

NOTES:

 WIND LOADING AS PER ASCE 7-22, EXPOSURE D, RISK CATEGORY III. BASIC WIND SPEED 172 MPH. such our company must be afforded the opportunity to inspect the work as it progresses to ensure conformity to the related design details, specifications and notes. If we are not accorded the privilege of inspecting the work on site before it is covered up or otherwise hidden or if variations to the original details are made without written approval by the engineer of record, Mason and Associates Ltd. will assume no responsibility for the works. Client is still required to contact Building Control for inspections.

direct or indirect input into specific design elements of the works. As



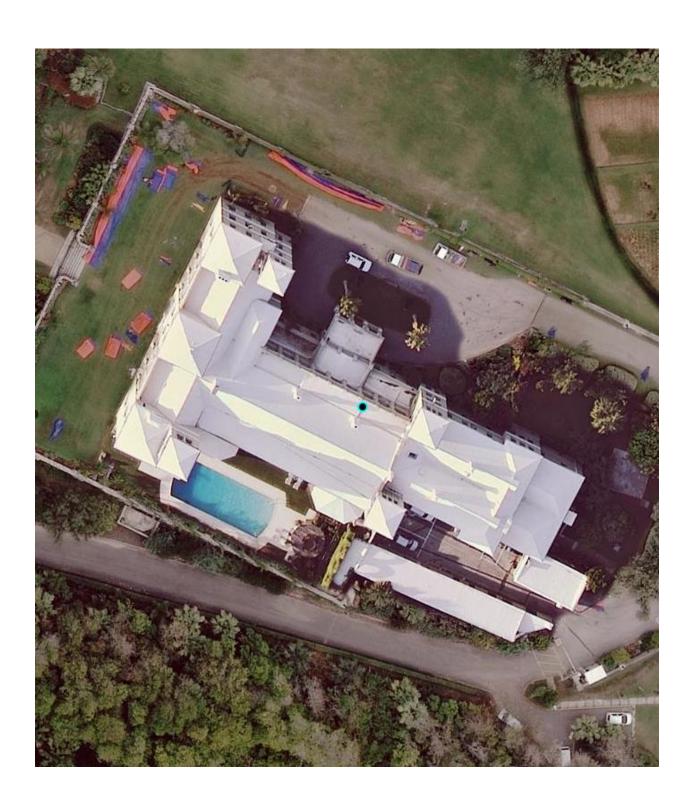
13 Par-La-Ville Road, Hamilton HM 11 Phone: (441) 331-1961 Email: info@mason.bm www.mason.bm PROJECT DETAILS

GOVERNMENT HOUSE ROOF REPLACEMENT

14 LANGTON HILL PEMBROKE TITLE

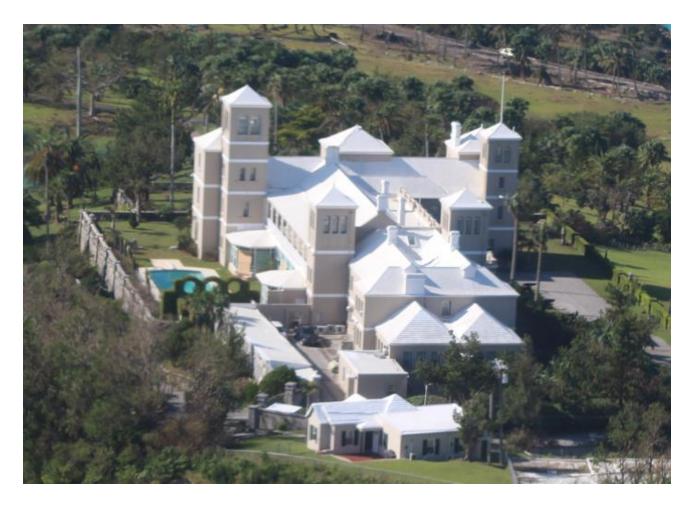
WALL PLATE ANCHOR DETAILS

Control for inspections.							
No.	DATE	BY	REVISION				
DRAWN: KJH			SCALE: AS SHOWN				
CHE	CKED:		JOB No: 15360				
DATE	E: 6 MAY	24	DRAWING No: SK1				

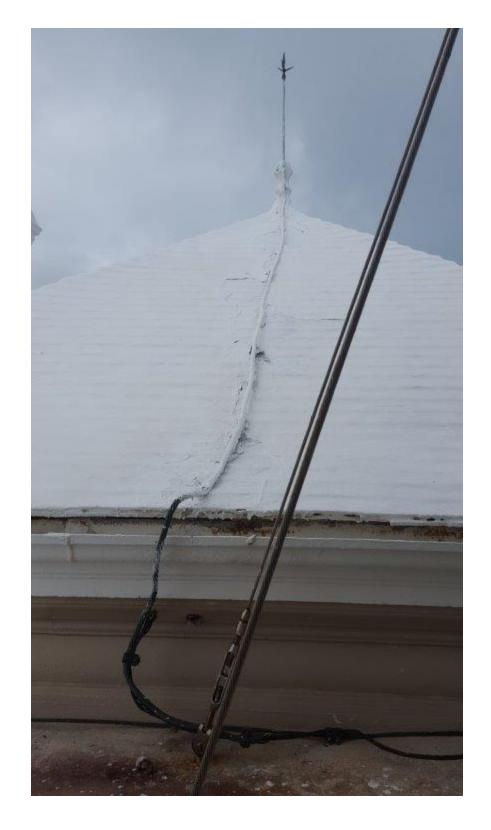




West View



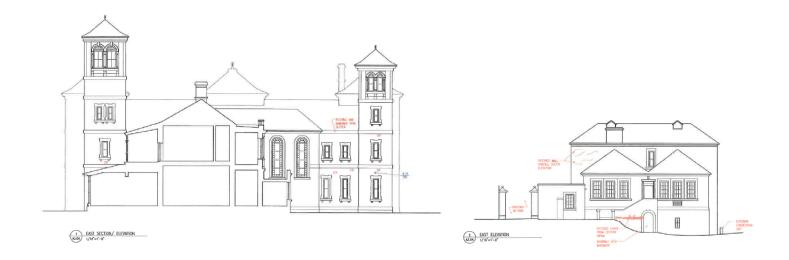
East View



North West Tower - East Elevation

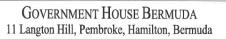


Underside of Existing Clay Tile Roof Coverings

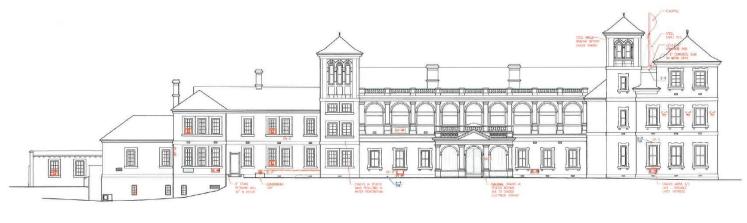












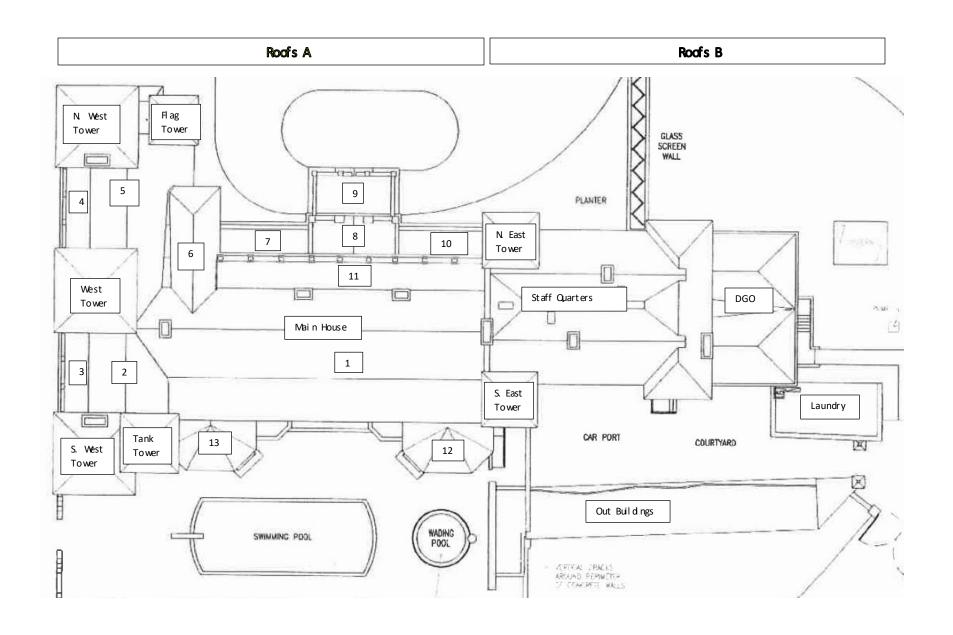




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GOVERNMENT HOUSE BERMUDA
11 Langton Hill, Pembroke, Hamilton, Bermuda



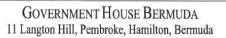


Government House - Roof Drawing













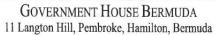




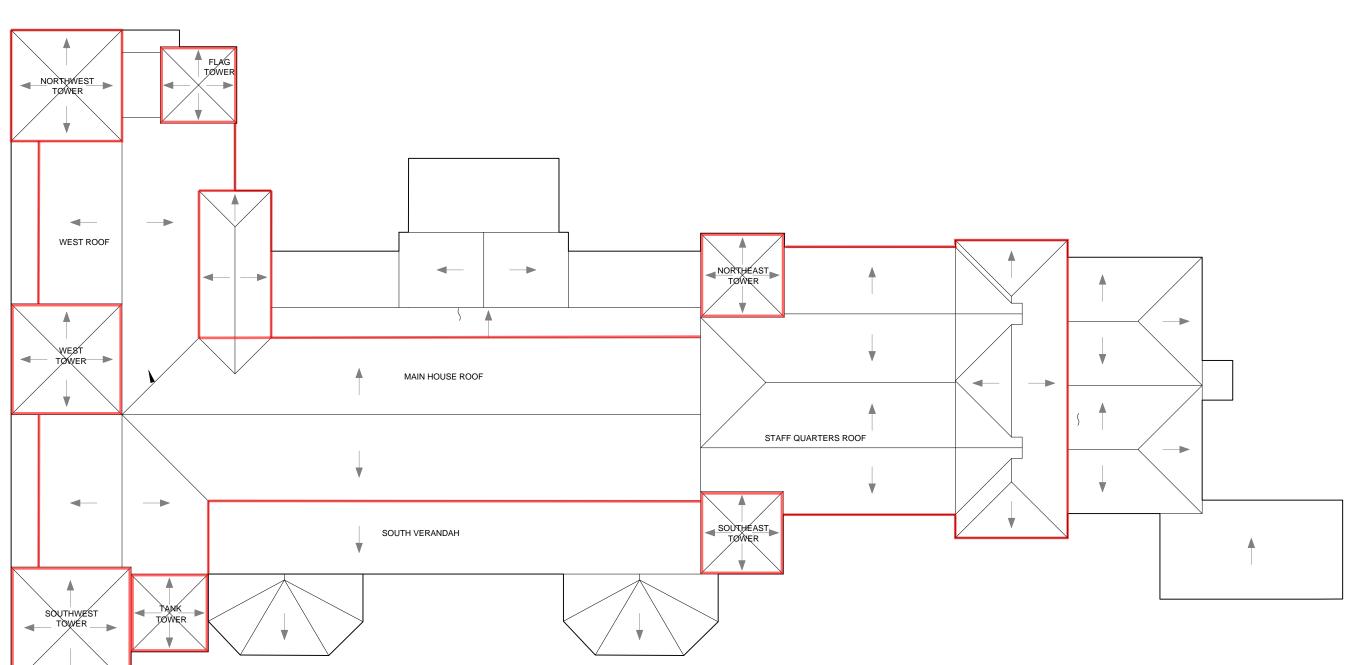












ROOF PLAN

Scale: N.T.S.



P.O. BOX 1477, Hamilton HM FX Phone: (441) 331-1961 Email: info@mason.bm www.mason.bm

CLIENT

ISSUED FOR INFORMATION

IMPORTANT NOTES

This seal indicates that Mason and Associates Ltd.(MAL) has had direct or indirect input into specific design elements of the works. As such our company must be afforded the opportunity to inspect the work as it progresses to ensure conformity to the related design details, specifications and notes. If we are not accorded the privilege of inspecting the work on site hefore. specifications and notes. If we are not accorded the privilege of inspecting the work on site before it is covered up or otherwise hidden or if variations to the original details are made without written approval by the engineer of record, Mason and Associates Ltd. will assume no responsibility for the works. Client is still required to contact Building Control for inspections.

	DATE	MAL ENGINEER	COMMENTS INSPECTION			
	REVISIONS					
	No.	DATE	BY	REVISION		
	GOVERNMENT HOUSE ROOF					

11 LANGTON HILL PEMBROKE

TITLE

ROOF PLAN

DRAWN BY: CKL

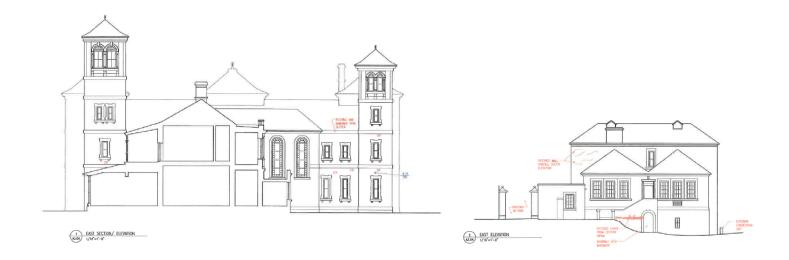
CHECKED BY: KJH

JOB No: 15223

DATE: JUNE 21, 2023

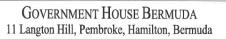
REVISION:

SHEET No: S1

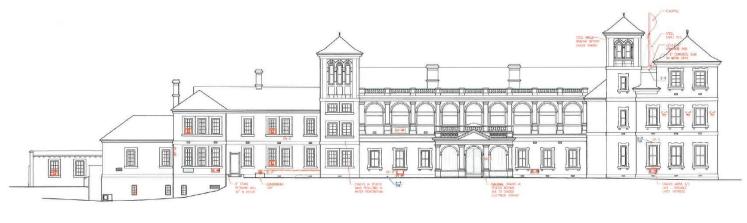
















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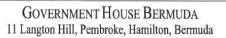
GOVERNMENT HOUSE BERMUDA
11 Langton Hill, Pembroke, Hamilton, Bermuda



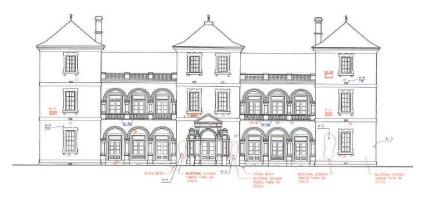






















GOVERNMENT HOUSE BERMUDA
11 Langton Hill, Pembroke, Hamilton, Bermuda





Ministry of Public Works Department of Public Lands and Buildings

TPO ROOF INSTALLATION AND ROOF PAINTING **SPECIFICATION GOVERNMENT HOUSE**

Between the Owner: Department of Public Lands & Buildings

2 Aeolia Drive Devonshire DV05

Hamilton Bermuda 441-292-8485

To Be Advised And the Contractor:

For the Project: Government House

11 Langford Hill

Pembroke

Building #s, 0351

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APPENDICES

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DIVISION 01. GENERAL REQUIREMENTS

01500 - Temporary Facilities and Controls

This work shall consist of the application of temporary measures throughout the life of the project.

01510 - Temporary Utilities

All connections and extensions required to provide temporary utilities shall be made by the Contractor at the Contractor's expense.

01511 - Temporary Electricity

The Contractor is to connect to the existing power service without disrupting local service requirements.

01518 - Temporary Water

The Contractor is to connect to the existing water source for construction operations.

01519 - Permits

Not Applicable.

01523 - Sanitary Facilities

The Contractor will be able to use the existing sanitary facilities, which he shall maintain in a neat and sanitary condition.

01530 - Temporary Construction

The contractor shall provide and maintain for duration of work all required temporary stairs, ladders, ramps, runways and hoists for use of all trades.

01540 - Construction Aides

The contractor to provide all construction aids needed during construction which shall include but not limited to; elevators, hoists, cranes, etc.

01542 - Construction Scaffolding and Platforms

The owner shall provide and maintain for duration of work all required temporary standing scaffolding and 'Independent tied' scaffold.

01550 - Vehicular Access and Parking

Arrange parking areas to accommodate construction personnel.

01560 - Temporary Barriers and Enclosures

The contractor shall provide barriers to prevent unauthorized entry into construction areas and to protect existing facilities and adjacent properties from damage from construction operations and demolition. Install barricades and covered walkways required by governing authorities for public right of ways.

01600 - Product Requirements (Scope of Work)

All materials shall be installed in strict accordance with the manufacturer's written specifications or Material's Institute Standards. Where the manufacturer's recommended details are used, the

Manufacturer shall be responsible for the performance of their product. All Items not specifically mentioned that are required to make the work complete and operational shall be included.

Installation and Storage - All materials, supplies and equipment shall be installed per manufacturer's recommendations and per applicable codes and requirements. Material stored on site shall be protected from damage by moisture, wind, sun, abuse or any other harmful effects.

01630 - Product Substitution Procedures

If unable to source the specified product on island the Contractor is to investigate alternative proposed products and determine that they are equal or superior in all respects to products specified. Coordinate installation of accepted substitutions into the Work, making such changes as may be required for the Work to be complete in all respects. Meet with clients and get change order request signed.

01700 - Execution Requirements

The execution of all work shall be in strict accordance with these specifications and manufacturer's written specifications or Material's Institute Standards. Where the manufacturer's recommended details are used, the manufacturer shall be responsible for the performance of their product. All work not specifically mentioned that is required to make the work complete and operational shall be included.

Codes - Construction shall comply with all applicable building codes. It is the responsibility of the Contractor to insure compliance with said codes and modify the specifications as needed to comply with such codes.

Measurements - The Contractor shall check and verify all dimensions and conditions before proceeding with construction.

Workmanship - Workmanship shall conform to the best and highest standards of quality in each trade and shall include all items of fabrication, construction and installation. All work shall be completed by skilled tradesmen and mechanics. Installation of all equipment and materials shall be in strict accordance with manufacturer's recommendations.

Insurance - Builders Risk Insurance shall be maintained by the contractor during the course of construction until final acceptance by the owner. All bonding and insurance requirements shall be coordinated with the Owner prior to beginning construction. All contractors shall provide and be solely responsible for necessary barricades and safety

precautions, and strictly adhere to all governing codes on safety, including the OSHA Act.

01740 - Cleaning

The construction site is to be in a clean and orderly condition throughout the construction process. Clean interior spaces prior to the application of the finishes. At the conclusion of construction, the project shall be properly cleaned. This should include but not be limited to; cleaning the interior and exterior glass, surfaces exposed to view, remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, and mop all tiled surfaces, etc. Remove all waste and surplus materials

01760 - Protecting Installed Construction

The Contractor is to protect all installed construction. If products or materials come with a protective coating, contractor shall maintain protective coating until construction is complete. Contractor shall replace any items that become defective or damaged.

01904 - Hazardous Materials Removal and Disposal

The owner shall arrange for the removal and disposal of all hazardous material before beginning construction.

01904 - Submittals

Prior to starting work, the roofing contractor must submit the following:

Shop drawings showing layout, details of construction and identification of materials.

A sample of the manufacturer's Membrane System Warranty.

Submit a letter of certification from the manufacturer which certifies the roofing contractor is authorized to install the manufacturer's roofing system and lists foremen who have received training from the manufacturer along with the dates training was received.

Certification from the membrane manufacturer indicating the membrane thickness over the reinforcing scrim (top ply membrane thickness) is nominal 15 mil or thicker.

DIVISION 02. ROOFING

02000 - General

Contractor is to allow for the careful removal and disposal of the existing roof coverings which is comprised of cement covered clay tiles to the Main House, 7No. towers, and Staff Quarters and with roofing boards to the Verandah and a SKB type roof over timber boards to the Deputy Governor's Office. Allow for the retaining of the timber battens to the main house and timber boards beneath Deputy Governor's Office.

The existing metal gutters and downpipes are to be retained.

Contractor shall provide labor and materials pertaining to TPO membrane roof covering installation and roof painting as specified herein, while complying with all applicable building codes.

DIVISION 06. CARPENTRY

06000 - General

Contractor shall provide labor and materials pertaining to carpentry repairs (provisional works) as instructed by the owner, while complying with all applicable building codes.

06105 - Plycem Boarding

The contractor is to allow for installing new 5/8" (Plycem) fiber reinforced cement board over the existing roof structure prior to the installation of the new TPO membranes.

DIVISION 07. WATERPROOFING AND ROOF DRAINAGE

07000 - General

Contractor shall provide labor and materials pertaining to moisture protection work as specified herein, while complying with all applicable building codes.

It should be noted that the works may be carried out whilst the buildings are partially occupied.

The contractor is to ensure that roof covering works are carried out during forecasted dry weather conditions. The contractor is to allow for alterations and repositioning temporary tarpaulins etc. necessary to protect the interior areas during the course of the roof covering works.

The Contractor is to review Roof layout in conjunction with this specification.

07110 - Waterproofing,

"Contractor shall provide labor and materials pertaining to moisture protection work as required and as specified herein, while complying with all applicable building codes and BS 6920:2000 (suitability of non-metallic products in contact with water intended for use for human consumption).

The contractor is to include for installing a **breathable roofing membrane** to all pitched roofs following the removal of the existing roof coverings.

The contractor is to allow for the resurfacing of the roofs with a new **Thermoplastic Polyolefin (TPO) Single Ply Membrane Roof** covering over the cement board.

Location: All roofs as Indicated on Roof Drawing as follows:

Main House roofs: 1, 2, 3, 4, 5, 6, and 11 All Roofs to the 7No. Towers Staff Quarters and Deputy Governor's Offices Roofs

Note Main House roofs: 7 and 10 are existing TPO roofs and are excluded from these works

07120 - Membrane Roofing

The contractor shall provide and utilize appropriate roof slopes, drainage system(s), cants, flashing, protection devices and materials necessary for an effective roof system. All Roofing techniques, systems and materials utilized should be "time proven" (20 years) and constructed as "composite" systems instead of applications. Roofing shall be performed by professionals who are fully qualified and approved as specified by the manufacturer.

Design Requirements

Slopes to drain should be unobstructed by above-roof building elements, equipment curbs, or similar objects. Where such obstructions are unavoidable, provide cants, saddles or other means to restore positive pitch to drain. No buck laps shall be permitted anywhere in single-ply roofing membranes. All installed Roofing Systems shall meet ASCE 7 category D design standards. All eaves are to include for Carlisle Sure weld or Mule Hide recommended drip detail (or similar approved). Proprietary Ventilation to be included to all pitched roofs.

Warranty Requirements - Comply with the following requirements for warranties: New Roofs: Roofing Systems shall include a 20 year, single source warranty covering the full single ply roofing system (including all accessories) for materials and labor.

Roofing System

Provide all labor, material, tools, equipment, and supervision necessary to complete the installation of the Carlisle Sure-Weld or Mule Hide (or similar approved) minimum 60-mil thick white TPO (Thermoplastic Polyolefin) reinforced membrane Adhered Roofing System including flashings as specified herein in accordance with the manufacturer's most current specifications and details.

The roofing contractor shall be fully knowledgeable of all requirements of the contract documents and shall make themselves aware of all job site conditions that will affect their work.

The roofing contractor shall confirm all given information and advise the building owner, prior to bid, of any conflicts that will affect their cost proposal.

Insulation – Not applicable.

Special Requirements - Re-roofing Projects.

Noise and Vibration - Consult with Project Coordinator to determine whether special requirements for evening or weekend work are necessary.

Dust Protection – Not applicable

Walkways - Not applicable

07130 - Flashing

Supply and Install Carlisle Sure weld or Mule Hide flashing (or similar approved product) at all joints of walls, up-stands, copings and other connection points to prevent the infiltration of water. All termination bars to be white.

07140 – Waterproofing Concrete Roofs

All roof joints and penetrations shall be made watertight using approved methods and materials.

Include allowance for patch repairs to roof comprising removing all loose masonry and vegetation to ensure the surface to be repaired is stable. Scrape and cut out all cracks and blisters.

Brush off all loose and friable paintwork and ensure that the deck is sound and free from holes, surface de-lamination, splitting, and that all unsupported joints are not flexing. Repair all areas that require attention. Brush off all dust with clean water and thereafter apply polymer modified mortar ("Fibrebond" or similar approved) repair to defective masonry areas including for reforming joints to match existing profile.

Include for repairing cracks to masonry around existing rainwater outlets. Leave repairs ready to receive subsequent painting coats.

Location; Roofs number 8 (Main Entrance) and 9 (Covered Driveway) Out Building and Laundry Room.

07150 - Liquid Membrane Coated Roofs

All work is to be inclusive of surface preparation, including the Clorox cleaning and scraping of the existing roofs either by brush or jet spraying.

If mildew is evident, the mildew must be removed and surface treated to inhibit further mildew growth.

Water based liquid applied membranes are to be one-component as supplied by Sika or similar approved

Location: Roofs Number 8, 9, 12, 13, Laundry and Out Buildings

07160 - Roof Glides

Repair all defective or damaged roof glides. Cut out all damaged sections of existing roof glides and reform glides using materials to match the existing to leave a smooth continuous finish ready to receive painting coat.

Location: Out Buildings and Laundry Room

07170 - Roof Dormers

Repair all defective or damaged dormer roofs and walls using 5/8" (Plycem) fiber reinforced cement board. Dormer roofs to be covered with TPO as detailed above.

Location: Staff Quarters

07180 - Caulking

All exterior caulking shall be either external quality **Dow Corning** or Marine quality caulk 5200 as supplied by **3M** or similar to the prior approval of the contract administrator.

Caulking shall be applied in accordance with the manufacturer's instructions, including surface preparation but excluding weep holes. Closed-cell polyethylene backer-rod must be used in all joints deeper or wider than ¼"; such joints shall be kept to a minimum in any event. Caulk shall be guaranteed non-staining, non sagging type. Caulk color shall match closely the finish of the masonry.

Joints and spaces to be caulked shall be thoroughly clean, dry, free of paint, putty oils, grease, dust and other foreign matters, and shall be primed if necessary. All caulking shall be removed from areas to receive new caulk. All surfaces to accept caulk shall be left broom clean before new application.

Application of caulk to the masonry, plaster, surfaces shall be provided in a manner recommended by the manufacturer. Caulk beads should be smooth and slightly concave, Excess, messy, or convex caulking will not be permitted, nor beads exceeding 3/8" wide.

All caulking shall be done using an approved type of caulking gun and applying the material under pressure, except where the use of a caulking gun is not practical. Caulk joints shall be tooled immediately upon application to assure maximum adhesion and neat joint appearance.

07190 - Rainwater Gutters, Hoppers, Drains and Drainage Strainers

Ensure all rainwater gutters, hoppers and drains are sealed and free flowing. Sealant to gutters and drains to be applied in accordance with the manufacturer's recommendations. Include for insert drainage strainer to all gutter and drain outlets.

TPO Drains to be minimum 60mil thick ASTM grade reinforced TPO and sized to fit adapted drain openings.

07200 - Lightning Protection System

The lightning protection system will be removed and reinstalled by others. The contractor is to allow for supplying and applying the primer, universal single-ply sealant and walkway pads beneath the lightning rods and braided wires.

07210 - Wall Plate Anchors

The contractor to carry out the installation of wall plate anchors all as detailed on the engineers drawings SK1 and S1.

APPENDIX 1

(PHOTOGRAPHS)