

<b>COMET REPAIR AND CONSERVATION SCHEDULE</b>				
<b>3</b>	<b>SPECIFIED WORKS</b>	Notes	£	
	<b>GENERAL INFORMATION</b>			
	<b>Scope</b>			
3.1	<p>The purpose of this package of works is to carry out necessary repairs and improvements to roof coverings, parapet walls, brickwork, windows &amp; doors, landscaped areas and internal areas identified by the Conservation Surveyor and Structural Engineer with the aim being to prolong the life of the historic fabric and limit further degradation.</p> <p>Brickwork repairs form a small but important part of a wider remit of works being undertaken including repair and refurbishment of The Comet building.</p>			
3.2	<p>The objective is to preserve the historic fabric with minimal intervention through 'sensitive' repair. Any areas where brick work, stone work, windows and doors are to be replaced, matching and reclaimed materials are to be used as directed by the Conservation Surveyor. Deviations from this may only be adopted with prior written consent from the Conservation Officer.</p>			
3.3	<p>This specification of repairs describes and approximately quantifies the scope of the works. The descriptions within this section must be read in conjunction with the Stride Treglown Specification, Stride Treglown Preliminary design drawings, Structural Engineer's details, the Stride Treglown Brickwork Repair Drawings and any Pre-Tender Health and Safety Documentation issued by ISG.</p>			
3.4	<p>The Comet Building is Grade II listed and therefore deviation from authorised works may result in criminal proceedings and/or a fine.</p> <p>For the purpose of this schedule of works, the Conservation Surveyor is: Stride Treglown Ltd. Contact Richard Jessup / Howard Thomas 0117 915 7686.</p>			
	<b>Associated Documentation</b>			
3.5	<p>This schedule of works is to be read in conjunction with the following documentation, which also forms part of this contract:</p> <ul style="list-style-type: none"> <li>- Stride Treglown Drawings reference: 150888-STL-XX-XX-DR-BSXXX-XXXX North Elevation, East Elevation, South Elevation, West Elevation, Plan of Roof &amp; Landscape walls</li> <li>- Structural engineer's report reference: Curtins Building Condition Statement Curtin's Ref CH1094</li> <li>- Stride Treglown Specification reference: Comet Hotel, Hatfield Refurbishment, Specification, Tender Issue, Revision 00, 08/09/2017</li> </ul>			

<b>Roof &amp; parapet walls</b>			
<b>General</b>			
3.6	<p>Roof repairs involve the removal of service items and structures in order to replace the existing roof coverings with an insulated asphalt roof.</p> <p>Where defective elements to the underlying concrete roof deck are identified, they are to be repaired following Structural Engineer's advice.</p> <p>Parapet wall repairs include: wholesale dismantling of parapet walls down to the roofdeck where sulphate attack is suspected and rebuilding to match existing; structural repairs where step cracking has been identified; isolated replacement to damaged brickwork faces; removal and replacement of inappropriate previous brickwork repairs.</p> <p>Repairs to coping stones are also required and involve crack repairs, repointing, replacement of damaged clay tile drip details and cement fillet.</p>		
3.7	<p>Pointing repairs are required to the internal areas of the parapet walls. Listed Building Consent requires laboratory analysis of the existing mortar and sample panels to be provided.</p>		
<b>Roof</b>			
3.8	<p>RR_01 - Remove all existing services to roof area to include water tank, electrical services, ventilation ducting to allow for complete new roof covering. Make good any necessary repairs to brickwork and pointing due to removal of services.</p> <p>Refer to M&amp;E specification for details on reusing existing services.</p> <p><b>Item</b></p>		
3.9	<p>RR_02a - Remove existing felt roof covering &amp; allow provisional sum for carrying out necessary repairs to concrete deck identified by survey reports and sampling of existing reinforcement.</p> <p><b>Item</b></p>		
3.10	<p><b>Provisional sum</b> for repairs to concrete deck.</p>	Prov sum	30,000
3.11	<p>RR_02b - Remove specified areas of felt roof covering in order to allow inspection of underlying concrete roof deck.</p> <p>Allow 11 number 1000x1000mm inspection areas to felt covered roofs</p> <p><b>Item</b></p>		
3.12	<p>RR_03 - New insulated asphalt roof covering to all areas except item RR_08 (below) to specialist roofing suppliers specification to include minimum 25 years warranty.</p> <p><b>Item</b></p>		
3.13	<p>RR_04 - Install insulated asphalt sump gutters to existing outlets.</p> <p><b>Allow for 3 number.</b></p>		
3.14	<p>RR_05 - Reinstate original roof lights to areas identified on drawings</p> <p><b>Allow for 3 number 700x700mm square.</b></p>		
3.15	<p>RR_06 - Remove all existing services to roof area to include blockwork enclosure, electrical services, ventilation ducting to allow for complete new roof covering.</p> <p>Make good any necessary repairs to brickwork &amp; pointing due to removal of services.</p> <p><b>Item</b></p>		

3.16	RR_07a - Remove existing asphalt roof covering & allow provisional sum for carrying out necessary repairs to concrete deck identified by survey reports and sampling of existing reinforcement. <b>Item</b>		
3.17	<b>Provisional sum</b> for repairs to concrete deck.	Prov sum	7,500
3.18	RR_07b - Remove specified areas of asphalt roof covering to lower central roof in order to allow inspection of underlying concrete roof deck. Allow 4 number 1000x1000mm inspection areas to asphalt covered roofs <b>Item</b>		
3.19	RR_08 - New insulated asphalt roof covering to lower central roof area to specialist roofing suppliers specification to include minimum 25 years warranty. <b>Item</b>		
3.20	RR_09 - Reinstate original roof lights to areas identified on drawings Allow for reinstatement of existing kerb edging to be raised in order to accommodate new insulated roof covering; Rooflights use type - refer to NBS preambles specification. <b>Allow for 5 number 600x600mm circular. Exact number &amp; location to be confirmed.</b>		
3.21	RR_10 - Carefully remove existing blockwork structure and flat roof located in lower central roof area & dispose of. Make good areas of original brickwork where necessary. Structure dimensions 3000x3000x1000 approx. <b>Item</b>		
<b>Parapet walls</b>			
3.22	<b>Brickwork mortar is likely to be natural hydraulic lime (NHL3.5) this will be confirmed by laboratory analysis of samples taken from existing mortar beds.</b>		
3.23	PP_01 - Carefully dismantle parapet walls to roof level and set aside bricks for reuse where possible. Where parapet walls are to be dismantled due to suspected sulphate attack, take samples for laboratory analysis to confirm condition. <b>Allow 15 Linear metres.</b>		
3.24	PP_02 Coping stone repair to cracked/broken items either: 1. Lift coping stone & relay on damp proof course and new mortar including pointing repair to cracked/broken area to match colour & texture of coping stones. <b>Item</b> 2. Resin repair to cracked/broken area to include mortar pointing to match colour & texture of coping stones. <b>Item</b> <b>Allow 10 number.</b>		
3.25	PP_03 - Coping stone realignment: carefully remove existing coping stones and set aside to reuse; repair broken coping stones as PP_02 (above), or replace with reclaimed to match existing; relay coping stones on cement mortar on damp proof course. <b>Allow for 40 linear metres.</b>		

3.26	<p>PP_04 - Drip detail repair: carefully remove using hand tools only cement fillet, intermediate clay tile and clay tile drip detail.          Take mould of clay tile drip detail in order to replace missing or broken items and rebuild inner drip detail to match existing.  <b>Allow for 15 linear metres.</b></p>		
3.27	<p>PP_05 - Relay loose coping stones on damp proof course on NHL 3.5 lime mortar.  <b>Allow 10 number</b></p>		
3.28	<p>PP_06 Condition of coping stones &amp; internal parapet wall not yet known due to existing felt covering.  <b>Provisional sum</b></p>	Prov sum	5,000
3.29	<p>Replacement of individual broken bricks to inside of parapet walls. Carefully remove, prepare area for new brick &amp; pointing to match existing.  <b>Allow 30 number</b></p>		
<b>Brickwork Repairs</b>			
<b>General</b>			
3.3	<p><b>Brickwork mortar is likely to be natural hydraulic lime (NHL3.5) this will be confirmed by laboratory analysis of samples taken from existing mortar beds.</b></p>		
3.31	<p>Brickwork repairs involve structural repairs where step cracking and cracks have been identified; isolated replacement to damaged brickwork faces, removal and replacement of inappropriate previous brickwork repairs. Repairs to coping stones are also required and involve crack repairs, repointing, replacement of damaged clay tile drip details and cement fillet. Repairs to stone and pre-cast window details include replacement of corroded elements, structural repairs, crack repairs and repointing. Repairs &amp; replacement of garden walling coping stones and rebuilding of entire low walls and their foundations.</p>		
3.32	<p>Pointing repairs are required to considerable areas of the building. Listed Building Consent requires laboratory analysis of the existing mortar and sample panels to be provided.</p>		
3.33	<p>Following liaison with the M&amp;E Engineer, carefully remove all redundant fixings, services, screws, clips, and brackets etc. and make good affected areas.  <b>Allow for filling individual mechanical fixing holes with brickwork colour matched materials.</b></p>		
3.34	<p>Remove plant growth &amp; root systems to all brickwork &amp; stone areas.  <b>Item</b></p>		
3.35	<p>Show your rate to infill 10m2 of Comet brickwork reclaimed on site or sourced from elsewhere, to match colour and texture of surrounding brickwork to be directed by Conservation Surveyor on site. Contractor to assume the locations of infill will be multiple and varied, of say circa 0.25m2 denominations (20 sections in total). Infills mostly required where services are being removed.  <b>Item</b></p>		

<b>Pointing</b>				
<b>3.36</b>	Carefully rake out and repoint all weathered lime and cementitious mortar joints 20mm minimum, 30mm maximum. Raking out to be undertaken with hand tools only (no mechanical tools permitted). Repoint in lime based mortar (NHL3.5 or NHL 5). For quoting purposes, allow to repoint 75% of all elevations - in areas indicated on drawings as well as areas to be agreed on site prior to work commencement. All joints weathered back more than 10mm are to be repointed <b>Item</b>			
<b>Stonework Repairs</b>				
<b>3.37</b>	Note: Any replacement stone is to be finished flush with surrounding masonry with no leading edge. Joints are to be tight (3mm maximum). Replacement stone from elsewhere on site, or reclaimed from elsewhere to match the profile, colour and texture of surrounding masonry to be approved by the Conservation Surveyor on site.			
<b>3.38</b>	Replacement precast coping stones with metal reinforcement to be reclaimed from elsewhere to match the profile, colour & texture of existing to be approved by the Conservation Surveyor on site. For quoting purposes allow to replace 40 linear metres.			
<b>Items</b>				
<b>3.39</b>	BW_01 - Rake out with hand tools only (20mm minimum, 30mm maximum) & repoint with flat finish set back 3mm from the front face. <b>Allow 70% of external elevations.</b>			
<b>3.40</b>	BW_02 - Rake out previous flush finish cement pointing with hand tools only (20mm minimum, 30mm maximum) & repoint with flat finish set back 3mm from the front face. <b>Allow 10% of external elevations</b>			
<b>3.41</b>	BW_03 - Rake out below damp proof course with hand tools only (20mm minimum, 30mm maximum) and repoint vertical joints up to 300mm with a flat finish set back 3mm from the front face. <b>Allow 60% of building perimeter</b>			
<b>3.42</b>	BW_04 - Step cracking to brickwork; rake out with hand tools only (20mm minimum, 30mm maximum) & repoint with a flat finish set back 3mm from the front face. <b>Allow 10 linear metres.</b>			
<b>3.43</b>	BW_05 - Vertical cracking to brickwork and brickwork reveals; dismantle and rebuild localised areas allowing for an inspection from the structural engineer/surveyor to establish causes. Replace cracked bricks to match existing, rake out pointing (20mm minimum, 30mm maximum) & repoint with a flush finish set back 3mm from the front face. <b>Allow 25 linear metres.</b>			

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| <b>3.44</b> | BW_06 - Brickwork bulging above windows EX_W_1_02, 03,04, 32, 33, 34, 36, 37 (note 36 & 37 are not shown on plans, they are located on the rear (south) elevation). Provide adequate support to brickwork above, dismantle affected areas allowing for an inspection from structural engineer/surveyor to establish causes. Rebuild using reclaimed bricks on site or sourced from elsewhere to be directed by Conservation Surveyor; assume replacement of corroded structural members - structural engineer to advise.<br><b>Allow 15 m2.</b> |
| <b>3.45</b> | BW_07 - Hack off cracked & defective render to chimney; carry out necessary repairs to underlying masonry & replace with cement render to match existing finish and texture.<br><b>Allow 6 m2.</b>  |
| <b>3.46</b> | BW_08 - Repairs to defective structural openings in lower central roof area above a window and above ducting. Provide adequate support to brickwork above, carefully dismantle existing brickwork and set aside to re-use, insert structural element following Structural Engineer's advice and rebuild.<br><b>Item</b>   |
| <b>3.47</b> | BW_09 - Replacement of badly weathered brick window cills in lower central roof area to match existing.<br><b>Allow 5 linear metres of matching brick.</b>  |
| <b>3.48</b> | BW_10 - Carefully remove 2 x window head sections, and set aside to reinstate later, to EX_W_1_12 & 13 in order to investigate causes of undulation.<br><b>Item</b>   |
| <b>3.49</b> | BW_11 - Rake out pointing to all brick vents that have been previously filled in.<br><b>Allow 12 x 300x300mm</b>  |
| <b>3.50</b> | BW_12 Remove all existing plastic and metal ventilation grilles to the external elevations and make good with brickwork to match existing.<br><b>Allow 4 number 300x300</b>   |
| <b>3.51</b> | BW_13 - Renew all lead flashings above window heads.<br><b>Allow 150 metres code 3 lead</b>   |
| <b>3.52</b> | Repair brickwork riser to one step and replace 2 x broken patio slab treads outside timber external door EX_D_0_01<br><b>Item</b>   |
| <b>3.53</b> | Investigative work to structural beam in rear courtyard (west elevation). Suitably prop structural beam and carry out investigative work in order to determine the extent & degree of corrosion and carbonation to the structural beam.<br><b>Item</b>  |
| <b>3.54</b> | For budgeting purposes, provide a cost for the following item of additional work which may or may not be required once works have commenced:<br>Helifix, or equal equivalent, stainless steel stitch to 1 linear metre of step cracking.<br><b>Item</b><br>Making good to existing brickwork where demolition of unwanted structures takes place.<br><b>Allow 10 m2</b>   |

<b>Metal Window &amp; Metal Door Repairs</b>				
	<b><u>General</u></b>			
3.55	<p>The majority of the original metal casement "Crittall" windows remain intact. Window repairs include removal and factory restoration to provide maintenance free warranties; insitu restoration where surface corrosion is minimal: replacement to match the original of later metal casement windows. Much of the window furniture remains, however, restoration / replacement of non-original items will be necessary, this includes the repair of guide rails to casement stays.</p>			
3.56	<p>Window removal &amp; factory repair:            Full restoration assumed to include carefully remove from opening - to include guide rails to curved windows, remove from site, de-glaze, set glass to one side for re-use, shot blast, remove severely corroded sections and replace with matching sections (identified in survey), re-machine fixings to metric threads for future maintenance), re-machine/restore hinges, repair/replace with matching handles etc, provide weather seals, apply molten zinc to surface of metal or other approved to prevent future corrosion, prepare for and paint, assemble and re-glaze (silicon), re-fix, apply silicon to reveal. Make good existing brickwork &amp; stone surround. Overhaul window opening gear i.e. strip paint, ease, re-grease and re-fix. Reinstatement, or replace copper weep hole elements in cills.  <b>Allow for completion of one window as a sample to be agreed.</b>  <b>Window numbers Ground floor: EX_W_0_04, 05, 10, 11, 14, 15, 16</b>  <b>First floor: EX_W_1_04, 05, 06, 07,08, 17, 18, 19, 23, 26, 27a, 28, 29, 30, 31, 33</b></p>			
3.57	<p>Window repair insitu:            Suitably prepare all metal parts and apply Rustoleam Combiprimer or equal equivalent &amp; 2 no. coats of smooth ***** (paint to be confirmed). All in accordance with manufacturer's instructions. Replace damaged glass panes, if required: apply silicon to reveal, overhaul window furniture and opening gear i.e. strip paint, ease, re-grease and re-fix. Opening lights to be fully operable on completion.  <b>Allow for completion of one window as a sample to be agreed.</b>            Window numbers Ground floor: EX_W_0_02, 03,18            First floor: EX_W_1_02, 03, 09, 09a, 10, 11, 12, 13, 14, 15, 21, 22, 27, 32, 35</p>			
3.58	<p>Window reinstatement:            Replace in steel to match existing sections, single glaze. Design to be heritage type i.e. to approximate existing section.  <b>Provide appropriate samples/details of selected manufacturer.</b>  <b>Window numbers Ground floor: EX_W_0_01, 07, 08, 12, 13, 17</b>  <b>First floor: EX_W_1_01,</b></p>			
3.59	<p>Reinstatement of window furniture:            Casement stays including guide rail:  <b>Allow 20 Number</b>            Cockspur handles:  <b>Allow 10 number</b></p>			

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| <b>3.60</b> | Crack repairs to previous repairs to natural stone window heads shown on drawings. Repair to include removal of previous crack repair and exposure of area sufficient to allow further investigation so that Structural Engineer can advise.   |
|             | <b>Allow for 10 number</b>   |
| <b>3.61</b> | Resin repair to cracked cills to include mortar pointing to match colour & texture of coping stones.   |
|             | <b>Allow for 10 number.</b>  |
| <b>3.62</b> | Repointing to window cills including raking out existing mortar & repointing in NHL 3.5.   |
|             | <b>Allow 15 linear metres</b>  |
| <b>3.63</b> | Certain windows require removal for repair and refurbishment. Show your cost here for undertaking all masonry related works required to assist with the removal and subsequently make good affected areas following reinstatement of window surrounds/reveals (both internally and externally).  |
|             | <b>Item each</b>   |
| <b>3.64</b> | Metal door removal & factory repair:<br>Full restoration assumed to include carefully remove from opening - to include, remove from site, de-glaze, set glass to one side for re-use, shot blast, remove severely corroded sections and replace with matching sections (identified in survey), re-machine fixings to metric threads for future maintenance), re-machine/restore hinges, repair/replace with matching handles etc, provide weather seals, apply molten zinc to surface of metal or other approved to prevent future corrosion, prepare for and paint, assemble and re-glaze (silicon), re-fix, apply silicon to reveal. Make good existing brickwork & stone surround. Overhaul door furniture i.e. strip paint, ease, re-grease and re-fix.  |
|             | <b>Door numbers EX_D_1_16, EX_D_1_20</b>   |
|             | <b>Lower central roof area windows: these windows do not appear on plans; window numbers start from 01 (to the immediate left of the door onto the roof) &amp; make their way clockwise around the courtyard to 12.</b>  |
| <b>3.65</b> | Window removal & factory repair:<br>Full restoration assumed to include carefully remove from opening - remove from site, de-glaze, set glass to one side for re-use, shot blast, remove severely corroded sections and replace with matching sections (identified in survey), re-machine fixings to metric threads for future maintenance), re-machine/restore hinges, repair/replace with matching handles etc, provide weather seals, apply molten zinc to surface of metal or other approved to prevent future corrosion, prepare for and paint, assemble and re-glaze (silicon), re-fix, apply silicon to reveal. Make good existing brickwork & stone surround. Overhaul window opening gear i.e. strip paint, ease, re-grease and re-fix. Reinststate, or replace copper weep hole elements in cills. |
|             | <b>Window numbers: 01, 02, 03, 07, 08, 09, 10</b>  |



- 3.66** Window repair insitu:  
Suitably prepare all metal parts and apply Rustoleam Combiprimer or equal equivalent & 2 no. coats of smooth \*\*\*\*\* (paint to be confirmed). All in accordance with manufacturer's instructions. Replace damaged glass panes, if required: apply silicon to reveal, overhaul window furniture and opening gear i.e. strip paint, ease, re-grease and re-fix. Opening lights to be fully operable on completion.  
**Allow for completion of one window as a sample to be agreed.**  
**Window numbers: 04, 05, 06,11, 12**
- 3.67** Metal door repair insitu:  
Suitably prepare all metal parts and apply Rustoleam Combiprimer or equal equivalent & 2 no. coats of smooth \*\*\*\*\* (paint to be confirmed). All in accordance with manufacturer's instructions. Replace damaged glass panes, if required: apply silicon to reveal, overhaul door furniture i.e. strip paint, ease, re-grease and re-fix.  
**Allow for completion of one door as a sample to be agreed.**  
**Door numbers EX\_D\_0\_02, EX\_D\_0\_03**
- 3.68** Wooden door repair insitu:  
Suitably prepare all wooden surfaces to receive paint or wood treatment to be confirmed. Replace damaged glass panes, if required: apply silicon to reveal, overhaul door furniture i.e. strip paint, ease, re-grease and re-fix.  
**Item**  
**Door number EX\_D\_0\_01**

### Landscape areas

#### General

- 3.69** Original areas of low level brickwork walls with pre cast coping stones and paved areas require replacement coping stones due corroded reinforcement; dismantling entire walls and foundations and rebuilding to match the original; repointing, coping stones repairs including relaying, replacement and repointing.
- 3.70** GW\_01 Dismantle brickwork garden walls and remove foundation. Where possible salvage both bricks and coping stones, set side afor re-use. Dispose of waste and replace coping stones where corrosion to reinforcement has occurred.  
Construct new walls including suitable foundations to match original.  
**Allow 30 linear metres.**
- 3.71** GW\_02 Coping stone replacement where corrosion to reinforcement has occurred or drip detail is inadequate.  
**Allow for 50 number**  
**Provide cost for sample of replacement coping stone for approval.**
- 3.72** GW\_03a Coping stone repair: Mortar repair to cracked coping stones where fragment is available.  
**Item**  
GW\_03b Coping stone repair: Resin repair to cracked coping stones where fragment is available.  
**Item**

<b>Metal elements other than windows</b>				
3.73	<p>MR_01 Construct an enclosed area and thoroughly shot blast the external spiral staircase to remove all existing paint layers to shiny metal, taking care not to damage the metal in the process. Undertake specialist repairs to all the corroded elements to be directed by Structural Engineer. Suitably prepare all metal parts and apply Rustoleam Combiprimer &amp; 2 no. coats of smooth black Combicolor. All in accordance with manufacturer's instructions. Paint all nosings with Stepmarker to highlight a 55mm strip in accordance with Approved Document M. Colour to be confirmed.</p> <p><b>Item</b>  <b>Allow for replacement of cracked cast iron lattice tread.</b></p>			
3.74	<p>MR_02 Carefully remove cast iron hoppers and downpipes in order to carry out thorough overhaul. Suitably prepare all metal parts and apply Rustoleam Combiprimer &amp; 2 no. coats of smooth black Combicolor. All in accordance with manufacturer's instructions.</p> <p>Resin fix to brickwork using threaded bar and rounded nuts.</p> <p><b>Item 3 number</b></p>			
<b>Internal repairs</b>				
	<b>General</b>			
3.75	Major alterations that include wholesale strip out interior fabric will require making good to plastered wall surfaces on solid wall and stud work partitioning.			
3.76	<p>Suitably prepare background and make good plasters to solid wall backgrounds.</p> <p><b>Provide costs for patch repairs to areas greater than 1m2</b>  <b>Provide costs for patch repairs to areas less than 1m2</b></p>			
3.77	<p>Prepare for &amp; remove all existing paint from decorative metal balustrade. Prepare for &amp; repaint.</p> <p><b>Item</b>            Allow provisional sum of £7,500 to enable modification of the handrail and guardrail heights by the installation of a plain stainless steel rail &amp; post to stand independent of the existing handrail. Detail &amp; fixings to be agreed.</p> <p><b>Provisional sum</b></p>	Prov sum	7,500	