41-42 CHESTER TERRACE
LONDON, NW1 4ND

REPAIR OF THE STUCCO FACADE:
Schedules of Work and Specification

PREPARED FOR
SHALIMAR INVESTORS LTD
September 2014

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1 INTRODUCTION

1.1 Summary of the Proposal

The project is for the conversion of nos. 41-42 Chester Terrace, a Grade 1 listed building, into a single dwelling house. The acceptability of such a proposal is highlighted in the Historic Conservation Matters Report and includes the following salient points:

- Research has revealed that both properties have undergone substantial changes and interventions since they were built, including a complete modern roof. In fact, the only entirely original fabric remaining is the external facades, and these do not have original fenestrations, due to earlier alterations and the bomb damage during the WWII (refer to morphological & significance plans).
- The two houses were designed to appear externally as a single house – a particular design concept of Nash.

1.2 Design Concept

The concept is thus for the remodelling and insertion of a new layout and interior within the shell of the existing building.

The contemporary interior would run through all floors and spaces but would be offset against a carefully detailed and classically proportioned back-drop of Regency details, reinstated sash window joinery and traditionally detailed panelled timber doors to main hall and landings. The staircase as the main element of the plan would similarly be of traditional Regency design.

In essence, the proposals represent a design of contemporary spaces set within a carefully restored historic envelope.

1.3 Aim of this Report

PAYE were instructed to carry out a hammer test and condition survey. The first report was produced in July 2014 (‘Stucco condition report, Rev A' - Appendix 3) and a second in August 2014 (‘priced schedules’ - Appendix 4). The facades were inspected using a combination of binocular surveys and a hammer test to the four elevations accessed by abseil rope technicians.

Heritage Architecture Ltd was appointed in September 2014 to prepare schedules of condition and repair works (Appendix 1 and 2) and specification using the information provided to date by PAYE with the necessary amendments and input in order to comply with the Crown Estate Guidelines and Standard Specification. Identified areas will need therefore to be reviewed following inspection from scaffolding.

1.4 Listed Building Legislation

Legislation protecting historic buildings in England has evolved over the past hundred years, initially taking ancient monuments into care and then gradually setting up the machinery for drawing up comprehensive lists of buildings thought worthy of preservation because of their architectural or historic interest. Demolition of, or alterations to, any building on these lists must have consent from the Local Authority.

It is a criminal offence under the Planning Acts if any person executes “*any work for the demolition of a listed building or for its alteration or extension in any manner which would*

affect its character as a building of special architectural or historic interest unless the works are authorised."

1.5 Repairs

Repairs to the property should be carried out in accordance with the relevant sections of the Crown Estate's "*Guidelines and Standard Specification to Architects for the Regent's Park, Kensington Palace gardens, St. James's, Pall Mall South, Haymarket and Lower Regent Street Residential and Commercial Estates*" (Seventh Edition, January 2014)

Where repairs involve the removal of original fabric or alteration of existing detail, listed building consent may be required. The architect must be notified of any change the schedules of works and specifications may require before any action is taken.

2 GUIDELINES AND STANDARD SPECIFICATION

2.0 THE CROWN ESTATE'S REQUIREMENTS

2.3 REPAIRS

2.3.1 Repairs to the properties should be carried out in accordance with the relevant sections of the Standard Specification and the Guidelines for Architects. Where repairs involve the removal of original fabric, listed building consent may be required. It is the responsibility of the Lessee to check with the Local Authority.

4.0 DESIGN PRINCIPLES

4.7 RENDER REPAIRS

4.7.1 Render is to be repaired in accordance with the NBS clauses. It is essential that the type of material used for the render (stucco, etc) is correctly identified to determine the appropriate repair material. The majority of the original render found in the Regent's Park Estate is "Roman Cement", a reddish material usually with a coarse aggregate.

There may be a few cases where "oil mastic" still survives, principally recognisable by the thinness of the render. Some areas where extensive renovation was carried out have a Portland cement based render.

CONSERVATION

C44 REPAIRING RENDER

C44/1 RENDER: refer also to section M20 for new rendering

C44/2 RENDER: correct identification of the material used for the render is essential for its repair. Generally it is Roman cement, but more recent repairs have been carried out with Portland cement. There may be areas of oil mastic, applied in noticeably thinner coats which requires a completely different repair technique. Obtain a specialist's analysis if there is any doubt.

C44/3.2 MOULDED WORK:

- Location: repair of moulded work
- Background: existing. The core of the moulding may be solid or formed with timber or metal lathing. Take care not to damage the core when removing defective render
- Preparation: as C44./6
- The following mixes are typical and must be checked against the particular project conditions.
- Dubbing Out: as required

  Cement: ordinary Portland cement

  Sand sand to BS 1199, Type A

  Mix Proportions 1.5: 1.5: 6 cement: sand

  Thickness not more than 10 mm in any one coat
- Undercoat(s):

Cement ordinary Portland cement

Lime: sand mix(coarse stuff): to be mixed from lime putty as Section Z21 sand to be washed graded silica sand (<3 mm)

or Ready-mixed to BS 4721 using sand to BS 1199, Type A without coarse aggregate

Mix Proportions 1:1:6 cement: lime: sand

Thickness not more than 10 mm in any one coat, and to decrease each subsequent undercoat.

- Top Coat:

  Materials as for undercoat, sand to be washed graded silica sand (<1 mm)

  Mix Proportions: 1:2:9 cement: lime: sand by volume

  Thickness average 7 mm

  Finish run with a zinc mould.

- Overall: overall thickness of render to match thickness to match existing adjacent.

C44/3.3 ROMAN CEMENT REPAIRS:

- Location: to repair existing Roman Cement render
- Background: as existing

  Preparation as C44/6

  Supplier: Rose of Jericho at St Blaise Ltd

  Westhill Barn, Evershot, Dorchester

  Dorset DT2 0LD

  Tel: 01935 83676/83662

- Basecoat:

  Lime: French Hydraulic Lime Grade XHN 100

  Sand: washed quartz silica sand (<3 mm)

  Colour: pigments for colour (lime-fast) if required

  Mix Proportions: 2:5 lime:sand

  Thickness not more than 10 mm in any one coat

- Topcoat:

  Lime: French Hydraulic Lime Grade XHN 100

  Sand: washed quartz silica sand (<1 mm)

  Colour: pigments for colour (lime-fast) if required

  Mix Proportions: 1:3 lime: sand

  Thickness: average 7 mm

  Finish wood float, leave ready for painting. A single pass with a steel float will match new work to the original surface. joint as C44/6

C44/3.4 OIL MASTIC STUCCO REPAIRS:

Location: to repair existing oil mastic stucco, a patent material used in the first quarter of the 19c and then discontinued.

Background: as existing

- Health & Safety One of the constituents of oil mastic is a form of lead monoxide. Ensure that any removal of oil mastic stucco, or any procedure that will raise dust is carried out in accordance with the current regulations relating to the Control of Lead at Work and other Health and Safety Legislation.
- Analysis: Obtain specialist analysis of sample to determine best repair material.
- Preparation: in addition, saturate the background with boiled linseed oil, allowing it to soak into the joints; leave to dry.
- Repair materials Dependent upon analysis. Oil mastic is typically applied in one thin coat, 6 - 8 mm thick.
- Reinforcement Fix stainless steel expanded metal lathing if substitute material is used based on Portland cement.

C44/4 MATERIAL FOR MOULDED WORK:

Material to match the type of existing render, generally each coat to be thinner and a weaker mix than the previous.

C44/5 REINFORCEMENT FOR RENDER:

To be stainless steel expanded metal to comply with BS 1369 Part 1 1987 and Austenitic stainless steel type 304/515 to BS 1449: Part 2 1993.

C44/6 DEFECTIVE AREAS:

- Hack off defective render with sharp chisels to a rectangular area bounded by ashlar lines where possible
- Remove loose and defective ornamental features
- Slightly undercut edges of old render except for the bottom
- Use a bristle brush to remove all dust, loosely adherent material, efflorescence and any organic growth
- Treat with biocide as recommended by the external paint manufacturer where necessary
- Leave the area clean, firm and sterile

C44/7 CRACKS:

Cut out cracks back to the structural background to a width of not less than 75 mm; clean as above

C44/8 MOULDED WORK:

Make good in situ if possible

- Do not use GRP or plastic substitutes

C44/9 STRUCTURAL BACKGROUND:

- Pin or stitch repair brickwork as necessary
- Rake out defective mortar
- Ensure that there is sufficient key for the new render
- Fix stainless steel expanded metal lath reinforcement across potential lines of movement as required

C44/10 EXISTING PREVIOUSLY PAINTED BACKGROUNDS:

Carefully hack and comb rake to provide key.

C44/11 DUBBING OUT:

- Dub out in as many coats as necessary, no coat exceeding 10 mm in depth
- Dampen background before rendering
- Well score for key

C44/12 EXISTING LINING OUT in imitation of ashlar

- Reinstate jointing which has been obscured but is still visible.

C44/13 LINING OUT in imitation of ashlar

- This work should be carried out by a skilled craftsperson or conservator
- Reinstate where completely obscured or missing
- Carefully re-cut to match existing adjacent lines in depth, width and finish
- Use a steel jointer and straight edged rule for marking out
- Do not attempt to mark out freehand

SURFACE FINISHES

M20 PLASTERED AND RENDERED COATINGS

M20/2 GENERAL REQUIREMENTS FOR WORKMANSHIP

M20/2.1 BASIC WORKMANSHIP: Comply with the clauses of BS 8000:Part 10 which are relevant to this section.

M20/2.2 FOLLOW THE MANUFACTURER'S/SUPPLIER'S INSTRUCTIONS when using repair renders and plasters.

M20/2.3 SAMPLES

General: Provide representative samples of the new render prepared to receive the paint finish for the approval of The Crown Estate Monitoring representative.

M20/2.4 UNIFORMITY OF COLOUR AND TEXTURE

General: Maintain consistent colour and texture. Obtain materials from one source. Mix different loads if necessary.

M20/2.5 SITE PREPARED LIME: SAND FOR CEMENT GUAGED RENDER MORTARS

Permitted use: Where a special colour is not required and in lieu of factory made ready-mixed material.

Lime: Hydrated nonhydraulic lime to BS 890.

Mixing: Thoroughly mixed. Allow to stand, without drying out, for at least 16 hours before using.

M20/2.7 MIXING

- Render mortars (site prepared):

- Batching: By volume. Use clean and accurate gauge boxes or buckets.
- Mix proportions: based on damp sand. Adjust for dry sands.
- Mixes: Of uniform consistency and free from lumps. Do not retemper or reconstitute mixes.
- Contamination: Prevent. Keep plant and banker boards clean.
- Do not use air entraining or other admixtures.

M20/2.8 SCAFFOLDING

General: Prevent putlog holes and other breaks in coatings.

M20/2.9 COLD WEATHER

General: Do not use frozen materials or apply coatings to frozen or frost bound backgrounds.

External work: Avoid when air temperature is at or below 5°C and falling or below 3°C and rising. Maintain temperature of work above freezing until coatings have fully hardened.

Internal work: Take all necessary precautions to enable internal coating work to proceed without damage when air temperature just below 3°C.

M20/3 PREPARING BACKGROUNDS

M20/3.1 KEYING/BONDING:

Prepare backgrounds as specified for the type of coating to be applied. Where not specified, comply with BS 8000: Part 10, clause 2.2.2.2. Methods other than those specified may be submitted for approval.

M20/3.2 EXISTING BACKGROUNDS Prepare existing backgrounds as included in Section C44 above.

M20/3.3 RAKING OUT FOR KEY

Soft joints in masonry: Rake out to a depth of 136mm (minimum).

Dust and debris: Remove from joints.

M20/3.4 EXISTING WALLS TO BE PLASTERED:

- Scrape off all old plaster and loose friable material
- Remove salts by brushing with a stiff bristle brush
- Use water to wash down very wet walls to ensure removal of soluble salts
- Completely remove all paint OR fix expanded metal lathing and apply plasters as M30/1
- Rake the joints on backgrounds of dense or hard bricks
- Leave walls to dry off before plastering

M20/3.5 ROUGHENING FOR KEY

Backgrounds: Roughen thoroughly and evenly.

Depth of surface removal: Minimum necessary to provide an effective key.

M20/3.6 EXISTING PLASTER / RENDER

Location and extent of renewal: Agree, at least on a provisional basis, before work commences with CC (The Crown Estate's Conservation Consultant, appointed by The Crown Estate to monitor the works on its behalf, carries out regular inspections and

recommends to The Crown Estate's agent that the works had been carried out and completed to The Crown Estate's satisfaction).

Removal of existing coatings: Use methods that minimise the amount of removal and renewal.

M20/3.7 REMOVING DEFECTIVE EXISTING RENDER

Render for removal: Loose, hollow, soft, friable, badly cracked, affected by efflorescence or otherwise damaged.

Patches: Cut out rectangular areas with straight edges.

Horizontal and vertical edges: Square cut or slightly undercut.

Bottom edges to external render: Do not undercut.

Render with imitation joints: Cut back to joint lines.

Cracks (other than hairline cracks): Cut out to a width of 75mm (minimum).

M20/3.8 EXISTING DAMP AFFECTED PLASTER / RENDER

Plaster affected by rising damp: Remove to a height of 300mm above highest point reached by damp or 1m above dpc, whichever is higher.

Perished and salt contaminated masonry:

Mortar joints: Rake out

Masonry units: Seek instructions.

Faults in background (structural deficiencies, additional sources of damp, etc.): Seek instructions.

Drying out backgrounds: Established drying conditions. Leave walls to dry for as long as possible before plastering.

Dust and loos material: Remove from exposed backgrounds and edges.

M20/4.7 RUN PROFILES IN LIME PLASTER

- Plaster: As clause 215
- Preparation: for small profiles build up the work on the plain render coat. For larger profiles build up a base profile of lathing on bracketing.
- Run profiles using a zinc or tin template, padded out for the under coats.
- Finish: 3 mm finishing coat, smooth finish.
- Enrichments: score the finishing coat before setting to ensure a good key where enrichments are to be fixed to the moulding.

M20/6 RENDERING

M20/6.1 APPLICATION GENERALLY:

- Apply each coating firmly to achieve good adhesion and in one continuous operation between angles and joints.
- All coatings to be not less than the thickness specified, firmly bonded, of even and consistent appearance, free from rippling, hollows and ridges.

- Finish surfaces to a true plane, to correct line and level, with all angles and corners to a right angle unless specified otherwise, and with walls and reveals plumb and square.
- Prevent excessively rapid or localised drying out.

M20/6.2 DUBBING OUT FOR RENDERING

General: To correct background inaccuracies.

Application: Achieve firm bond. Allow each coat to set sufficiently before the next is applied. Comb surface of each coat.

M20/6.3 UNDERCOAT GENERALLY

General: Rule to an even surface. Comb to provide a key for the next coat.

Do not penetrate the coat.

M20/6.4 FINAL COAT – PLAIN FLOATED FINISH

Finish: An even, open texture free from laitance.

M20/6.5 KEYING as specified in BS 8000: Part 10, clause 3.3.2.4 is to be carried out with a suitable comb to produce evenly spaced wavy horizontal lines, approximately 20 mm apart and 5 mm deep to provide a key for following coat. Do not penetrate through the coat. Do not use cross scratching.

M20/6.6 CURING AND DRYING

General: Prevent premature setting and uneven drying of each coat.

Curing coatings: Keep each coat damp by covering with polyethylene sheet and / or spraying with water.

Final coat: Hang sheeting clear of final coat.

Drying: Allow each coat to dry thoroughly, with drying shrinkage substantially complete before applying each coat.

Protection: Protect from frost and rain.

M20/6.7 DRYING:

Keep each undercoat and final coat damp for the first 3 days by covering with polyethylene sheet and/or spraying with water. Thereafter prevent from drying out too rapidly. Work in shade whenever possible. Allow each coat to dry out thoroughly to ensure that drying shrinkage is substantially complete before applying next coat.

M20/6.8 PROTECTION:

Adequately protect newly applied external coatings against frost and rain for the first 48 hours using polyethylene sheet hung clear of the face, or other approved method.

M60 PAINTING AND CLEAR FINISHING

M60/3.35 MINOR CRACKS IN STUCCO (RENDER)

- Rake out cracks less than 5 mm in stucco to a square edge, dampen the edges with water and fill with Permoglaze Filler Stopper.
- Do not extend filler over the face of the stucco either side
- Do not fill fine hair cracks.

- For larger cracks see Section C 44 RENDER REPAIRS

M60/3.36 NEW RENDER

- Delay painting of new rendering to allow for any shrinkage cracks at the junctions of old and new work to develop and be filled with Stopper, and for moisture level to reach acceptable standard.

M60/3.37 STABILISING

- Apply Sandtex Stabilising Solution to all new rendered surfaces and render stripped of paint to manufacturer's recommendations
- Do not apply Stabilising Solution over bitumen treated surfaces
- Note that Permoglaze Filler/Stopper must be applied after stabilisation, and before application of Classic Stone Gloss.

M60/4.8 PAINTING PREVIOUSLY UNPAINTED STUCCO (RENDER)

- After preparation, prime all areas of new stucco with two full-bodied coats of Gloss Paint.
- Allow 6 hours drying time between coats minimum.

M60/4.9 PAINTING PREVIOUSLY PAINTED STUCCO (RENDER)

- Patch prime areas where existing stucco has had the previous paint system removed with one full bodied coat of Gloss Paint or as many as necessary to bring forward
- Allow 6 hours drying time between coats minimum.

M60/4.10 FINAL COATS TO PAINTING STUCCO (RENDER)

- After initial coats as M60/4.8, 4.9 above, decorate all areas with two full-bodied coats of Gloss Paint.
- Generally, the colour is to be as M60/6.

M60/5.1 STUCCO (RENDER) COLOUR

- The paint for the stucco, including downpipes and the like, for Regents' Park to be Dulux Regents Park Cream Gloss, Munsell reference 10 YR 9/2.
- For the other estates it is to be either Dulux Regents Park Cream Gloss, Munsell reference 10 YR 9/2 or Sandtex Classic Stone Gloss, 1990 Crown Cream, Munsell reference 10 YR 9/2.
- Patch priming to be "Magnolia" colour
- The paint and colour specified must be used in order to preserve the uniformity of colour throughout the Terraces and Park Villas.
- Deviation from the approved paint and colour will incur a liability to repaint.

Z21 MORTARS

SAND AND LIME MORTARS

50 GENERAL

The purpose of the repair/conservation work is to conserve existing sound masonry and pointing and replacement/repairs are limited to defective masonry that is structurally unsound or that has decayed and may allow water ingress by compromising weathering details.

60 MORTAR ANALYSIS

A chemical analysis of samples of the original mortar is to being undertaken. It is intended that the mortars to be used for the repair/conservation work will match the specification of the original mortars as closely as possible.

Z21/2.1 MORTAR MIX PROPORTIONS and other particular requirements are specified elsewhere, and are subject to planning permissions/listed building consents

- See contract administrator for advice on these matters.

Z21/2.2 SAND FOR LIME:SAND MORTARS:

- Sharp, well-graded and conforming to the methods of sampling and testing and quality requirements of BS 882 or BS 1200 unless specified otherwise.
- Source(s)/type(s) of sand are specified elsewhere.
- Type: to be determined by specialist analysis

  To be sharp, well graded, well washed, with no silt or salt contamination.

Z21/2.6 SITE STORAGE OF LIME: SAND MORTAR MATERIALS

- Store different sands and aggregates in different stockpiles on hard clean bases which allow free drainage.
- Store bags of hydrated lime in dry conditions, raised off the ground and not touching damp surfaces. Do not use hydrated lime affected by damp.
- Store ready prepared non hydraulic lime: sand mortar either on clean bases or in clean containers that allow free drainage. Keep covered to prevent drying out or wetting and protect from frost.
- Avoid intermixing and contamination between stored materials and other building materials, debris and other deleterious matter.

Z21/2.7 MAKING LIME: SAND MORTARS GENERALLY:

- Use operatives who are skilled and experienced in the making and use of lime: sand mortars. Provide evidence of their experience to the CC on request.
- Keep plant and banker boards clean at all times. Avoid contamination of lime: sand mortar by other materials or by any set material (including Portland cement).
- Measure materials accurately by volume using clean gauge boxes or clean undamaged buckets.
- Do not mix mortar when the air temperature is at or below 5°C and falling or below 3°C and rising.
- Site slaking of lime is not recommended.
- Water used for mortar to be in accordance with BS1348:1980, being clean and free from impurities either in solution or in suspension sufficient to have a harmful effect on the mortar or to impair the durability of adjacent materials.

Z21/2.11 SITE PREPARATION OF HYDRAULIC LIME: SAND MORTAR:

- Thoroughly mix eminently hydraulic lime powder with sand, first in the dry state and then with water. Follow the lime manufacturer's recommendations for each stage of the mix. Add only sufficient water to produce a workable mix.
- Use mortar within the time limits recommended by the lime manufacturer. Do not use mortar that has begun to stiffen.

NOTE: Brickwork and mortar mix to be confirmed after laboratory analysis.

APPENDIX 1: SCHEDULES OF CONDITION AND REPAIRS

41-42 CHESTER TERRACE - STUCCO FAÇADE: SCHEDULES OF CONDITION AND REPAIRS

GENERAL NOTES	Correct identification of the existing render type/composition essential for its repair. Specialist mortar analysis required.				
	At present the wholesale replacement of the column stucco casings is proposed to the North elevation. Once on site they need to be inspected/reviewed to see if they could be pinned and grouted to avoid replacement, but this is something only possible from a scaffold as some cores would need to be taken.				
	The reference drawings are indicative and are to be cross checked with the contractor.				
	ALL FACADES	**TOTAL AREA (approx.)**	**UNIT**	**UNIT COST**	**COST**
	Clean existing facades with cold water prior to decoration			**item**	
	Localised poultice paint removal with the application of two coats of multi layer paint stripper to remove flaking and blistered paint				
	Areas n.e 1m2	**10**	**No**		
	Areas n.e 2m2	**10**	**No**		
	Careful cutting and forming chases for lead flashings and the like and pointing upon completion of the leadworks (all in accordance with Lead Sheet Association Recommendations - Lead Sheet Manual).	**100**	**m**		
	Reflaunch skysurface of the grand cornice with hydraulic mortar (eminently hydraulic or to much approved stucco mixed - whichever the weaker mix) to throw water away from the building in preparation for new leadwork (by others)	**85**	**m**		

East Elevation - Drwg No. CT-StRep-01

ELEMENT	ELEMENT DETAIL	REF. NUMBER	MATERIAL	CONDITION DESCRIPTION	REPAIR / WORKS	TOTAL AREA / LENGTH (approx.)	UNIT	UNIT COST	COST
Exterior	Facade render	EE-01	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.7**	**sqm**		
Exterior	Facade render	EE-02	Stucco	Obvious fractures through the stucco and moulded details.	Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.8**	**m**		
Exterior	Facade render	EE-03	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cutt-out defective area of stucco where debonded from brick. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.5**	**sqm**		
Exterior	Facade render	EE-04	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0,5**	**sqm**		
Exterior	Facade render	EE-05	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.6**	**sqm**		

ELEMENT	ELEMENT DETAIL	REF. NUMBER	MATERIAL	CONDITION DESCRIPTION	REPAIR / WORKS	TOTAL AREA / LENGTH (approx.)	UNIT	UNIT COST	COST
Exterior	Facade render	EE-06	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.7**	**sqm**		
Exterior	Facade render	EE-07	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.6**	**sqm**		
Exterior	Facade render	EE-08	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.4**	**sqm**		
Exterior	Facade render	EE-09	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.5**	**sqm**		
Exterior	Facade render	EE-10	Stucco	Obvious fractures through the stucco and moulded details.	Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.3**	**m**		
Exterior	Render to attached, fluted Corinthian column	EE-11	Stucco	The column stucco casing sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully remove existing stucco to fluted columns maintaining bands at 1.2m centres for replication of the profile. Inspect the condition of the background and repair as required to TCE Specification C44:Repairing Render. Reapply fluted stucco detail to columns to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1**	**sqm**		

ELEMENT	ELEMENT DETAIL	REF. NUMBER	MATERIAL	CONDITION DESCRIPTION	REPAIR / WORKS	TOTAL AREA / LENGTH (approx.)	UNIT	UNIT COST	COST
Exterior	Facade render	EE-12	Stucco	Obvious fractures through the stucco and moulded details.	Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1**	**m**		
Exterior	Facade render	EE-13	Stucco	Obvious fractures through the stucco and moulded details.	Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.2**	**m**		
Exterior	Facade render	EE-14	Stucco	Obvious fractures through the stucco and moulded details.	Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1**	**m**		
Exterior	Facade render	EE-15	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.4**	**sqm**		
Exterior	Facade render	EE-16	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel. Obvious fractures through the stucco.	Carefully cut-out defective area of stucco where debonded from brick. Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.7**	**sqm**		

ELEMENT	ELEMENT DETAIL	REF. NUMBER	MATERIAL	CONDITION DESCRIPTION	REPAIR / WORKS	TOTAL AREA / LENGTH (approx.)	UNIT	UNIT COST	COST
Exterior	Facade render	EE-17	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.3**	**sqm**		

North Elevation - Drwg No. CT-StRep-02

ELEMENT	ELEMENT DETAIL	REF. NUMBER	MATERIAL	CONDITION DESCRIPTION	REPAIR / WORKS	TOTAL AREA / LENGTH (approx.)	UNIT	UNIT COST	COST
Exterior	Facade render	NE-01	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.1**	**sqm**		
Exterior	Facade render	NE-02	Stucco	Obvious fractures through the stucco and moulded details.	Where fractures are evident carefully cut the render either side of the fracture to a width of not less than 75 mm. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.5**	**m**		
Exterior	Render to attached, fluted Corinthian column	NE-03	Stucco	The column stucco casing sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully remove existing stucco to fluted columns maintaining bands at 1.2m centres for replication of the profile. Inspect the condition of the background and repair as required to TCE Specification C44:Repairing Render. Reapply fluted stucco detail to columns (full girth) to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**5.5**	**sqm**		

ELEMENT	ELEMENT DETAIL	REF. NUMBER	MATERIAL	CONDITION DESCRIPTION	REPAIR / WORKS	TOTAL AREA / LENGTH (approx.)	UNIT	UNIT COST	COST
Exterior	Render to attached, fluted Corinthian column	NE-04	Stucco	The column stucco casing sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully remove existing stucco to fluted columns maintaining bands at 1.2m centres for replication of the profile. Inspect the condition of the background and repair as required to TCE Specification C44:Repairing Render. Reapply fluted stucco detail to columns (full girth) to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**5.5**	**sqm**		
Exterior	Render to attached, fluted Corinthian column	NE-05	Stucco	The column stucco casing sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully remove existing stucco to fluted columns maintaining bands at 1.2m centres for replication of the profile. Inspect the condition of the background and repair as required to TCE Specification C44:Repairing Render. Reapply fluted stucco detail to columns (full girth) to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**5.5**	**sqm**		
Exterior	Render to attached, fluted Corinthian column	NE-06	Stucco	The column stucco casing sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully remove existing stucco to fluted columns maintaining bands at 1.2m centres for replication of the profile. Inspect the condition of the background and repair as required to TCE Specification C44:Repairing Render. Reapply fluted stucco detail to columns (full girth) to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**5.5**	**sqm**		
Exterior	Facade render	NE-07	Stucco	Obvious fractures through the stucco and moulded details.	Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.3**	**m**		
Exterior	Facade render	NE-08	Stucco	Obvious fractures through the stucco and moulded details.	Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.2**	**m**		

ELEMENT	ELEMENT DETAIL	REF. NUMBER	MATERIAL	CONDITION DESCRIPTION	REPAIR / WORKS	TOTAL AREA / LENGTH (approx.)	UNIT	UNIT COST	COST
Exterior	Facade render	NE-09	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.7**	**sqm**		
Exterior	Facade render	NE-10	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.2**	**sqm**		
Exterior	Facade render	NE-11	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.9**	**sqm**		
Exterior	Facade render	NE-12	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.5**	**sqm**		
Exterior	Facade render	NE-13	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.5**	**sqm**		

ELEMENT	ELEMENT DETAIL	REF. NUMBER	MATERIAL	CONDITION DESCRIPTION	REPAIR / WORKS	TOTAL AREA / LENGTH (approx.)	UNIT	UNIT COST	COST

West Elevation - Drwg No. CT-StRep-03

ELEMENT	ELEMENT DETAIL	REF. NUMBER	MATERIAL	CONDITION DESCRIPTION	REPAIR / WORKS	TOTAL AREA / LENGTH (approx.)	UNIT	UNIT COST	COST
Exterior	Render to attached, fluted Corinthian column	WE-01	Stucco	The column stucco casing sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully remove existing stucco to fluted columns maintaining bands at 1.2m centres for replication of the profile. Inspect the condition of the background and repair as required to TCE Specification C44:Repairing Render. Reapply fluted stucco detail to columns to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.0**	**sqm**		
Exterior	Facade render	WE-02	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.7**	**sqm**		
Exterior	Render to attached, fluted Corinthian column	WE-03	Stucco	The column stucco casing sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully remove existing stucco to fluted columns maintaining bands at 1.2m centres for replication of the profile. Inspect the condition of the background and repair as required to TCE Specification C44:Repairing Render. Reapply fluted stucco detail to columns to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.6**	**sqm**		
Exterior	Render to attached, fluted Corinthian column	WE-04	Stucco	The column stucco casing sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully remove existing stucco to fluted columns maintaining bands at 1.2m centres for replication of the profile. Inspect the condition of the background and repair as required to TCE Specification C44:Repairing Render. Reapply fluted stucco detail to columns to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.6**	**sqm**		
Exterior	Render to attached, fluted Corinthian column	WE-05	Stucco	The column stucco casing sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully remove existing stucco to fluted columns maintaining bands at 1.2m centres for replication of the profile. Inspect the condition of the background and repair as required to TCE Specification C44:Repairing Render. Reapply fluted stucco detail to columns to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.0**	**sqm**		

ELEMENT	ELEMENT DETAIL	REF. NUMBER	MATERIAL	CONDITION DESCRIPTION	REPAIR / WORKS	TOTAL AREA / LENGTH (approx.)	UNIT	UNIT COST	COST
Exterior	Render to attached, fluted Corinthian column	WE-06	Stucco	The column stucco casing sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully remove existing stucco to fluted columns maintaining bands at 1.2m centres for replication of the profile. Inspect the condition of the background and repair as required to TCE Specification C44:Repairing Render. Reapply fluted stucco detail to columns to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.4**	**sqm**		
Exterior	Facade render	WE-07	Stucco	Obvious fractures through the stucco.	Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.8**	**m**		
Exterior	Facade render	WE-08	Stucco	Obvious fractures through the stucco.	Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.7**	**m**		
Exterior	Facade render	WE-09	Stucco	Obvious fractures through the stucco.	Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.2**	**m**		
Exterior	Facade render	WE-10	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel. Obvious fractures through the stucco.	Carefully cut-out defective area of stucco where debonded from brick. Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.2**	**sqm**		

ELEMENT	ELEMENT DETAIL	REF. NUMBER	MATERIAL	CONDITION DESCRIPTION	REPAIR / WORKS	TOTAL AREA / LENGTH (approx.)	UNIT	UNIT COST	COST
Exterior	Facade render	WE-11	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.5**	**sqm**		
Exterior	Facade render	WE-12	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.0**	**sqm**		
Exterior	Facade render	WE-13	Stucco	Obvious fractures through the stucco.	Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**2.7**	**m**		
Exterior	Facade render	WE-14	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.4**	**sqm**		
Exterior	Facade render	WE-15	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.2**	**sqm**		

ELEMENT	ELEMENT DETAIL	REF. NUMBER	MATERIAL	CONDITION DESCRIPTION	REPAIR / WORKS	TOTAL AREA / LENGTH (approx.)	UNIT	UNIT COST	COST
Exterior	Facade render	WE-16	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel. Obvious fractures through the stucco.	Carefully cut-out defective area of stucco where debonded from brick. Where required carefully remove existing stucco to moulded details. Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.4**	**sqm**		
Exterior	Facade render	WE-17	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.0**	**sqm**		
Exterior	Facade render	WE-18	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.9**	**sqm**		
Exterior	Facade render	WE-19	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel. Obvious fractures through the stucco.	Carefully cut-out defective area of stucco where debonded from brick. Where required carefully remove existing stucco to moulded details. Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.0**	**sqm**		
Exterior	Facade render	WE-20	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.6**	**sqm**		

ELEMENT	ELEMENT DETAIL	REF. NUMBER	MATERIAL	CONDITION DESCRIPTION	REPAIR / WORKS	TOTAL AREA / LENGTH (approx.)	UNIT	UNIT COST	COST
Exterior	Facade render	WE-21	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel. Obvious fractures through the stucco.	Carefully cut-out defective area of stucco where debonded from brick. Where required carefully remove existing stucco to moulded details. Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.0**	**sqm**		
Exterior	Facade render	WE-22	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.7**	**sqm**		
Exterior	Facade render	WE-23	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.6**	**sqm**		

South Elevation - Drwg No. CT-StRep-04

ELEMENT	ELEMENT DETAIL	REF. NUMBER	MATERIAL	CONDITION DESCRIPTION	REPAIR / WORKS	TOTAL AREA / LENGTH (approx.)	UNIT	UNIT COST	COST
Exterior	Facade render	SE-01	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel. Obvious fractures through the stucco.	Carefully cut-out defective area of stucco where debonded from brick. Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.3**	**sqm**		

ELEMENT	ELEMENT DETAIL	REF. NUMBER	MATERIAL	CONDITION DESCRIPTION	REPAIR / WORKS	TOTAL AREA / LENGTH (approx.)	UNIT	UNIT COST	COST
Exterior	Facade render	SE-02	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.6**	**sqm**		
Exterior	Facade render	SE-03	Stucco	Obvious fractures through the stucco.	Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.7**	**m**		
Exterior	Facade render	SE-04	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.1**	**sqm**		
Exterior	Facade render	SE-05	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.8**	**sqm**		
Exterior	Facade render	SE-06	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel. Obvious fractures through the stucco.	Carefully cut-out defective area of stucco where debonded from brick. Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**13.0**	**sqm**		

ELEMENT	ELEMENT DETAIL	REF. NUMBER	MATERIAL	CONDITION DESCRIPTION	REPAIR / WORKS	TOTAL AREA / LENGTH (approx.)	UNIT	UNIT COST	COST
Exterior	Facade render	SE-07	Stucco	Obvious fractures through the stucco.	Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**3.0**	**m**		
Exterior	Facade render	SE-08	Stucco	Obvious fractures through the stucco.	Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.5**	**sqm**		
Exterior	Facade render	SE-09	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel. Obvious fractures through the stucco.	Carefully cut-out defective area of stucco where debonded from brick. Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.8**	**sqm**		
Exterior	Facade render	SE-10	Stucco	Obvious fractures through the stucco.	Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.0**	**m**		
Exterior	Facade render	SE-11	Stucco	Obvious fractures through the stucco.	Where fractures are evident carefully cut the render either side of the fracture to a width of not less than 75 mm. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.9**	**m**		

ELEMENT	ELEMENT DETAIL	REF. NUMBER	MATERIAL	CONDITION DESCRIPTION	REPAIR / WORKS	TOTAL AREA / LENGTH (approx.)	UNIT	UNIT COST	COST
Exterior	Facade render	SE-12	Stucco	Stucco sounded hollow and debonded from the substrate when tapped with a metal chisel.	Carefully cut-out defective area of stucco where debonded from brick. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.4**	**sqm**		

ELEMENT	ELEMENT DETAIL	REF. NUMBER	MATERIAL	CONDITION DESCRIPTION	REPAIR / WORKS	TOTAL AREA / LENGTH (approx.)	UNIT	UNIT COST	COST
Exterior	Facade render	SE-13	Stucco	Obvious fractures through the stucco.	Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm. Where required carefully remove existing stucco to moulded details. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**11.0**	**m**		
Exterior	Facade render	SE-14	Stucco	Obvious fractures through the stucco.	Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render/run the profile to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.4**	**m**		

Boundary Walls - W - Drwg No. CT-StRep-05

GENERAL	TOTAL AREA / LENGTH (approx.)	UNIT	UNIT COST	COST
Clean the walls in preparation for decoration (by others) using a cold water pressure washer.			**item**	
Where the railing bracket has corroded and expanded carefully expose the railing tip, clean the metal surface with a sharp metal scrape and apply a rust inhibitor.	**20**	**No**		

ELEMENT	ELEMENT DETAIL	REF. NUMBER	MATERIAL	CONDITION DESCRIPTION	REPAIR / WORKS	TOTAL AREA / LENGTH (approx.)	UNIT	UNIT COST	COST
Boundary walls	Low wall render	BW1-01	Cementitious render	Obvious fractures through the render.	Where the low level boundary wall face has fractured carefully cut the render either side of the fracture to a width of 150 mm. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean, apply stainless steel eml and reinstate the render as required to match existing to TCE Specification M20:Plastered and Rendered Coatings.	**0.5**	**m**		

ELEMENT	ELEMENT DETAIL	REF. NUMBER	MATERIAL	CONDITION DESCRIPTION	REPAIR / WORKS	TOTAL AREA / LENGTH (approx.)	UNIT	UNIT COST	COST
Boundary walls	The pier render	BW-P1/2	Cementitious render	Obvious fractures through the render in two levels-at the connection with the low wall and just below the capping stone.	Carefully remove loose and defective render to piers. Where fractures are evident carefully cut the render either side of the fracture to a width of 150 mm. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.2**	**sqm**		
Boundary walls	Low wall render	BW2-01	Cementitious render	Obvious fractures through the render.	Where the low level boundary wall face has fractured carefully cut the render either side of the fracture to a width of 150 mm. Inspect the condition of the brickwork/background and repair as required to TCE Specification C44:Repairing Render. Clean, apply stainless steel eml and reinstate the render as required to match existing to TCE Specification M20:Plastered and Rendered Coatings.	**0.6**	**m**		
Boundary walls	Low wall render	BW2-02	Cementitious render	Obvious fractures through the render.	Where the low level boundary wall face has fractured carefully cut the render either side of the fracture to a width of 150 mm. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean, apply stainless steel eml and reinstate the render as required to match existing to TCE Specification M20:Plastered and Rendered Coatings.	**0.7**	**m**		
Boundary walls	The pier render	BW-P2/3	Cementitious render	Obvious fractures through the render in three locations-junction between the cap and pier, bottom of the pier has blown and failed and fracture at the level of the iron railings top rail.	Carefully remove loose and defective render to piers. Where fractures are evident carefully cut the render either side of the fracture to a width of 150 mm. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.6**	**sqm**		
Boundary walls	Low wall render	BW3-01	Cementitious render	Obvious fracture through the render.	Where the low level boundary wall face has fractured carefully cut the render either side of the fracture to a width of 150 mm. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean, apply stainless steel eml and reinstate the render as required to match existing to TCE Specification M20:Plastered and Rendered Coatings.	**0.5**	**m**		

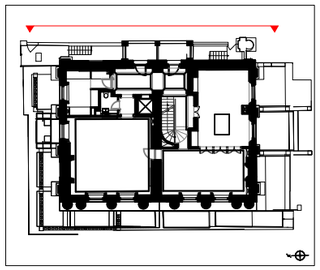
ELEMENT	ELEMENT DETAIL	REF. NUMBER	MATERIAL	CONDITION DESCRIPTION	REPAIR / WORKS	TOTAL AREA / LENGTH (approx.)	UNIT	UNIT COST	COST
Boundary walls	Low wall render	BW3-02	Cementitious render	Obvious fracture through the render and a small patch of hollow render.	Where the low level boundary wall face has fractured carefully cut the render either side of the fracture to a width of 150 mm. Carefully cut-out defective area of render where debonded from brick. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean, apply stainless steel eml and reinstate the render as required to match existing to TCE Specification M20:Plastered and Rendered Coatings.	**0.3**	**sqm**		
Boundary walls	Low wall coping	BW3-03	Reconstituted stone coping	The reconstituted stone coping heavily eroded and not decorated.	Carefully rake out weak joints and repoint (girth 650mm). Coping stone repair as necessary. Mortar to general specification .	**7.2**	**m**		
Boundary walls	The pier render	BW-P3/4	Cementitious render	The pier cap is fractured and hollow on all sides. Obvious fracture through the render at the level of the iron railings top rail.	Carefully remove loose and defective render to piers. Where fractures are evident carefully cut the render either side of the fracture to a width of 150 mm. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.2**	**sqm**		
Boundary walls	Low wall render	BW4-01	Cementitious render	Obvious fracture through the render and a small patch of hollow render.	Where the low level boundary wall face has fractured carefully cut the render either side of the fracture to a width of 150 mm. Carefully cut-out defective area of render where debonded from brick. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean, apply stainless steel eml and reinstate the render as required to match existing to TCE Specification M20:Plastered and Rendered Coatings.	**0.3**	**sqm**		
Boundary walls	Low wall render	BW4-02	Cementitious render	Obvious fracture through the render.	Where the low level boundary wall face has fractured carefully cut the render either side of the fracture to a width of 150 mm. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean, apply stainless steel eml and reinstate the render as required to match existing to TCE Specification M20:Plastered and Rendered Coatings.	**0.7**	**m**		

ELEMENT	ELEMENT DETAIL	REF. NUMBER	MATERIAL	CONDITION DESCRIPTION	REPAIR / WORKS	TOTAL AREA / LENGTH (approx.)	UNIT	UNIT COST	COST
Boundary walls	Low wall render	BW4-03	Cementitious render	Obvious fracture through the render.	Where the low level boundary wall face has fractured carefully cut the render either side of the fracture to a width of 150 mm. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean, apply stainless steel eml and reinstate the render as required to match existing to TCE Specification M20:Plastered and Rendered Coatings.	**0.7**	**m**		
Boundary walls	Low wall render	BW4-04	Cementitious render	Obvious fracture through the render.	Where the low level boundary wall face has fractured carefully cut the render either side of the fracture to a width of 150 mm. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean, apply stainless steel eml and reinstate the render as required to match existing to TCE Specification M20:Plastered and Rendered Coatings.	**0.7**	**m**		
Boundary walls	The pier render	BW-P4/5	Cementitious render	Obvious fractures and a small patch of hollow render at the connection with the low wall.	Carefully remove loose and defective render to piers. Where fractures are evident carefully cut the render either side of the fracture to a width of 150 mm. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**0.2**	**sqm**		
Boundary walls	The pier render	BW-P5	Cementitious render	Obvious fractures at the connection with the low wall and at the level of the iron railings top rail.	Where fractures are evident carefully cut the render either side of the fracture to a width of 150 mm. Inspect the condition of the brickwork and repair as required to TCE Specification C44:Repairing Render. Clean and apply the appropriate new render to match existing (based on trial results) to TCE Specification M20:Plastered and Rendered Coatings.	**1.0**	**m**		

ELEMENT	ELEMENT DETAIL	REF. NUMBER	MATERIAL	CONDITION DESCRIPTION	REPAIR / WORKS	TOTAL AREA / LENGTH (approx.)	UNIT	UNIT COST	COST

APPENDIX 2: STUCCO CONDITION DRAWINGS

EAST ELEVATION



Areas that need repairing

Fractures through the stucco

Client

SHALIMAR INVESTORS LTD

Job

41-42 CHESTER TERRACE

Title

Stucco Facade -
Schedule of Repairs
East Elevation

Scale

1: 100 @ A3

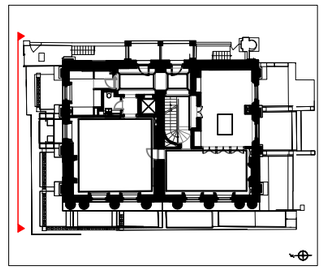
Drawing status

For Information

Date	Drawing No
Sep 2014	CT-StRep-01

STEPHEN LEVRANT HERITAGE ARCHITECTURE

62 British Grove, Chiswick, London 2NL
Telephone : 0208 748 5501 Fax: 0208 748 4992



Areas that need repairing

Fractures through the stucco

NORTH ELEVATION

Client

SHALIMAR INVESTORS LTD

Job

41-42 CHESTER TERRACE

Title

Stucco Facade -
Schedule of Repairs
North Elevation

Scale

1: 100 @ A3

Drawing status

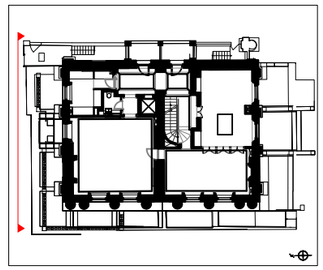
For Information

Date	Drawing No
Sep 2014	CT-StRep-02

STEPHEN LEVRANT HERITAGE ARCHITECTURE

62 British Grove, Chiswick, London 2NL
Telephone : 0208 748 5501 Fax: 0208 748 4992

WEST ELEVATION



Areas that need repairing

Fractures through the stucco

Client

SHALIMAR INVESTORS LTD

Job

41-42 CHESTER TERRACE

Title

Stucco Facade -
Schedule of Repairs
West Elevation

Scale

1: 100 @ A3

Drawing status

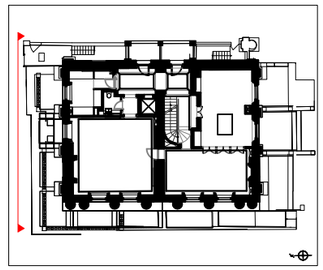
For Information

Date	Drawing No
Sep 2014	CT-StRep-03

STEPHEN LEVRANT HERITAGE ARCHITECTURE

62 British Grove, Chiswick, London 2NL
Telephone : 0208 748 5501 Fax: 0208 748 4992

SOUTH ELEVATION



Areas that need repairing

Fractures through the stucco

Client

SHALIMAR INVESTORS LTD

Job

41-42 CHESTER TERRACE

Title

Stucco Facade -
Schedule of Repairs
South Elevation

Scale

1: 100 @ A3

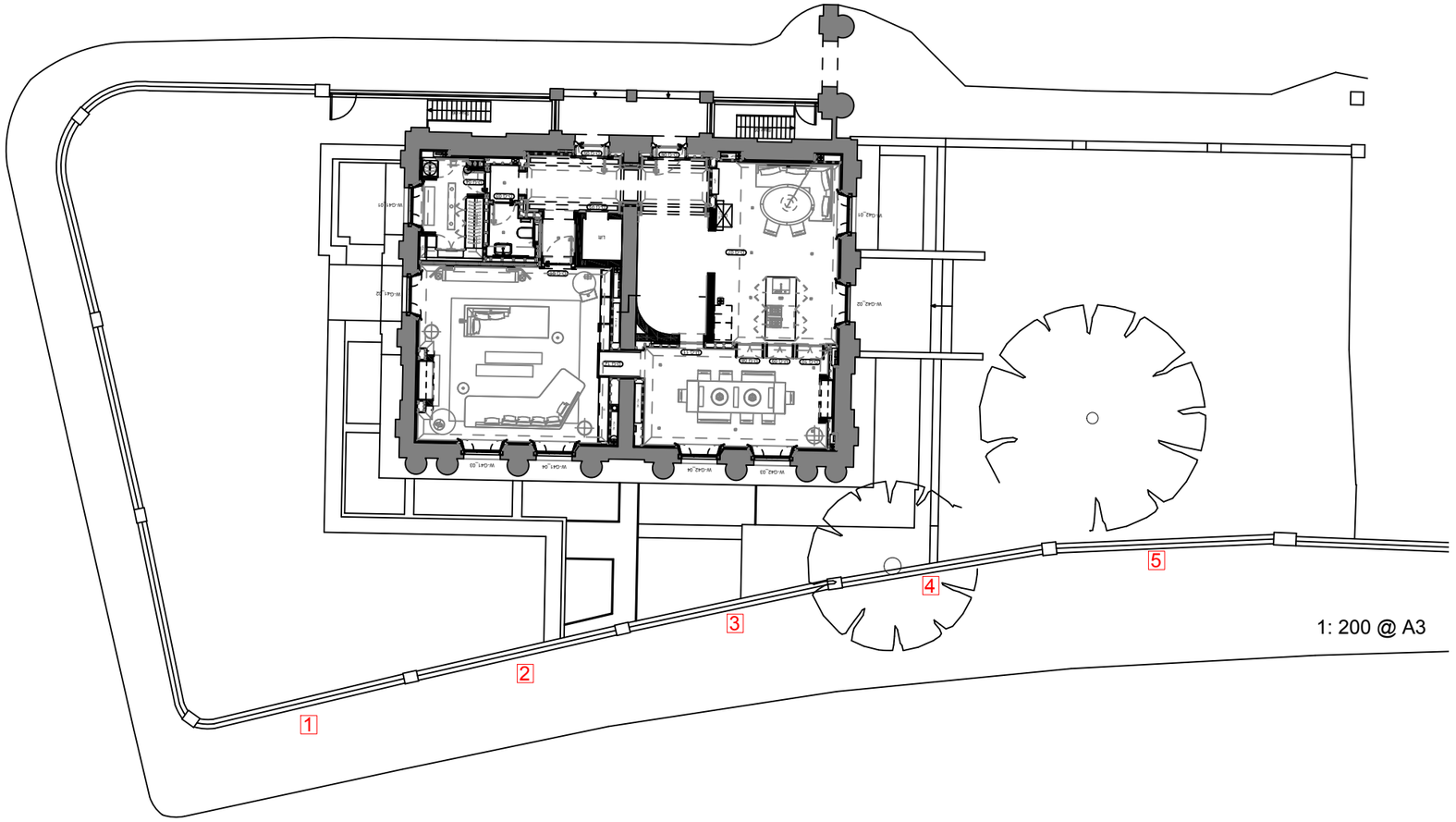
Drawing status

For Information

Date	Drawing No
Sep 2014	CT-StRep-04

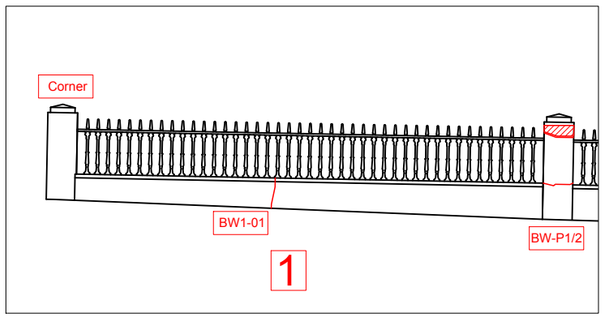
STEPHEN LEVRANT HERITAGE ARCHITECTURE

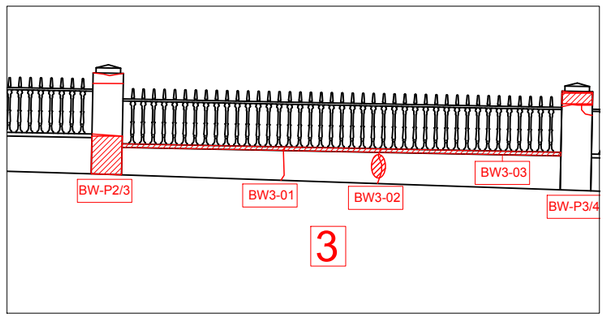
62 British Grove, Chiswick, London 2NL
Telephone : 0208 748 5501 Fax: 0208 748 4992

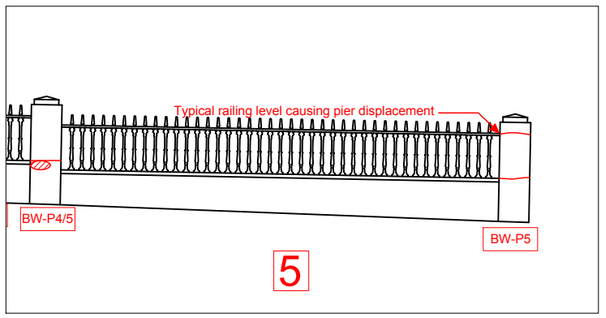


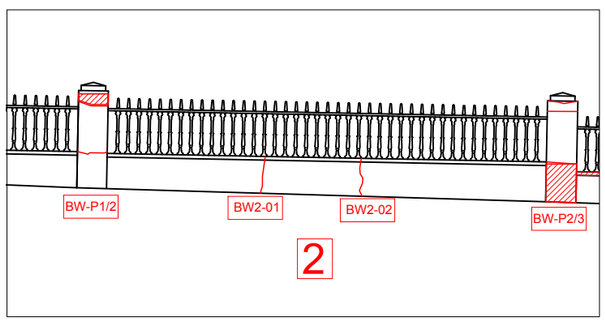
Areas that need repairing

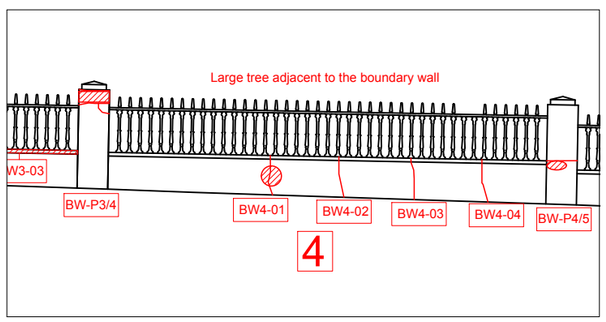
Fractures through the stucco











Typical bay length	**7200mm**
Typical plinth wall level	**+645mm level**
Typical railing level	**+1380mm**
Overall pier height	**+1695mm**
Pier plan dimension	**385mm x 485mm**

Client

SHALIMAR INVESTORS LTD

Job

41-42 CHESTER TERRACE

Title

Stucco Facade -
Schedule of Repairs
Boundary Walls - W

Scale

1: 100 @ A3

Drawing status

For Information

Date

Sep 2014

Drawing No

CT-StRep-05

STEPHEN LEVRANT HERITAGE ARCHITECTURE

62 British Grove, Chiswick, London 2NL
Telephone : 0208 748 5501 Fax: 0208 748 4992

APPENDIX 3: "STUCCO CONDITION REPORT" BY PAYE

41 / 42 CHESTER TERRACE

STUCCO CONDITION REPORT.

Rev A.

Author R Greer

Dated 15th July 2014

CONTENTS

EXECUTIVE SUMMARY.

The facades were inspected using a combination of binocular surveys and a hammer test to the four elevations accessed by abseil rope technicians to ascertain the overall condition of the facades.

Whilst the elevations would appear to be well maintained, there is evidence of some cracking and displacement that should be investigated further by the design team.

On the west elevation there is a trend line fracture the full height of the building along the line of the party wall between the two properties.

Above some of the window heads there is evidence of fracturing and it would be prudent with the level of intervention proposed with the redevelopment to assess the condition of the window lintels which could be timber.

On all elevations the modillions and decorative Corinthian capitols sounded hollow and this is expected if the details were constructed from an early form of terracotta or Coade stone. At this stage we have investigated the fixing of the modillions to the cornice.

With regards to the weathering of the building, we would recommend that all of the lead cappings and flashings are replaced to provide a long term weather proofing solution.

INTRODUCTION.

The term 'stucco' is of Germanic origin and its use has had many applications since the Middle Ages. These range from a coarse plaster or cement used chiefly for covering rough exterior surface of walls in imitation of stone, to a fine plaster, especially one composed of gypsum and pulverised marble, used for covering walls, ceilings and floors, and for making cornices, mouldings and other decorations. Consequently, the materials used in producing stucco vary considerably. Binders have included fully burnt gypsum; limes, sometimes with pozzolanic additives such as brick powder; cements; and linseed oil (mastic). Aggregates have included marble dust, crushed stone and sand. All have been used in varying mixes and hydraulic strengths with a wide range of colorants and other additives.

The use of stucco or smooth render to simulate finely dressed stonework or rustication became popular in parts of Britain in the early 19th century. The material was often applied over brickwork but also sometimes over rubble stone. Not only was the appearance of finely jointed work or rustication achievable in stucco, it was also far more affordable than stone in many parts of the country.

External stucco had been introduced into London in the later 18th century and was increasingly used to satisfy the Regency and early Victorian taste for smooth, evenly coloured house fronts, its cost amounting to about one quarter that of stone. Mid-Victorian fashions, however, as well as the fall in the price of stone, helped to phase out stucco very quickly after 1860. Later in the century, terracotta came into its own as a cheap and durable material for applied decoration and aggrandisement.

In the early Victorian period stucco was used in a variety of developments ranging from the highly prestigious to the less expensive. John Nash used stucco extensively in the early 19th century for his terraces in London, Brighton, Hastings, Southsea and Torquay as well as his Gothic and Italianate villas in Malvern,

Leamington and Harrogate. Perhaps the finest example was his development of Regents Park, arguably his greatest work.

MATERIAL

Stucco renders are of three basic types:

- a fat lime and sand mix sometimes with animal hair as reinforcement;
- a hydraulic mix containing either hydraulic lime and sand,
- fat lime with a pozzolanic additive and sand; and various forms of mastic.

Correct identification of the material used is essential when carrying out repairs to ensure both historical continuity and structural compatibility, as a different mortar mix may well be incompatible with the original.

LIME BASED STUCCO.

Generally, a pure or fat lime would have been prepared by slaking quicklime (calcium oxide) made from a pure limestone or chalk. Dry hydrated lime is sometimes used today for repair work, although mature fat lime is generally preferred.

A faster set could be achieved by using either a hydraulic lime or by adding a pozzolanic additive such as brick dust to a fat lime. Roman cement, used in stucco from the 1790s, is one form of hydraulic lime which was made from an argillaceous limestone (septarian nodules) and has a distinctive pinky-brown colour. The sand and other aggregates used in a repair should match the existing in particle size, colour and type. For new stucco, washed and graded pit sand complying with the British Standard should be used. This should be hard, sharp, gritty and free from clay and organic impurities.

Lime plasters perform best in layers of uniform thickness. They are applied in two or three coats. The mix should be as dry as workably possible as this reduces the shrinkage and cracking on drying and, prior to the application of each coat, the surface should be sprayed

down with clean water. This wetting helps to prevent moisture from being sucked out of each stucco application too rapidly, which results in cracking, loss of bond, and generally poor quality stuccowork.

The success of external lime-based stucco is in the tending. The longer it takes to dry out the better it will perform. Each coat of a fat lime stucco should be allowed to dry for between seven and 21 days, depending on the mix, season, weather and temperature, prior to applying subsequent coats. For a hydraulic lime mix the interval between coats can be as little as two or three days. It is most important to protect the work during and after application to prevent either accelerated or prolonged drying. In hot weather or situations where rapid drying is likely, the work should be protected with damp hessian. In addition, work must be completed long before the first frost.

MASTIC.

In the late 18th and early 19th centuries different mastic recipes were patented by a succession of people trying to produce a high quality but inexpensive stucco. These included 'Adam's New Invented Patent Stucco' used by the Adam brothers, Robert and James (in fact based on stucco recipes patented by David Work in 1763 and Liadet in 1773), Christopher Dehl's mastic (1815), and Hamelin's Cement (1817).

The various forms of mastic generally consisted of a fine aggregate such as limestone, sands, crushed pottery and glass bound with linseed oil, often with litharge (lead monoxide) to aid drying. Dehl's mastic, for example, which is believed to have been used by Nash at Regent's Park and Carlton House Terrace, London, was made of 'linseed oil boiled with litharge and mixed with [fired] porcelain clay, finely powdered and coloured with ground brick or pottery, turpentine being used as the thinner'. The background was liberally coated with linseed oil before applying the mastic.

Mastic can be recognised by the fact that it repels water. The material did not age well and tends to be very brittle. Where large areas have failed, it is recommended to use a stucco made from

hydraulic lime as an alternative to mastic. However, it can generally be said that repair of mastic stuccos is fraught with problems. On the whole the principal of 'like for like' may be followed.

Mastic as a topcoat of stucco was a smooth, trowelled finish, and scored or lined in imitation of ashlar. This effect could be achieved in three ways: joint lines could be marked on while the top coat is still green using a tool called a jointer; the joints may be formed by sunken, slightly chamfered battens fixed to the second coat and then removed after the top coat stucco has set firm; or they may be run by a double horsed running mould. Special care must be taken to match to the existing work in position, spacing and style.

Generally, traditional renders of any period were painted, with the exception of some early experimental stucco recipes which were self-coloured, sometimes enhanced with a wash of copperas (iron sulphate) to give the appearance of Bath stone, but often it was left unpainted, particularly where fine aggregates were used. A thin line of white lime putty, graphite, or some other pigment sometimes enhanced the illusion of masonry joints. If using pigments today, it is important to ensure they are compatible with lime.

HAMMER TEST SURVEYS.

On the following pages we have provided a set of elevation drawings marked up with the current condition of the stucco.

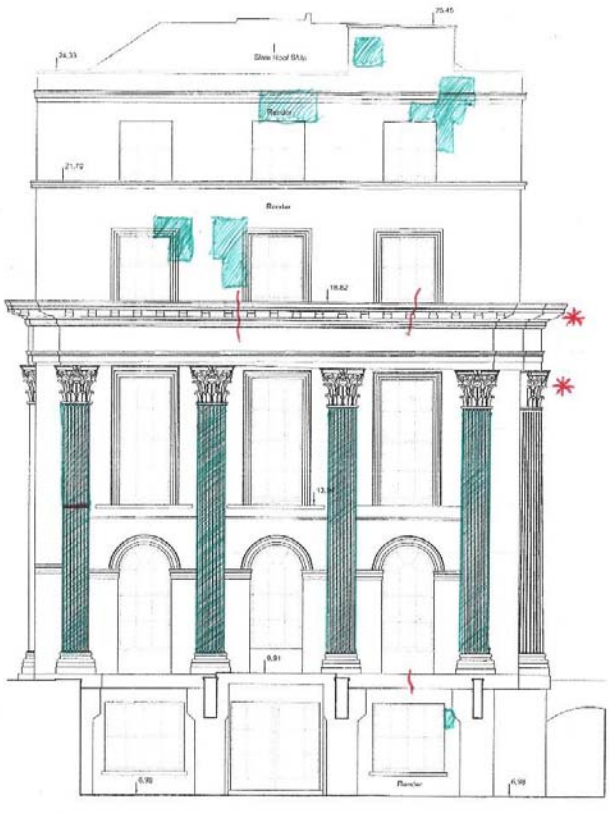
Red lines indicate obvious fractures through the stucco

Green areas are areas of stucco that sounded hollow and debonded from the substrate when tapped with a metal chisel.

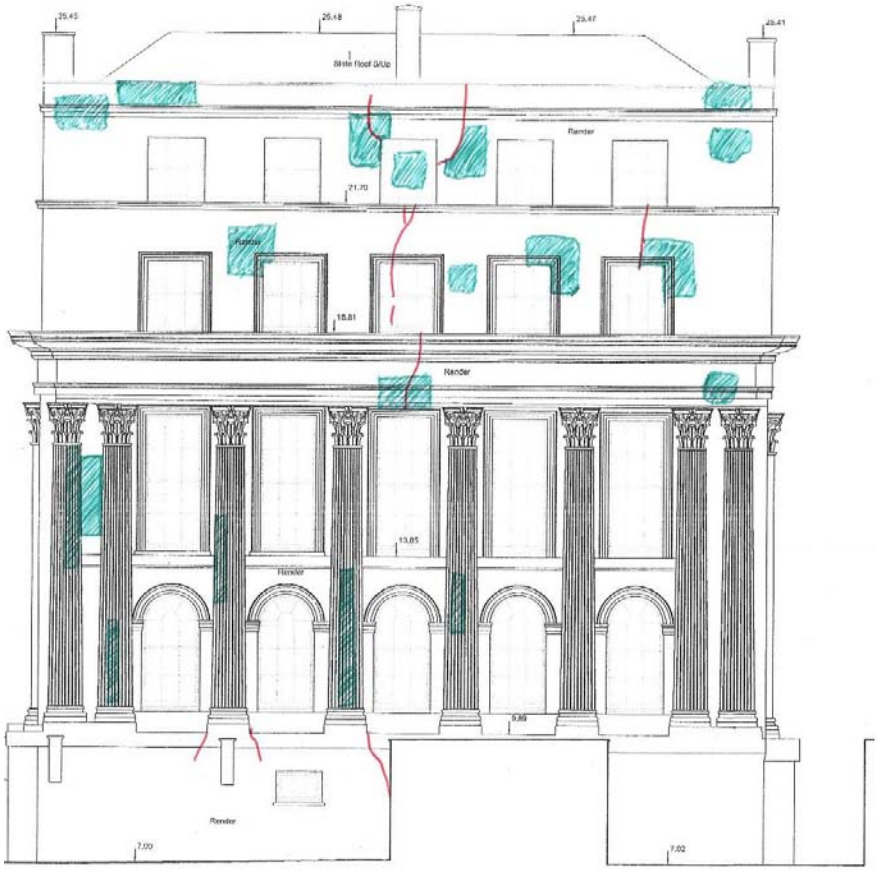
With regards to the boundary wall we have also considered the verticality and displacement caused by railing connections, trees etc.

With regards to the rear elevation of the boundary wall we were unable to inspect due to the existing foliage and trees and we will inspect these once access is available.

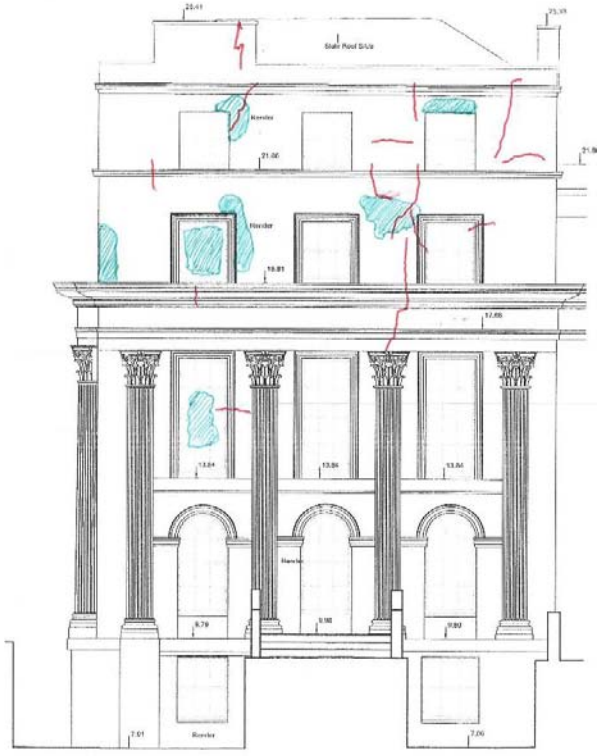
EAST ELEVATION



NORTH ELEVATION

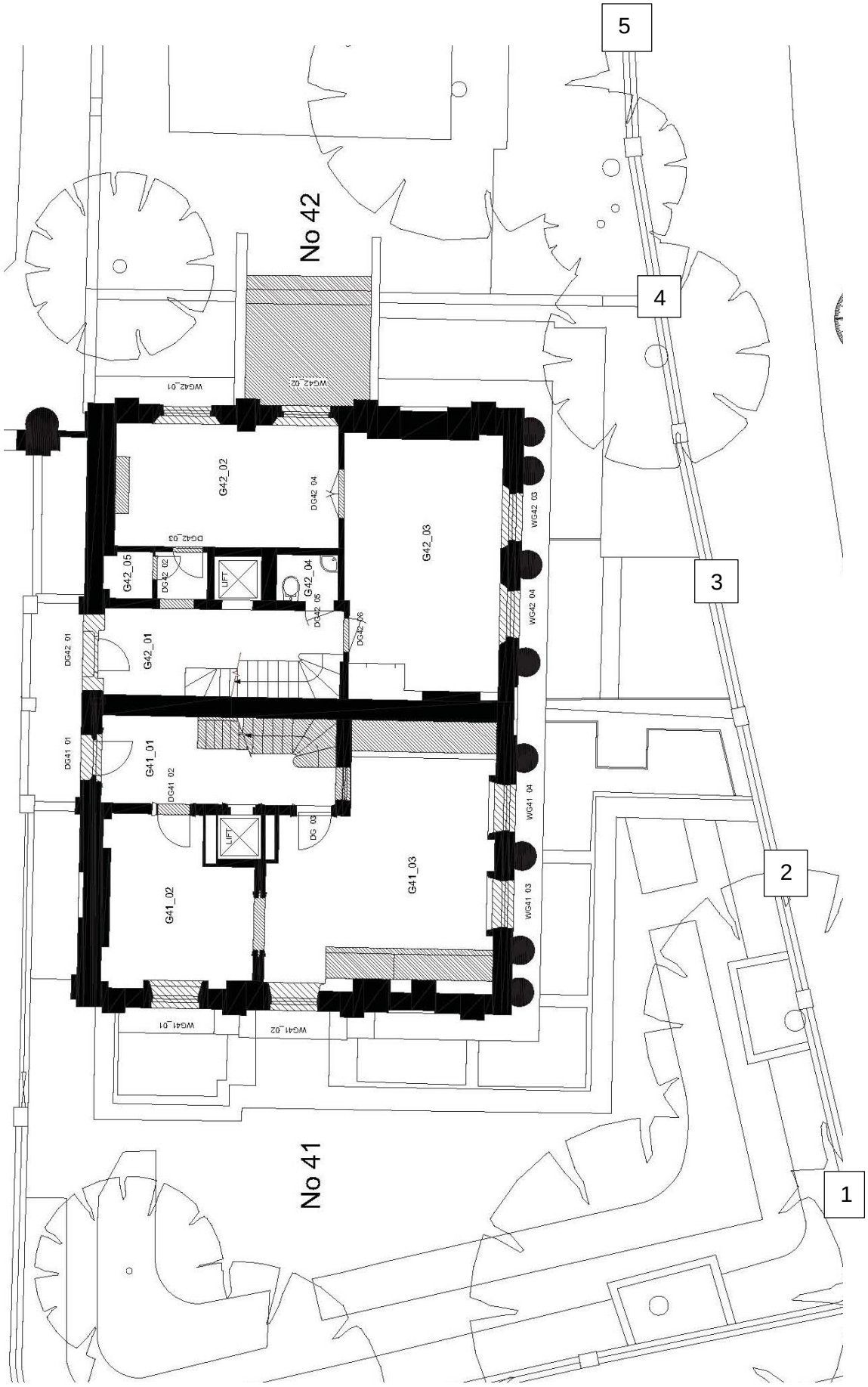


WEST ELEVATION



SOUTH ELEVATION

BOUNDARY WALLS



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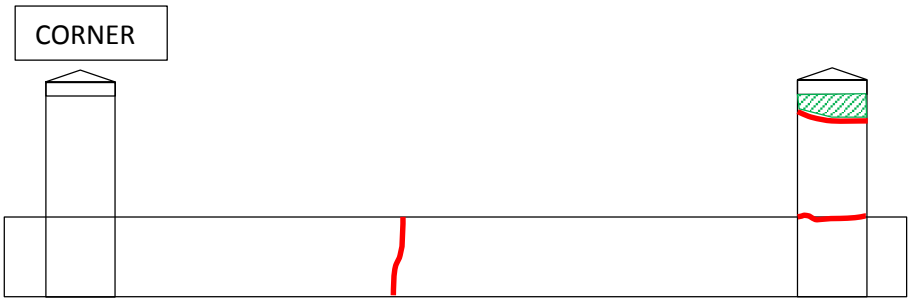

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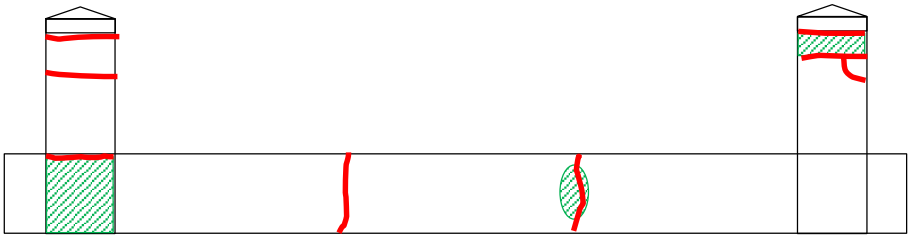

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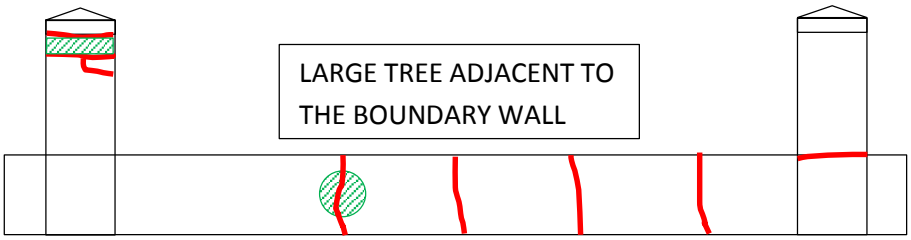

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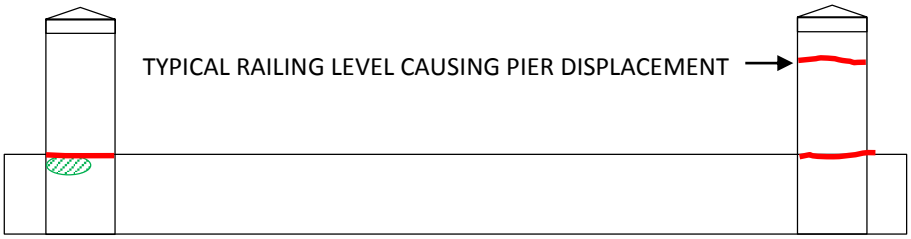


Typical bay length	7200mm
Typical plinth wall level	+645mm level
Typical railing level	+1380mm
Overall pier height	+1695mm
Pier plan dimension	385mm x 485mm

METHOD OF REPAIR.

Record the area to be conserved prior to commencement as well as during the works. Particular attention should be taken to detail the areas of loose, defective and inappropriate render.

Mortar samples are required to ascertain the most appropriate repair mix for replacement areas of stucco and trial patches should be undertaken to satisfy the Conservation Officer's requirements.

Remove the inappropriate and poorly bonded materials and methods of repair and replace with the appropriate stucco/render. However, removal should only be carried out if this does not put greater risk on the original fabric. The perimeter of the repair should be undercut using a fine bladed variable speed grinder to prevent debonding creep as the defective mortars are carefully removed and to provide an appropriate perimeter key for the new render.

New mortars should be well mixed and applied in layers not exceeding 12mm in thickness then allowed to set and cure sufficiently prior to the application of the subsequent layer of render or finishing coat. Depending upon the render layer being applied the surface should be scratched whilst setting to provide an adequate key for the next coat.

As mentioned previously, the lining of stucco renders was used as a method to replicate and mimic natural stone joints. The record surveys prior to commencement of the works will establish the extent of stucco lining remaining (if at all applied) and provide a discussion topic with the Conservation Officer to determine the extent and type of stucco lining to be incorporated in to the stucco repairs

Cracks greater than 2mm in the stucco should be carefully cut out to form a slight undercut which will act as a key, and thoroughly flushed out with water to remove dust and loose debris before being filled with fresh mortar based on trial results. Obviously a finer aggregate will be required where the crack is fine or hairline and it is often deemed unnecessary to undercut as the space is easily filled especially if limewash is to be applied.

Salt efflorescence may be dry brushed and removed from all surfaces, as should all algal growth. A suitable biocide should be applied to affected areas only, to remove remaining algae and prevent re-growth.

Friable areas of a lime-based stucco may be consolidated with repeated applications of limewater. To avoid a white bloom it is most important not to let the limewater sit on the surface but to sponge it off with clean water.

Substituting modern materials for the original should always be avoided if at all possible. Wherever a high proportion of original stucco has survived a hundred years or more in the British climate, bear in mind that the original has been proved to work. This historic material, produced by craftsmen long ago, has its own intrinsic value like any antique and, with careful consolidation, suitable repairs and thorough maintenance, it should be possible to ensure that the original stucco work can still be seen by future generations.

PAST EXPERIENCE.

KENWOOD HOUSE, LONDON.

PAYE completed the restoration of Kenwood House in 2013 having ve had a constant presence on site for three years carefully conserving the internal and external fabric.

The work involved transforming the former Service Wing in to a café and visitors centre, conserving the Orangery and restoring the main house which English Heritage vacated during the works.

GERMAN EMBASSY, BELGRAVE SQUARE, LONDON.

This Grade I listed residence was built in 1825 in Graeco-Roman style and forms part of four grand terraces facing Belgrave Square in West London.

The facade suffered heavily from weathering and poor levels of craftsmanship in previous renovations.

Substantial work has been carried out to reinstate the historical grandeur of the building. This has involved detailed technical analysis and historical research of existing features, materials and structures. The restoration concept was carefully planned in close collaboration with English Heritage. During construction the residence building remained in occupation, while meeting high level security requirements

Client: Federal Republic of Germany Ms Melanie Jankovic vw-11@lond.diplo.de

Architect: Uber Raum Architects Mr Markus Siefferman ms@uber-raum.com

PQS: MDA Consulting Mr Chris Bancroft CBancroft@mdaconsulting.co.uk

CLIVEDEN HOUSE, TAPLOW, BERKSHIRE.

Designed by Sir Charles Barry in 1851 to replace a house previously destroyed by fire, the present house is a blend of the English Palladian style and the Roman Cinquecento.

The Victorian three-story mansion sits on a 120 m long, 6.1 m high brick terrace or viewing platform which dates from the mid-seventeenth century and the fabric of the exterior of the house is a combination of rendered Roman cement on brick, terracotta additions such as balusters, capitals, keystones and finials and natural stone.

PAYE's craftsmen are currently on site repairing years of neglect and poor workmanship

- reroofing the Cockeril Pavillion,
- carefully dismantling, repairing and reconstructing the grand staircase to the South Terrace
- designing, supplying and installing a large childrens fun slide as a summer revenue stream for the National Trust
- cleaning the water storage tanks and confined spaces underneath the terrace to create bat nesting sites

Client: National Trust Mr Victor Wojcik

Architect: Julian Harrap Architects Mr Bob Sandford
robert@julianharraparchitects.co.uk

AVAILABILITY

Repairing and conserving historic buildings has become a very important and highly skilled area of work requiring a thorough understanding of both traditional construction and new technology.

PAYE have become a very successful specialist in this area. The quality of our work and the standard of service have been the foundations on which the success has been built and we are proud to have become one of the most highly regarded U.K. companies in this field. The company was formed by Bert Goodwin and Adrian Paye in 1992 and has gradually grown to become the largest specialist conservation and masonry company in England with a turnover in excess of £20million.

We have repaired or adapted many of our country's national monuments - the Royal Opera House, Windsor Castle, The Tower of London, Southwark Cathedral, the Royal Albert Memorial, The Royal Albert Hall and the Houses of Parliament to name but a few and we are equally proud to have been associated with projects involving local churches, housing associations, commercial and private properties.

With a team of forty specialist site managers, supervisors and foremen we are able to provide a wealth of experience across all disciplines in house to manage and complete the works to the highest standard of craftsmanship required.

Current high profile projects include:

- Battersea Power Station
- German Embassy, Belgrave Square, London
- Cliveden House, Taplow, Berkshire
- Apsley House, London
- 30 Queen Annes Gate, London SW1
- 32 Queen Annes Gate, London SW1
- Knole House, Sevenoaks, Kent

We confirm that the management team are available for the duration of the works as required.

PERSONNEL

MANAGEMENT PROPOSALS / ORGANISATION CHART / CV'S OF KEY PERSONNEL.

Proposed management structure.

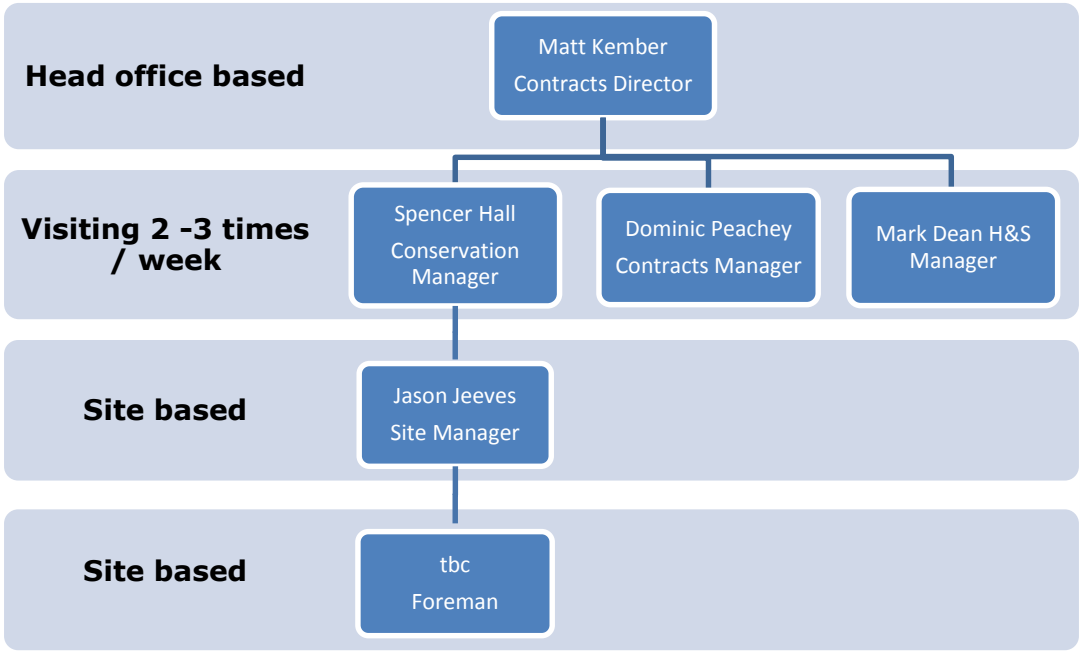
PAYE has extensive experience of managing the repair and restoration of the fabric of historic buildings especially when the works involve occupied buildings and the close proximity of the general public.

We recognise that working on prominent and high profile projects requires a strong management structure with clear lines of reporting and responsibility to ensure that decisions are acted upon correctly.

The management structure shown below is able to provide the depth of support and knowledge available to the site team to ensure that the project is delivered successfully.

The proposed team is as follows:

Contracts Director	Matt Kember
Conservation Manager	Spencer Hall
Estimator	Graham Staple
Site Manager	tbc
Stucco restoration foreman	tbc



On the following pages we have provided details of the site team and their experience.

CONTRACTS DIRECTOR MATT KEMBER

Profile

Matthew joined PAYE Stonework & Restoration in March 1994, and is the company's Contracts Director, whereby, he runs and oversees many varied high profile projects with the assistance of Contracts and Project Managers.

Matthew is also responsible for the management of the Contracts Department. He has good technical and practical knowledge of the industry having worked within construction for 20 years.

With responsibility for a large number of prestigious and complicated restoration and conservation projects, Matthew maintains regular contact with Client and Professional Teams to ensure that the PAYE Project Teams are effectively managed from initial enquiry through to final account stages.

Projects

Projects managed and completed by Matthew include the following :-

- Darnley Mausoleum
- The London Hippodrome
- The Grange, Ramsgate (Grade I Listed Building)
- Osborne House, Isle of Wight (Grade I Listed Building)
- St. Michael and All Angels Church, Kingsnorth, Ashford (Grade II Listed Building)
- The Archbishops Palace, Canterbury (Grade I Listed Building)
- The Royal Artillery Memorial and Duke of Wellington Memorial – Hyde Park Corner (Grade II Listed Monuments)
- St. Mary's Church, Hampton
- St. Barnabas Church, Kensington
- St. Cuthbert's Church, Earls Court
- Holy Trinity Church, Sloane Street
- St. Stephen's Church, Tonbridge
- H.M. Tower of London - River Wall Repairs
- Knole House – Sevenoaks
- Albemarle House - Piccadilly
- Aspley House - Hyde Park Corner
- Harley House - Marylebone Road
- The Royal Marsden Hospital - Brompton Road
- Epsom Clock Tower - Epsom, Surrey
- Aylesford Priory - Aylesford, Kent

CONTRACTS MANAGER DOMINIC PEACHEY BSc(Hons)

Qualifications

Dominic obtained an Honours Degree in Construction Management from UMIST in 2004 and joined PAYE Stonework & Restoration Limited as a Trainee Site Manager immediately after.

Dominic has worked his way up to Contracts Manager, and has been involved in a variety of jobs including, principal contract, façade retention, conservation work and new build projects.

Profile.

As Contracts Manager, Dominic will report directly to the board. He will be responsible for all aspects of the contract including determining the site objectives and ensuring that these are met as well as managing the overall commercial aspects of the project.

He will take overall responsibility for all site operations including site safety and security, management of the site teams, co-ordination and management of the subcontractors, the supply and direction of labour and materials, standards of workmanship and progress monitoring.

Relevant Experience

With nearly ten years experience in the conservation and repair of the fabric of historic buildings Dominic has overseen more than 250 projects and all within the South East of England. Some examples are as follows:

Whitechapel High Street 2012 Regeneration.

As part of the 2012 Olympic Legacy PAYE have restored over 100 properties correcting decades of neglect and poor maintenance including the replacement of the timber shopfronts to restore the streetscape to its original condition.

Client: LOCOG / Tower Hamlets
Value: £6,000,000

3 – 10 Grosvenor Place, London.

Complete external façade restoration to a full terrace of Georgian stucco properties as part of the transformation in to high value apartments on behalf of Grosvenor Estates.

Client: Grosvenor Estate
Value: £1,200,000

CONSERVATION MANAGER SPENCER ADAM HALL ACR

QUALIFICATIONS

2011	ICON Accredited Conservator Restorer
1998-2000	Bournemouth University MSc Historic Building Conservation & PGDip

EMPLOYMENT HISTORY

Spencer has twenty years experience conserving and repairing historic buildings from commencing at Hirst Conservation gradually increasing his level of experience, qualification and responsibility culminating in a senior management position at Cliveden Conservation Workshop.

2007-2013	**Director**	CLIVEDEN CONSERVATION WORKSHOP
2005-2007	**Architectural Projects Manager**	CLIVEDEN CONSERVATION WORKSHOP
2004-2005	**Site Manager,**	CLIVEDEN CONSERVATION WORKSHOP
1998-2004	**Senior Conservator**	SKILLINGTON WORKSHOP LTD.
1998-2001	**Senior Conservator**	CLIVEDEN CONSERVATION WORKSHOP
1994-1998	**Conservator**	HIRST CONSERVATION WORKSHOP LTD.

PROJECTS OF NOTABLE DISTINCTION

2005 to Present	The Grill Room, Café Royal - BARCO BV - Donald Insall Associates
	Stowe Phase III - Stowe Preservation Trust – PMT Architects
	Shotover House - Sir Beville Stanier - Longmore Ltd
	Kent House, London - London Interspace HM Ltd - Robin Walker Architects
	Royal Institution of GB, London Client; ISG Interior/Exterior - Rodney Melville & Partners
	Ballyfin House, Ireland – Private - Purcell, Millar & Tritton
	Art Deco London Underground Facades, London - Gleeson MCL – OPUS Architects
2004-2005	Stowe Phase II (approximate contract value £750K) - Stowe Preservation Trust - PMT
2003	St Paul's Cathedral, London - Cathedral Works - PMT
2002	Peterborough Cathedral - Cathedral Works - Julian Limentani
	Exton Church Monuments - World Monuments Fund
2001	Bolsover Castle, Derbyshire - English Heritage
	Ightham Mote, Kent - The National Trust - Stuart Page Architects
1994 -2000	Norwich Cathedral - Julian Limentani Architects

Project Management of Award Winning Projects

Ballyfin House - RICS Project of The Year 2012

Stowe House Phase II – Highly Commended – Natural Stone Awards 2011

The Royal Institution of Great Britain – Commended – RICS Awards 2010

Stowe Marble Saloon – Winner Eastern Region Country Life 'Restoration of The Century' 2010

Petworth Rotunda – Sussex Heritage Trust Awards 2008

SITE MANAGER JASON JEEVES

Qualifications

Jason is a time served apprentice mason who has worked his way up the management ranks to become one of our most experienced and effective site managers.

Profile

Jason would be the permanent on site representative for PAYE reporting daily to the Contracts Manager. He will be responsible for the 'hands on' day to day management of the project including the supervision and coordination of all the subcontractors and suppliers liaising closely with the clients team.

He can be relied upon to utilise his technical knowledge and expertise to quickly identify and overcome potential problems, ensuring the smooth progression and timely delivery of the project.

Jason is responsible for ensuring that our Health and safety policy is strictly adhered to. All Site Managers are required to undertake our stringent Health and Safety training programme as well as a variety of additional training courses including First Aid certification and the promotion of management and communication skills.

Relevant Experience

Jason has managed numerous multi tenanted projects for PAYE including the following:

Knightsbridge Estate
London
Located adjacent to Harrods Store on the Brompton Road the project involves three separate scaffolds and the coordination of multiple retail and residential tenants as part of the regeneration of the prime retail estate.
Client: Chelsfield Properties
Value: £500,000

Northumberland Avenue
London
Situated directly opposite Nelsons Column and Trafalgar Square the project proved to be extremely challenging involving a complex logistics and liaison strategy as well as daily coordination meetings with TfL and Westminster Council
Client: Capita Symonds
Value: £85,000

HEALTH AND SAFETY.

PAYE employ an in house Health and Safety Adviser – Mark Dean who provides key safety management guidance across the company to ensure its exemplary Health & Safety record is maintained to the highest standards. Mark is supplemented by a team of external consultants known as 'The Health and Safety People' who specialise in providing health and safety advice to construction specialists.

The team provide support on all issues associated with health and safety including:

- Corporate governance and up to date advice for compliance with changes in Health and Safety legislation.
- Policies and procedures to enable us to discharge our responsibilities and duties correctly
- Audit and checking of our management team to ensure that we are up to date with our operations.
- Site inspections to ensure that all health and safety advice has filtered down to site level and all projects are undertaken safely.
- 24hr advice line and support.

The Health and Safety Team will take a prominent role in the management and delivery of this dismantling project with a series of regular inspections and review of procedures including:

- Development of a Project Specific Health and Safety Plan for the project that incorporates the fundamental requirements of the Key Health and Safety Standards for Contractors.

• Site H & S Inspections	Physical inspection of standards	Fortnightly
• H & S Audits	Review of procedural compliance	Monthly
• H & S Tours	Site management team inspection	Weekly
• Procedural review		Monthly

We recognise that close scrutiny and management of our health and safety procedures for the project will assist in creating a more efficient and safer working environment. On the project the proposed health and safety inspectors is Mark Dean supplemented by Chris Ivey as necessary.

MARK DEAN - (Tech IOSH)

Mark joined PAYE Stonework & Restoration Limited in January 2012 as the company Health & Safety Manager having previously worked as a Consultant to several construction firms for an external Health & Safety Consultancy in London.

CONTINUED PROFESSIONAL DEVELOPMENT.

Mark has attended the following C.P.D. training courses:-

- Nebosh Certificate – IOSH/British safety Council (Tech IOSH)
- Fire Management Course – Vulcan Fire Training/IFSM (Tech IFSM)
- First Aid Course
- CSCS Managers Accreditation
- Asbestos Awareness
- Fall Arrest Harness Training/Train To Train Harness Course
- Hydra-Jaws Testing Course (Scaffold Tie Tests) – Hydra-Jaws
- Fire Warden/Marshall Training
- Hot Works Permit Training
- Fire Extinguishers Training

RESPONSIBILITIES.

Mark is responsible for monitoring, enforcing, auditing and reviewing health & safety across the company and also for managing external health & safety resources.
He has a good technical and practical knowledge of health & safety in the construction industry having worked as a consultant or in-house advisor for the last 5 years and had previous safety experience working in the armed forces and on de-mining projects.

PROJECTS.

Mark has worked on the following projects for PAYE:

- Strand Palace Hotel
- Blackfriars Bridge
- Brompton Cemetery
- Hadlow Tower
- Kenwood House
- 1-6 Lombard Street
- 11 Knightsbridge

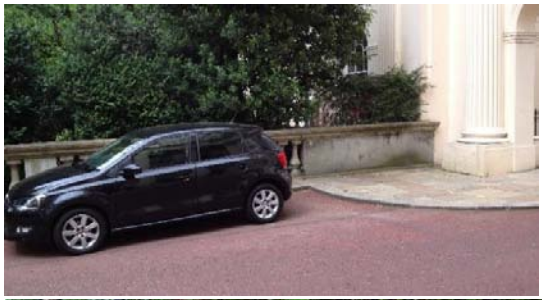
Mark has worked as a safety consultant on, amongst others, the following projects:

- Swiss Church
- Houses of Parliament

PHOTOGRAPHIC RECORD.

1 The Chester Terrace balustrade walling adjacent to the communal garden gate is undecorated reconstituted stone with some minor discolouration and carbonation.

2 The pointing to the plinth wall and balustrade connecting to the house is open and should be repointed.



3 The pointing to the southern end of the balustrade is also defective.
The level of the balustrade and gate post has also lifted and displaced which was probably caused by the roots of the adjacent tree

4 The balustrade along the garden line dividing the private garden from the communal garden is in a poor condition with excessive displacement and settlement.

5 A majority of the bottles have split and fractured and require replacing.
It is anticipated that the remaining bottles are in a similar condition and the whole wall should be reconstructed.

6 As a general comment tree root damage has caused alignment and stability issues with several sections of the balustrade.

Also the surface of a majority of the copings is heavily eroded.

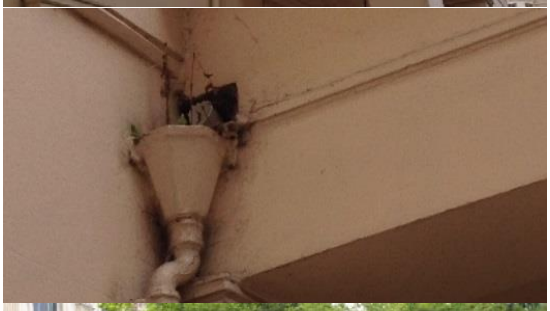
7 As with all elevations the Chester Terrace elevation is in reasonable condition with limited defective stucco render.

8 To maintain the quality of the facades we would recommend that the asphalt and lead guttering details and coverings to cornices are replaced.

9 Within the entrance porch the paint is debonding in sheets which is indicative of the impermeable quality of the paint system and the extent of water ingress from the flat rood above.

10 The current rainwater discharge from the porch is via a small cast iron hopper and 50mm diameter downpipe with no lead shoe to the outlet.

11 The hopper contains tree growth and also plastic cups impeding the flow from the porch roof.



12 The Chester Terrace perimeter wall is in reasonable condition with no evident hollow render.

As with all balustrades we were unable to inspect the internal face due to vegetation and tree growth.

13 The boundary wall to the Cumberland Place elevation is constructed of three bays.

14 The conifer tree screening has been planted close to the boundary wall but at present root disturbance is not evident.

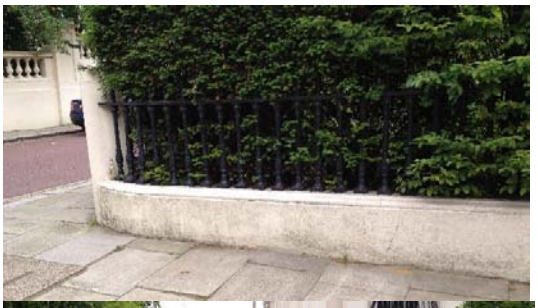
15 The wall is in reasonable condition with only minor shrinkage cracks evident that would be covered with the decoration scope of works.

16 The screening to some of the bays have been replaced with plywood screening which is sat on the plinth coping.
Over time this will increase the moisture content within the stucco which could cause freeze thaw damage.

17 The pier on the corner of Outer Circle and Cumberland Place has been repaired previously.

18 The top rail of the Cumberland Place balustrade has been disconnected from the boundary wall pier.

19 The outer circle boundary wall comprises of 5 bays of cast iron balustrading set between cementitious rendered brick piers.
The decorations are in a poor condition due to traffic pollutants and the texture of the stucco.



20 The vegetation covers a considerable amount of the railings and it is difficult to determine the condition of the iron railings.

21 The pier between bays 1 & 2 is showing signs of fracture in two levels.

22 The connection between the pier and the boundary wall has fractured which is most probably due to the dissimilar thermal movement patterns of the masonry and the cast iron.

23 The stucco render just below the capping stone has blown which is most probably attributable to the saturation of the pier cap and water ingress through incorrectly applied stucco renders.

24 The stucco to bay 2 walling is in a reasonable condition and requires cleaning and redecorating.

25 The stucco render to pier 2/3 has failed in three locations.
The junction between the cap and column has failed in a similar manner to pier ½.

26 The stucco to the bottom of the pier has blown and failed

27 The pier has fractured at the level of the balustrade top rail. On closer inspection it is apparent that the corrosion of the top rail is the cause of the fracturing.

28 The reconstituted stone coping stone to bay 3 is heavily eroded and not decorated.

29 A small patch of hollow render is evident to bay 3 located either side of a fracture through the balustrade wall.

30 A small planter box has been constructed directly behind the wall which is providing a water trap to the coping detail and allowing the stucco to become saturated.

31 The pier cap to pier 3/4 is fractured and hollow due to a combination of water ingress and displacement caused by the corroding railing top rail connection.

32 The pier column is fractured at the junction with the balustrade wall.

33 The render to the pier cap is sounding hollow on all sides.

34 The wall to bay 4 is fractured in 4 locations with render sounding hollow around one of the fractures.

35 The column shaft to pier 4/5 is fractured at the connection with the balustrade wall.

36 The railing connection within the southern pier to bay 5 is fractured at the level of the top rail and at the junction between the column and the balustrade.

37 Where window grills have been removed within the basement area damage has occurred around the redundant fixing holes that require making good.

38 On the west (Outer Circle) elevation there is a fine vertical fracture approximately on the line of the party wall.

39 The fracture is shown on the marked up drawing of the west elevation running through the basement wall, second floor cornice, through the blind window on the second floor and then either side of the third floor windows.

40 The fracture is most noticeable through the lintel and frieze of the second floor cornice.

41 It would be prudent to ascertain the method of cornice construction and window lintel construction once access is available to allow any repair strategy to be finalised.

42 Fracture through the basement wall / column plinth.

ROOF REPAIRS.

The roof is constructed of Welsh slate with a shallow pitch falling towards the outer wall.

The water is then directed towards the hopper located within the corners of the building. The gutter is a lead box gutter stepped at approximately 2m centres.

The slate roof hips are covered with a lead capping with a lead roll over ridge detail. The main roof is covered with lead, roll jointed and laid to a fall.

It should be noted that there were very few chimney penetrations evident and the roof access is limited. A modern skylight has been constructed over the flat lead roof of No 41 Chester Terrace.

The question regarding lead repair vs replacement and the wholesale replacement of the slates is somewhat dependent upon the anticipated lifespan / maintenance regime required by the client and we would welcome further detailed discussions regarding this.

We would anticipate that 50% of the slates would be salvageable.

APPENDIX 4: PRICED SCHEDULES BY PAYE

PAYE Stonework & Restoration Ltd

41 / 42 Chester Terrace **15th August 2014**

Stucco façade restoration **14116/RG**

FACADES GENERAL				
Clean existing facades wil cold water clean prior to decoration		item		6,250.00
Localised poultice paint removal with the application of two coats of multi layer paint stripper to remove flaking and blistered paint				
Areas n.e 1m2	10	nr	141.70	1,417.00
Areas n.e 2m2	10	nr	283.40	2,834.00
Carefully cutting and forming chases for lead flashings and the like and pointing upon completion of the leadworks	100	m	22.00	2,200.00
Reflaunch skysurface of the grand cornice with a polymer modified mortar to throw water away from the building in preparation for new leadwork (by others)	85	m	75.00	6,375.00
EAST ELEVATION				
Carefully remove existing flat stucco render where debonded from brick				
areas not exceeding 1m2	8	Nr	22.00	176.00
areas not exceeding 0.5m2	4	Nr	18.00	72.00
Carefully remove existing stucco to MOULDED DETAILS				
300mm ne 0.6m	3	nr	25.00	75.00
500mm girth ne 1.6m	1	nr	45.00	45.00
Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm				
lengths n.e 1.0m	7	nr	44.00	308.00
lengths ne 2.0m	1	nr	60.00	60.00
Apply naturally hydraulic lime mortars to stucco to a total depth not exceeding 25mm and a maximum of three coats wiyh no coat exceeding 12mm in thickness				
to flat areas n.e 500mm x 500mm	4	nr	45.00	180.00
to flat areas n.e 1m2	7	nr	78.00	546.00
to moulded details girth n.e 300mm	2	m	127.00	254.00
to moulded details girth n.e 500mm	2	m	172.00	344.00
WEST ELEVATION				
Carefully remove existing flat stucco render where debonded from brick				
areas not exceeding 1m2	8	nr	22.00	176.00
areas not exceeding 0.5m2	5	nr	18.00	90.00
Carefully remove existing stucco to fluted columns maintaining bands at 1.2m centres for replication of the profile				
150mm girth 1m height	34	nr	42.70	1,451.80
Where fractures are evident carefully cut the render either side of the fracture				
lengths n.e 1.0m	5	nr	44.00	220.00
lengths ne 2.0m	3	nr	60.00	180.00

Apply naturally hydraulic lime mortars to stucco to a total depth not exceeding 25mm and a maximum of three coats wiyh no coat exceeding 12mm in thickness				
to flat areas n.e 500mm x 500mm	5	nr	45.00	225.00
to flat areas n.e 1.0m2	8	nr	78.00	624.00
to moulded details girth n.e 250mm	12	nr	127.00	1,524.00
Reapply fluted stucco detail to columns				
150mm girth	2	nr	157.50	315.00
300mm girth	8	nr	315.00	2,520.00
450mm girth	4	nr	472.50	1,890.00
SOUTH ELEVATION				
Carefully remove existing flat stucco render where debonded from brick substrate				
areas not exceeding 1m2	6	nr	22.00	132.00
areas not exceeding 0.5m2	1	nr	18.00	18.00
Where fractures are evident carefully cut the render either side of the fracture to a width of 200mm				
lengths n.e 1.0m	9	nr	44.00	396.00
lengths ne 2.0m	3	nr	60.00	180.00
Apply naturally hydraulic lime mortars to stucco to a total depth not exceeding 25mm and a maximum of three coats wiyh no coat exceeding 12mm in thickness				
to flat areas n.e 500mm x 500mm	1	nr	45.00	45.00
to flat areas n.e 1.0m2	6	nr	78.00	468.00
to moulded details girth n.e 250mm	2	m	127.00	254.00
NORTH ELEVATION				
Carefully remove existing flat stucco render where debonded from brick				
areas not exceeding 1m2	5	nr	22.00	110.00
areas not exceeding 0.5m2	1	nr	18.00	18.00
Carefully remove existing stucco to fluted columns maintaining bands at 1.2m centres for replication of the profile				
150mm girth 1m height				
full girth 1m height	32	nr	200.00	6,400.00
Where fractures are evident carefully cut the render either side of the fracture				
lengths n.e 500mm	1	nr	44.00	44.00
lengths ne 1m			60.00	0.00
Apply naturally hydraulic lime mortars to stucco to a total depth not exceeding 25mm and a maximum of three coats wiyh no coat exceeding 12mm in thickness				
to flat areas n.e 500mm x 500mm	1	nr	45.00	45.00
to flat aeas n.e 1.0m2	5	nr	78.00	390.00
to moulded details girth n.e 250mm	3	m	127.00	381.00
Reapply fluted stucco detail to columns (full girth)	32	m	1152.00	36,864.00

Contingency sum for any unforseen works	1	ps	5000.00	5,000.00
Contingency for works to inside facae of parapet walls and chimneys	1	ps	5000.00	5,000.00
BOUNDARY WALLS				
Clean the walls in preparation for decoration (by others) using a cold water pressure washer.	1	item		1,400.00
Carefully remove loose and defective render to piers				
in areas ne 0.5m2	24	nr	18.00	432.00
in areas n.e 0.25m2	3	nr	15.00	45.00
Where the railing bracket has cooroded and expanded carefully expose the railing tip, clean the metal surface with a sharp metal				
scrape and apply a rust inhibitor	20	nr	66.00	1,320.00
reinstate mortar fill and stucco face to pier	20	nr	23.50	470.00
Where the low level boundary wall face has fractured carefully cut the render back 150mm either side of the fracture, apply stainles steel eml and reinstate the renders as required.	58	nr	48.00	2,784.00
Carefully rake out and repoint the coping joints (girth 650mm) prior to	60	nr	12.00	720.00
Contingency sum for unforseen works to the boundary wall	1	ps	5000.00	5,000.00
			TOTAL (exc VAT)	**98,267.80**

