the applicable areas once the fixings have been removed.

Repointing

Effort should be made to match the original pointing mortar by removing samples from various locations around the building and matching from local sands from within the area or sending to a specialist mortar manufacturer to be replicated. Samples should be approved before work commences.

Repointing should only be undertaken by operatives experienced in using lime mortar products. No pointing to take place if temperature is below 5 degrees celsius or above degrees celsius. Joints should be cut out by hand, to a depth twice the height of the original, and no more than 25mm deep. Joints should be flushed out with clean water prior to re-pointing and should be damp as the new mortar is applied. Mortar to be packed tightly into open joints with an appropriately sized pointing trowel, taking care not to spread excess mortar onto the adjacent stone / brick work face. Any excess mortar should be removed immediately. After the initial set, mortar should be tamped into the joint using a stiff churn brush, and finished afterwards using a soft hand brush. After brushing, the joints should be lightly sprayed with clean water and covered with hessian depending on weather conditions.

Brickwork Methodology

Material Specification – Berkeley Commercial Red



REFERENCE 1 - Removal of Existing Brickwork Column



The above photo of the existing brickwork pier (hatched in red) under drawing reference 6023 is to be removed and reconstructed as per the area highlighted in blue. The removal of this pier is to allow for a concise construction detail between the existing façade and the new office block / retail space.

REFERENCE 2 - Existing Brickwork Piers



Any areas of efflorescing brickwork are to be cleaned by means of doff cleaning to the satisfaction of the conservation officer. Damaged brickwork is to be replaced in its entirety with new.

REFERENCE 3 - New Brickwork

All existing brickwork will be surveyed thoroughly in conjunction with the conservation officer and all damaged areas of brickwork will be broken out and new bricks inserted to match the existing Flemish bonded brick façade. Once all bricks have been completed to a finished state acceptable to the conservation officer then the brickwork will be tinted to match the existing bricks so that all areas of the façade match throughout.

REFERENCE 4 - Repointing

Effort should be made to match the original pointing mortar by removing samples from various locations around the building and matching from local sands from within the area or sending to a specialist mortar manufacturer to be replicated. Samples should be approved before work commences.

Repointing should only be undertaken by operatives experienced in using lime mortar products. No pointing to take place if temperature is below 5 degrees celsius or above degrees celsius. Joints should be cut out by hand, to a depth twice the height of the original, and no more than 25mm deep. Joints should be flushed out with clean water prior to re-pointing and should be damp as the new mortar is applied. Mortar to be packed tightly into open joints with an appropriately sized pointing trowel, taking care not to spread excess mortar onto the adjacent stone / brick work face. Any excess mortar should be removed immediately. After the initial set, mortar should be tamped into the joint using a stiff churn brush, and finished afterwards using a soft hand brush. After brushing, the joints should be lightly sprayed with clean water and covered with hessian depending on weather conditions.