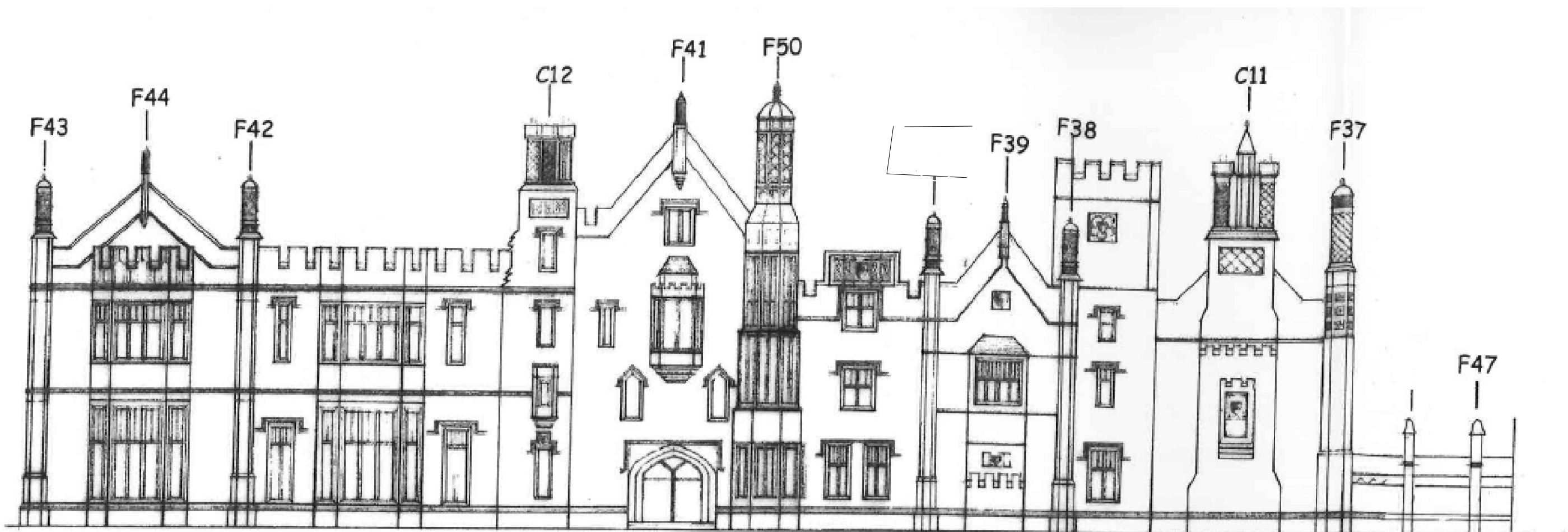
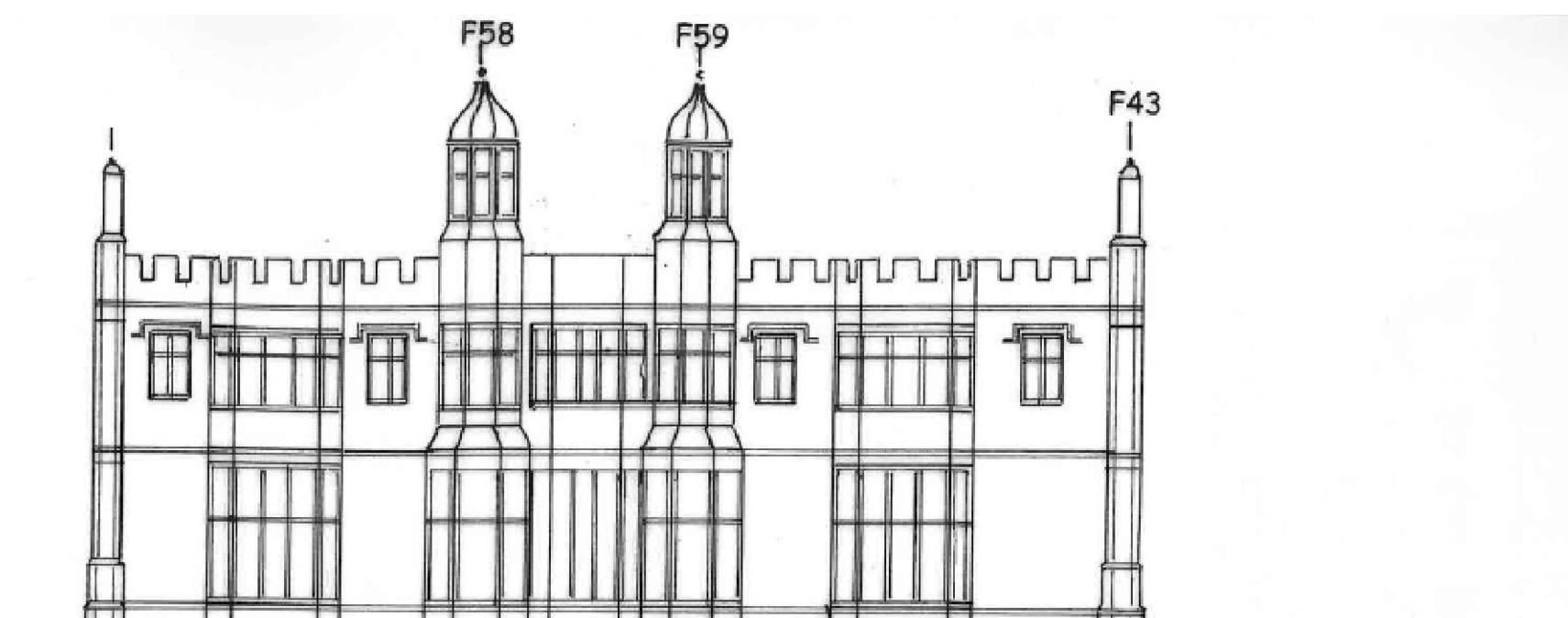
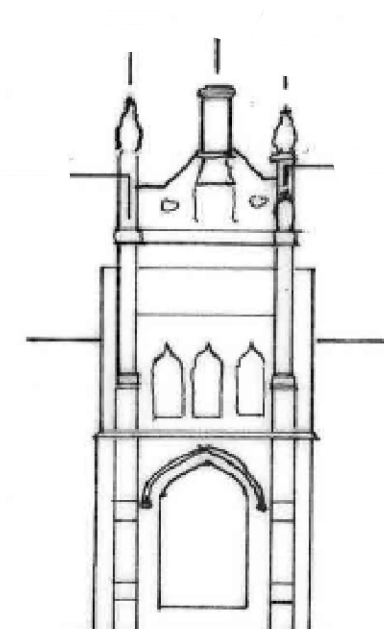
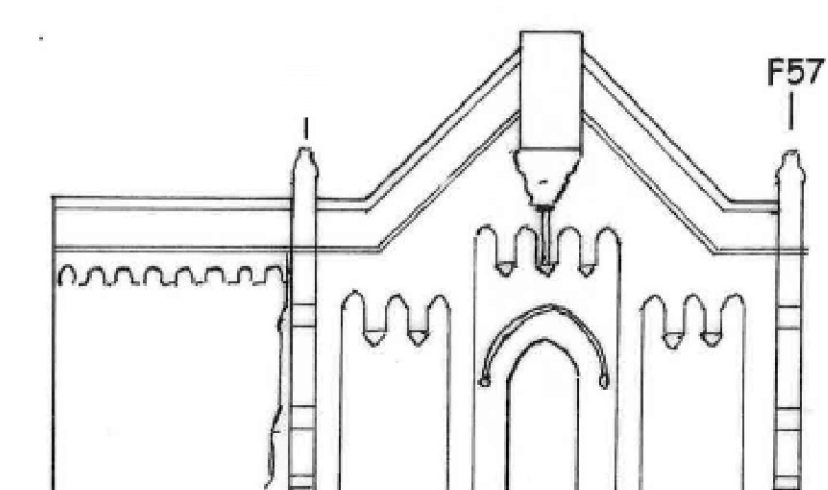
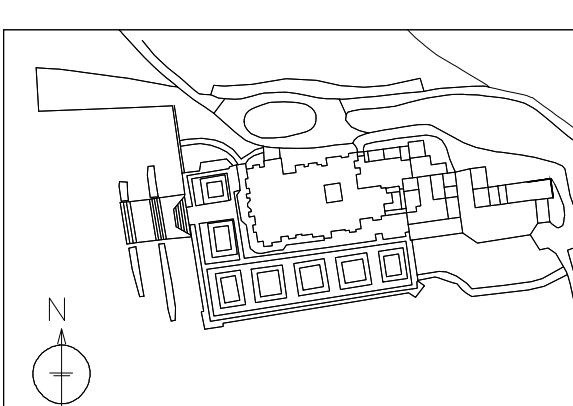


Rev.		Project						Notes					
		METHOD STATEMENT FOR THE REPAIR OF STONWORK FEATURES AT MARGAM CASTLE						1. All dimensions in millimetres unless otherwise stated.					
		1.1 DISMANTLING - GENERAL SAFETY:											
		1.2 Safe and adequate access shall be provided to and about the working area. All dismantling equipment to be tested to ensure safe operation and compliance with the requirements of the relevant Acts and Regulations governing the use of lifting and transporting equipment.											
		1.3 Prior to the commencement of the works a manual handling assessment to be carried out to establish where temporary table supports and the like, block and tackle lifting points, "hop ups" and where additional operatives shall be required during the dismantling / refixing process.											
		1.4 Access to the work area shall be via a safe route and the works are adequately hoarded of from the public and park staff for the protection of all.											
		1.5 As a minimum all operatives to wear safety boots, high visibility tabard, protective glasses, safety helmet and protective gloves suitable for the specific task being performed.											
		1.6 All operatives to be qualified and experienced in the works involved.											
		2.1 SCAFFOLDING:											
		2.2 Any scaffolding used to comply with the provisions of current standards and regulations											
		2.3 Erection of scaffolding shall be carried out by suitable experienced scaffolders who have prior to adaptations or installation received a suitable induction. This induction shall highlight the importance of the building, the nature, extent and implications of the listing imposed together with the materials used in its construction and the cost implications of the individual features. The instability of the stone features plus the possibility of collapse and any other associated dangers with the structure shall be impressed on the operatives.											
		2.4 The scaffold shall be constructed to be independent of the existing structure and shall be supported at its base on planking or similar to spread loads and protect existing surfaces from harm. All exposed ends of scaffold poles shall have suitable plastic end caps.											
		2.5 All boarding shall be adequate to take all materials including temporarily removed stonework.											
		2.6 All existing scaffold is to be inspected and certified in accordance with current regulations, certified and ensured as suitable for the works.											
		3.1 DISMANTLING FEATURES:											
		3.2 Before taking down the respective stone features, all stones shall be numbered and photographed and dimensional drawings prepared.											
		3.3 All stones shall be identified as to location and orientation within the feature and respective to the building.											
		3.4 Prior to dismantling provide suitable support to each feature as required to avoid collapse.											
		3.5 Dismantle each feature using appropriate hand tools only carefully loosen the stones ready for dismantling.											
		3.6 From the top level level downwards dismantle the stonework and place onto pallets											
		3.7 The method for removing the stones to be as follows:											
		a) Cut the perimeter joints using appropriate hand tools to loosen the components.											
		b) Using timber wedges only to loosen the stonework to break the bond.											
		c) Using timber wedges lift the stones sufficiently to install skids to allow the insertion of lifting straps.											
		d) Each stone to be lowered onto a pallet.											
		e) The dismantling is from the top downwards only. No stones are to be removed that will undermine the load transfer of the remainder of the feature and wall.											
		f) Prior to palleting the beds to be cleaned of mortar using hand tools only.											
		All palletted stonework is to be protected with an adequately secured weatherproof covering.											
		h) Remove clean and record existing fixing type, details and location. Retain for reuse where possible.											
		Existing leadwork is to be removed, cleaned and set aside for reuse. Its position recorded before noval.											
		3.8 Dismantling shall involve minimal disturbance to surrounding masonry and such disturbance shall only be sufficient to allow bonding and tying to match the existing bonding and tying.											
		3.9 Each feature is to be taken down to the denoted maximum extent of work line shown or an agreed level of stability where above this line.											
		3.10 Where the maximum extent of work line is reached before a stable surface is reached halt all work and obtain further instructions.											
		3.11 A photographic record is to be taken when the stable surface is reached.											
		3.12 Obtain samples of original bedding mortar and arrange a specialist analysis to determine colour, aggregate composition and size.											
		4.1 STORAGE:											
		4.2 The stones are to be laid on pallets and protected with waterproof material.											
		4.3 A waterproof notice is to be stapled to each pallet clearly stating the reference number of the feature and the numbers of each stone stored thereon. Only stones from the same feature to be stored on the same pallet.											
		4.4 To avoid unnecessary damage to the stones the stresses induced at all stages of handling and storage to be properly and safely related to the strength of the particular components.											
		4.5 In addition to the identification marks, where appropriate the stones to be marked sufficiently to identify their location and orientation within the feature.											
		4.6 Care to be taken to avoid damage during transportation and storage if removal from the immediate vicinity of the feature. Supply timber packing pieces in between store components.											
		5.1 REBUILDING FEATURES:											
		5.2 All former bedding mortar and inappropriate repairs and repainting to be removed from the stones using hand tools prior to rebuilding.											
		5.3 All masonry rebuilding to be completed in accordance with BS 8298 and good working practice.											
		5.4 Care shall be taken not to over-wet the stones prior to use.											
		5.5 Before relaying of stones is commenced the surface onto which it is laid shall be clean and clear of dust, dirt and mortar droppings. Face work shall be kept clean as the work proceeds.											
		5.6 As work proceeds the stones shall be carried up in a uniform manner with no one portion being raised more than 900 mm above any adjacent portion or less to maintain stability at any one time.											
		5.7 Care to be taken that each stone is rebedded in a corresponding position and orientation to that it originally occupied.											
		5.8 Re-insert existing fixings as the original detail. Where fixings are not reusable new fixings shall be of the same configuration and material or stainless steel having obtained prior approval of the Contract Administrator and CADW.											
		5.9 All stones to be well buttered with mortar before laying and all joints shall be full and flushed as work proceeds. Mortar joint thickness to exactly match existing.											
		5.10 As the work proceeds refix existing lead features and repoint as the original detail.											
		5.11 A photographic record is to be made of each rebuild feature.											
		6.1 CUTTING STONE:											
		6.2 Where it is necessary to cut stones i.e. where new fixings are larger than original, then this work is to be done off-site in a stone masons yard by suitably skilled and qualified craftsmen. No on-site cutting with machine tools to be undertaken.											
		7.1 STONE REPAIRS:											
		7.2 Replacement stone where required shall be obtained from the Forest of Dean and shall match the existing for colour and texture.											
		7.3 The cutting and carving of replacement stone shall be done off-site in a stone Mason's yard by suitably skilled and qualified craftsmen.											
		8.1 MORTAR:											
		8.2 The new mortar should match the original in texture and colour as far as reasonably practical. Specialist to undertake simple mortar analysis to determine colour, aggregate composition and size.											
		8.3 Provisionally: Specify fine grade non hydraulic lime (NHL5 or NHL3 as appropriate) mix (1 part lime to 2.5 or 3 parts aggregate) to achieve fine joint width required to match existing. The exact proportions of mortar mix will dependant on the sample analyzed. Sample panels are to be prepared for LPA Project Manager's and CADW approval.											
		8.4 After the initial set the mortar face may be 'weathered' to match the existing pointing in one of the following ways. lightly spray with water and possibly brush with a soft paint brush to show the aggregate; stipple with a stiff bristle brush; dab with coarse sacking. In hot weather the pointing must be kept damp. Pointing should not be carried out in frosty weather. If it is unavoidable then the work must be thoroughly protected.											
		8.5 Filling Fine Joints: Stick a strip of adhesive carpet tape over the joint. Cut the tape with a sharp knife and press the edges into the joint. The joint can then be filled with mortar and compacted using a pointing iron of suitable width, and the tape peeled away.											
		9.1 APPROVALS:											
		9.2 All works shall be carried out in accordance with CADW's requirements and approval. Any alternative Working Methods suggested by the Contractor will be submitted to the LPA and any approval given following consultation with CADW.											
													
		SOUTH ELEVATION to CASTLE											
													
		WEST ELEVATION to CASTLE											
		1:200 Approx											
													
		SOUTH ELEVATION to COURTYARD 3											
													
		WEST ELEVATION to SHOP											
		1:100											
													
		PROPOSED LOCATION PLAN 1:2500											
		METHOD STATEMENT MAY NEED TO BE REVIEWED AND REVISED ONCE WORK TO STONWORK IS OPENED UP						DRAWING TO BE READ IN CONJUNCTION WITH METHOD STATEMENT AND DRAWING 7081/BS/0217/02					
		UNFORSEEN WORKS TO BE REPORTED TO THE SUPERVISING OFFICER FOR CONSULTATION WITH CADW.											