School of Applied Sciences

My Undergraduate Placement

My placement involved me assisting Harry Manley with the digitising of site plans and drawings from an archaeological site, with prominent use of the programme ArcMap.

Rosemary Helen Mayne

BSc Hons Archaeological, Anthropological and Forensic Sciences

Student Ref; 4332382 (i7944093)

The Process of Digitising;

In order to create the working map I had to create an index within Excel which could be used to locate the drawing number of the pit and the relevant important information.

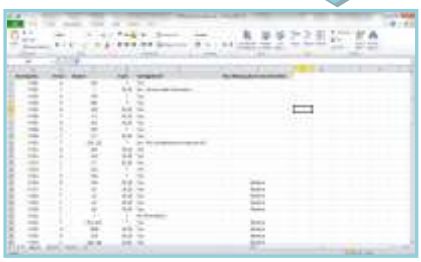

Figure 1; Drawing Index.

After I was done with filling in the drawing index I started 'sketching' and 'geo-referencing' the archaeological pits. To do this I imported the cropped plan image into my DBD12 Plans ArcMap file, and then using the geo-reference tool I matched up points that had been drawn on the plan drawing with the co-ordinates of the map. The co-ordinates were taken on site using a total station and recorded onto the plan drawing. This meant all I had to do was input them and make sure the aspect was correct.

Figure 2; Geo-referencing.

After the drawing was correctly geo-referenced, I was able to 'sketch', using multiple points around the edge, the outline of the pit to create the digitised copy.

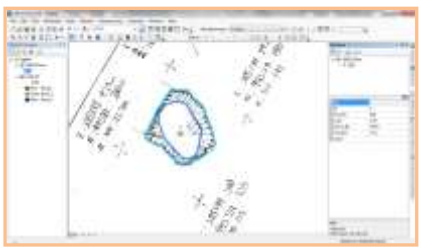

Figure 3; Adding Attributes and 'sketching pits.

By adding attributes to each 'sketch' such as feature number, whether it is the top of a pit or bottom and the scale of the pit. When a 'sketch' is highlighted, such as the blue highlighted pit in the centre, it brings up a list of attributes. This function can help identify pits and locate their plans and to study their relation to surrounding pits or the whole site itself. By adding these attributes a simple query search of 'Feature Number; 524' would highlight this pit.

I repeated this process for the DBD09 Plans, and once I was finished I was able to import the DBD09 Plans into my DBD12 Plan file to see how the two relate to each other and the site.

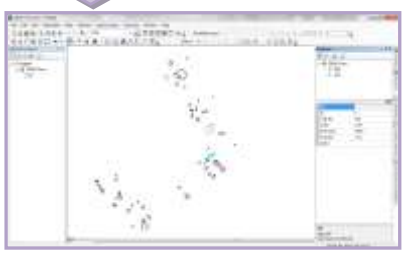

Figure 4; Attribute Function and simple query search.

Applications of the Digitised Map;

This digitised map would then be used as the reference for the Durotriges Archaeological site. This is because each individual digitised pit would have attributes which you could query. These attributes were; feature number, the top and bottom of the pits and who digitised them. This would help people identify individual pits and see their relation to the site as a whole and gain more insight on this archaeologically important site. This map is now a useful tool in studying the Durotriges Archaeological site as archaeologists can now search for individual pits and find out their shape and interpretations just by using this map instead of having to look through plan drawings and handwritten indexes.

Reflections on My Placement;

From this placement I learnt a wide selection of skills, ranging from computer based skills to communication necessities. Most importantly I learnt how to use a multitude of archaeological based computer software with heavy emphasis on ArcMap, which I had never used before this placement. I am very happy with this experience and the skills it has provided me with and will be glad to tell people that I am able to convert hand drawn images, which were recorded on site, into digital maps in ArcMap that can be queried and searched through. I feel this is important as it lets Archaeology progress into the 'Computer and Digital Ages' rather than keep it in the old fashion 'Hand-drawn Era'.