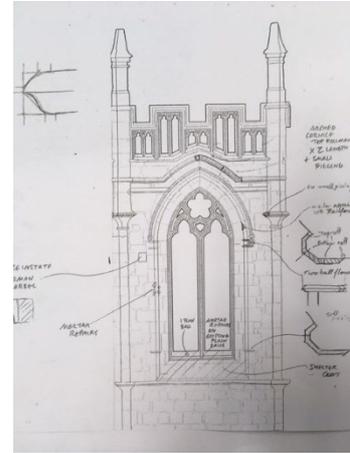


Martin Gwilliams
Progress update July 2020

Window of opportunity

It has been another encouraging month for Martin as he has continued learning and putting into practice new skills alongside developing others he has already gained. There has been plenty for him to get on with.

Martin writes: At the beginning of the month Pascal gave me an 18-point To-Do list of work-based activities for me to undertake, all concerned with the 14th century window in the north ambulatory apsidal chapel. The tasks range from cutting out, making, and fixing the convex hood mould, to some simple mortar repairs to the jambs.



Stone dentistry



My first task was to cut out the old stone of the hood mould. I applied the templates that I previously made to the front of the old stone and drew a pencil line along the bottom bed so I could see the height to which I needed to cut out the old stone. To guide me in the process of cutting out I made two templates of the new stones which will be required. As I was removing the old stone I put the templates into the 'pockets' which I created so that I could gauge the height, depth and angle of the spaces I was making in order to fix the new stones at a later stage.

I calculated the depth of the new stone and initially used a drill to make holes in sections of the old stone to the prescribed depth. These incisions made it easier to cut out the old stonework. For the cutting out I used a variety of chisels, a hammer, a mallet, and an air gun with different chisel attachments, for example, punch and claw. I made a series of pockets in the old stonework and then joined these up by removing the remaining stone in between each section. This helped to maintain the shape of the concave curve of the hood. Task one done; onto the next one!



Made to measure

One of the elements of stonemasonry that Martin particularly enjoys is taking the measurements of old stones in order to create new ones. He has previously described this as being like detective work.



He writes: With my toolkit of dividers, callipers, tape measures, rulers, bevels, a profile gauge, paper and pens I set about taking the various measurements I needed from the capital on the right hand side of the window and from a missing corbel on the left hand side.

During the next few days in the workshop I used the carefully recorded dimensions to create full size drawings of these two components. For each of them I made a rough outline of the stone and noted the measurements on each drawing including the various angles of the stones. In order to gain a full picture of the stone and the mouldings the rough drawings include aerial, face and side profiles.

On the capital I will only be restoring portions of the two polygonal fillets - small projections – which includes a modest cyma recta profile. Pascal told me that it is always good practice to record and show such modest ‘piecings’ - portions of the whole stone - in the context of the whole stone so my drawing included profiles of the whole capital.



I will be restoring the whole of the corbel as this has worn away completely. What is left is a concave weathered surface on the face of the old stone. The corbel indicates where the roofline of this part of the Norman abbey once was. The parapet and the 14th century window were both later additions to the church. As the profile of this stone is fully worn, I had to base my detective skills for recreating the new one on the dimensions gained from a row of five other corbels on elevation one, a little further round the left side of the chapel.

With the dimensions and measurement recorded for the capital and corbel, I headed back to the workshop to create the drawings from which I will later make the new components of each stone. Two more tasks done – next!

Good stock

Over 80 different types of stone have been recorded in the fabric of the Cathedral. In more recent times the masons have been using two types for repairs and restoration: Lepine, also known as Lavoux, and Beaunotte.

Martin writes: The hood mould is designed to protect the stonework of the window below by throwing off water when it rains. It needs to be made from a suitably hardy type of stone which is slow to decay from weathering and Beaunotte is perfect for such conditions. I selected my stone from the stock in the yard and I was then introduced to the large saw in the saw shop. Following careful induction by Pascal I found that this beast of a machine cuts with gentleness and precision. Using the templates I had made earlier, I marked them out on each stone so I knew where to make the necessary cuts. Before slowly doing the cutting I laid the stones on some 'skids' – wooden bearers - adjusted the saw, and using the laser guide, lined up each stone. After a final double check by eye I started up the saw with the water running to keep the blade cool. I carefully made a series of cuts in order to achieve the rough sizes. Another job done! I cleaned up the debris and water in the saw shop. I put the stones to one side, ready for working later in the month. On to the next job...



More cement

Not on my To-Do list, but I'm always happy to do what I can. The marathon task of cutting out the cement mortar from the joints of the stonework on the north ambulatory, which began in June, continued for about another week. Two chisels split under the pressure of the hardy cement. The joints are now open and ready for repointing with lime mortar. I really like repointing with the lovely rhythm of taking the mortar from my hawk with my trusty pointing tool, pushing it gently but firmly into each joint and repeating this until each joint is full. We leave the mortar slightly proud of the face of the stone and 'knock' and scrape it back as part of the process – sheer poetry!

Working stone

In the penultimate week of July, Martin was finally ready to begin the working of the stones for the hood mould.

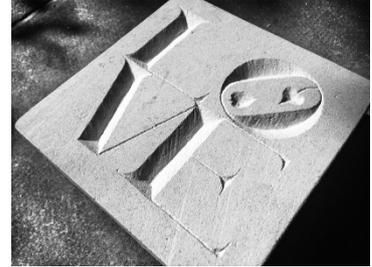
Martin writes: I began by applying the templates I had previously made to the stones I had cut on the large saw. To set out the prescribed arc of the hood I applied the face template and for the moulding, the profile section of the left and right sides. I began by removing the stone, making drafts along the plane of each in order to reveal the profile. I am now at the stage of removing the waste between each draft, bringing out the shape of the component. I've made a small dent in my To-Do list, but the jobs continue...



Keeping up

The weekends have afforded Martin time to keep up with some of the crafting he did during his time on furlough, letter cutting in stone and calligraphy.

He writes: Earlier this month I attended my first post-lockdown wedding. I was one of a handful of guests in the splendidly cavernous nave of Guildford Cathedral. The service was an intimate affair in such a vast space and a fine and fitting occasion, albeit without any live singing. The couple's happy day had provided me with an opportunity to create a suitable and personal gift in stone. I wish them all the very best.



Martin already has plans for his next letter cutting projects and says he is always available for commissions!