

## **Refurbishment and Upgrading of uMsunduzi Museums Buildings**

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## **DRAWINGS**

## **Refurbishment and Upgrading of uMsunduzi Museums Buildings**

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### **Architectural Drawings**



GENERAL NOTES

- SITE:**  
S1. SET OUT TO BE DONE BY LAND SURVEYOR  
S2. ALL LAYER WORKS AND SITE WORK TO BE IN ACCORDANCE TO ENGINEERS DETAILS AND SPECIFICATIONS. ENGINEERS DRAWINGS AND ARCHITECTS DRAWINGS TO BE READ IN CONJUNCTION WITH EACH OTHER AT ALL TIMES  
S3. ALL STORM WATER TO ENGINEERS DETAILS AND SPECIFICATIONS  
S4. ALL SITE HEALTH & SAFETY TO BE COMPLIED TO IN TERMS OF THE SANS-10400 NATIONAL BUILDING REGULATIONS AND AGREED BUILDING CONTRACT  
S5. SOLID HOARDING TO BE IN PLACE AT SECTIONS TO BE WORKED ON PRIOR TO ANY WORK COMMENCING ON SITE

- FOUNDATIONS:**  
F1. ALL FOUNDATIONS, SURFACE BEDS, SLABS, RAFTS, RETAINING WALLS ETC TO BE IN ACCORDANCE TO ENGINEERS DETAILS AND SPECIFICATIONS. ALL TO BE ON WELL COMPACTED LAYER WORKS & 250 MICRON DPMs & TO HAVE SOIL POISON TREATMENT WITH 5 YEAR GUARANTEE  
F2. ALL FOUNDATIONS NOT DESIGNED BY PROFESSIONAL ENGINEER TO BE IN ACCORDANCE WITH THE SANS-10400 NATIONAL BUILDING REGULATIONS

- WALLS:**  
W1. WALLS TO BE 230 & 115 COROBRIK FBX CLAY BRICK WALLS (EXTERNAL) & 230 CLAY BRICK WITH PLASTER WALLS (INTERNAL)  
W2. EXTERNAL WALLS TO BE RED FACE BRICK, COROBRIK FIRELIGHT SATIN FBX, WHERE NEW WALL MEETS OLD ALL COURSES TO BE PROPERLY TOOTHED IN.  
W3. INTERNAL WALLS TO BE REPAIRED AND PLASTERED WHERE REPAIR IS BEING DONE (IF NEED BE), PLASTER MIX TO BE AS PER APPROVED MIXTURE RATIO, ALL READY TO RECEIVE A 3 COAT PAINT SYSTEM.  
W4. PLASTER WALL & WALL COPING PAINT - 1x COAT DULUX TRADE PLASTER PRIMER, 2X COATS DULUX PEARLGLO.

- ROOF:**  
R1. GRS 0.53mm ALU-ZINC COATED (COLORPLUS - SLATE) 'IBR' PROFILE ROOF SHEETS, ON 76mm TIMBER PURLINS ON 252mm TIMBER RAFTERS - TO ENGINEERS DETAILS & SPECIFICATIONS (TIMBER TO BE FULLY TREATED HIGH GRADE SA-PINE) & PAINTED TIMBER EXTERNAL - 1x COAT DULUX WOOD PRIMER, 1x COAT DULUX TRADE UNIVERSAL UNDERCOAT, 1x DULUX TRADE GLOSS 100 ENAMEL, TIMBER TO BE FULLY PAINTED ON AREAS WHERE SUPPORT FIXINGS ARE PRIOR TO INSTALLING  
R2. 170mm THICK CONCRETE ROOF, PLASTERED AND PAINTED - 1x COAT DULUX TRADE PLASTER PRIMER, 2X COATS DULUX PEARLGLO.  
R3. ALL ROOFS TO HAVE 'SISALATION 405' REFLECTIVE FOIL UNDER PURLIN UNDERLAY THROUGHOUT, ALL TO HAVE 150mm HEAD LAPS  
R4. NEW ROOF TO HAVE 80mmØ PVC RAIN WATER DOWNPIPE, FITTED TO WALL WITH STANDARD PVC MOUNTING BRACKETS  
R5. NEW ROOF TO HAVE STANDARD OGEE SEAMLESS ALU. GUTTER, TO MATCH ROOF SHEET.  
R6. NEW ROOF TO HAVE 22x22mm FASCIA BOARD FIXED TO RAFTERS, TO BE PAINTED SAME AS RAFTERS

- CEILINGS:**  
C1. CEILINGS TO BE PELICAN JUMBO SUSPENDED GRID, SCREW-UP SKIMMED JOINT 9mm THICK GYPSUM BOARD IN ACCORDANCE TO 'SASISA', WITH TIMBER CORNICE TO MATCH EXISTING CORNICE IN PROFILE EXACTLY.  
C2. ALL BULKHEADS TO BE 22mm MDF BOARDS ON SAME GRID SYSTEM AS CEILINGS, TO BE PAINTED SAME AS CEILING, WITH 25x25mm 'L' CORNICE ON WALLS  
C3. ALL PENETRATIONS THROUGH EXISTING SUSPENDED MESH AND PLASTER CEILING, TO BE KEPT TO A MINIMUM AND DONE WITH EXTREME CAUTION, ALL TO HAVE REINFORCED SUB-FRAME INSTALLED PRIOR TO CUTTING, PERIMETER OF CUT TO HAVE NEW SURROUND EDGE TRIM DONE USING 45x8mm TIMBER STRIPS PAINTED FINISH  
C4. REFUGE ROOM TO HAVE PLASTERED SOFFIT, 15mm THICK, PAINTED TO MATCH CEILING.  
C5. CEILING PAINT - 1x COAT DULUX PLASTER/ TIMBER PRIMER, 2x COATS DULUX TRADE 65 MATT.

- PLUMBING:**  
P1. ALL PLUMBING TO BE DONE BY REGISTERED PLUMBER, PLUMBING SIGN-OFF TO BE ISSUED AT END OF CONTRACT  
P2. ALL PLUMBING TO COMPLY WITH SANS 10400-P & 10400-XA & SANS 10252-1:2004, SANS 1307, SANS 10106, SANS 10254 & SANS 10252-1.
- FLOORING:**  
FL1. CONCRETE FLOOR WITH HARDENED SCREED AND ANTI-DUSTING AGENT, TO HAVE SMOOTH TROWEL FINISH.  
FL2. CONCRETE RAMP WITH HARDENED SCREED AND ANTI-DUSTING AGENT, TO HAVE NON-SLIP FLOAT FINISH.  
FL3. REFUGE FLOOR TO BE 30mm GRANO ANTI DUSTING SCREED ON EXISTING CONCRETE FLOOR  
FL4. ALL SOIL TO BE TREATED WITH APPROVED TERMITE TREATMENT, PRIOR TO FOUNDATIONS BEING CAST AND PAVING BEING LAID, WITH A 5 YEAR GUARANTEE ISSUED.

- WINDOWS & DOORS:**  
W1. ALL EXISTING WINDOWS AND DOORS TO BE FULLY PROTECTED AT ALL TIMES, ANY DAMAGE TO THESE WILL BE RECTIFIED AT THE CONTRACTORS COST  
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W4. NEW ALUMINIUM GABLE GRILLES TO BE INSTALLED (AS PER NE ELEVATION) ALL TO THE MECHANICAL ENGINEERS DRAWINGS & SPECIFICATIONS.

REFER TO 5044-101 ROOF PLAN FOR BALANCE OF THE GENERAL NOTES

MUNICIPAL STAMPS

- MECHANICAL & ELECTRICAL:**  
M1. ALL MECHANICAL EXTRACTION AND VENTILATION TO BE DONE IN ACCORDANCE WITH THE MECHANICAL ENGINEERS DESIGN AND DETAILS.  
E1. ALL LIGHTING AND ELECTRICAL RETICULATION TO BE DONE IN ACCORDANCE TO ELECTRICAL ENGINEERS DESIGN AND DETAILS.

Areas:	
AREA, EXISTING:	2 690m <sup>2</sup> (76.6% - FAR)
AREA, NEW WORK:	35m <sup>2</sup>
NEW TOTAL AREA:	2 725m <sup>2</sup> (77.6% - FAR)
EXISTING COVERAGE:	3 347m <sup>2</sup>
NEW COVERAGE:	3 391m <sup>2</sup>
SITE AREA:	3 485m <sup>2</sup>

Occupancy Classification : C2

Owner: uMSUNDUZI MUSEUM  
Name: \_\_\_\_\_  
Sign: \_\_\_\_\_ Date: \_\_\_\_\_

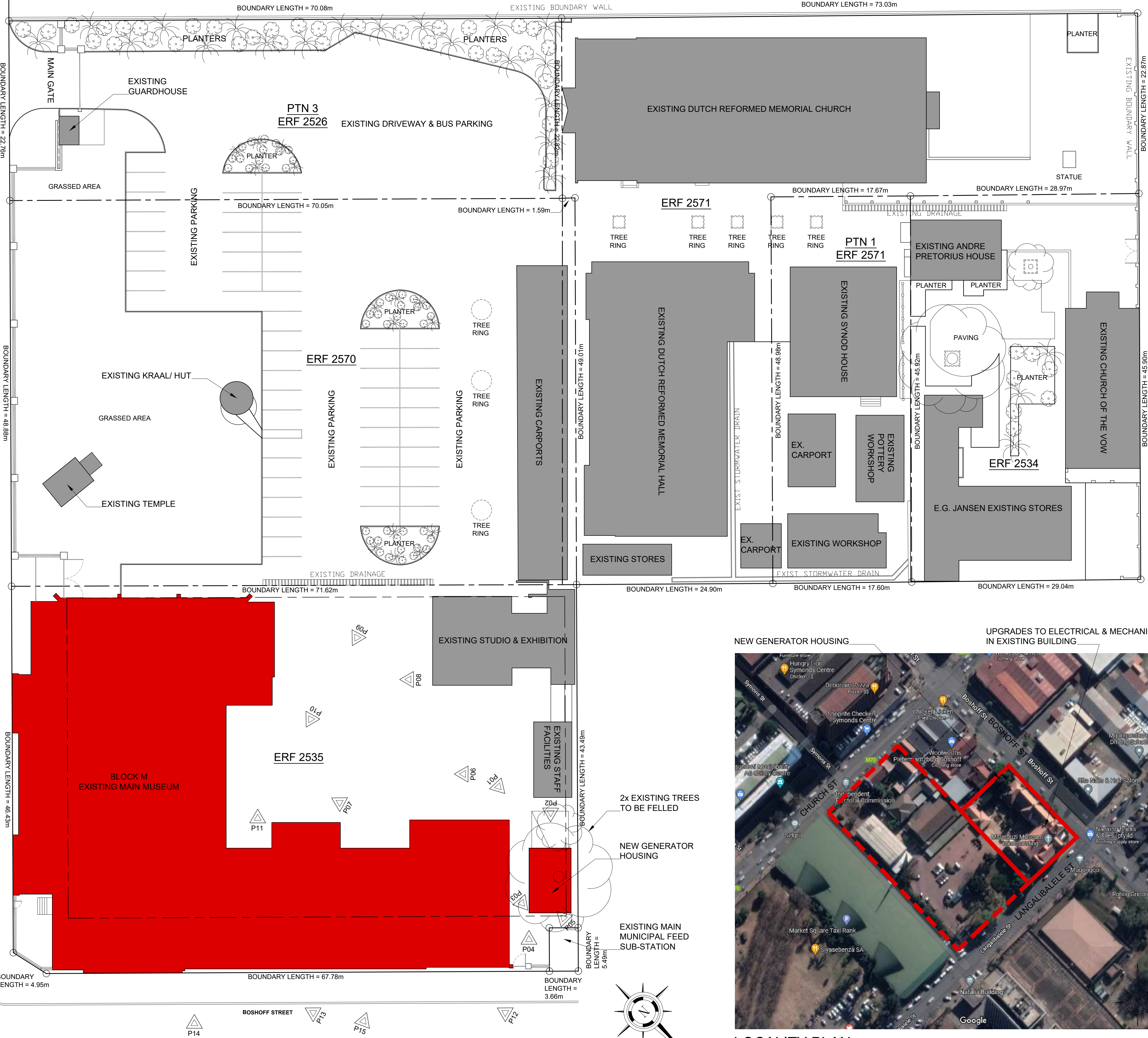
Architect: JA Meintjes  
Name: \_\_\_\_\_  
Sign: \_\_\_\_\_ Date: \_\_\_\_\_  
Professional registration No.: 6428

**BARTSCH**  
LADYSMITH: TEL(036) 631 1888, P.O.BOX: 1097, LADYSMITH 3370  
QUEENSTOWN: TEL(045) 839 5728, HARRISMITH: TEL(058) 623 471  
EAST LONDON: TEL(043) 727 0765, BLOEMFONTEIN: TEL(051) 300 547  
CAPE TOWN: TEL(021) 252 225, PRETORIA: TEL(012) 346 0526  
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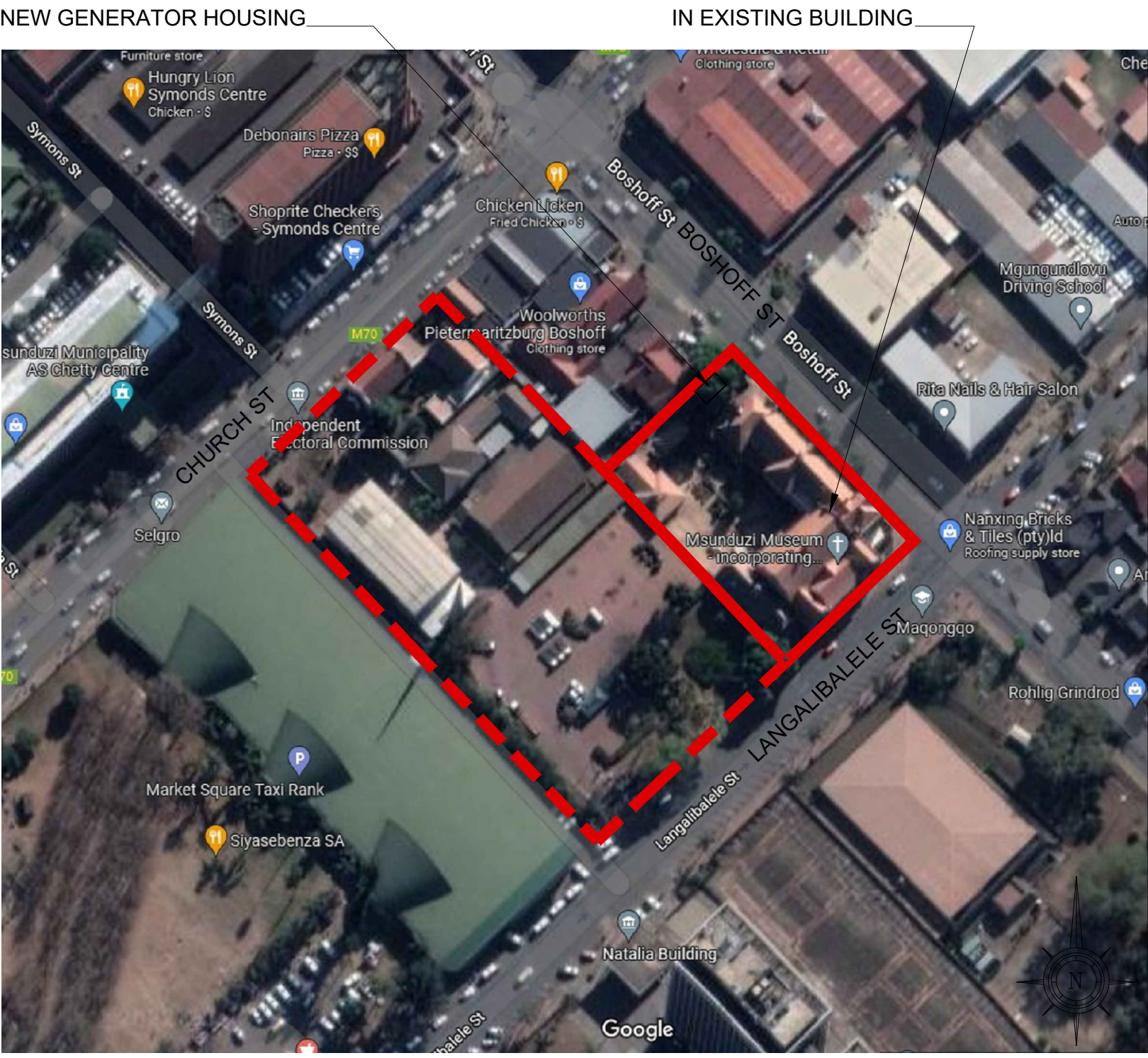
Project: PROPOSED UPGRADES AND INSTALLATION OF ELECTRICAL & MECHANICAL WORKS: MAIN BUILDING (BLOCK M) - uMSUNDUZI MUSEUM, ERF 2535, 351 LANGALIBALELE STREET, PIETERMARITZBURG, KZN, 3201

Drawing Description: PLAN - SITE LAYOUT

Drawn: REC P	Date: AUG 2022	Stage: Const.
Scale/s: 1:250 @ A1	Checked:	Revision: 00
Drawing number: 5044 - 001		

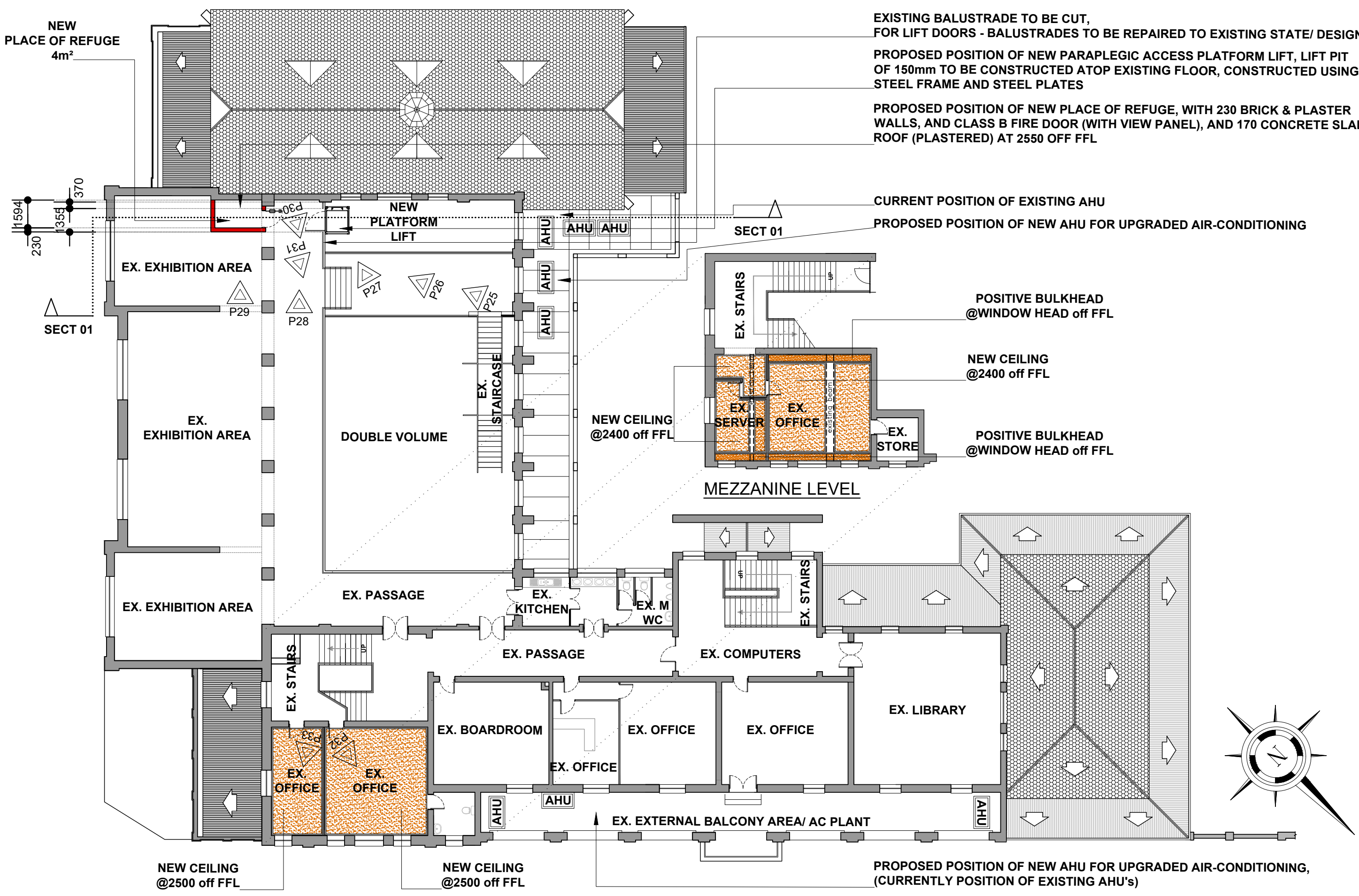


SITE - EXISTING LAYOUT WITH NEW GENERATOR HOUSING

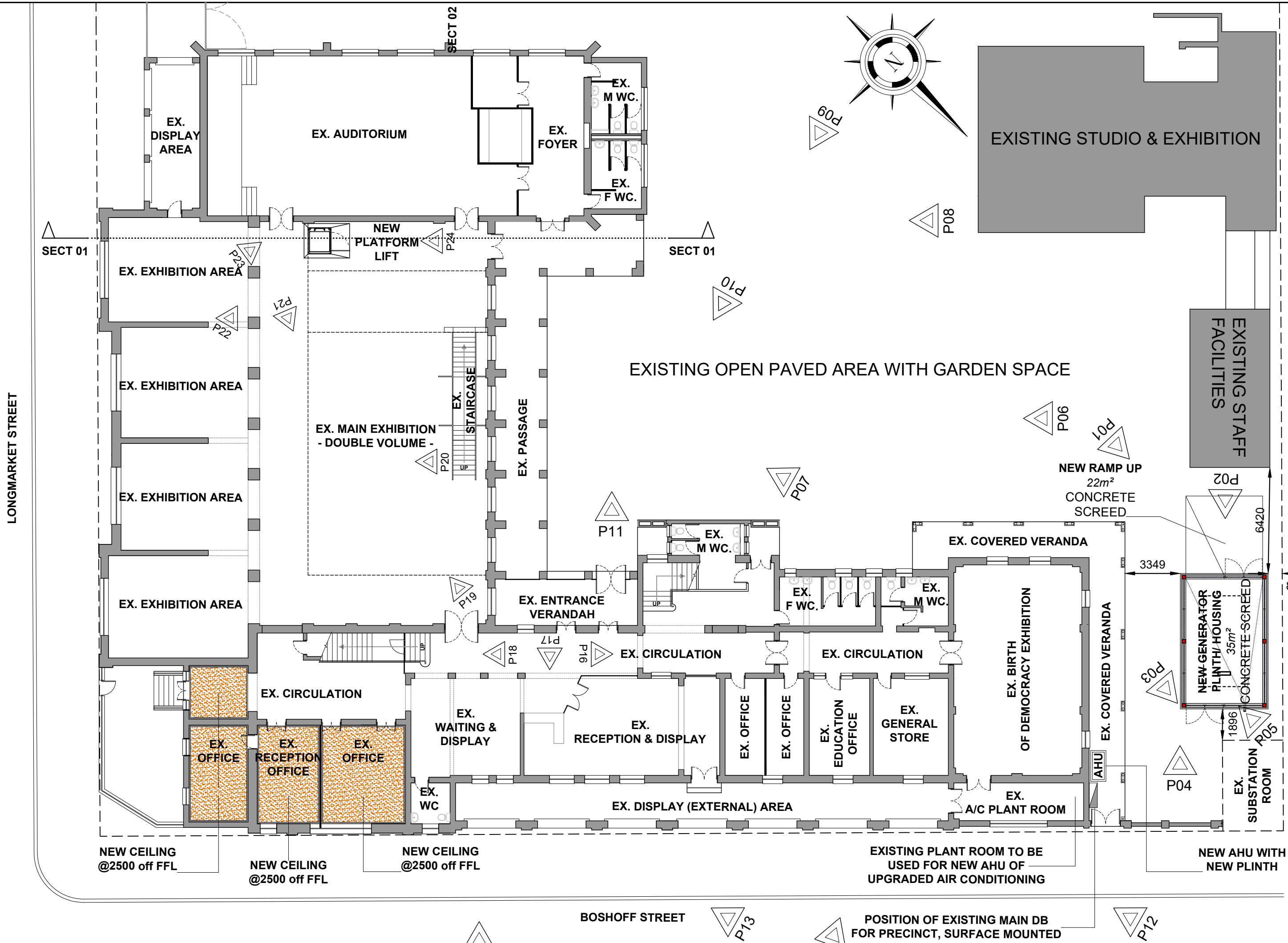


LOCALITY PLAN

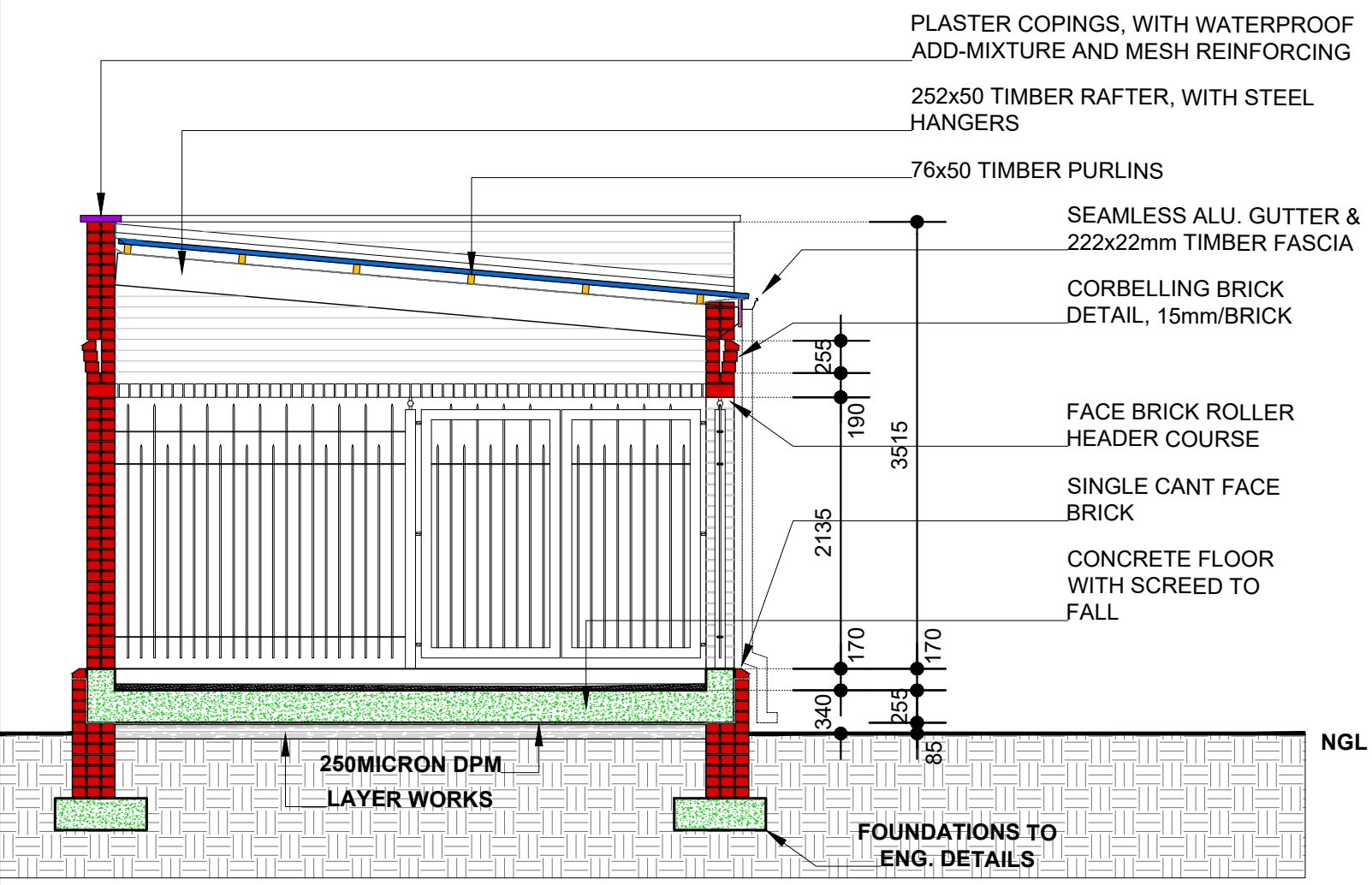




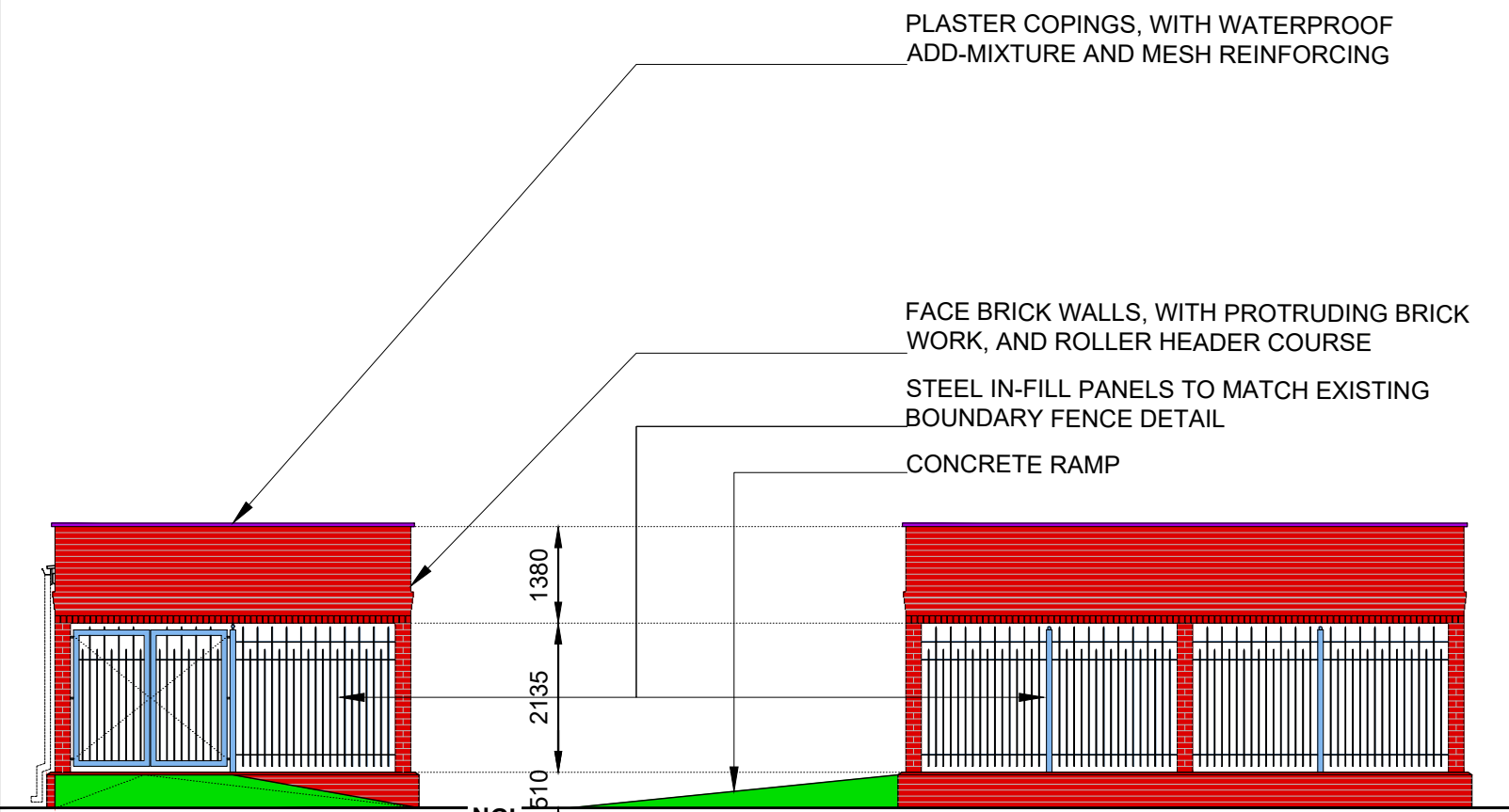
FIRST FLOOR - EXISTING LAYOUT WITH NEW LIFT



GROUND FLOOR - EXISTING LAYOUT WITH NEW LIFT & GENERATOR HOUSING

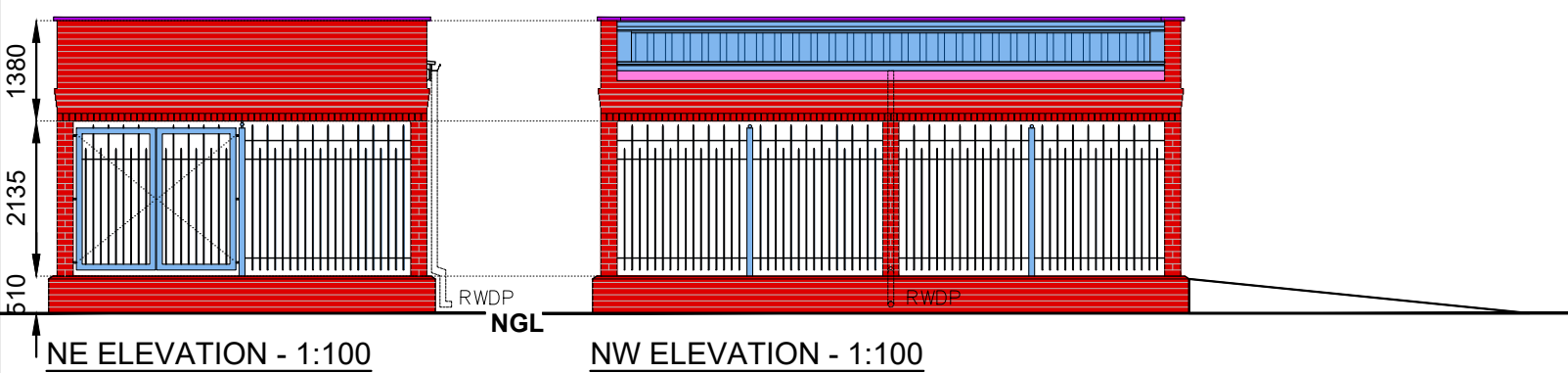


CROSS SECTION - 1:50



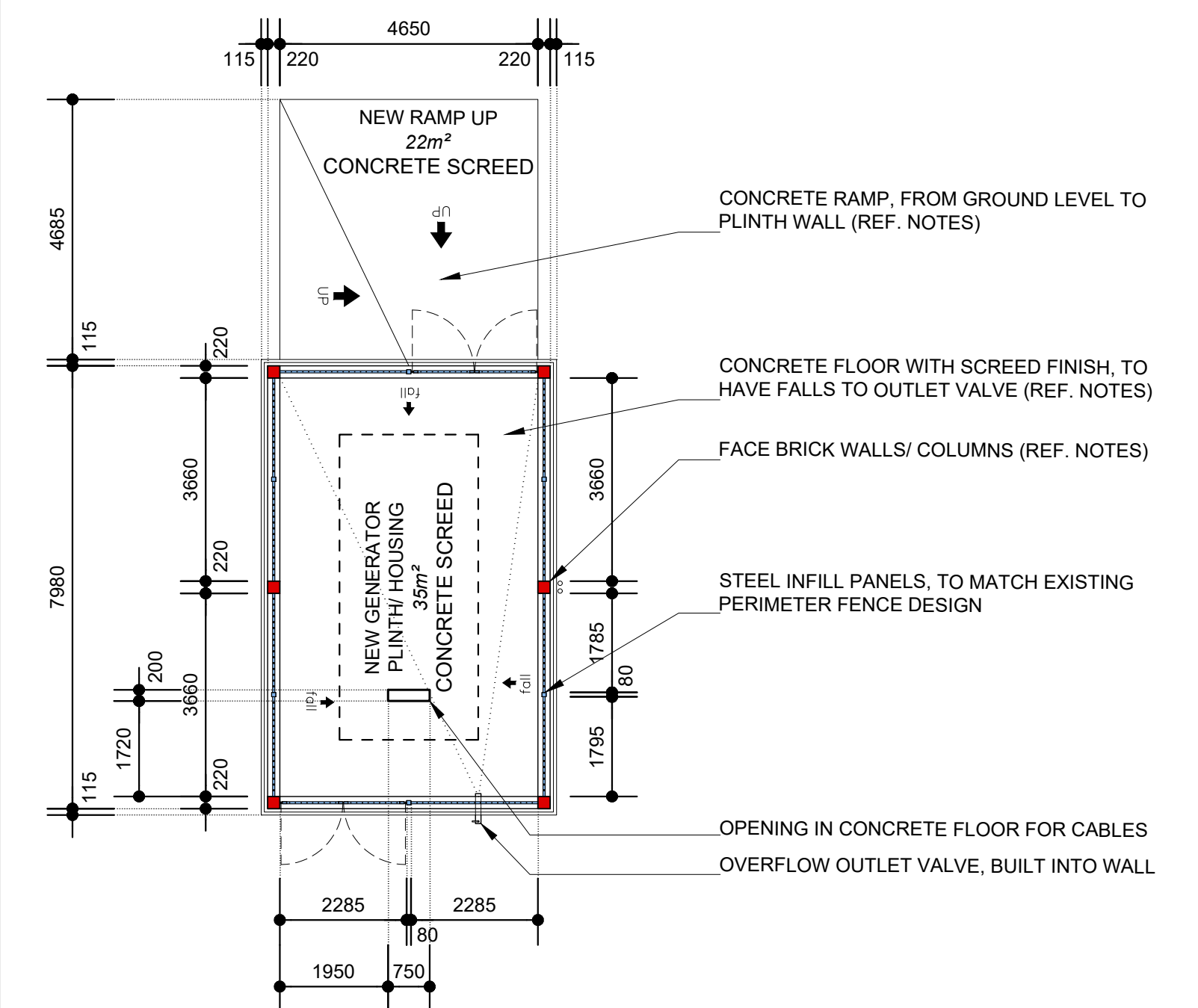
SW ELEVATION - 1:100

SE ELEVATION - 1:100



NE ELEVATION - 1:100

NW ELEVATION - 1:100



PLAN - 1:100

NEW GENERATOR HOUSING

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Occupancy Classification : C2

Owner: \_\_\_\_\_  
Name: \_\_\_\_\_ uMSUNDUZI MUSEUM  
Sign: \_\_\_\_\_ Date: \_\_\_\_\_

Architect: \_\_\_\_\_  
Name: \_\_\_\_\_ JA Meintjes  
Sign: \_\_\_\_\_ Date: \_\_\_\_\_  
Professional registration No.: \_\_\_\_\_ 6428

**BARTSCH**

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EAST LONDON: TEL(043) 727 0765, BLOEMFONTEIN: TEL(051) 300 547  
CAPE TOWN: TEL(021) 252 225, PRETORIA: TEL(012) 346 0526  
WINDHOEK: TEL(0926461) 237 405, PMB: TEL(033) 347 1325

Project: \_\_\_\_\_  
PROPOSED UPGRADES AND INSTALLATION OF ELECTRICAL & MECHANICAL WORKS:  
MAIN BUILDING (BLOCK M) - uMSUNDUZI MUSEUM, ERF 2535, 351 LANGALIBALELE STREET, PIETERMARITZBURG, KZN, 3201

Drawing Description: \_\_\_\_\_  
PLAN - EXISTING GROUND FLOOR LAYOUT WITH NEW GENERATOR HOUSING

Drawn: REC P	Date: AUG 2022	Stage: Const.
Scale/s: 1:200 @ A1	Checked: _____	Revision: 00
Drawing number: 5044 - 100		





P01

P02

P03

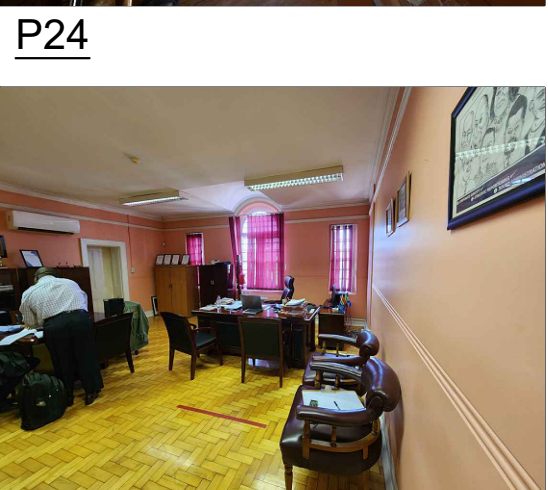
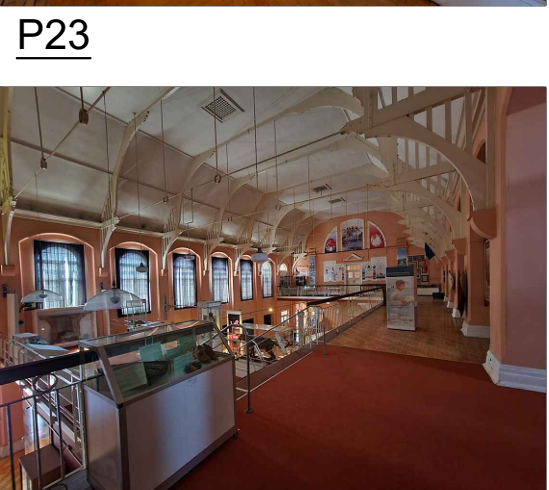
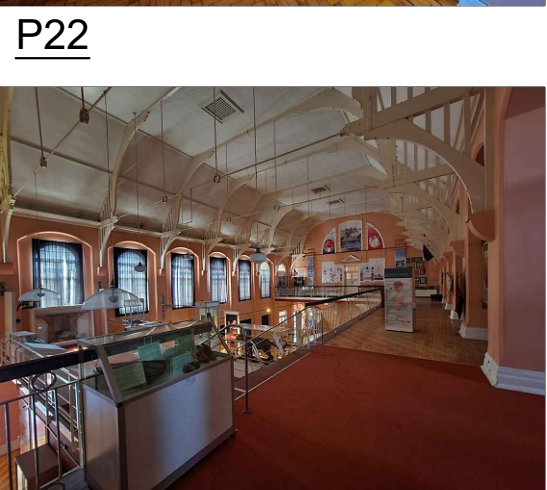
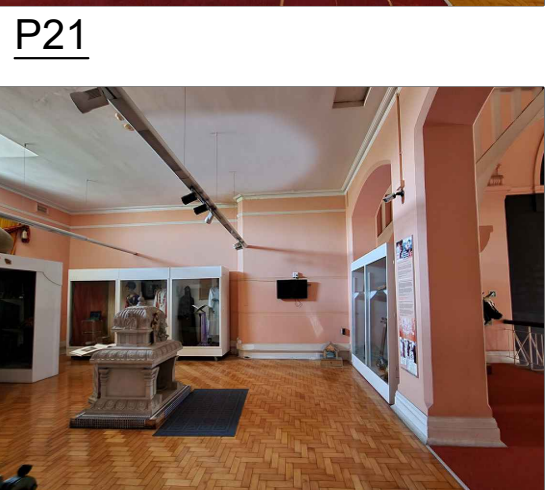
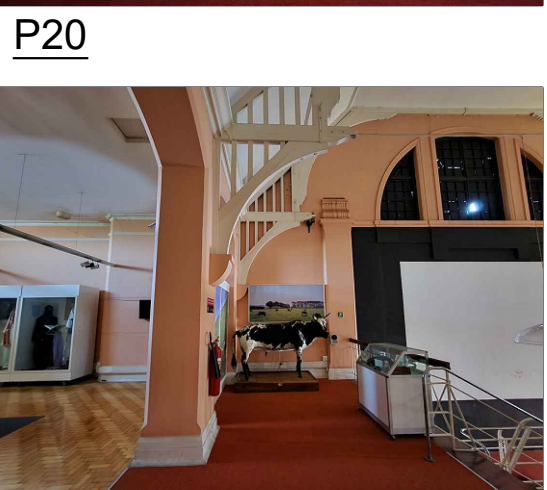
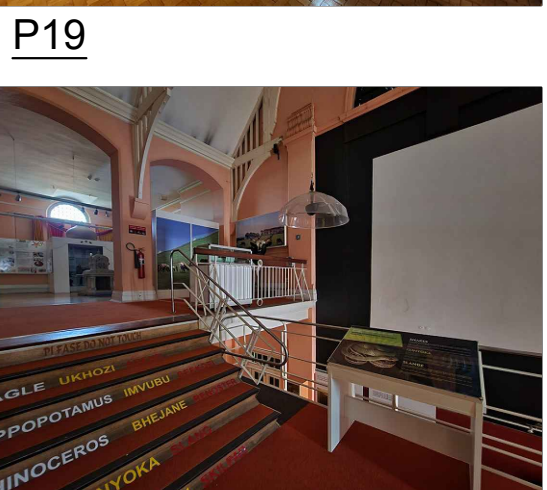
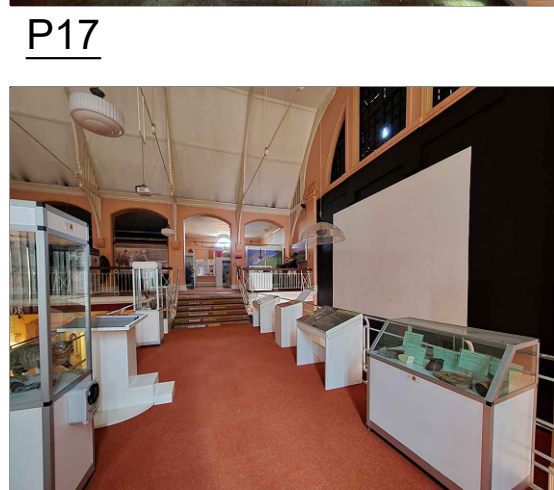
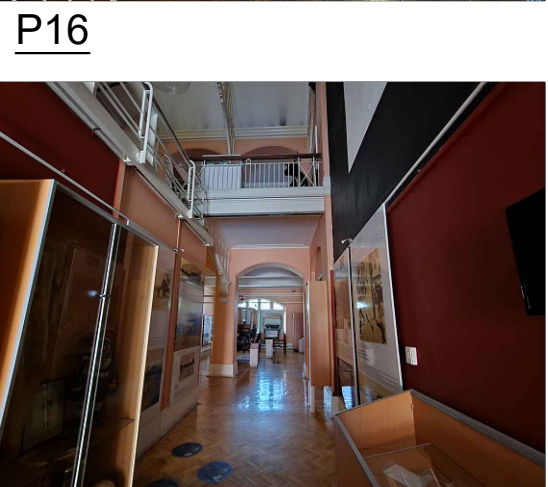
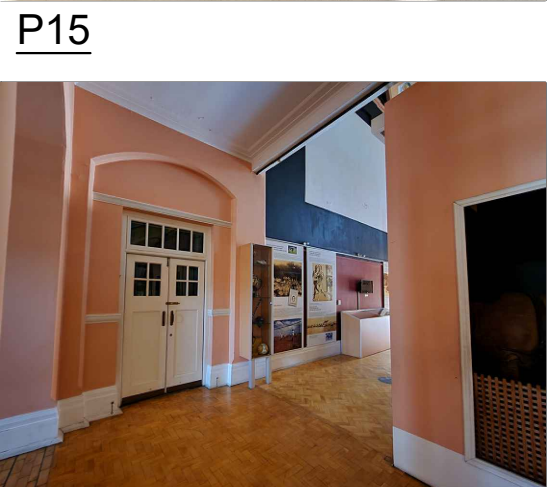
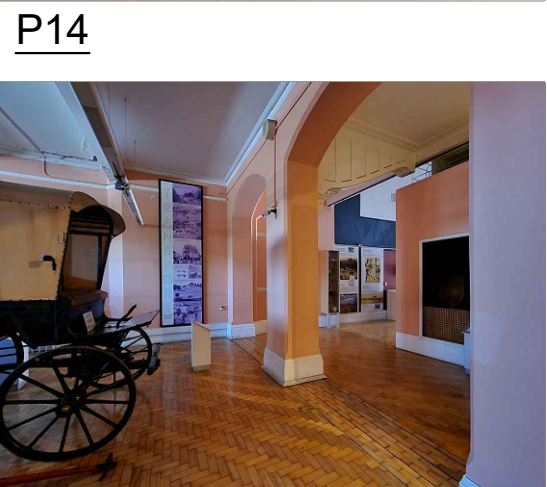
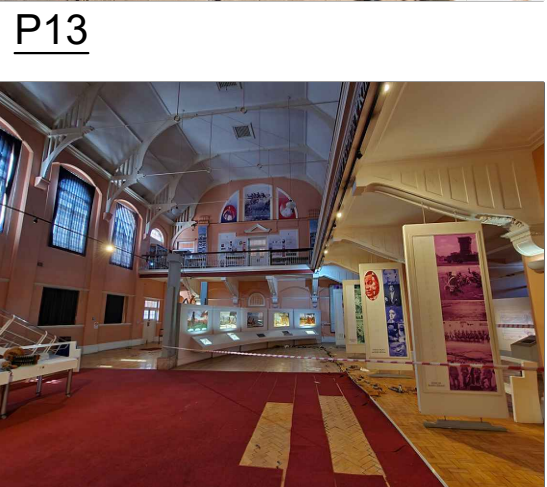
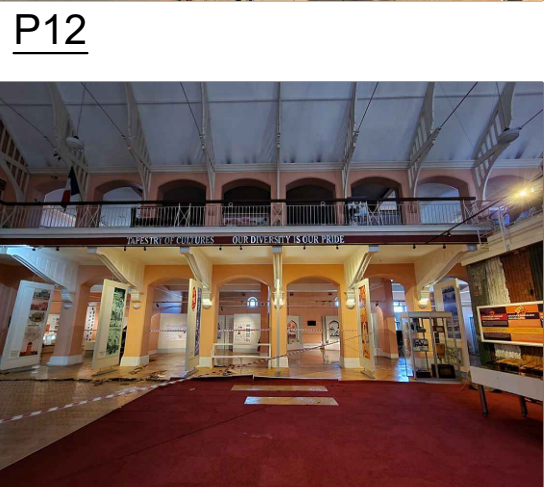
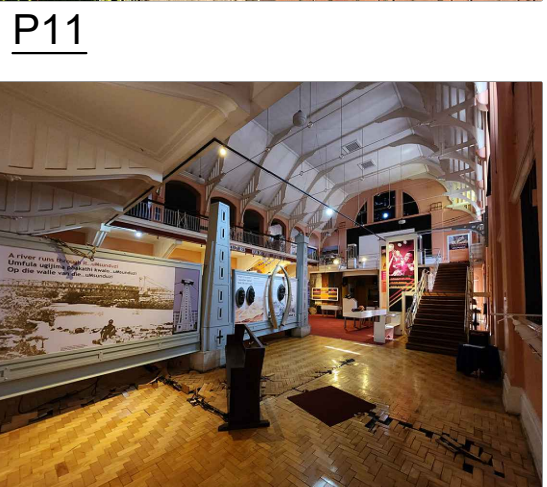
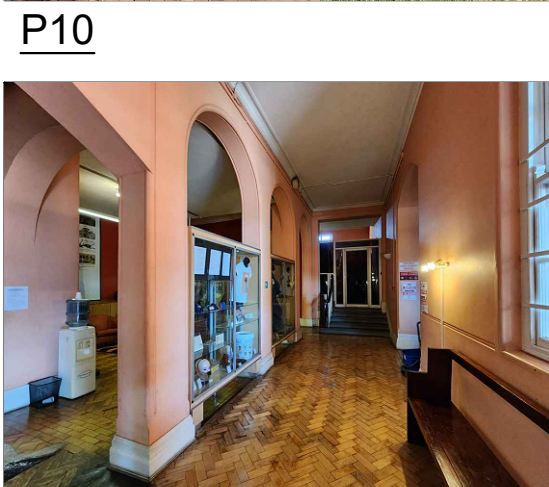
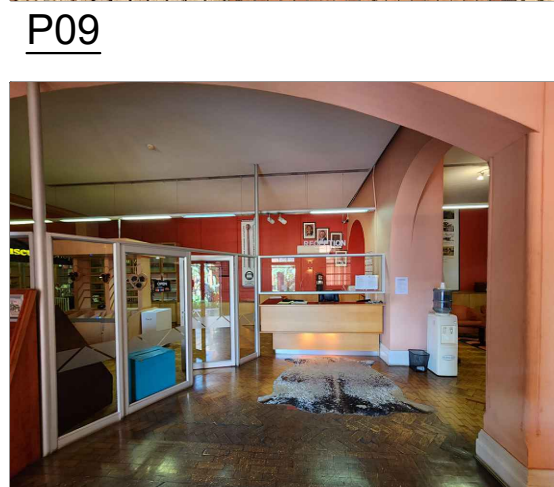
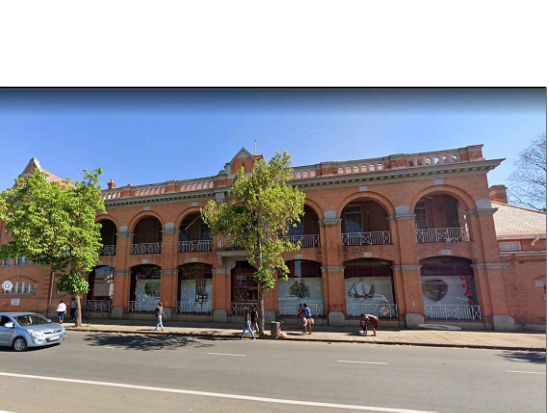
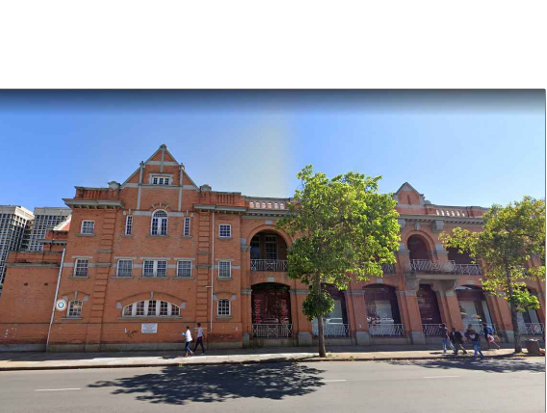
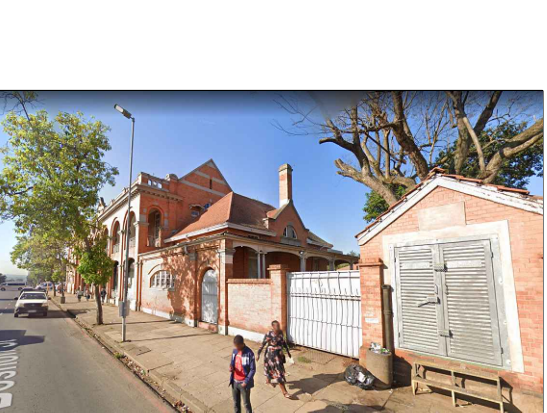
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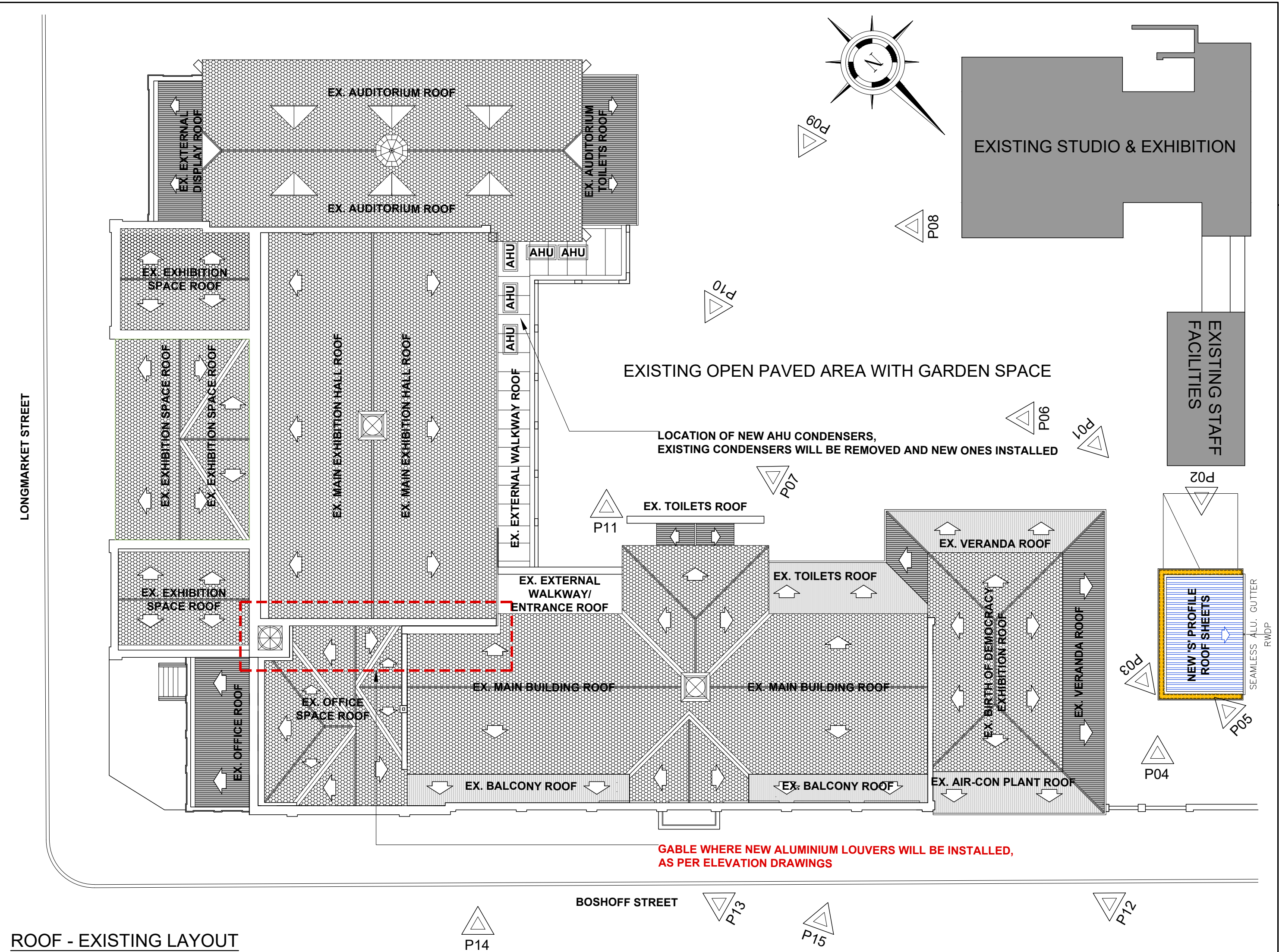
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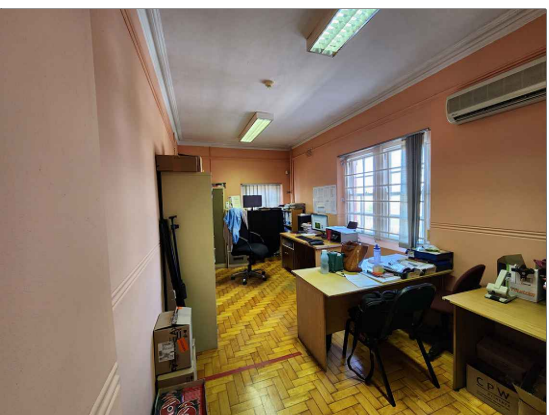
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P31

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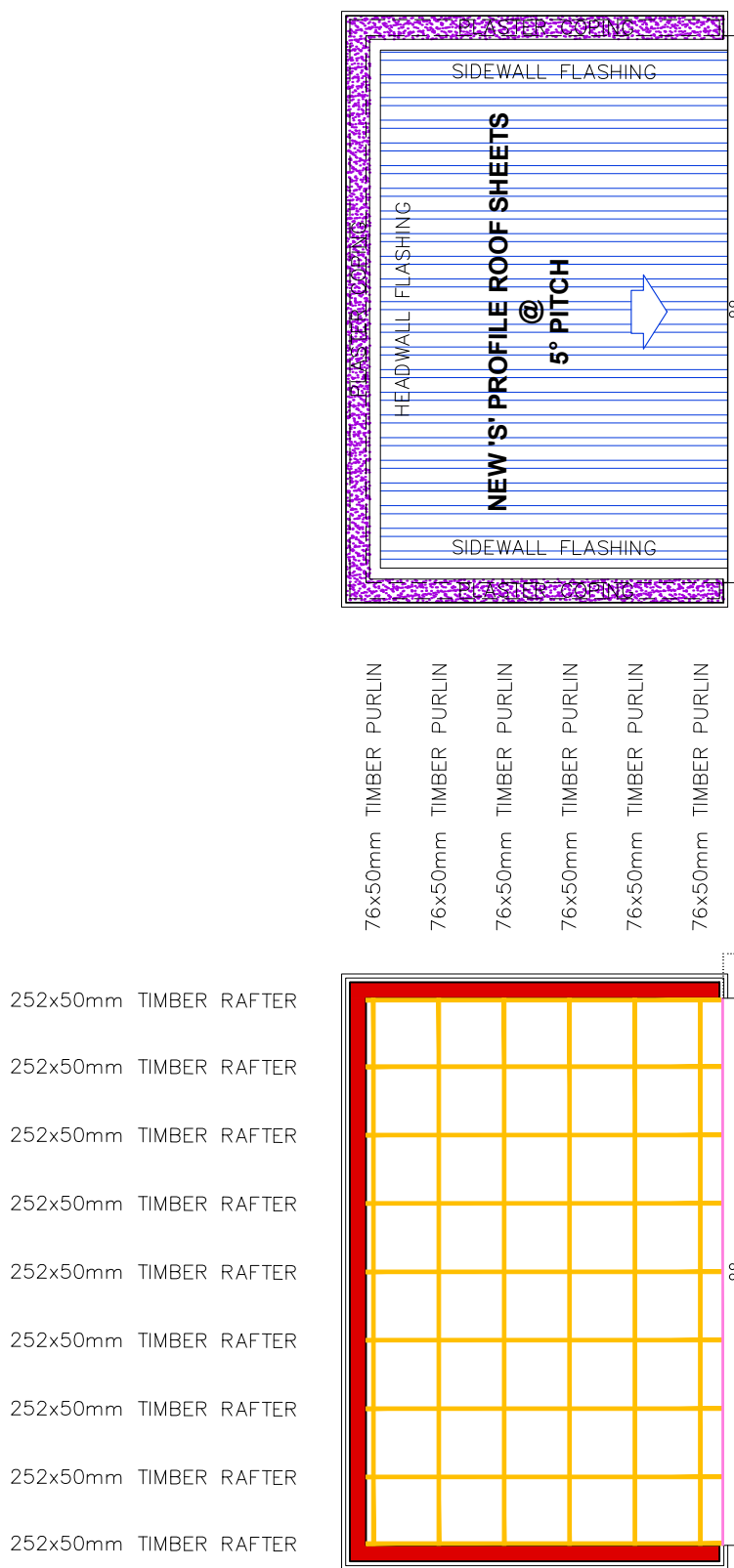


ROOF - EXISTING LAYOUT



P33

PHOTOS - EXISTING BUILDING



ROOF - NEW ROOF LAYOUT

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  - W4. PLASTER WALL & WALL COPING PAINT - 1x COAT DULUX TRADE PLASTER PRIMER, 2X COATS DULUX PEARLGLO.

- ROOF:**
- R1. GRS 0.53mm ALU-ZINC COATED (COLORPLUS - SLATE) 'IBR' PROFILE ROOF SHEETS, ON 76mm TIMBER PURLINS ON 252mm TIMBER RAFTERS - TO ENGINEERS DETAILS & SPECIFICATIONS (TIMBER TO BE FULLY TREATED HIGH GRADE SA-PINE) & PAINTED TIMBER EXTERNAL - 1x COAT DULUX WOOD PRIMER, 1x COAT DULUX TRADE UNIVERSAL UNDERCOAT, 1x DULUX TRADE GLOSS 100 ENAMEL, TIMBER TO BE FULLY PAINTED ON AREAS WHERE SUPPORT FIXINGS ARE PRIOR TO INSTALLING
  - R2. 170mm THICK CONCRETE ROOF, PLASTED AND PAINTED - 1x COAT DULUX TRADE PLASTER PRIMER, 2X COATS DULUX PEARLGLO.
  - R3. ALL ROOFS TO HAVE 'SISALATION 405' REFLECTIVE FOIL UNDER PURLIN UNDERLAY THROUGHOUT, ALL TO HAVE 150mm HEAD LAPS
  - R4. NEW ROOF TO HAVE 80mmØ PVC RAIN WATER DOWNPIPE, FITTED TO WALL WITH STANDARD PVC MOUNTING BRACKETS
  - R5. NEW ROOF TO HAVE STANDARD OGEE SEAMLESS ALU. GUTTER, TO MATCH ROOF SHEET.
  - R6. NEW ROOF TO HAVE 222x22mm FASCIA BOARD FIXED TO RAFTERS, TO BE PAINTED SAME AS RAFTERS

- CEILINGS:**
- C1. CEILINGS TO BE PELICAN JUMBO SUSPENDED GRID, SCREW-UP SKIMMED JOINT 9mm THICK GYPSUM BOARD, IN ACCORDANCE TO 'SABISA', WITH TIMBER CORNICE TO MATCH EXISTING CORNICE IN PROFILE EXACTLY.
  - C2. ALL BULKHEADS TO BE 22mm MDF BOARDS ON SAME GRID SYSTEM AS CEILINGS, TO BE PAINTED SAME AS CEILING, WITH 25x25mm 'L' CORNICE ON WALLS
  - C3. ALL PENETRATIONS THROUGH EXISTING SUSPENDED MESH AND PLASTER CEILING, TO BE KEPT TO A MINIMUM AND DONE WITH EXTREME CAUTION, ALL TO HAVE REINFORCED SUB-FRAME INSTALLED PRIOR TO CUTTING, PERIMETER OF CUT TO HAVE NEW SURROUND EDGE TRIM DONE USING 45x8mm TIMBER STRIPS (PAINTED FINISH)
  - C4. REFUGE ROOM TO HAVE PLASTERED SOFFIT, 15mm THICK, PAINTED TO MATCH CEILING.
  - C5. CEILING PAINT - 1x COAT DULUX PLASTER/ TIMBER PRIMER, 2x COATS DULUX TRADE 65 MATT.

- PLUMBING:**
- P1. ALL PLUMBING TO BE DONE BY REGISTERED PLUMBER, PLUMBING SIGN-OFF TO BE ISSUED AT END OF CONTRACT
  - P2. ALL PLUMBING TO COMPLY WITH SANS 10400-P & 10400-XA & SANS 10252-1:2004, SANS 1307, SANS 10106, SANS 10254 & SANS 10252-1.
- FLOORING:**
- FL1. CONCRETE FLOOR WITH HARDENED SCREED AND ANTI-DUSTING AGENT, TO HAVE SMOOTH TROWEL FINISH.
  - FL2. CONCRETE RAMP WITH HARDENED SCREED AND ANTI-DUSTING AGENT, TO HAVE NON-SLIP FLOAT FINISH.
  - FL3. REFUGE FLOOR TO BE 30mm GRANO ANTI DUSTING SCREED ON EXISTING CONCRETE FLOOR
  - FL4. ALL SOIL TO BE TREATED WITH APPROVED TERMITICIDE TREATMENT, PRIOR TO FOUNDATIONS BEING CAST AND PAVING BEING LAID, WITH A 5 YEAR GUARANTEE ISSUED.

- WINDOWS & DOORS:**
- W1. ALL EXISTING WINDOWS AND DOORS TO BE FULLY PROTECTED AT ALL TIMES, ANY DAMAGE TO THESE WILL BE RECTIFIED AT THE CONTRACTORS COST
  - W2. PAINTED TIMBER INTERNAL - 1x COAT DULUX WOOD PRIMER, 1x COAT DULUX TRADE UNIVERSAL UNDERCOAT, 1x DULUX TRADE EGGSHELL ENAMEL
  - W3. PAINTED TIMBER EXTERNAL - 1x COAT DULUX WOOD PRIMER, 1x COAT DULUX TRADE UNIVERSAL UNDERCOAT, 1x DULUX TRADE GLOSS 100 ENAMEL
  - W4. NEW ALUMINIUM GABLE GRILLES TO BE INSTALLED (AS PER NE ELEVATION) ALL TO THE MECHANICAL ENGINEERS DRAWINGS & SPECIFICATIONS.

## MUNICIPAL STAMPS

**MECHANICAL & ELECTRICAL:**

- M1. ALL MECHANICAL EXTRACTION AND VENTILATION TO BE DONE IN ACCORDANCE WITH THE MECHANICAL ENGINEERS DESIGN AND DETAILS.
- E1. ALL LIGHTING AND ELECTRICAL RETICULATION TO BE DONE IN ACCORDANCE TO ELECTRICAL ENGINEERS DESIGN AND DETAILS.

Occupancy Classification : C2

Owner: \_\_\_\_\_

Name: \_\_\_\_\_ uMSUNDUZI MUSEUM

Sign: \_\_\_\_\_ Date: \_\_\_\_\_

Architect: \_\_\_\_\_

Name: \_\_\_\_\_ JA Meintjes

Sign: \_\_\_\_\_ Date: \_\_\_\_\_

Professional registration No.: \_\_\_\_\_ 6428

**BARTSCH**

LADYSMITH: TEL(036) 631 1888, P.O BOX 1697, LADYSMITH 3370  
QUEENSTOWN: TEL(045) 839 5728, HARRISMITH: TEL(058) 623 471  
EAST LONDON: TEL(043) 727 0765, BLOEMFONTEIN: TEL(051) 300 547  
CAPE TOWN: TEL(021) 252 225, PRETORIA: TEL(012) 346 0526  
WINDHOEK: TEL(0926461) 237 405, PMB: TEL(033) 347 1329

Project:

PROPOSED UPGRADES AND INSTALLATION OF ELECTRICAL & MECHANICAL WORKS: MAIN BUILDING (BLOCK M) - UMSUNDUZI MUSEUM, ERF 2535, 351 LANGALIBALELE STREET, PIETERMARITZBURG, KZN, 3201

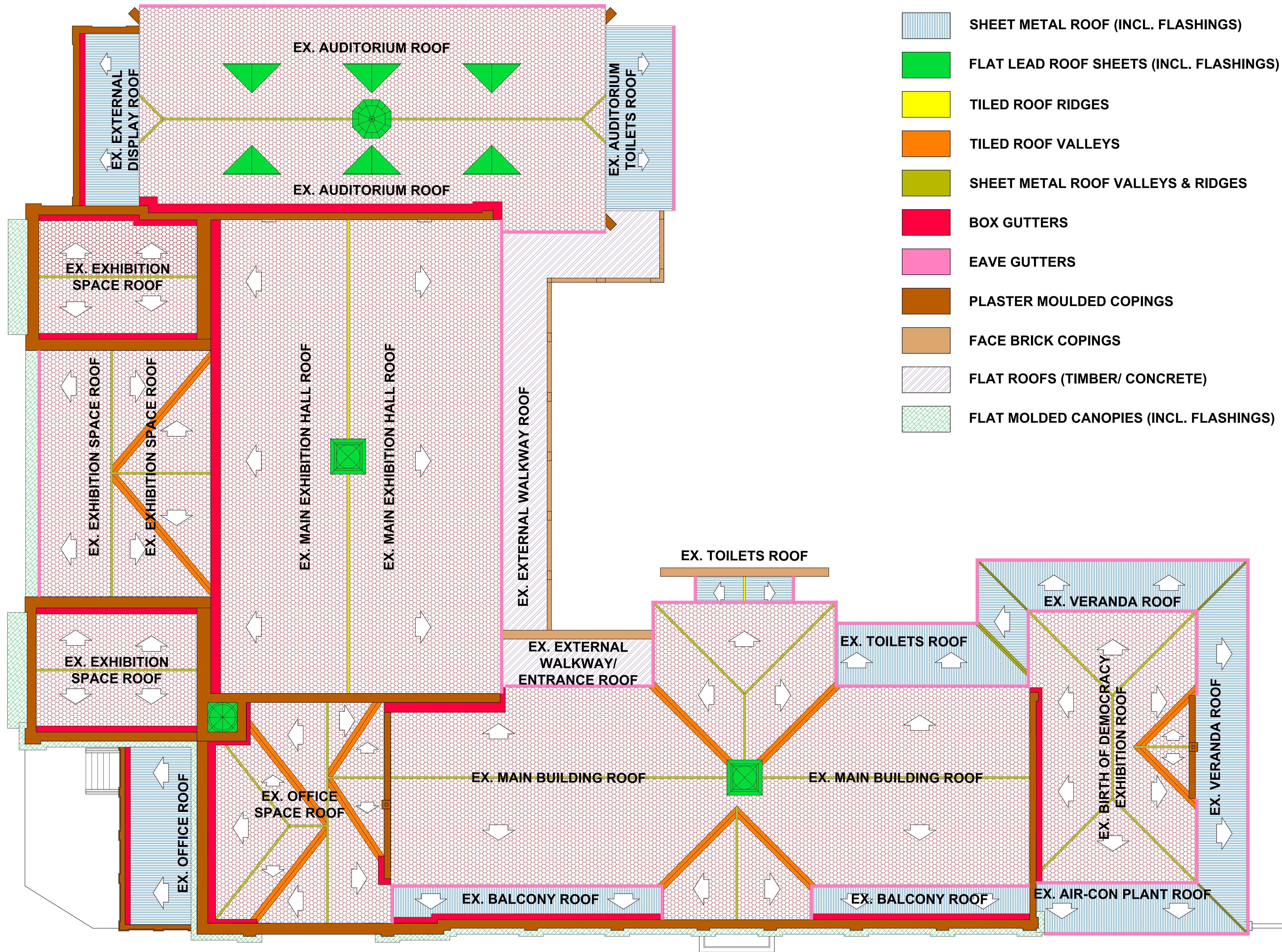
Drawing Description:

PLAN - EXISTING ROOF LAYOUT WITH CURRENT SITE PICTURES

Drawn: REC P	Date: AUG 2022	Stage: Const.
Scale/s: 1:200 @ A1	Checked:	Revision: 00
Drawing number: 5044 - 101		

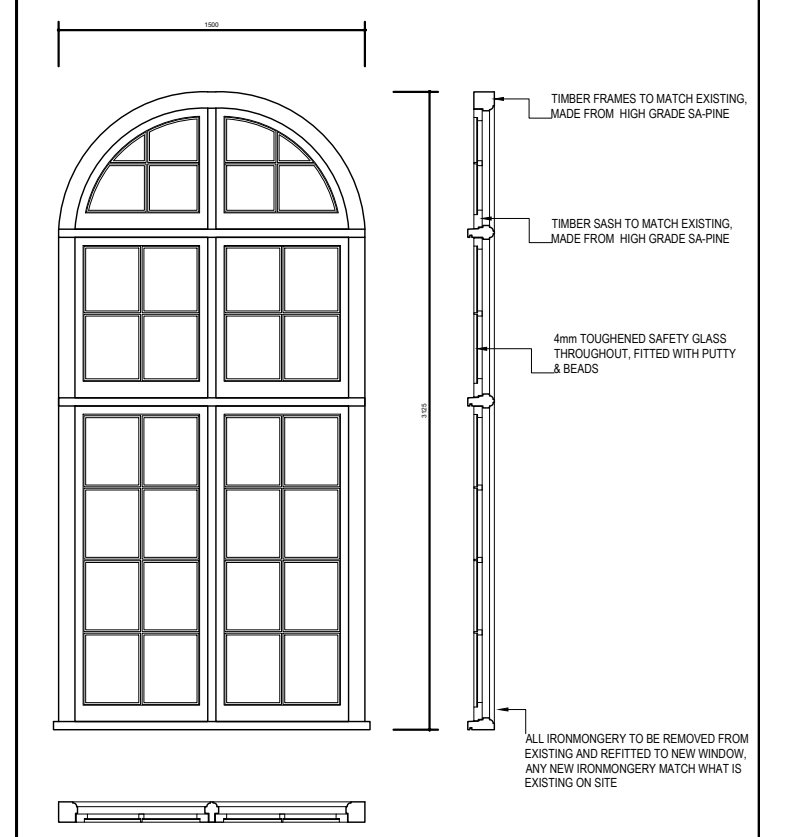


**LONGMARKET STREET**



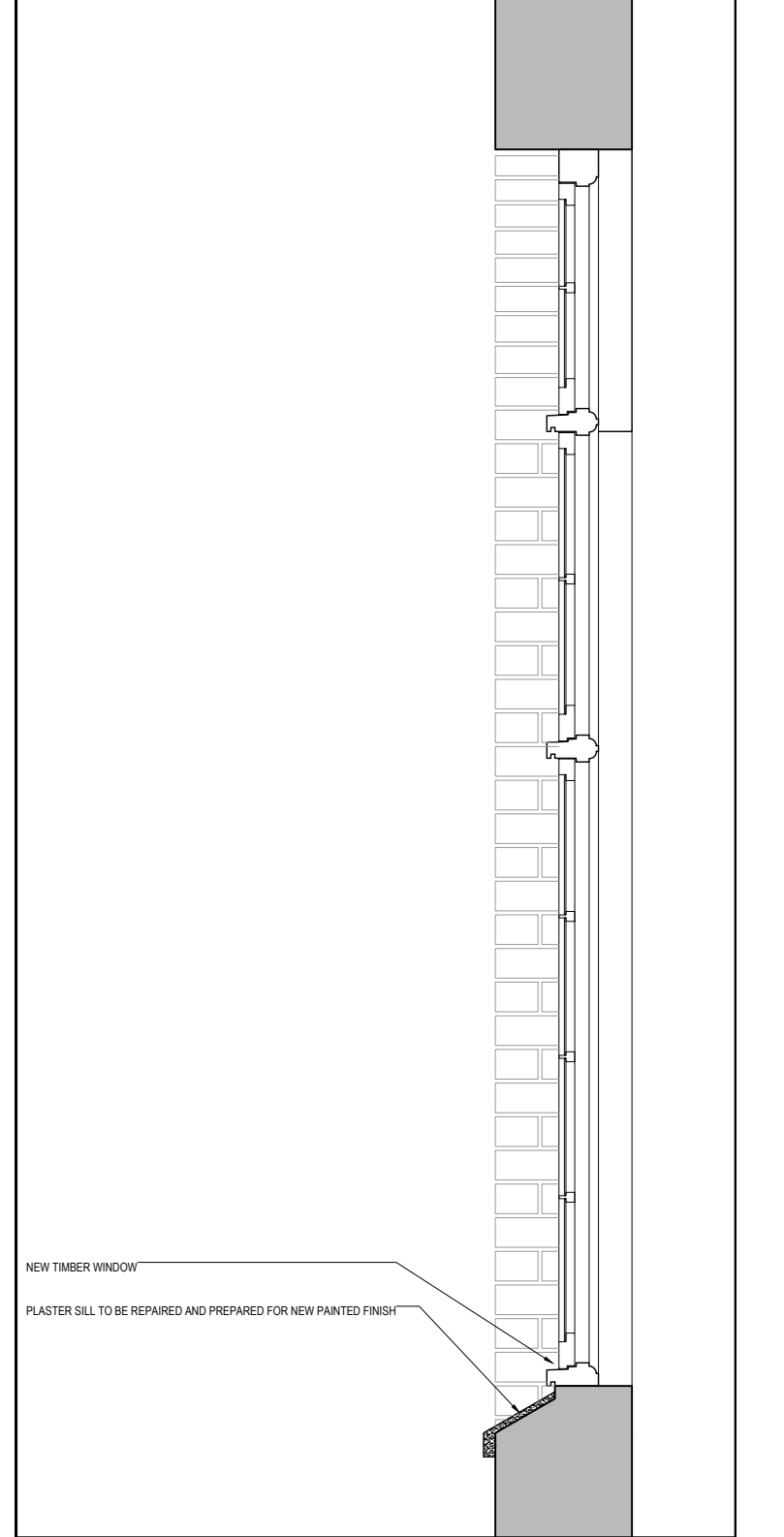
TYPICAL WINDOW

ALL DIMENSIONS ARE GUIDELINES. EVERYTHING MUST BE CHECKED AND MEASURED ON SITE PRIOR TO ANY FABRICATION TAKING PLACE. ALL WINDOWS ARE TO MATCH EXISTING WINDOWS EXACTLY.



NEW WINDOW

- ALL TIMBER TO HIGH GRADE S-PINE
- ALL WORK TO BE CARRIED OUT BY APPROVED AMAFA SPECIALIST SUB-CONTRACTOR
- FINISH: ONE COAT WOOD PRIMER, ONE COAT UNDERCOAT & THREE COAT ENAMEL
- IRONMONGERY: REMOVE FROM EXISTING WINDOW, AND REINSTALL ONTO NEW WINDOW



Occupancy Classification : C2
-------------------------------

Owner: \_\_\_\_\_

Name: uMSUNDUZI MUSEUM

Sign: \_\_\_\_\_ Date: \_\_\_\_\_

Architect:

Name: JA Meintjes

Sign: \_\_\_\_\_ Date: \_\_\_\_\_

Professional registration No.: 6428

**BARTSCH**

LADYSMITH: TEL(036) 631 1888, P.O.BOX 1097, LADYSMITH 3370  
QUEENSTOWN: TEL(045) 839 5728, HARRISMITH: TEL(058) 623 471  
EAST LONDON : TEL(043) 727 0765, BLOEMFONTEIN: TEL(051) 300 547  
CAPE TOWN : TEL(021) 252 225, PRETORIA: TEL(012) 346 0526  
WINDHOEK : TEL(0926461) 237 403, PMB: TEL(033) 347 1325

Project: \_\_\_\_\_

PROPOSED UPGRADES AND INSTALLATION  
OF ELECTRICAL & MECHANICAL WORKS:  
MAIN BUILDING (BLOCK M) - uMSUNDUZI  
MUSEUM, ERF 2535, 351 LANGALIBALELE  
STREET, PIETERMARITZBURG, KZN, 3201

Drawing Description:

PLAN - EXISTING MAIN MUSEUM ROOF LAYOUT,  
WITH AREAS OF WORK FOR REPAIRS

<u>Drawn:</u> REC P	<u>Date:</u> MAY 2023	<u>Stage:</u> Sub.
<u>Scale/s:</u> 1:100 @ A1	<u>Checked:</u>	

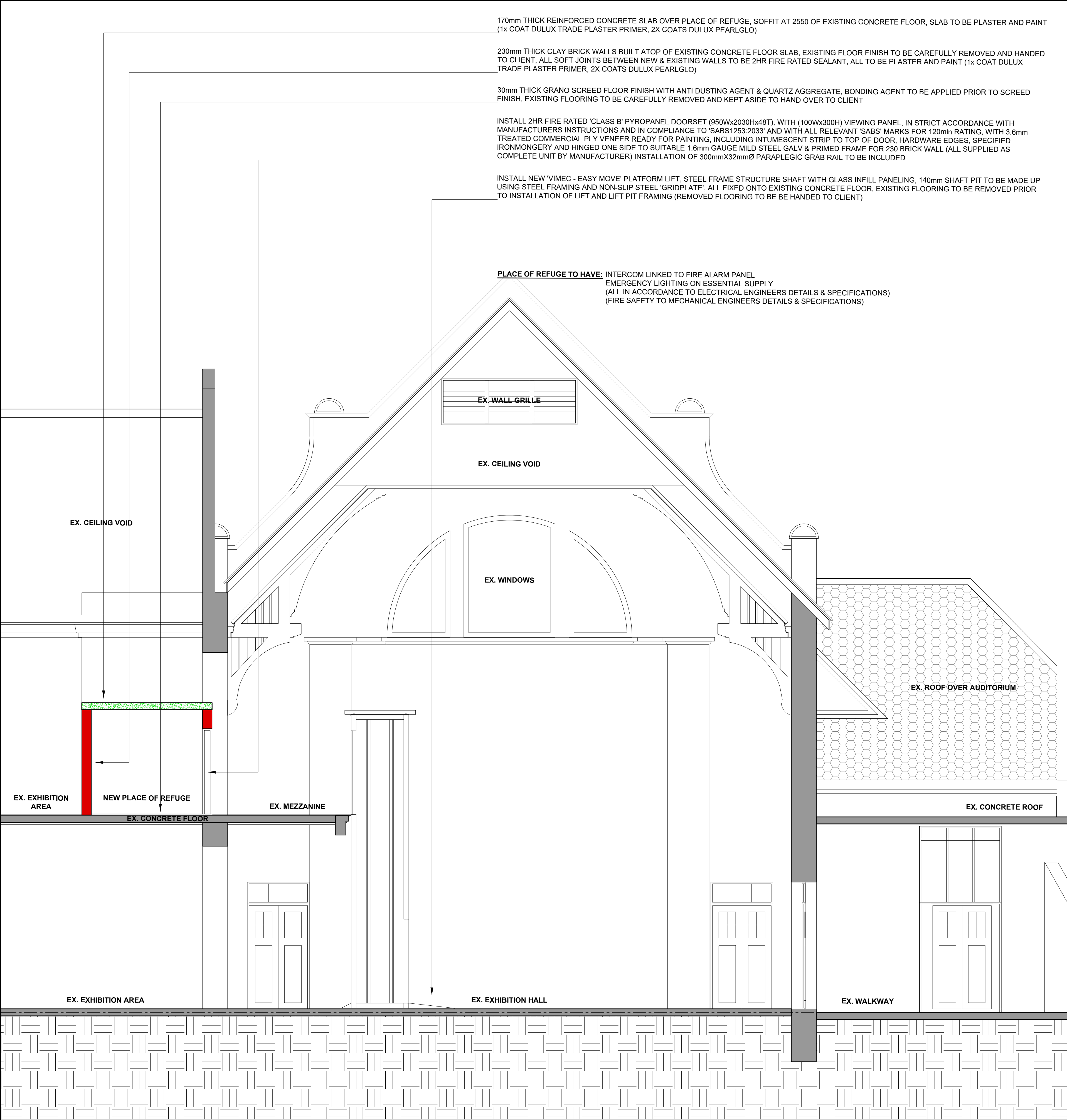
Drawing number:	5044 - 101a	Revision:	00
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**BOSHOF STREET**









SECTION 01

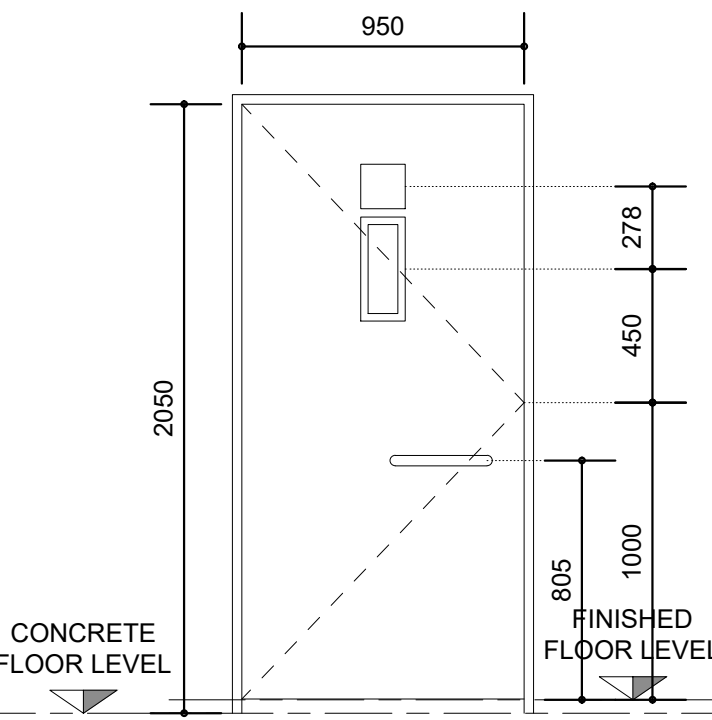
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GENERAL NOTES

**STEEL:**  
ST1. ALL STEEL TO BE MILD STEEL, PLASCON EPOXY PAINTED WITH 4 COAT SYSTEM (PRIMER, UNIVERSAL UNDERCOAT, 2x FINISH COATS)  
ST2. ALL STEEL TO BE FULL SANDBLASTED CLEAN FREE OF CONTAMINATES PRIOR TO PAINT APPLICATION  
ST3. ALL WELDS TO BE NEAT CONTINUOUS FILLET WELDS, CONSISTENT IN THICKNESS AND UNIFORMITY  
ST4. STEEL SHOP DRAWINGS TO BE ISSUED TO ARCHITECT FOR APPROVAL, PRIOR TO ANY FABRICATION OR INSTALLATION

**MISCELLANEOUS:**  
M1. ANY DAMAGE TO SURROUNDING FINISHES, FITTINGS, SERVICES, EQUIPMENT ETC. TO BE REPAIRED AND/ OR REPLACED BY CONTRACTOR.  
M2. NO ORIGINAL CIRCA 1905-1965 BUILDING FITTINGS TO REMOVED, IF REMOVED THEN THEY MUST BE DONE WITH EXTREME SENSITIVITY/ CARE & STORED IN A SAFE LOCATION TO BE REINSTATED/ INSTALLED ONCE WORK IS COMPLETE.  
M3. STEEL PAINT FINISH, 4 COAT SYSTEM DULUX EPOXY - (1xPRIMER & 1x UNDERCOAT & 2x FINISH COATS)  
M4. REFUGE DOOR - 2HR FIRE RATED CLASS B PYROPANEL DOORSET (950x2030x48), WITH VIEWING PANEL, IN STRICT ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS AND IN COMPLIANCE TO 'SABS1253:2033' AND WITH ALL RELEVANT 'SABS' MARKS FOR 120min, WITH 3.6mm TREATED COMMERCIAL PLY, INCLUDING INTUMESCENT STRIP TO TOP OF DOOR, HARDWARE EDGES, SPECIFIED IRONMONGERY AND HINGED ONE SIDE TO SUITABLE 1.6mm GAUGE MILD STEEL GALV & PRIMED FRAME FOR 230 BRICK WALL  
M5. ALL COPING TO BE IN-SITU PLASTER COPING, MUST BE A EXTRA STRENGTH PLASTER MIX, WITH SIKALITE ADD MIXTURE  
M6. ALL COPING TO HAVE SIKATOP SEAL-107 ZA APPLIED TO TOP OF WALLS PRIOR TO BEING CAST  
M7. ALL DRAWINGS TO BE READ IN CONJUNCTION WITH EACH OTHER AND TO BE READ IN CONJUNCTION WITH THE SPECIFICATION & METHOD DOCUMENT.

REFUGE FIRE DOOR



**DOOR:** 2032x950mm  
'Bilcon - Rubidor' Class B fire door, or similar approved. Supplied from manufacturer as a complete unit and to have 100x300mm vision panels with pyroceramic fire resistant glass. To be supplied with intumescent strip to top of door, hardwood edges.  
Door to be installed in strict accordance to manufacturers specifications and details. And be in compliance with SABS 1253:2003 and carrying the relevant SABS mark

**STANDARD DOOR FRAME 230mm:** 1.6mm metal double rebated frame. Complete as supplied by manufacturer. **Strike Plate must be set at 1000cc from bottom of Door Panel.**

**D.FINISH:** Commercial veneer, complete as supplied by manufacturer. Undercoat and two coats gloss enamel.

**F.FINISH:** Galvanised steel frame as by manufacturer.

**FURNITURE:**  
Door to be fitted with standard tested locks and closer's, inclusive of heavy duty 100mm flanged stainless steel hinges (1.5 pair for standard sized door & 2 Pair for non standard sized door)  
Door and door frame to be fully and correctly labeled as per regulations.  
Door to have 'Refuge (GA12)' Sign fitted as per 'SANS 1186-1'

- Door furniture as supplied by DORMA KABA or equally approved.
- dormakaba MECHANICAL HOLD OPEN Cam action slide channel door closer. Max door width 1250mm. Closing Force EN 2-5V. Adjustable strength. Hydraulic speed control. Backcheck. Delayed action. Pull-side door leaf fixing (Standard). Push-side transom fixing. Door closer compliant with EN 1154. Hold-open devices tested to EN 1155. Door closer is CERTI FIRE approved Certificate No. GF 1191 for door types ITT 120, MM/IMM 240. Certified manufacturer to ISO 9001.  
Note: Door closer to be installed on pull side
  - 400mm x 75mm x 2mm grade 304 s/s back plate with 6 holes lasered for countersunk fixings. 2 only 8mm diameter holes lasered for dormakaba fixings. Bolts to fit through plate and door.
  - dormakaba 325x25mm Straight Tubular Pull Handle BTB (6TB Fixing Sets included)
  - dormakaba 150x150mm REFUGE sign

**NOTE:** Max. 4mm gap all round between door and frame and in between double doors. All windows, doors & door frames to measured on site prior to manufacture.

GENERAL NOTES

**SITE:**  
S1. SET OUT TO BE DONE BY LAND SURVEYOR  
S2. ALL LAYER WORKS AND SITE WORK TO BE IN ACCORDANCE TO ENGINEERS DETAILS AND SPECIFICATIONS. ENGINEERS DRAWINGS AND ARCHITECTS DRAWINGS TO BE READ IN CONJUNCTION WITH EACH OTHER AT ALL TIMES  
S3. ALL STORM WATER TO ENGINEERS DETAILS AND SPECIFICATIONS  
S4. ALL SITE HEALTH & SAFETY TO BE COMPLIED TO IN TERMS OF THE SANS-10400 NATIONAL BUILDING REGULATIONS AND AGREED BUILDING CONTRACT  
S5. SOLID HOARDING TO BE IN PLACE AT SECTIONS TO BE WORKED ON PRIOR TO ANY WORK COMMENCING ON SITE

**FOUNDATIONS:**  
F1. ALL FOUNDATIONS, SURFACE BEDS, SLABS, RAFTS, RETAINING WALLS ETC TO BE IN ACCORDANCE TO ENGINEERS DETAILS AND SPECIFICATIONS. ALL TO BE ON WELL COMPACTED LAYER WORKS & 250 MICRON DPMs & TO HAVE SOIL POISON TREATMENT WITH 5 YEAR GUARANTEE  
F2. ALL FOUNDATIONS NOT DESIGNED BY PROFESSIONAL ENGINEER TO BE IN ACCORDANCE WITH THE SANS-10400 NATIONAL BUILDING REGULATIONS

**WALLS:**  
W1. WALLS TO BE 230 & 115 COROBRIK FBX CLAY BRICK WALLS (EXTERNAL) & 230 CLAY BRICK WITH PLASTER WALLS (INTERNAL)  
W2. EXTERNAL WALLS TO BE RED FACE BRICK, COROBRIK FIRELIGHT SATIN FBX, WHERE NEW WALL MEETS OLD ALL COURSES TO BE PROPERLY TOOTHED IN.  
W3. INTERNAL WALLS TO BE REPAIRED AND PLASTERED WHERE REPAIR IS BEING DONE (IF NEED BE), PLASTER MIX TO BE AS PER APPROVED MIXTURE RATIO, ALL READY TO RECEIVE A 3 COAT PAINT SYSTEM.  
W4. PLASTER WALL & WALL COPING PAINT - 1x COAT DULUX TRADE PLASTER PRIMER, 2X COATS DULUX PEARLGLO.

**ROOF:**  
R1.GRS 0.53mm ALU-ZINC COATED (COLORPLUS - SLATE) 'IBR' PROFILE ROOF SHEETS, ON 76mm TIMBER PURLINS ON 252mm TIMBER RAFTERS - TO ENGINEERS DETAILS & SPECIFICATIONS (TIMBER TO BE FULLY TREATED HIGH GRADE SAPHNE) & PAINTED TIMBER EXTERNAL - 1x COAT DULUX WOOD PRIMER, 1x COAT DULUX TRADE UNIVERSAL UNDERCOAT, 1x DULUX TRADE GLOSS 100 ENAMEL, TIMBER TO BE FULLY PAINTED ON AREAS WHERE SUPPORT FIXINGS ARE PRIOR TO INSTALLING  
R2. 170mm THICK CONCRETE ROOF, PLASTED AND PAINTED - 1x COAT DULUX TRADE PLASTER PRIMER, 2X COATS DULUX PEARLGLO.  
R3. ALL ROOFS TO HAVE 'SISALATION 405' REFLECTIVE FOIL UNDER PURLIN UNDERLAY THROUGHOUT, ALL TO HAVE 150mm HEAD LAPS  
R4. NEW ROOF TO HAVE 30mmØ PVC RAIN WATER DOWNPIPE, FITTED TO WALL WITH STANDARD PVC MOUNTING BRACKETS  
R5. NEW ROOF TO HAVE STANDARD OGEE SEAMLESS ALU. GUTTER, TO MATCH ROOF SHEET.  
R6. NEW ROOF TO HAVE 22x22mm FASCIA BOARD FIXED TO RAFTERS, TO BE PAINTED SAME AS RAFTERS

**CEILINGS:**  
C1. CEILINGS TO BE PELICAN JUMBO SUSPENDED GRID, SCREW-UP SKIMMED JOINT 9mm THICK GYPSUM BOARD, IN ACCORDANCE TO 'SABISA', WITH TIMBER CORNICE TO MATCH EXISTING CORNICE IN PROFILE EXACTLY.  
C2. ALL BULKHEADS TO BE 22mm MDF BOARDS ON SAME GRID SYSTEM AS CEILINGS, TO BE PAINTED SAME AS CEILING, WITH 25x25mm 'L' CORNICE ON WALLS  
C3. ALL PENETRATIONS THROUGH EXISTING SUSPENDED MESH AND PLASTER CEILING, TO BE KEPT TO A MINIMUM AND DONE WITH EXTREME CAUTION, ALL TO HAVE REINFORCED SUB-FRAME INSTALLED PRIOR TO CUTTING, PERIMETER OF CUT TO HAVE NEW SURROUND EDGE TRIM DONE USING 45x8mm TIMBER STRIPS PAINTED FINISH  
C4. REFUGE ROOM TO HAVE PLASTERED SOFFIT, 15mm THICK, PAINTED TO MATCH CEILING.  
C5. CEILING PAINT - 1x COAT DULUX PLASTER/ TIMBER PRIMER, 2x COATS DULUX TRADE 65 MATT.

**PLUMBING:**  
P1. ALL PLUMBING TO BE DONE BY REGISTERED PLUMBER, PLUMBING SIGN-OFF TO BE ISSUED AT END OF CONTRACT  
P2. ALL PLUMBING TO COMPLY WITH SANS 10400-P & 10400-XA & SANS 10252-1:2004, SANS 1307, SANS 10106, SANS 10254 & SANS 10252-1.

**FLOORING:**  
FL1. CONCRETE FLOOR WITH HARDENED SCREED AND ANTI-DUSTING AGENT, TO HAVE SMOOTH TROWEL FINISH.  
FL2. CONCRETE RAMP WITH HARDENED SCREED AND ANTI-DUSTING AGENT, TO HAVE NON-SLIP FLOAT FINISH.  
FL3. REFUGE FLOOR TO BE 30mm GRANO ANTI DUSTING SCREED ON EXISTING CONCRETE FLOOR  
FL4. ALL SOIL TO BE TREATED WITH APPROVED TERMITTE TREATMENT, PRIOR TO FOUNDATIONS BEING CAST AND PAVING BEING LAID, WITH A 5 YEAR GUARANTEE ISSUED.

**WINDOWS & DOORS:**  
W1. ALL EXISTING WINDOWS AND DOORS TO BE FULLY PROTECTED AT ALL TIMES, ANY DAMAGE TO THESE WILL BE RECTIFIED AT THE CONTRACTORS COST  
W2. PAINTED TIMBER INTERNAL - 1x COAT DULUX WOOD PRIMER, 1x COAT DULUX TRADE UNIVERSAL UNDERCOAT, 1x DULUX TRADE EGGSHELL ENAMEL  
W3. PAINTED TIMBER EXTERNAL - 1x COAT DULUX WOOD PRIMER, 1x COAT DULUX TRADE UNIVERSAL UNDERCOAT, 1x DULUX TRADE GLOSS 100 ENAMEL  
W4. NEW ALUMINIUM GABLE GRILLES TO BE INSTALLED (AS PER NE ELEVATION) ALL TO THE MECHANICAL ENGINEERS DRAWINGS & SPECIFICATIONS.

MUNICIPAL STAMPS

**MECHANICAL & ELECTRICAL:**  
M1. ALL MECHANICAL EXTRACTION AND VENTILATION TO BE DONE IN ACCORDANCE WITH THE MECHANICAL ENGINEERS DESIGN AND DETAILS.  
E1. ALL LIGHTING AND ELECTRICAL RETICULATION TO BE DONE IN ACCORDANCE TO ELECTRICAL ENGINEERS DESIGN AND DETAILS.

Occupancy Classification : C2

**Owner:**  
Name: uMSUNDUZI MUSEUM  
Sign: \_\_\_\_\_ Date: \_\_\_\_\_

**Architect:**  
Name: JA Meintjes  
Sign: \_\_\_\_\_ Date: \_\_\_\_\_  
Professional registration No.: 6428

**BARTSCH**

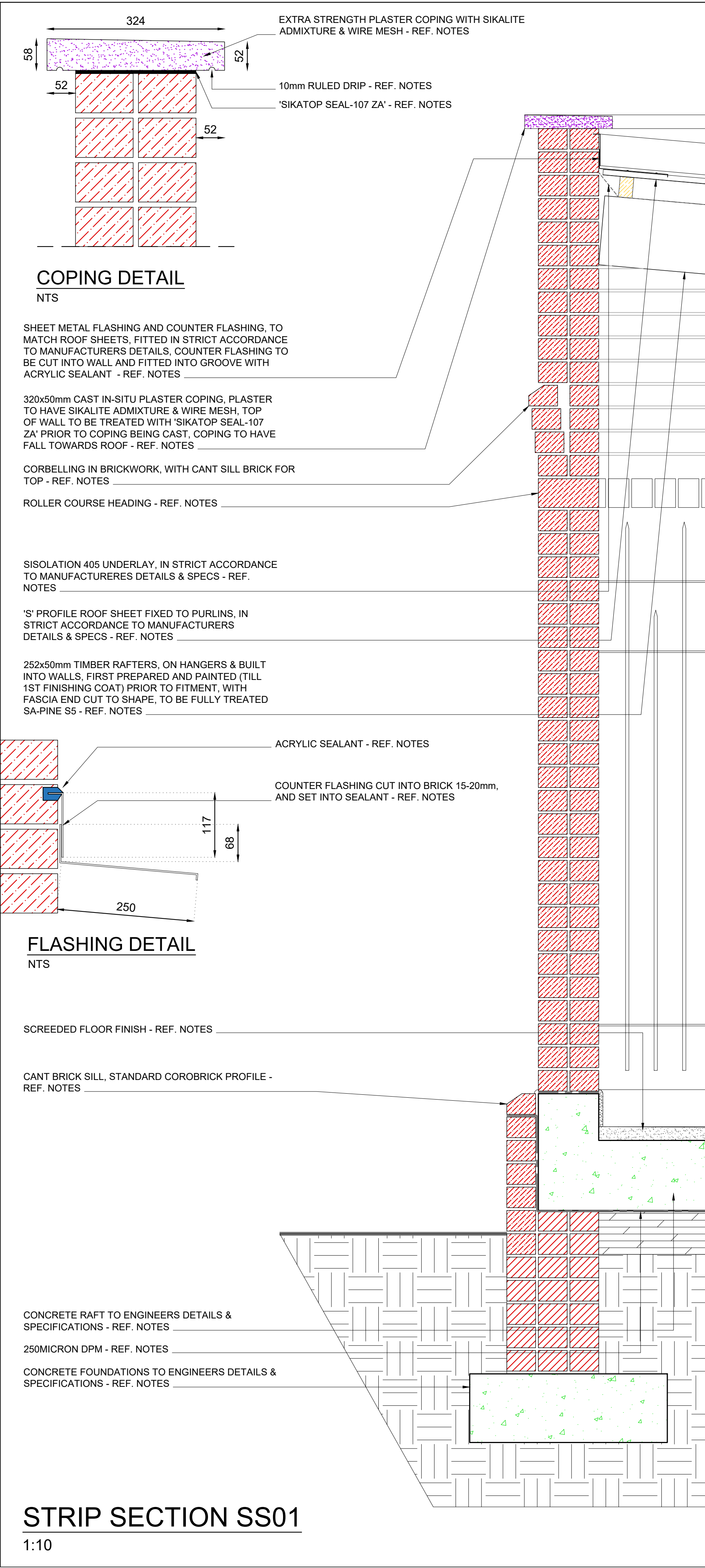
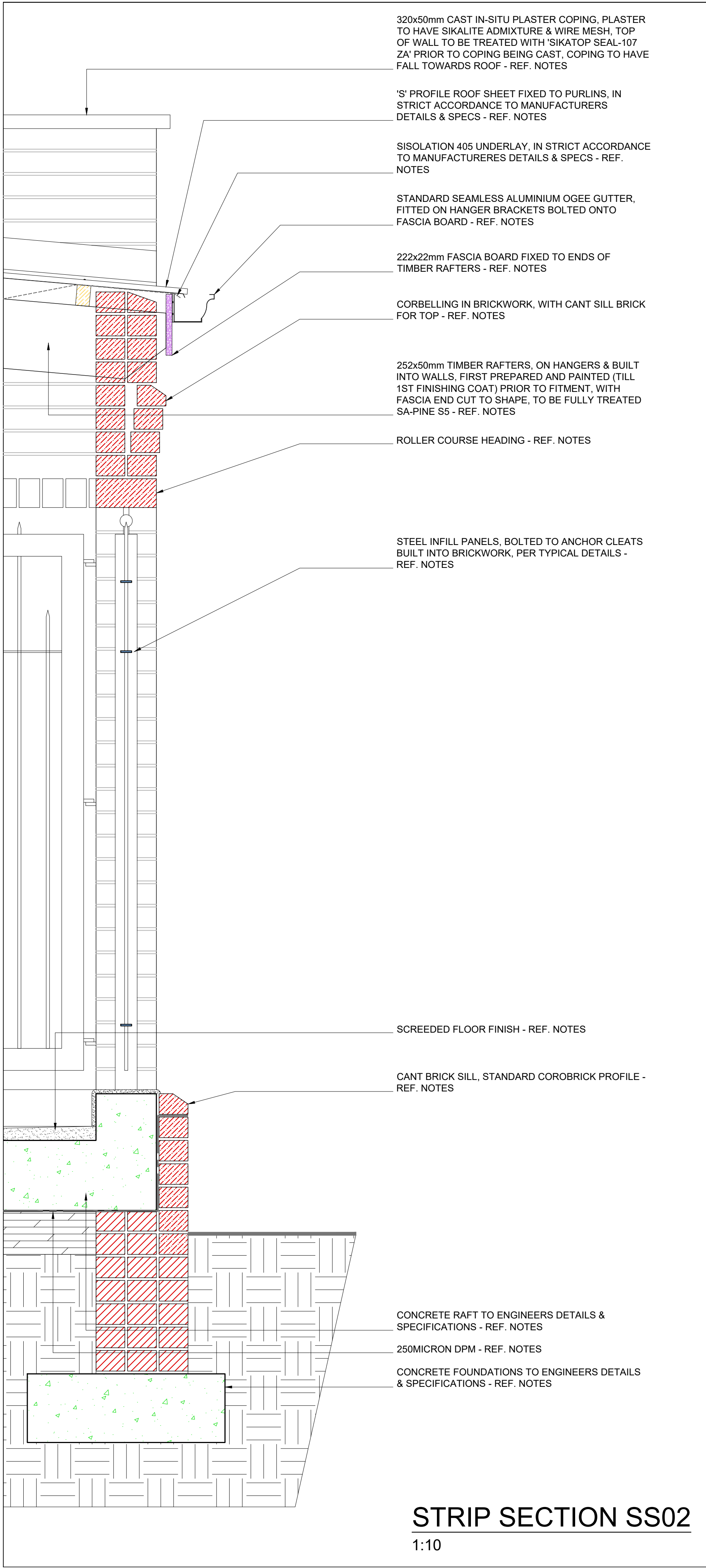
LADYSMITH: TEL(036) 631 1888, P.O.BOX. 1697, LADYSMITH 3370  
QUEENSTOWN: TEL(045) 839 5728, HARRISMITH: TEL(058) 623 471  
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WINDHOEK : TEL(0926461) 237 405, PMB: TEL(033) 347 1325

Project:  
PROPOSED UPGRADES AND INSTALLATION OF ELECTRICAL & MECHANICAL WORKS: MAIN BUILDING (BLOCK M) - uMSUNDUZI MUSEUM, ERF 2535, 351 LANGALIBALELE STREET, PIETERMARITZBURG, KZN, 3201

Drawing Description:  
SECTIONS - S01: EXISTING BLOCK M, WITH NEW PLATFORM LIFT & REFUGE AREA

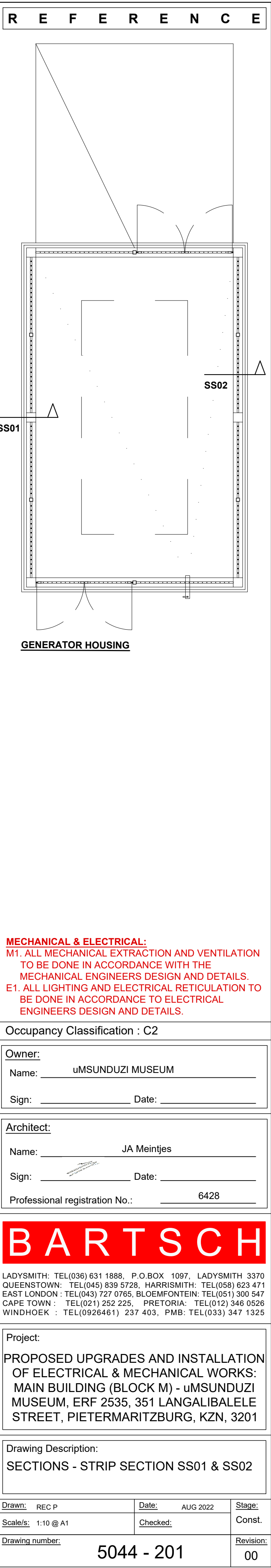
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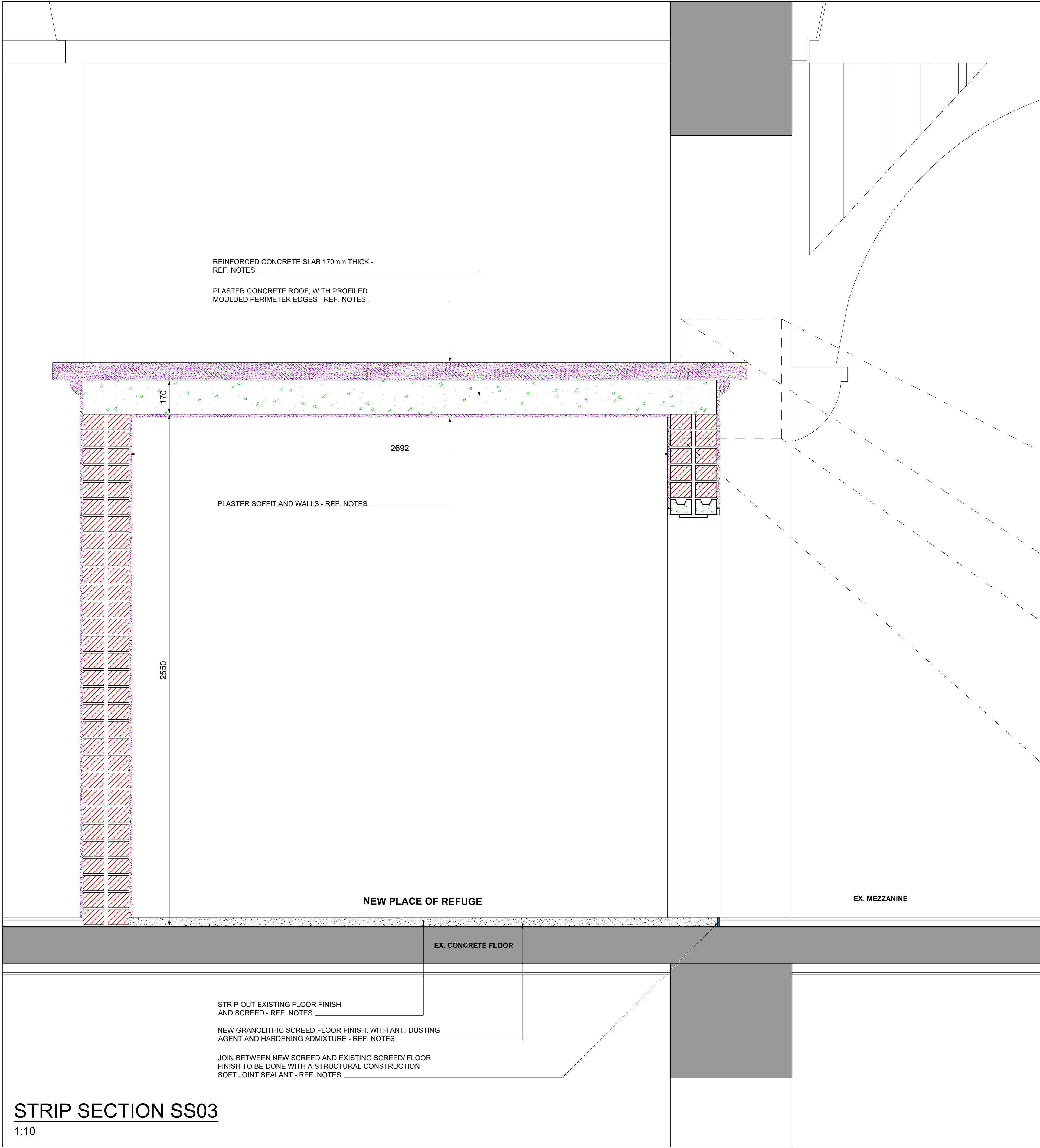


- ### GENERAL NOTES
- STEEL:**  
ST1. ALL STEEL TO BE MILD STEEL, PLASCON EPOXY PAINTED WITH 4 COAT SYSTEM (PRIMER, UNIVERSAL UNDERCOAT, 2x FINISH COATS)  
ST2. ALL STEEL TO BE FULL SANDBLASTED CLEAN FREE OF CONTAMINATES PRIOR TO PAINT APPLICATION  
ST3. ALL WELDS TO BE NEAT CONTINUOUS FILLET WELDS, CONSISTENT IN THICKNESS AND UNIFORMITY  
ST4. STEEL SHOP DRAWINGS TO BE ISSUED TO ARCHITECT FOR APPROVAL, PRIOR TO ANY FABRICATION OR INSTALLATION
- MISCELLANEOUS:**  
M1. ANY DAMAGE TO SURROUNDING FINISHES, FITTINGS, SERVICES, EQUIPMENT ETC. TO BE REPAIRED AND/ OR REPLACED BY CONTRACTOR.  
M2. NO ORIGINAL CIRCA 1905-1965 BUILDING FITTINGS TO REMOVED, IF REMOVED THEN THEY MUST BE DONE WITH EXTREME SENSITIVITY/ CARE & STORED IN A SAFE LOCATION TO BE REINSTATED/ INSTALLED ONCE WORK IS COMPLETE.  
M3. STEEL PAINT FINISH, 4 COAT SYSTEM DULUX EPOXY - (1xPRIMER & 1x UNDERCOAT & 2x FINISH COATS)  
M4. REFUGE DOOR - 2HR FIRE RATED CLASS B PYROPANEL DOORSET (950x2030x48), WITH VIEWING PANEL, IN STRICT ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS AND IN COMPLIANCE TO 'SABS1253:2033' AND WITH ALL RELEVANT 'SABS' MARKS FOR 120min, WITH 3.6mm TREATED COMMERCIAL PLY, INCLUDING INTUMESCENT STRIP TO TOP OF DOOR, HARDWARE EDGES, SPECIFIED IRONMONGERY AND HINGED ONE SIDE TO SUITABLE 1.6mm GAUGE MILD STEEL GALV & PRIMED FRAME FOR 230 BRICK WALL  
M5. ALL COPING TO BE IN-SITU PLASTER COPING, MUST BE A EXTRA STRENGTH PLASTER MIX, WITH SIKALITE ADD MIXTURE  
M6. ALL COPING TO HAVE SIKATOP SEAL-107 ZA APPLIED TO TOP OF WALLS PRIOR TO BEING CAST  
M7. ALL DRAWINGS TO BE READ IN CONJUNCTION WITH EACH OTHER AND TO BE READ IN CONJUNCTION WITH THE SPECIFICATION & METHOD DOCUMENT.
- WINDINGS & DOORS:**  
W1. ALL EXISTING WINDOWS AND DOORS TO BE FULLY PROTECTED AT ALL TIMES, ANY DAMAGE TO THESE WILL BE RECTIFIED AT THE CONTRACTORS COST  
W2. PAINTED TIMBER INTERNAL - 1x COAT DULUX WOOD PRIMER, 1x COAT DULUX TRADE UNIVERSAL UNDERCOAT, 1x DULUX TRADE EGGSHELL ENAMEL  
W3. PAINTED TIMBER EXTERNAL - 1x COAT DULUX WOOD PRIMER, 1x COAT DULUX TRADE UNIVERSAL UNDERCOAT, 1x DULUX TRADE GLOSS 100 ENAMEL  
W4. NEW ALUMINIUM GABLE GRILLES TO BE INSTALLED (AS PER NE ELEVATION) ALL TO THE MECHANICAL ENGINEERS DRAWINGS & SPECIFICATIONS.

- ### GENERAL NOTES
- SITE:**  
S1. SET OUT TO BE DONE BY LAND SURVEYOR  
S2. ALL LAYER WORKS AND SITE WORK TO BE IN ACCORDANCE TO ENGINEERS DETAILS AND SPECIFICATIONS. ENGINEERS DRAWINGS AND ARCHITECTS DRAWINGS TO BE READ IN CONJUNCTION WITH EACH OTHER AT ALL TIMES  
S3. ALL STORM WATER TO ENGINEERS DETAILS AND SPECIFICATIONS  
S4. ALL SITE HEALTH & SAFETY TO BE COMPLIED TO IN TERMS OF THE SANS-10400 NATIONAL BUILDING REGULATIONS AND AGREED BUILDING CONTRACT  
S5. SOLID HOARDING TO BE IN PLACE AT SECTIONS TO BE WORKED ON PRIOR TO ANY WORK COMMENCING ON SITE
- FOUNDATIONS:**  
F1. ALL FOUNDATIONS, SURFACE BEDS, SLABS, RAFTS, RETAINING WALLS ETC TO BE IN ACCORDANCE TO ENGINEERS DETAILS AND SPECIFICATIONS. ALL TO BE ON WELL COMPACTED LAYER WORKS & 250 MICRON DPMs & TO HAVE SOIL POISON TREATMENT WITH 5 YEAR GUARANTEE  
F2. ALL FOUNDATIONS NOT DESIGNED BY PROFESSIONAL ENGINEER TO BE IN ACCORDANCE WITH THE SANS-10400 NATIONAL BUILDING REGULATIONS
- WALLS:**  
W1. WALLS TO BE 230 & 115 COROBRICK FBX CLAY BRICK WALLS (EXTERNAL) & 230 CLAY BRICK WITH PLASTER WALLS (INTERNAL)  
W2. EXTERNAL WALLS TO BE RED FACE BRICK, COROBRICK FIRELIGHT SATIN FBX, WHERE NEW WALL MEETS OLD ALL COURSES TO BE PROPERLY TOOTHED IN.  
W3. INTERNAL WALLS TO BE REPAIRED AND PLASTERED WHERE REPAIR IS BEING DONE (IF NEED BE), PLASTER MIX TO BE AS PER APPROVED MIXTURE RATIO, ALL READY TO RECEIVE A 3 COAT PAINT SYSTEM.  
W4. PLASTER WALL & WALL COPING PAINT - 1x COAT DULUX TRADE PLASTER PRIMER, 2X COATS DULUX PEARLGLO.
- ROOF:**  
R1.GRS 0.53mm ALU-ZINC COATED (COLORPLUS - SLATE) 'IBR' PROFILE ROOF SHEETS, ON 76mm TIMBER PURLINS ON 252mm TIMBER RAFTERS - TO ENGINEERS DETAILS & SPECIFICATIONS (TIMBER TO BE FULLY TREATED HIGH GRADE SA-PINE) & PAINTED TIMBER EXTERNAL - 1x COAT DULUX WOOD PRIMER, 1x COAT DULUX TRADE UNIVERSAL UNDERCOAT, 1x DULUX TRADE GLOSS 100 ENAMEL, TIMBER TO BE FULLY PAINTED ON AREAS WHERE SUPPORT FIXINGS ARE PRIOR TO INSTALLING  
R2. 170mm THICK CONCRETE ROOF, PLASTED AND PAINTED - 1x COAT DULUX TRADE PLASTER PRIMER, 2X COATS DULUX PEARLGLO.  
R3. ALL ROOFS TO HAVE 'SISALATION 405' REFLECTIVE FOIL UNDER PURLIN UNDERLAY THROUGHOUT, ALL TO HAVE 150mm HEAD LAPS  
R4. NEW ROOF TO HAVE 30mmØ PVC RAIN WATER DOWNPIPE, FITTED TO WALL WITH STANDARD PVC MOUNTING BRACKETS  
R5. NEW ROOF TO HAVE STANDARD OGEE SEAMLESS ALU. GUTTER, TO MATCH ROOF SHEET.  
R6. NEW ROOF TO HAVE 222x22mm FASCIA BOARD FIXED TO RAFTERS, TO BE PAINTED SAME AS RAFTERS
- CEILINGS:**  
C1. CEILINGS TO BE PELICAN JUMBO SUSPENDED GRID, SCREW-UP SKIMMED JOINT 9mm THICK GYPSUM BOARD, IN ACCORDANCE TO 'SABISA', WITH TIMBER CORNICE TO MATCH EXISTING CORNICE IN PROFILE EXACTLY.  
C2. ALL BULKHEADS TO BE 22mm MDF BOARDS ON SAME GRID SYSTEM AS CEILINGS, TO BE PAINTED SAME AS CEILING, WITH 25x25mm 'L' CORNICE ON WALLS  
C3. ALL PENETRATIONS THROUGH EXISTING SUSPENDED MESH AND PLASTER CEILING, TO BE KEPT TO A MINIMUM AND DONE WITH EXTREME CAUTION, ALL TO HAVE REINFORCED SUB-FRAME INSTALLED PRIOR TO CUTTING, PERIMETER OF CUT TO HAVE NEW SURROUND EDGE TRIM DONE USING 45x8mm TIMBER STRIPS (PAINTED PRIM SH)  
C4. REFUGE ROOM TO HAVE PLASTERED SOFFIT, 15mm THICK, PAINTED TO MATCH CEILING.  
C5. CEILING PAINT - 1x COAT DULUX PLASTER/ TIMBER PRIMER, 2x COATS DULUX TRADE 65 MATT.
- PLUMBING:**  
P1. ALL PLUMBING TO BE DONE BY REGISTERED PLUMBER, PLUMBING SIGN-OFF TO BE ISSUED AT END OF CONTRACT  
P2. ALL PLUMBING TO COMPLY WITH SANS 10400-P & 10400-XA & SANS 10252-1:2004, SANS 1307, SANS 10106, SANS 10254 & SANS 10252-1.
- FLOORING:**  
FL1. CONCRETE FLOOR WITH HARDENED SCREED AND ANTI-DUSTING AGENT, TO HAVE SMOOTH TROWEL FINISH.  
FL2. CONCRETE RAMP WITH HARDENED SCREED AND ANTI-DUSTING AGENT, TO HAVE NON-SLIP FLOAT FINISH.  
FL3. REFUGE FLOOR TO BE 30mm GRANO ANTI DUSTING SCREED ON EXISTING CONCRETE FLOOR  
FL4. ALL SOIL TO BE TREATED WITH APPROVED TERMITE TREATMENT, PRIOR TO FOUNDATIONS BEING CAST AND PAVING BEING LAID, WITH A 5 YEAR GUARANTEE ISSUED.
- MECHANICAL & ELECTRICAL:**  
M1. ALL MECHANICAL EXTRACTION AND VENTILATION TO BE DONE IN ACCORDANCE WITH THE MECHANICAL ENGINEERS DESIGN AND DETAILS.  
E1. ALL LIGHTING AND ELECTRICAL RETICULATION TO BE DONE IN ACCORDANCE TO ELECTRICAL ENGINEERS DESIGN AND DETAILS.
- Occupancy Classification : C2
- Owner: uMSUNDUZI MUSEUM
- Architect: JA Meintjes
- Professional registration No.: 6428
- ## BARTSCH
- LADYSMITH: TEL(036) 631 1888, P.O.BOX. 1697, LADYSMITH 3370  
QUEENSTOWN: TEL(045) 839 5728, HARRISMITH: TEL(058) 623 471  
EAST LONDON: TEL(043) 727 0765, BLOEMFONTEIN: TEL(051) 300 547  
CAPE TOWN: TEL(021) 252 225, PRETORIA: TEL(012) 346 0526  
WINDHOEK: TEL(0926461) 237 405, PMB: TEL(033) 347 1325
- Project: PROPOSED UPGRADES AND INSTALLATION OF ELECTRICAL & MECHANICAL WORKS: MAIN BUILDING (BLOCK M) - uMSUNDUZI MUSEUM, ERF 2535, 351 LANGALIBALELE STREET, PIETERMARITZBURG, KZN, 3201
- Drawing Description: SECTIONS - STRIP SECTION SS01 & SS02
- |                            |                |               |
|----------------------------|----------------|---------------|
| Drawn: REC P               | Date: AUG 2022 | Stage: Const. |
| Scale/s: 1:10 @ A1         | Checked:       |               |
| Drawing number: 5044 - 201 |                | Revision: 00  |







GENERAL NOTES

**STEEL:**  
ST1. ALL STEEL TO BE MILD STEEL, PLASCON EPOXY PAINTED WITH 4 COAT SYSTEM (PRIMER, UNIVERSAL UNDERCOAT, 2x FINISH COATS)  
ST2. ALL STEEL TO BE FULL SANDBLASTED CLEAN FREE OF CONTAMINATES PRIOR TO PAINT APPLICATION  
ST3. ALL WELDS TO BE NEAT CONTINUOUS FILLET WELDS, CONSISTENT IN THICKNESS AND UNIFORMITY  
ST4. STEEL SHOP DRAWINGS TO BE ISSUED TO ARCHITECT FOR APPROVAL, PRIOR TO ANY FABRICATION OR INSTALLATION

**MISCELLANEOUS:**  
M1. ANY DAMAGE TO SURROUNDING FINISHES, FITTINGS, SERVICES, EQUIPMENT ETC. TO BE REPAIRED AND/ OR REPLACED BY CONTRACTOR.  
M2. NO ORIGINAL CIRCA 1905-1965 BUILDING FITTINGS TO REMOVED, IF REMOVED THEN THEY MUST BE DONE WITH EXTREME SENSITIVITY/ CARE & STORED IN A SAFE LOCATION TO BE REINSTATED/ INSTALLED ONCE WORK IS COMPLETE.  
M3. STEEL PAINT FINISH, 4 COAT SYSTEM DULUX EPOXY - (1xPRIMER & 1x UNDERCOAT & 2x FINISH COATS)  
M4. REFUGE DOOR - 2HR FIRE RATED CLASS B PYROPANEL DOORSET (950x2030x48), WITH VIEWING PANEL, IN STRICT ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS AND IN COMPLIANCE TO 'SABS1253:2033' AND WITH ALL RELEVANT 'SABS' MARKS FOR 120min, WITH 3.6mm TREATED COMMERCIAL PLY, INCLUDING INTUMESCENT STRIP TO TOP OF DOOR, HARDWARE EDGES, SPECIFIED IRONMONGERY AND HINGED ONE SIDE TO SUITABLE 1.6mm GAUGE MILD STEEL GALV & PRIMED FRAME FOR 230 BRICK WALL  
M5. ALL COPING TO BE IN-SITU PLASTER COPING, MUST BE A EXTRA STRENGTH PLASTER MIX, WITH SIKALITE ADD MIXTURE  
M6. ALL COPING TO HAVE SIKATOP SEAL-107 ZA APPLIED TO TOP OF WALLS PRIOR TO BEING CAST  
M7. ALL DRAWINGS TO BE READ IN CONJUNCTION WITH EACH OTHER AND TO BE READ IN CONJUNCTION WITH THE SPECIFICATION & METHOD DOCUMENT.

GENERAL NOTES

**SITE:**  
S1. SET OUT TO BE DONE BY LAND SURVEYOR  
S2. ALL LAYER WORKS AND SITE WORK TO BE IN ACCORDANCE TO ENGINEERS DETAILS AND SPECIFICATIONS. ENGINEERS DRAWINGS AND ARCHITECTS DRAWINGS TO BE READ IN CONJUNCTION WITH EACH OTHER AT ALL TIMES  
S3. ALL STORM WATER TO ENGINEERS DETAILS AND SPECIFICATIONS  
S4. ALL SITE HEALTH & SAFETY TO BE COMPLIED TO IN TERMS OF THE SANS-10400 NATIONAL BUILDING REGULATIONS AND AGREED BUILDING CONTRACT  
S5. SOLID HOARDING TO BE IN PLACE AT SECTIONS TO BE WORKED ON PRIOR TO ANY WORK COMMENCING ON SITE

**FOUNDATIONS:**  
F1. ALL FOUNDATIONS, SURFACE BEDS, SLABS, RAFTS, RETAINING WALLS ETC TO BE IN ACCORDANCE TO ENGINEERS DETAILS AND SPECIFICATIONS. ALL TO BE ON WELL COMPACTED LAYER WORKS & 250 MICRON DPMs & TO HAVE SOIL POISON TREATMENT WITH 5 YEAR GUARANTEE  
F2. ALL FOUNDATIONS NOT DESIGNED BY PROFESSIONAL ENGINEER TO BE IN ACCORDANCE WITH THE SANS-10400 NATIONAL BUILDING REGULATIONS

**WALLS:**  
W1. WALLS TO BE 230 & 115 COROBRIK FBX CLAY BRICK WALLS (EXTERNAL) & 230 CLAY BRICK WITH PLASTER WALLS (INTERNAL)  
W2. EXTERNAL WALLS TO BE RED FACE BRICK, COROBRIK FIRELIGHT SATIN FBX, WHERE NEW WALL MEETS OLD ALL COURSES TO BE PROPERLY TOOTHED IN.  
W3. INTERNAL WALLS TO BE REPAIRED AND PLASTERED WHERE REPAIR IS BEING DONE (IF NEED BE), PLASTER MIX TO BE AS PER APPROVED MIXTURE RATIO, ALL READY TO RECEIVE A 3 COAT PAINT SYSTEM.  
W4. PLASTER WALL & WALL COPING PAINT - 1x COAT DULUX TRADE PLASTER PRIMER, 2X COATS DULUX PEARLGLO.

**ROOF:**  
R1.GRS 0.53mm ALU-ZINC COATED (COLORPLUS - SLATE) 'IBR' PROFILE ROOF SHEETS, ON 76mm TIMBER PURLINS ON 252mm TIMBER RAFTERS - TO ENGINEERS DETAILS & SPECIFICATIONS (TIMBER TO BE FULLY TREATED HIGH GRADE SA-PINE) & PAINTED TIMBER EXTERNAL - 1x COAT DULUX WOOD PRIMER, 1x COAT DULUX TRADE UNIVERSAL UNDERCOAT, 1x DULUX TRADE GLOSS 100 ENAMEL, TIMBER TO BE FULLY PAINTED ON AREAS WHERE SUPPORT FIXINGS ARE PRIOR TO INSTALLING  
R2. 170mm THICK CONCRETE ROOF, PLASTED AND PAINTED - 1x COAT DULUX TRADE PLASTER PRIMER, 2X COATS DULUX PEARLGLO.  
R3. ALL ROOFS TO HAVE 'SISALATION 405' REFLECTIVE FOIL UNDER PURLIN UNDERLAY THROUGHOUT, ALL TO HAVE 150mm HEAD LAPS  
R4. NEW ROOF TO HAVE 30mmØ PVC RAIN WATER DOWNPIPE, FITTED TO WALL WITH STANDARD PVC MOUNTING BRACKETS  
R5. NEW ROOF TO HAVE STANDARD OGEE SEAMLESS ALU. GUTTER, TO MATCH ROOF SHEET.  
R6. NEW ROOF TO HAVE 22x22mm FASCIA BOARD FIXED TO RAFTERS, TO BE PAINTED SAME AS RAFTERS

**CEILINGS:**  
C1. CEILINGS TO BE PELICAN JUMBO SUSPENDED GRID, SCREW-UP SKIMMED JOINT 9mm THICK GYPSUM BOARD, IN ACCORDANCE TO 'SABISA', WITH TIMBER CORNICE TO MATCH EXISTING CORNICE IN PROFILE EXACTLY.  
C2. ALL BULKHEADS TO BE 22mm MDF BOARDS ON SAME GRID SYSTEM AS CEILINGS, TO BE PAINTED SAME AS CEILING, WITH 25x25mm 'L' CORNICE ON WALLS  
C3. ALL PENETRATIONS THROUGH EXISTING SUSPENDED MESH AND PLASTER CEILING, TO BE KEPT TO A MINIMUM AND DONE WITH EXTREME CAUTION, ALL TO HAVE REINFORCED SUB-FRAME INSTALLED PRIOR TO CUTTING, PERIMETER OF CUT TO HAVE NEW SURROUND EDGE TRIM DONE USING 45x8mm TIMBER STRIPS (PAINTED FINISH)  
C4. REFUGE ROOM TO HAVE PLASTERED SOFFIT, 15mm THICK, PAINTED TO MATCH CEILING.  
C5. CEILING PAINT - 1x COAT DULUX PLASTER/ TIMBER PRIMER, 2x COATS DULUX TRADE 65 MATT.

**PLUMBING:**  
P1. ALL PLUMBING TO BE DONE BY REGISTERED PLUMBER, PLUMBING SIGN-OFF TO BE ISSUED AT END OF CONTRACT  
P2. ALL PLUMBING TO COMPLY WITH SANS 10400-P & 10400-XA & SANS 10252-1:2004, SANS 1307, SANS 10106, SANS 10254 & SANS 10252-1.

**FLOORING:**  
FL1. CONCRETE FLOOR WITH HARDENED SCREED AND ANTI-DUSTING AGENT, TO HAVE SMOOTH TROWEL FINISH.  
FL2. CONCRETE RAMP WITH HARDENED SCREED AND ANTI-DUSTING AGENT, TO HAVE NON-SLIP FLOAT FINISH.  
FL3. REFUGE FLOOR TO BE 30mm GRANO ANTI DUSTING SCREED ON EXISTING CONCRETE FLOOR  
FL4. ALL SOIL TO BE TREATED WITH APPROVED TERMITE TREATMENT, PRIOR TO FOUNDATIONS BEING CAST AND PAVING BEING LAID, WITH A 5 YEAR GUARANTEE ISSUED.

**WINDOWS & DOORS:**  
W1. ALL EXISTING WINDOWS AND DOORS TO BE FULLY PROTECTED AT ALL TIMES, ANY DAMAGE TO THESE WILL BE RECTIFIED AT THE CONTRACTORS COST  
W2. PAINTED TIMBER INTERNAL - 1x COAT DULUX WOOD PRIMER, 1x COAT DULUX TRADE UNIVERSAL UNDERCOAT, 1x DULUX TRADE EGGSHELL ENAMEL  
W3. PAINTED TIMBER EXTERNAL - 1x COAT DULUX WOOD PRIMER, 1x COAT DULUX TRADE UNIVERSAL UNDERCOAT, 1x DULUX TRADE GLOSS 100 ENAMEL  
W4. NEW ALUMINIUM GABLE GRILLES TO BE INSTALLED (AS PER NE ELEVATION) ALL TO THE MECHANICAL ENGINEERS DRAWINGS & SPECIFICATIONS.

REFERENCE

**MECHANICAL & ELECTRICAL:**  
M1. ALL MECHANICAL EXTRACTION AND VENTILATION TO BE DONE IN ACCORDANCE WITH THE MECHANICAL ENGINEERS DESIGN AND DETAILS.  
E1. ALL LIGHTING AND ELECTRICAL RETICULATION TO BE DONE IN ACCORDANCE TO ELECTRICAL ENGINEERS DESIGN AND DETAILS.

Occupancy Classification : C2

Owner:  
Name: uMSUNDUZI MUSEUM  
Sign: \_\_\_\_\_ Date: \_\_\_\_\_

Architect:  
Name: JA Meintjes  
Sign: \_\_\_\_\_ Date: \_\_\_\_\_  
Professional registration No.: 6428

**BARTSCH**

LADYSMITH: TEL(036) 631 1888, P.O.BOX: 1697, LADYSMITH 3370  
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EAST LONDON : TEL(043) 727 0765, BLOEMFONTEIN: TEL(051) 300 547  
CAPE TOWN : TEL(021) 252 225, PRETORIA: TEL(012) 346 0526  
WINDHOEK : TEL(0926461) 237 405, PMB: TEL(033) 347 1325

Project:  
PROPOSED UPGRADES AND INSTALLATION OF ELECTRICAL & MECHANICAL WORKS: MAIN BUILDING (BLOCK M) - uMSUNDUZI MUSEUM, ERF 2535, 351 LANGALIBALELE STREET, PIETERMARITZBURG, KZN, 3201

Drawing Description:  
SECTIONS - STRIP SECTION SS03 (REFUGE ROOM)

Drawn: REC P	Date: AUG 2022	Stage: Const.
Scale/s: 1:10 @ A1	Checked:	
Drawing number: 5044 - 202	Revision: 00	

STRIP SECTION SS03  
1:10



- EXISTING WATERPROOFING TO BE REMOVED, TO EXPOSE GUTTER, REPLACE GUTTER WITH NEW WHEN REQUIRED AFTER INSPECTING - REF. NOTES
- EXISTING GUTTER TO BE REMOVED, TO EXPOSE GUTTER STRUCTURE, REPLACE WITH NEW STRUCTURE WHEN REQUIRED AFTER INSPECTING - REF. NOTES
- EXISTING ROOF TILES TO BE REMOVED & KEPT SAFELY ASIDE, TO EXPOSE VALLEY PURLIN, REPLACE WITH NEW PURLIN WHEN REQUIRED AFTER INSPECTING - REF. NOTES

REMOVE ROTTEN OR DETERIORATED VALLEY GUTTER BOARDS AND INSTALL NEW ONTO TRUSS/ BEAM - REF. NOTES

EXISTING TIMBER TRUSS/ BEAM - REF. NOTES

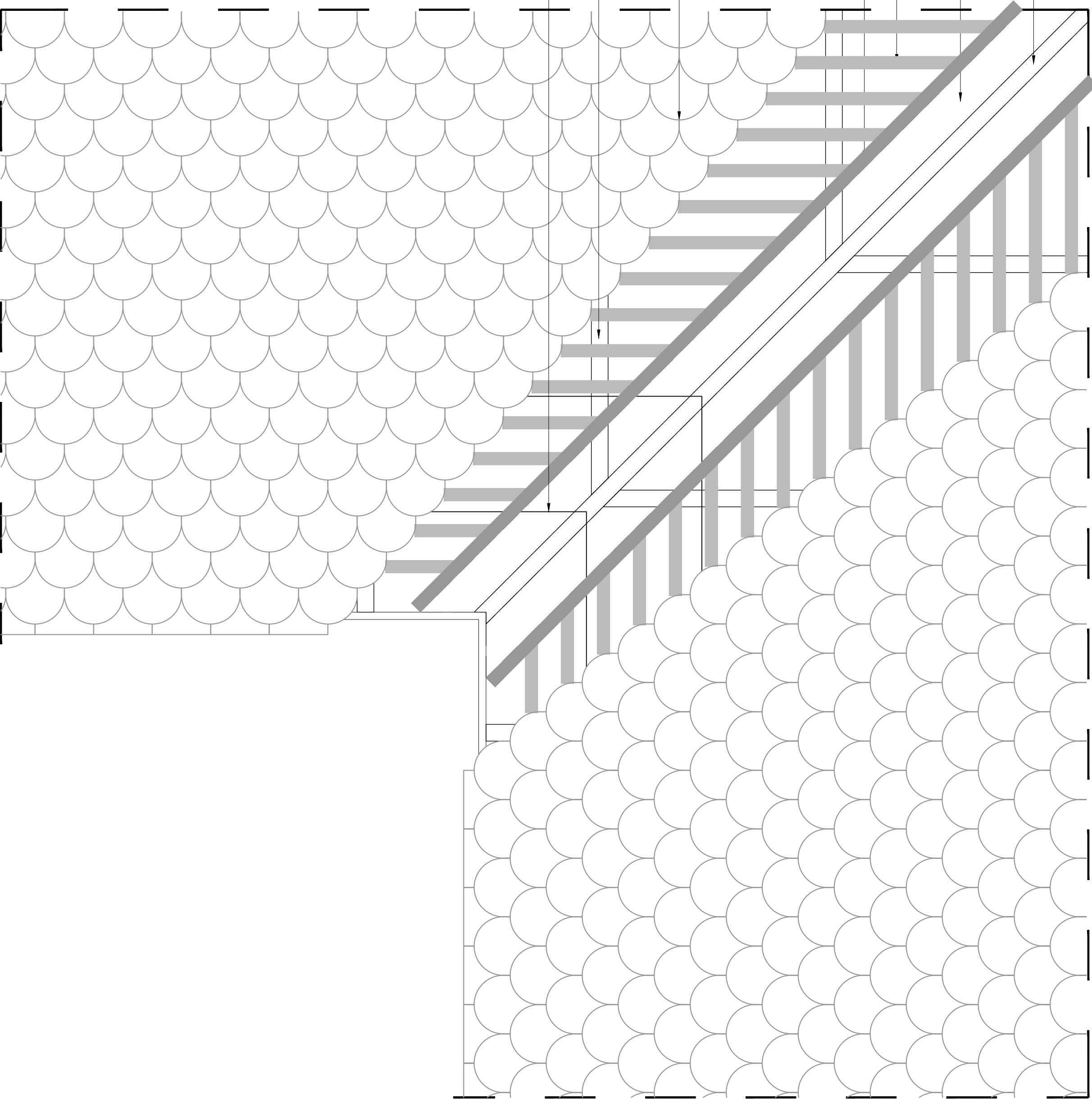
INSPECT PURLINS ONCE TILES ARE REMOVED, NEW PURLINS TO BE INSTALLED IF FOUND TO BE DETERIORATED - REF. NOTES

VALLEY PURLIN TO BE REPLACED IF REQUIRED, TO MATCH EXISTING - REF. NOTES

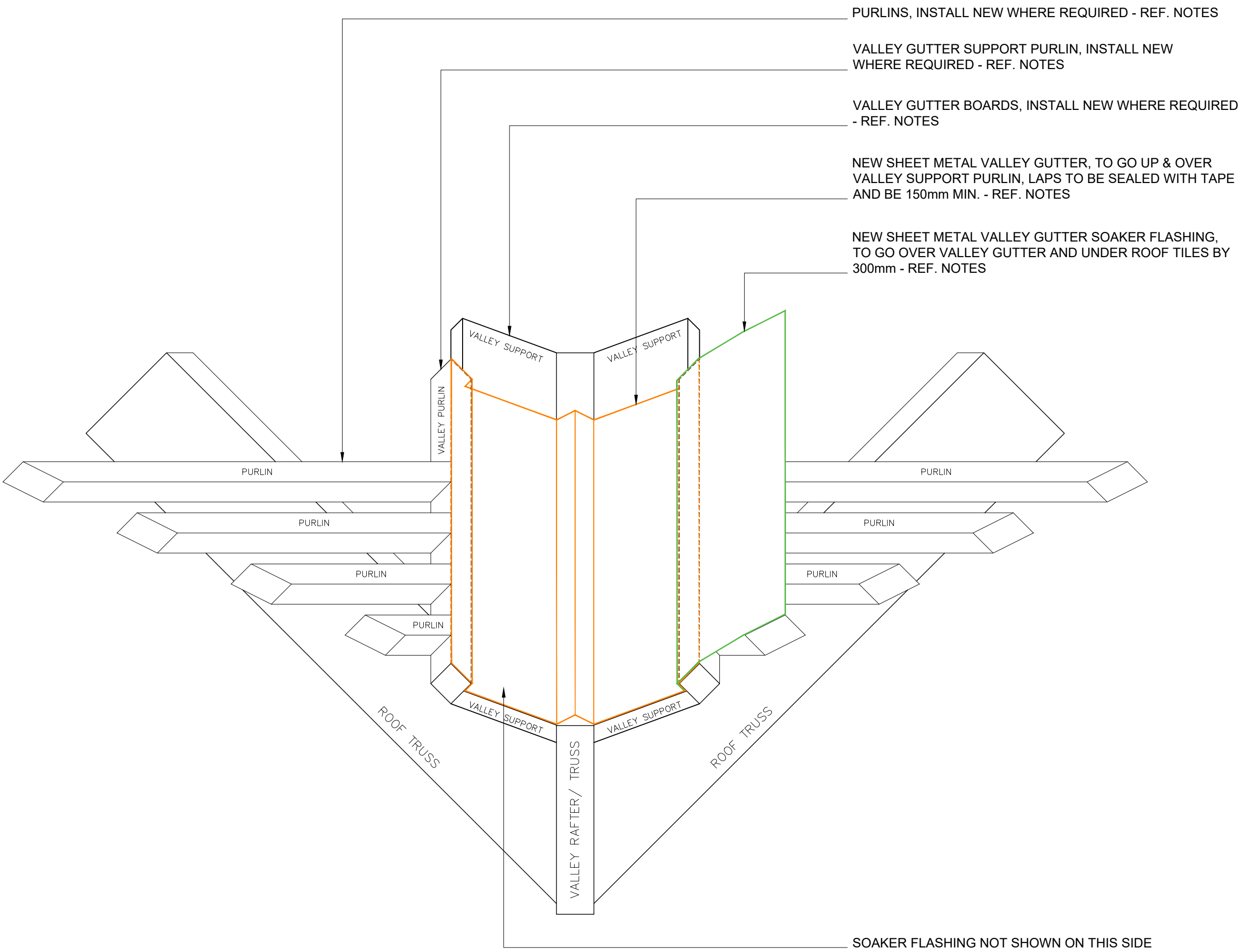
REMOVE EXISTING ROOF TILES, TO EXPOSE VALLEY GUTTER IN FULL - REF. NOTES

TIMBER TRUSS - REF. NOTES

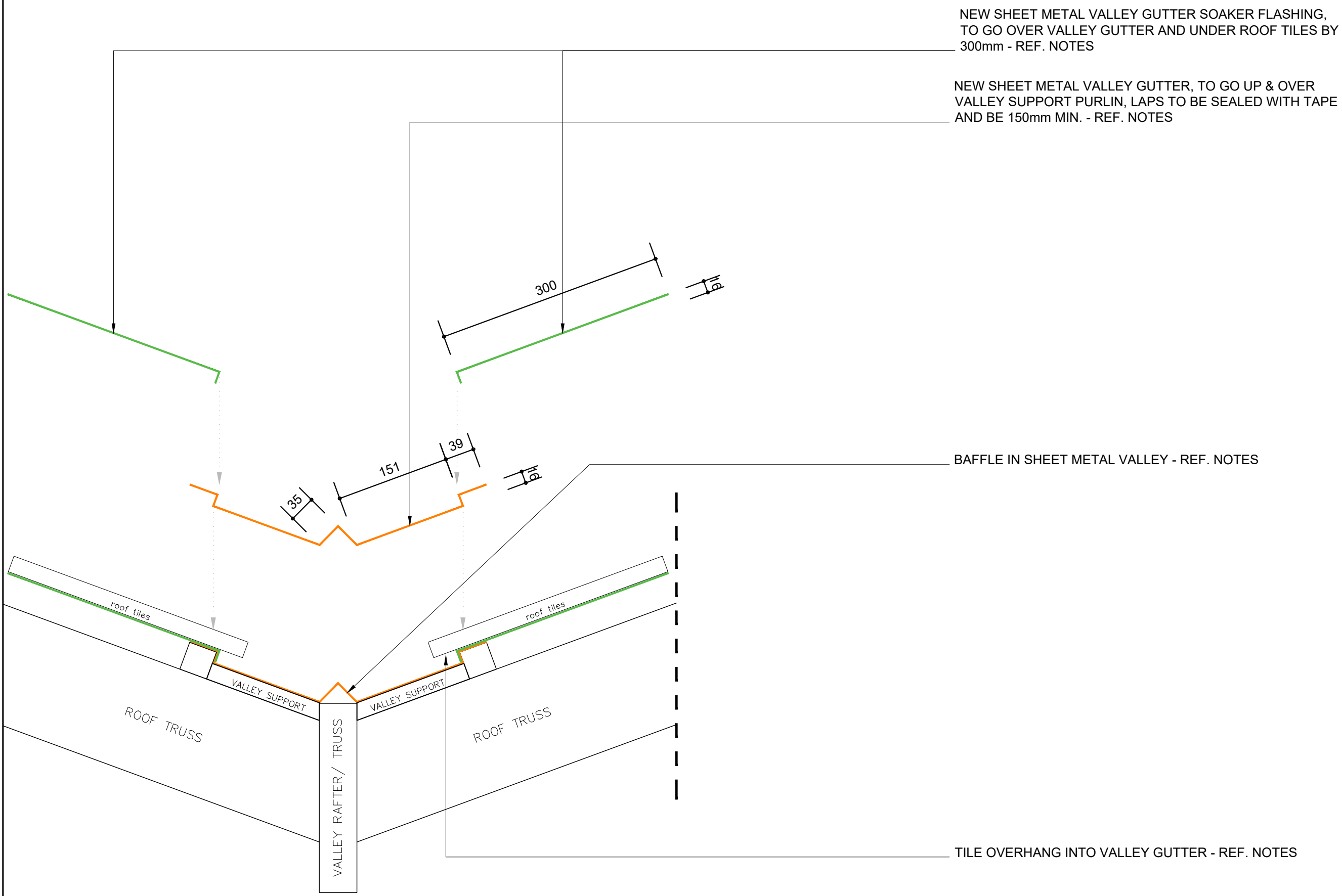
WALL - REF. NOTES



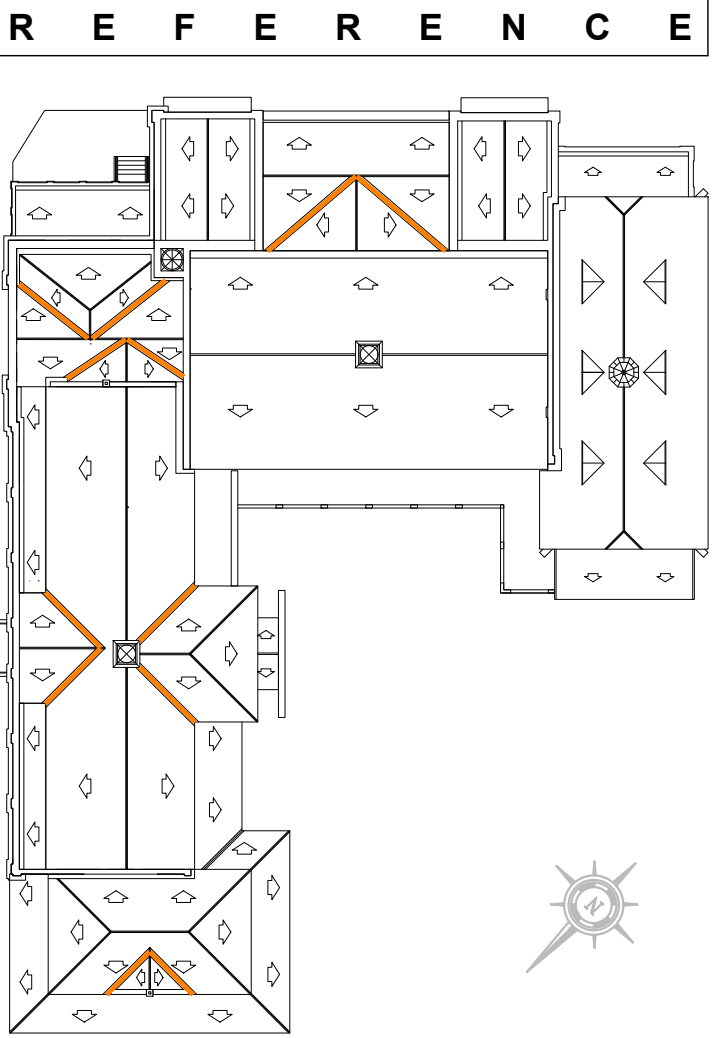
TILE VALLEY LAYOUT  
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TILE VALLEY SECTION  
NTS



TILE VALLEY SECTION - TILE OVERHANG  
NTS



EXISTING ROOF LAYOUT

## GENERAL NOTES

DRAWING MUST BE USED AND READ IN CONJUNCTION WITH -  
**ROOF LEAK REPAIR SPECIFICATIONS AND METHODOLOGY REPORT**

Occupancy Classification : C2

Owner:  
Name: uMSUNDUZI MUSEUM  
Sign: \_\_\_\_\_ Date: \_\_\_\_\_

Architect:  
Name: JA Meintjes  
Sign: \_\_\_\_\_ Date: \_\_\_\_\_  
Professional registration No.: 6428

**BARTSCH**

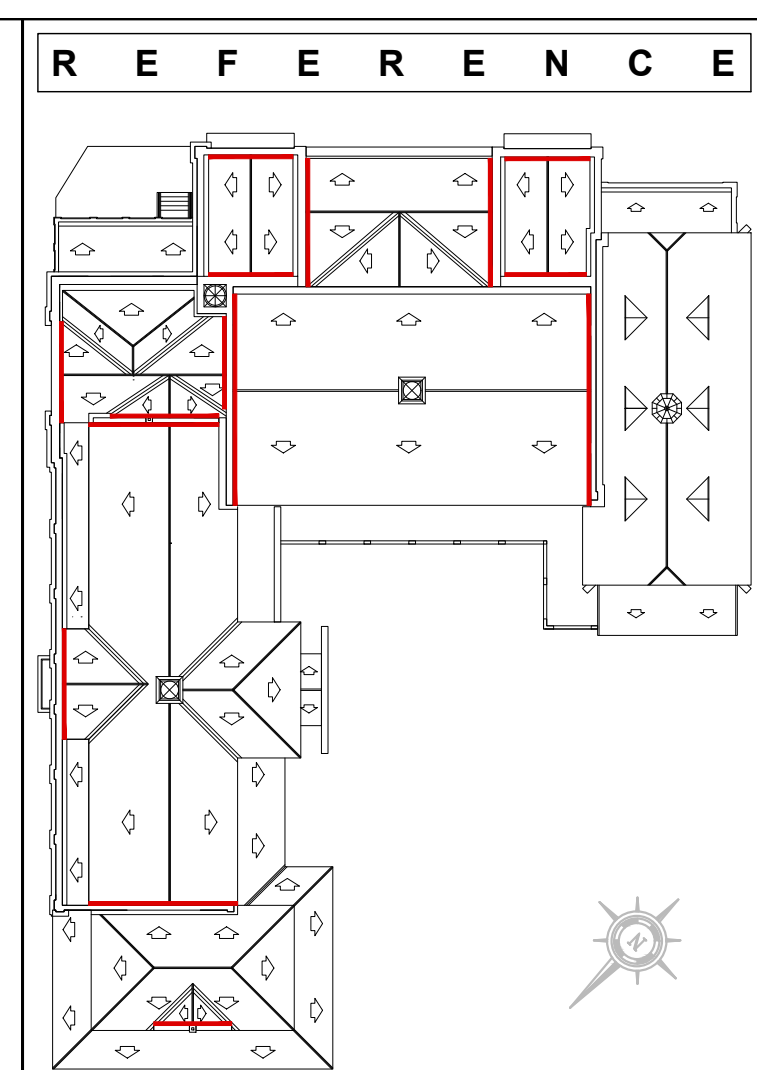
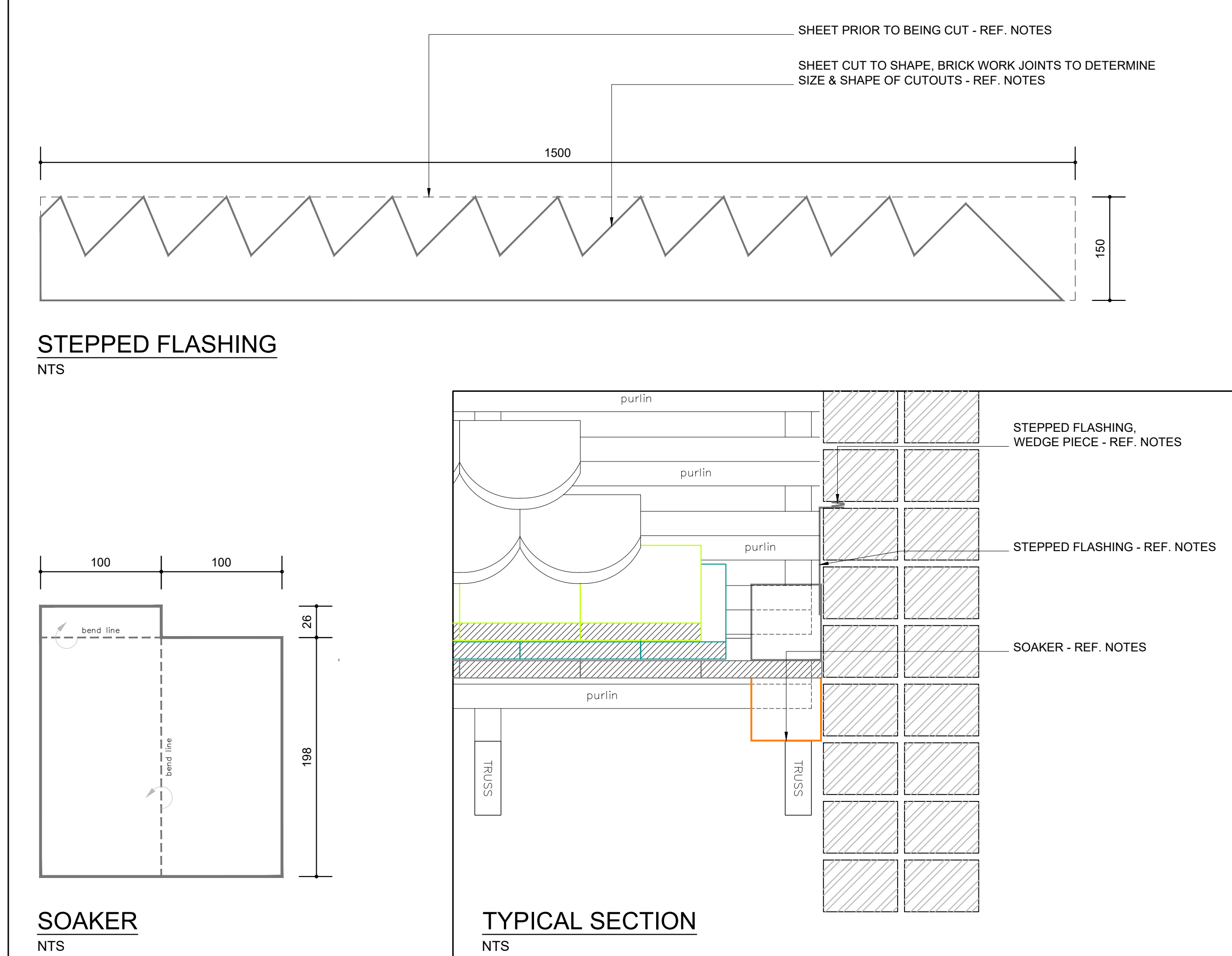
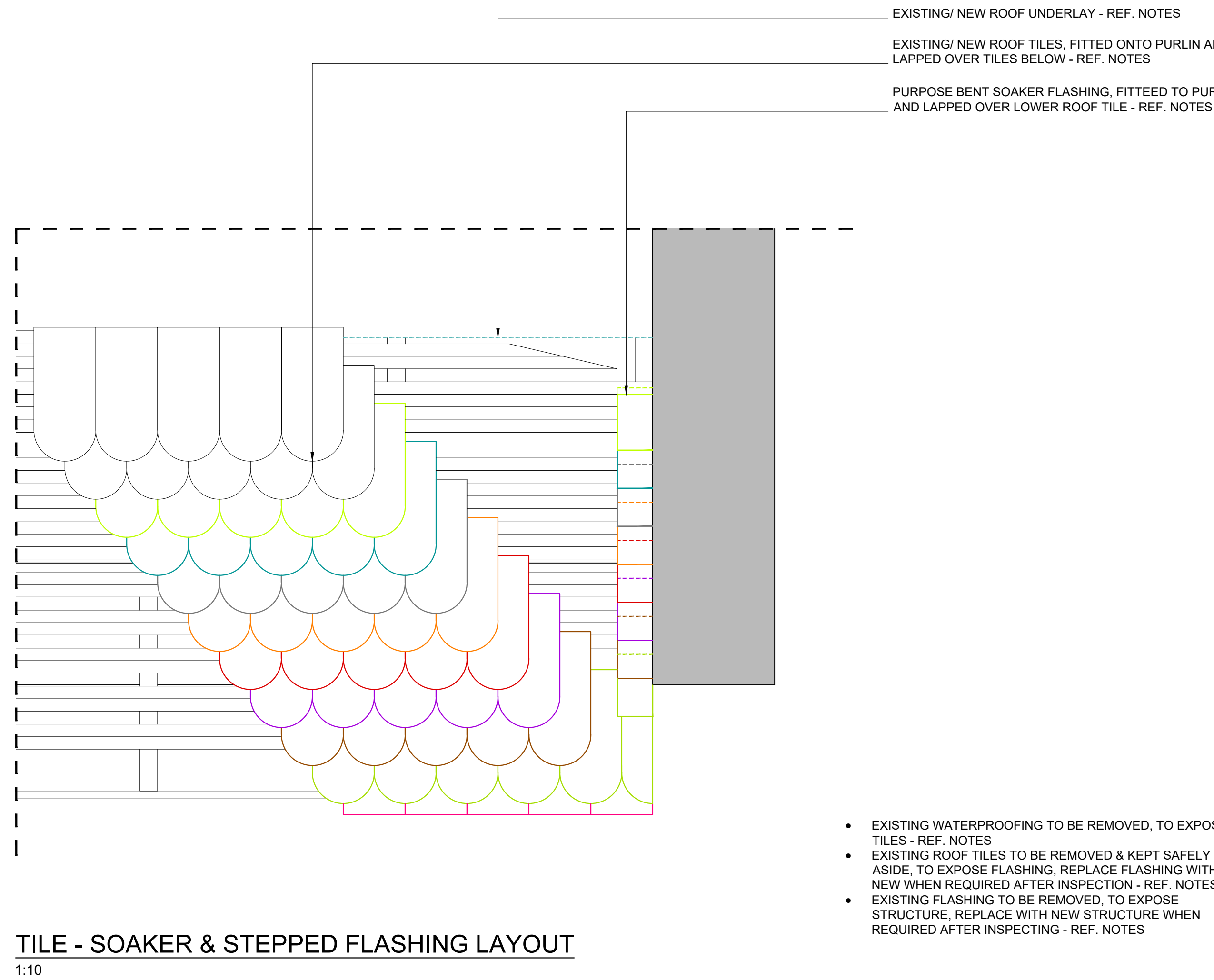
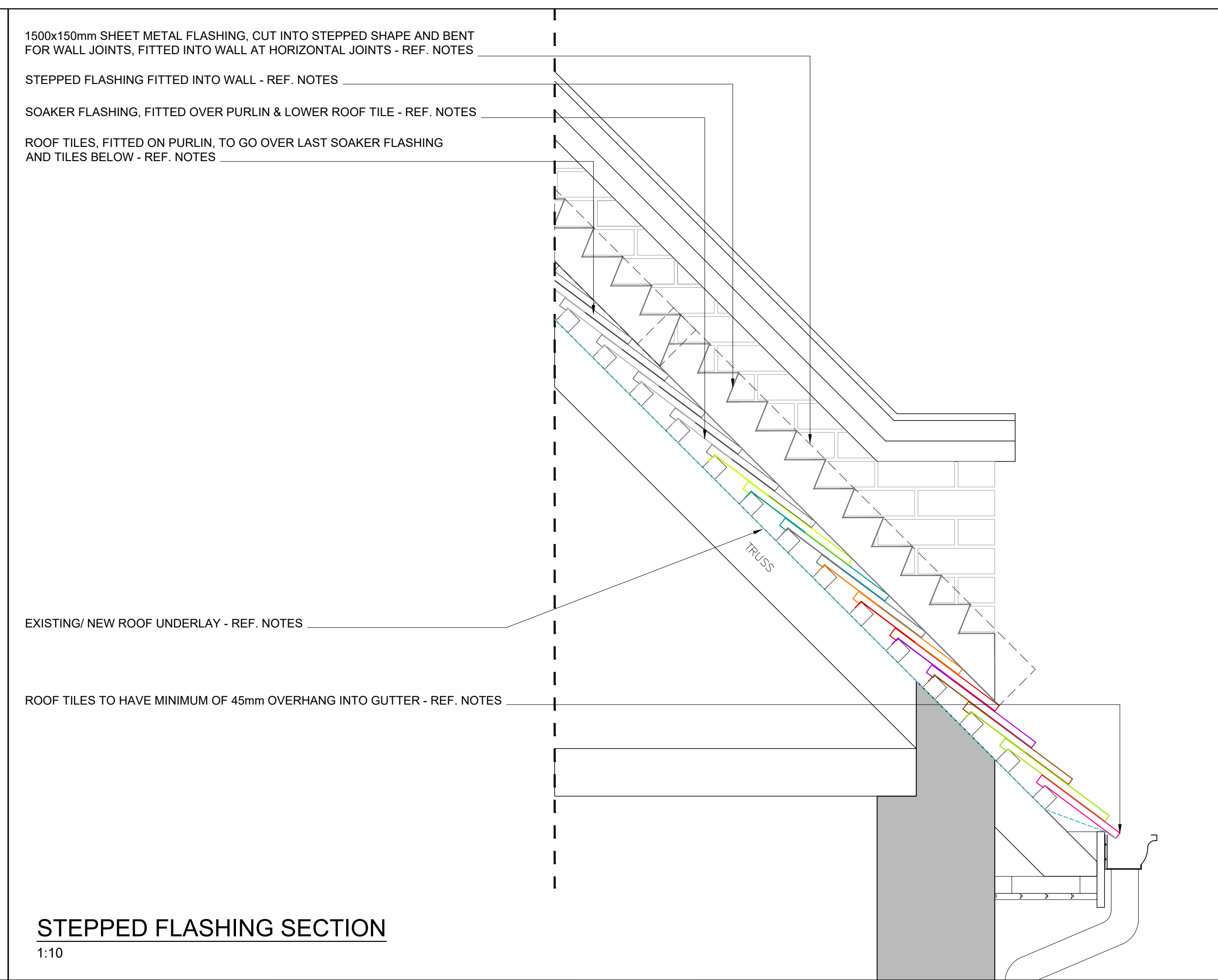
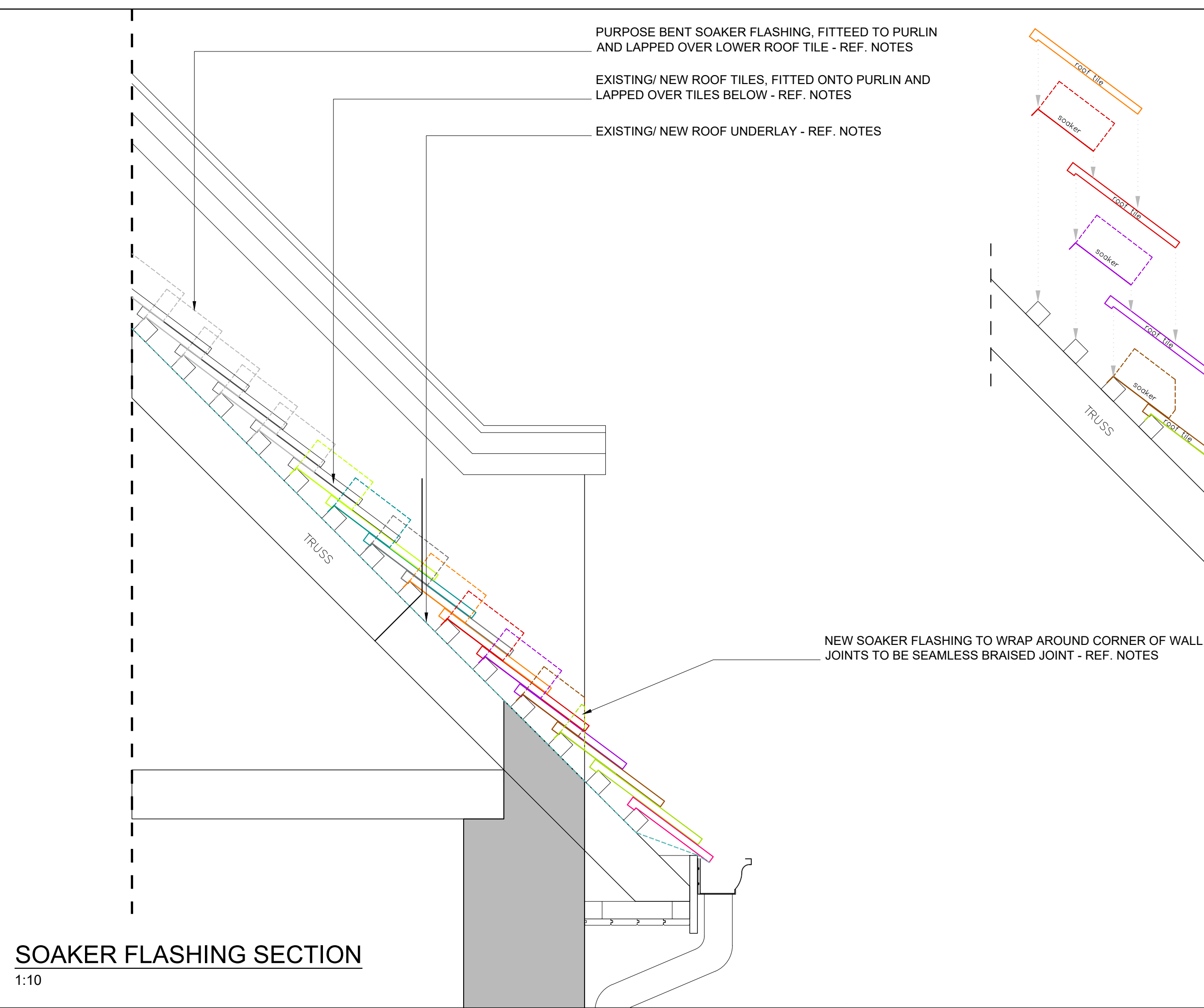
LADYSMITH: TEL(036) 631 1888, P.O.BOX: 1097, LADYSMITH 3370  
QUEENSTOWN: TEL(045) 839 5728, HARRISMITH: TEL(058) 623 471  
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CAPE TOWN : TEL(021) 252 225, PRETORIA: TEL(012) 346 0526  
WINDHOEK : TEL(0926461) 237 403, PMB: TEL(033) 347 1329

Project:  
PROPOSED REFURBISHMENT AND MAINTENANCE OF ROOFS & WATERPROOFING: MAIN BUILDING (BLOCK M)  
- uMSUNDUZI MUSEUM, ERF 2535, 351 LANGALIBALELE STREET, PIETERMARITZBURG, KZN, 3201

Drawing Description:  
TYPICAL DETAILS - ROOF VALLEY

Drawn: REC P	Date: JUL 2023	Stage: Const.
Scale/s: 1:10 @ A1	Checked:	
Drawing number: 5044 - 210	Revision: 00	





## GENERAL NOTES

DRAWING MUST BE USED AND READ IN  
CONJUNCTION WITH -  
**ROOF LEAK REPAIR SPECIFICATIONS AND  
METHODOLOGY REPORT**

Occupancy Classification : C2

**Owner:** \_\_\_\_\_  
**Name:** uMSUNDUZI MUSEUM \_\_\_\_\_  
**Sign:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Architect: \_\_\_\_\_

Name: \_\_\_\_\_ JA Meintjes \_\_\_\_\_

Sign: \_\_\_\_\_ Date: \_\_\_\_\_

Professional registration No.: \_\_\_\_\_ 6428 \_\_\_\_\_

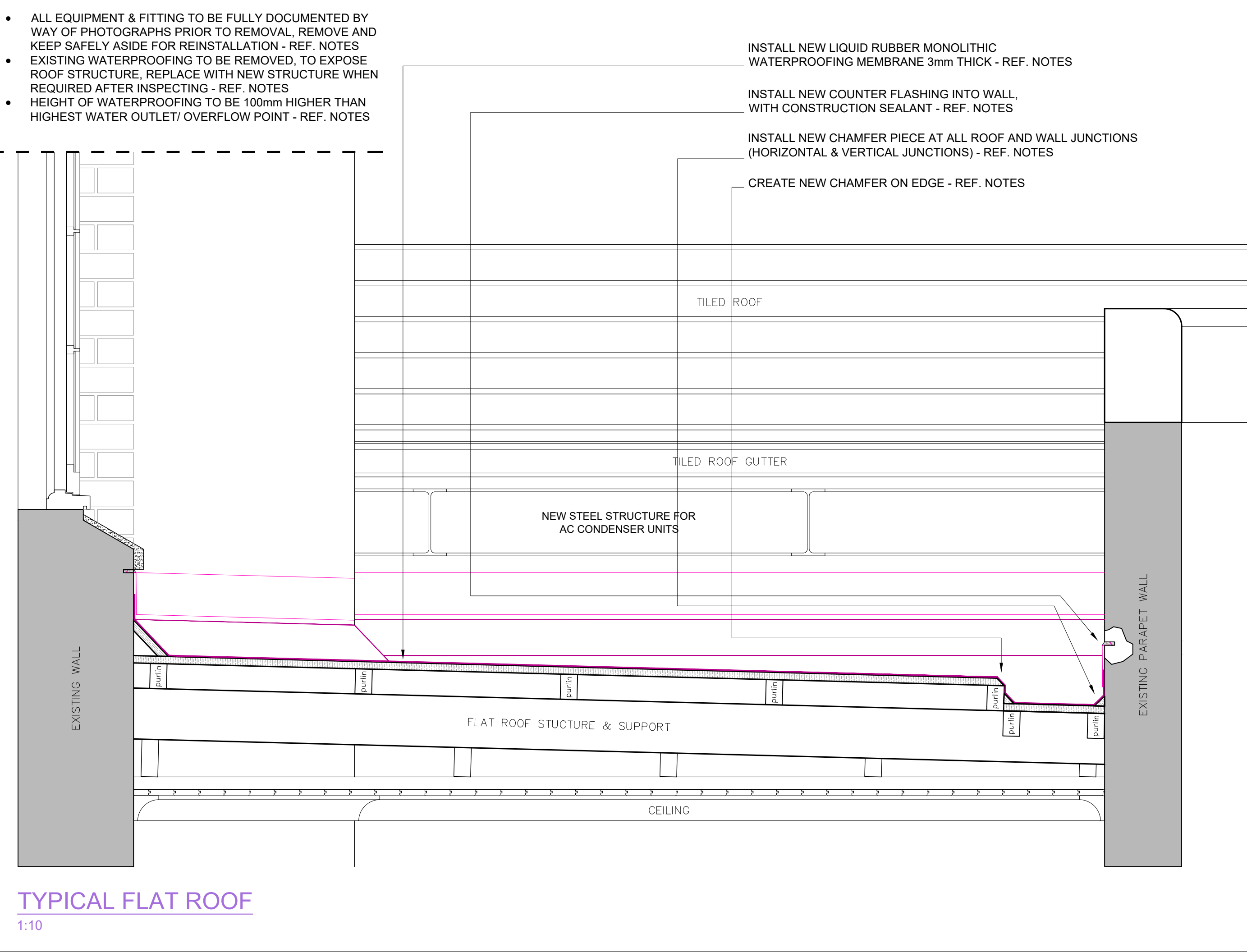
**BARTSCH**

Project:  
**PROPOSED REFURBISHMENT AND  
 MAINTENANCE OF ROOFS &  
 WATERPROOFING: MAIN BUILDING (BLOCK M)**  
 - uMSUNDUZI MUSEUM, ERF 2535, 351  
 LANGALIBALELE STREET,  
 PIETERMARITZBURG, KZN. 3201

Drawing Description:  
TYPICAL DETAILS - ROOF STEPPED  
FLASHING

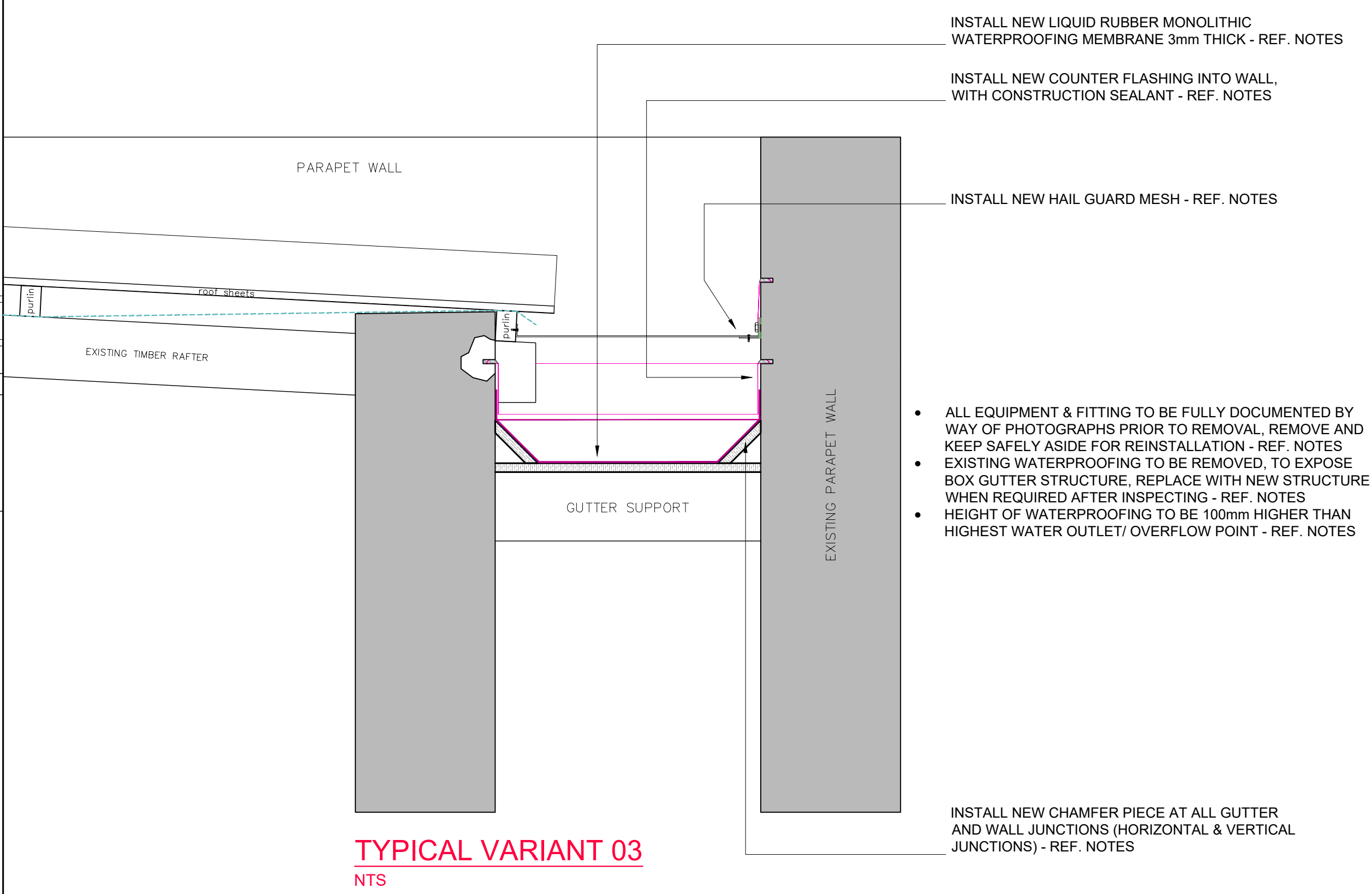
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<u>Scale/s:</u>	1:10 @ A1	<u>Checked:</u>		<u>Const.</u>	
<u>Drawing number:</u>	5044 - 211			<u>Revision:</u>	00





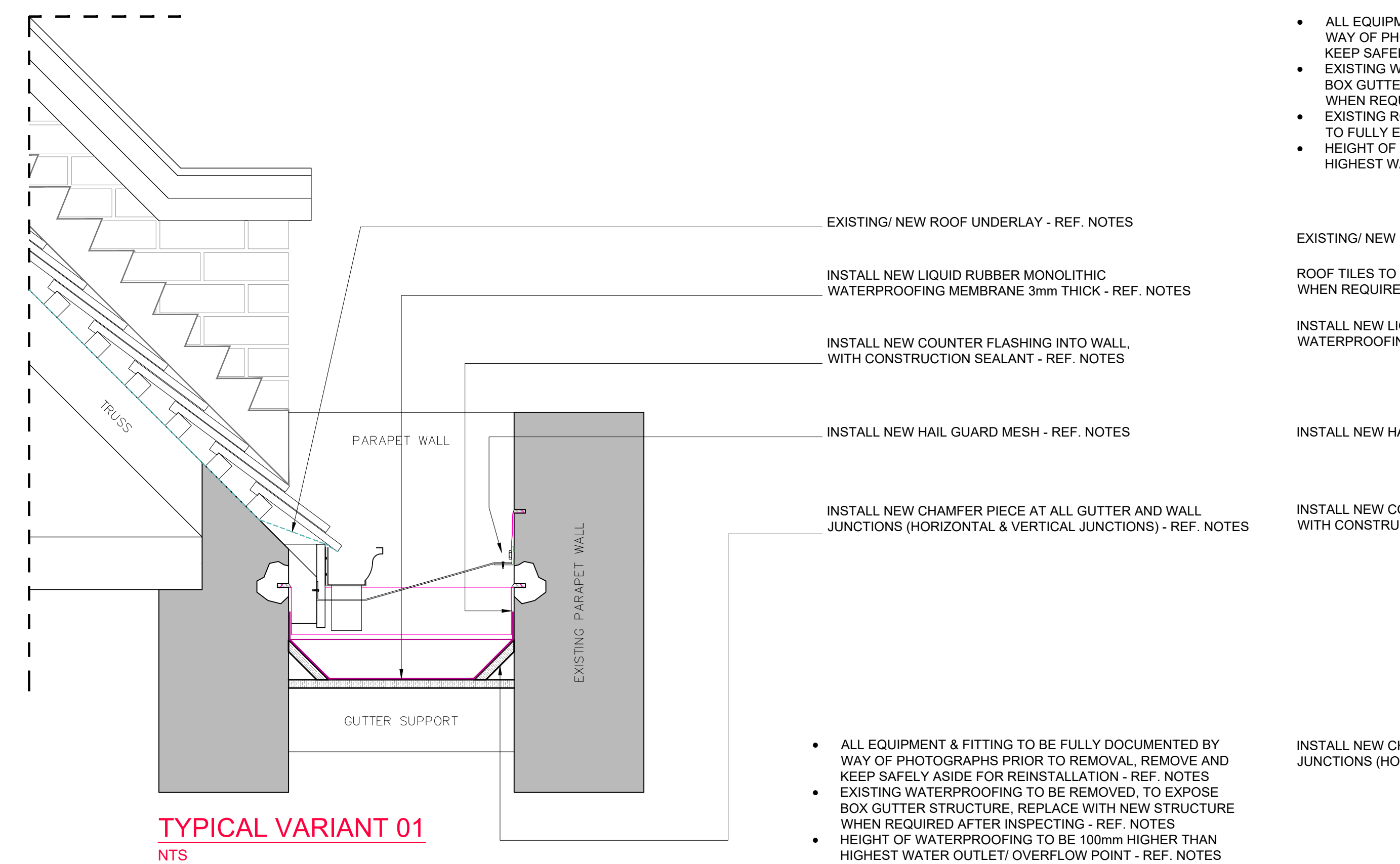
TYPICAL FLAT ROOF

1:10



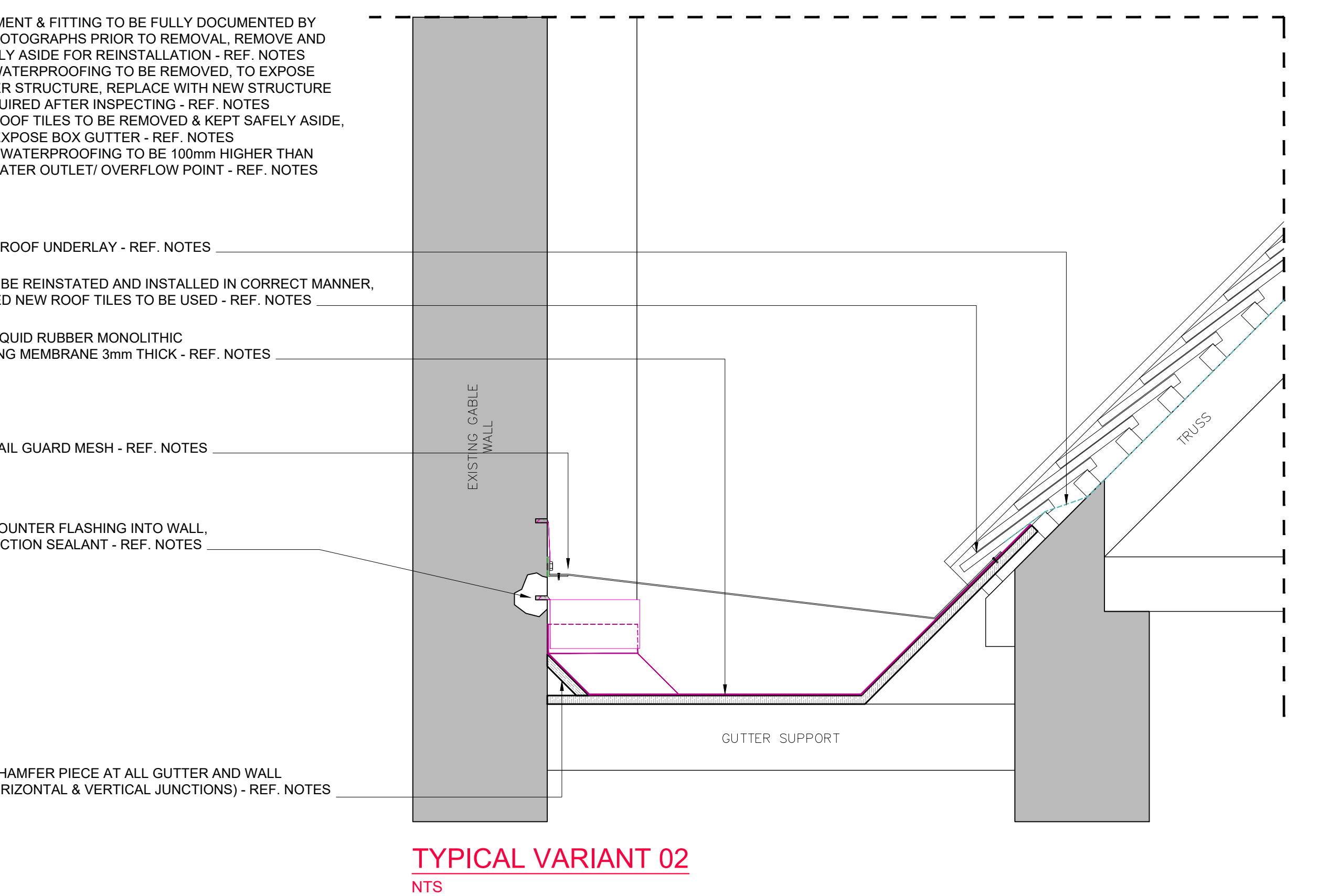
TYPICAL VARIANT 03

NTS



TYPICAL VARIANT 01

NTS



TYPICAL VARIANT 02

NTS

R E F E R E N C E

EXISTING ROOF LAYOUT

CONSTRUCTION SEALANT - REF. NOTES

COUNTER FLASHING, WITH BENT LIP - REF. NOTES

G E N E R A L N O T E S

DRAWING MUST BE USED AND READ IN CONJUNCTION WITH -

**ROOF LEAK REPAIR SPECIFICATIONS AND METHODOLOGY REPORT**

Occupancy Classification : C2

Owner:

Name: uMSUNDUZI MUSEUM

Sign: \_\_\_\_\_ Date: \_\_\_\_\_

Architect:

Name: JA Meintjes

Sign: \_\_\_\_\_ Date: \_\_\_\_\_

Professional registration No.: 6428

**BARTSCH**

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Project:

PROPOSED REFURBISHMENT AND MAINTENANCE OF ROOFS & WATERPROOFING: MAIN BUILDING (BLOCK M) - uMSUNDUZI MUSEUM, ERF 2535, 351 LANGALIBALELE STREET, PIETERMARITZBURG, KZN, 3201

Drawing Description:

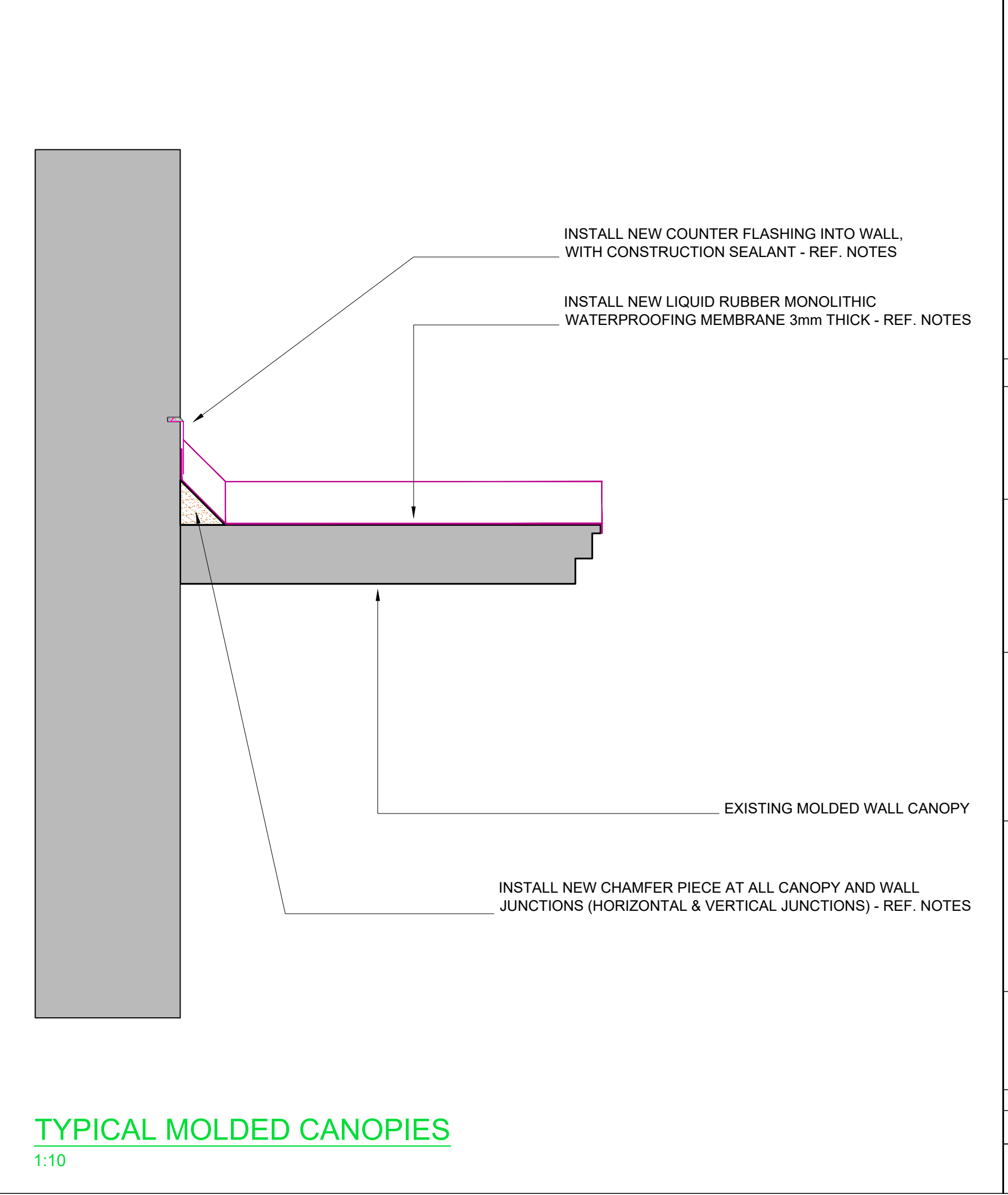
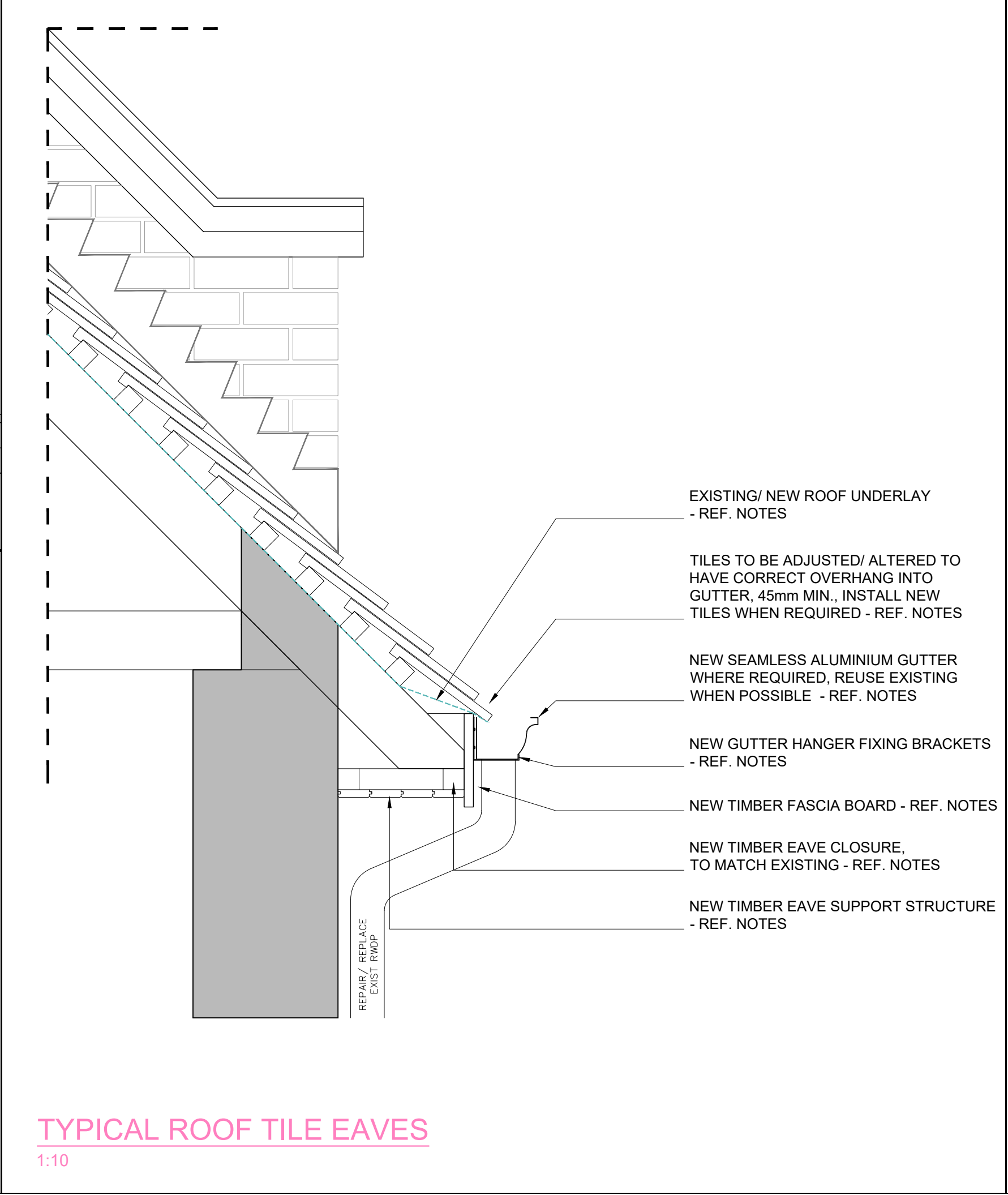
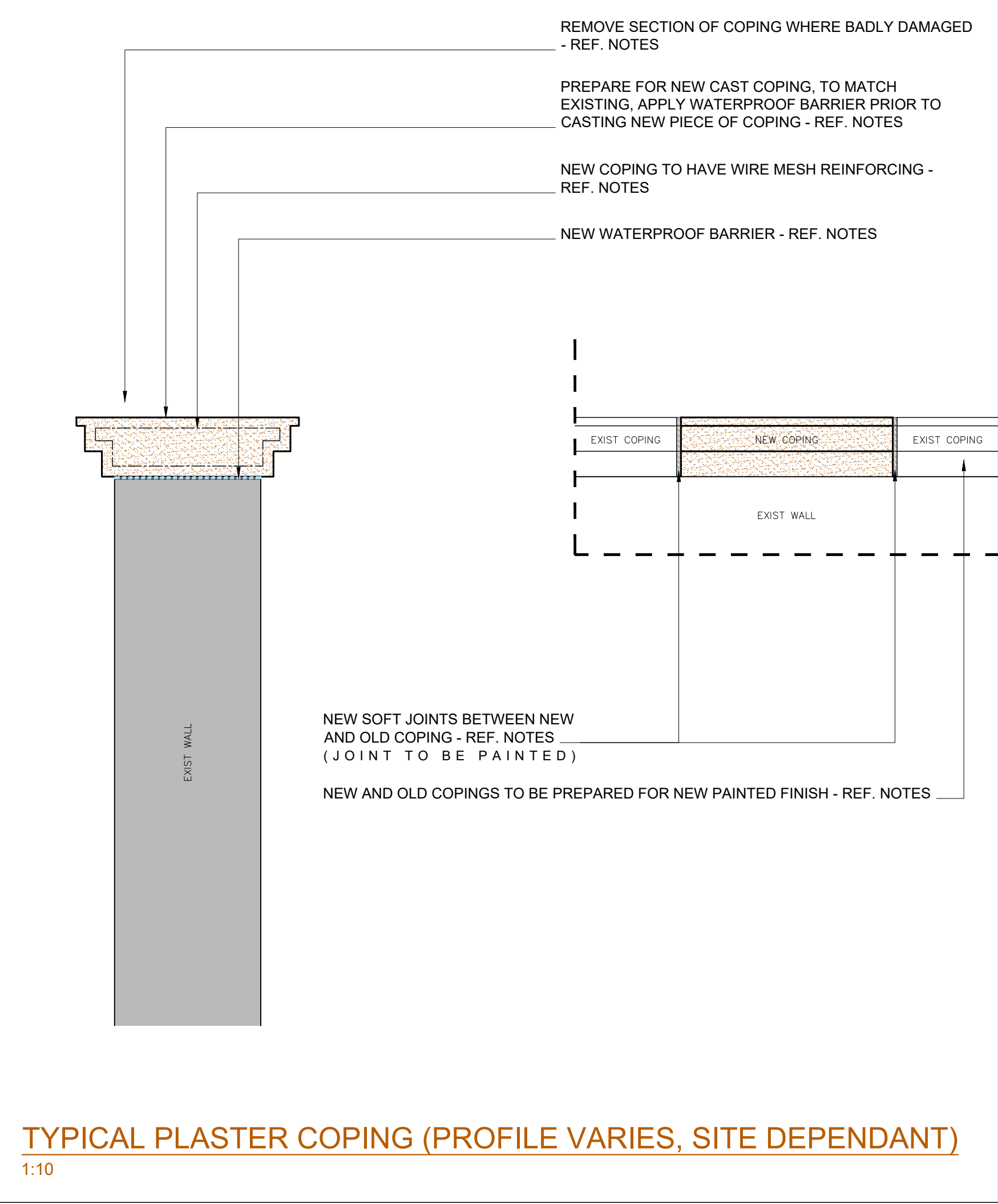
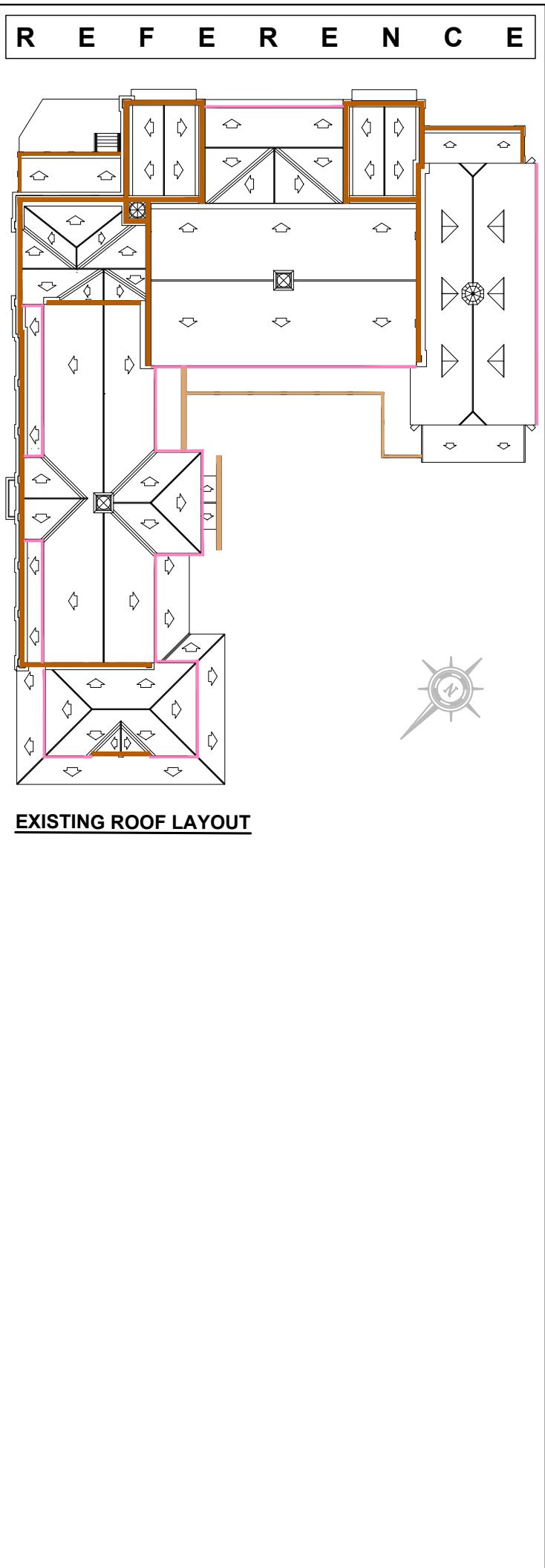
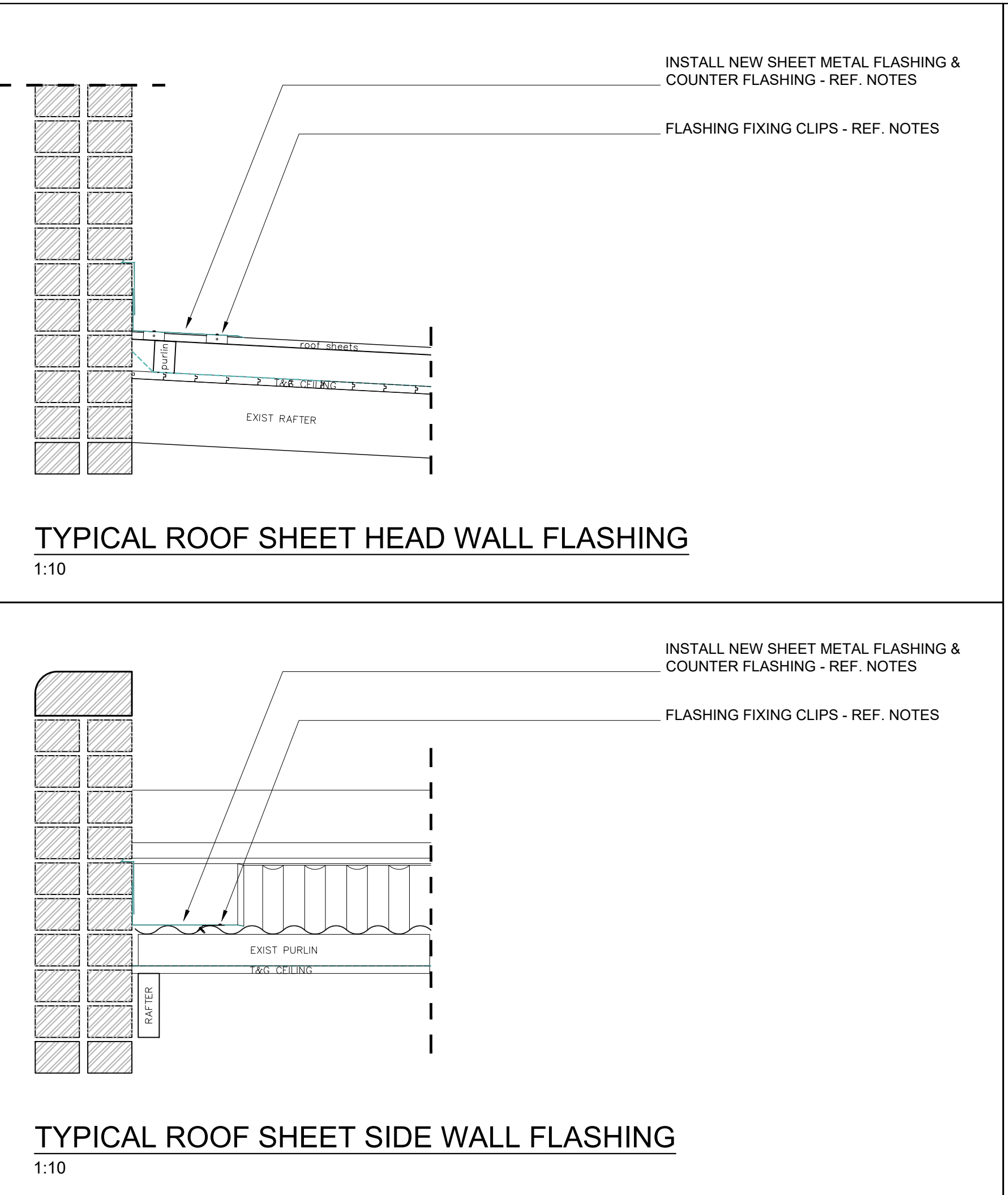
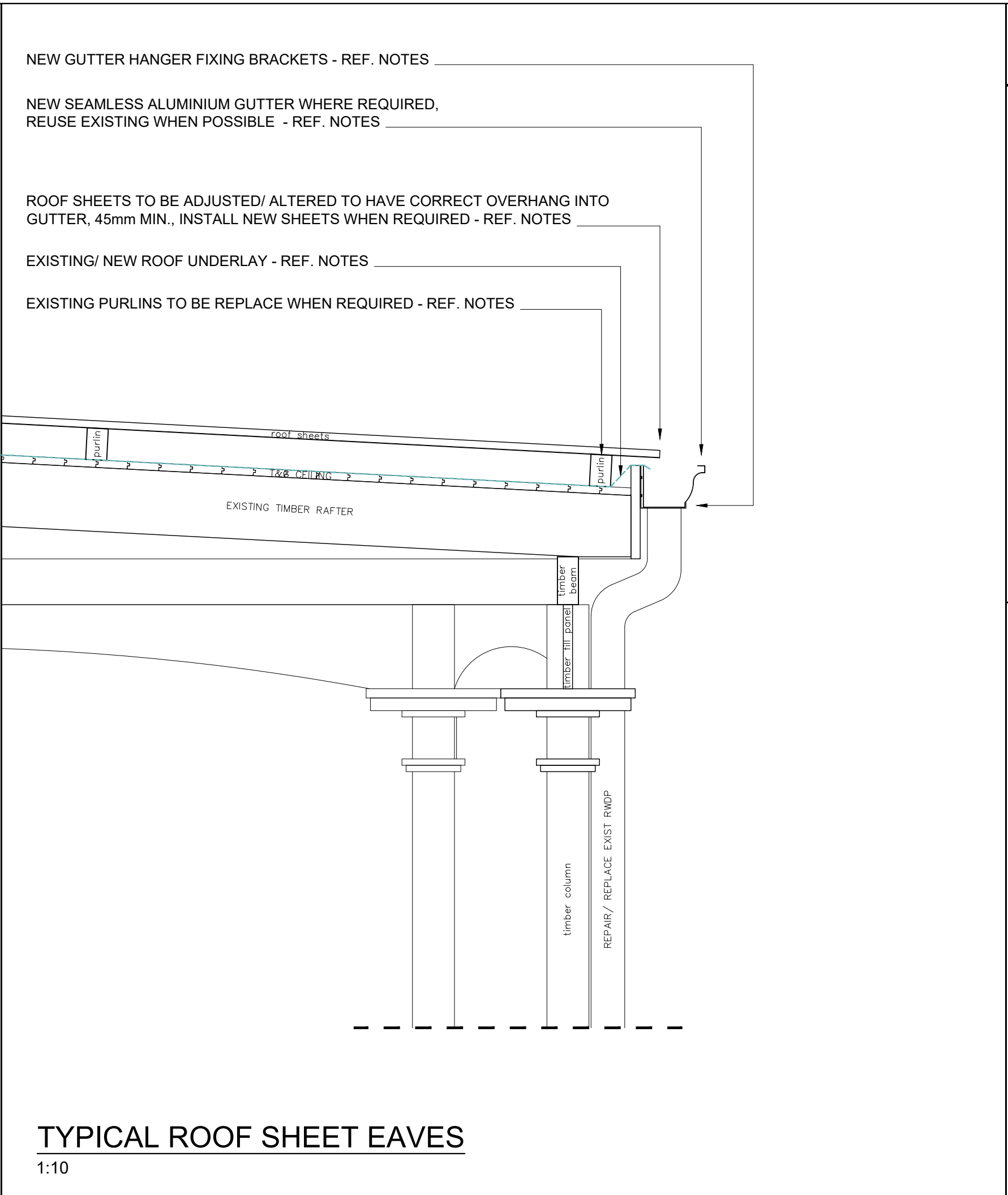
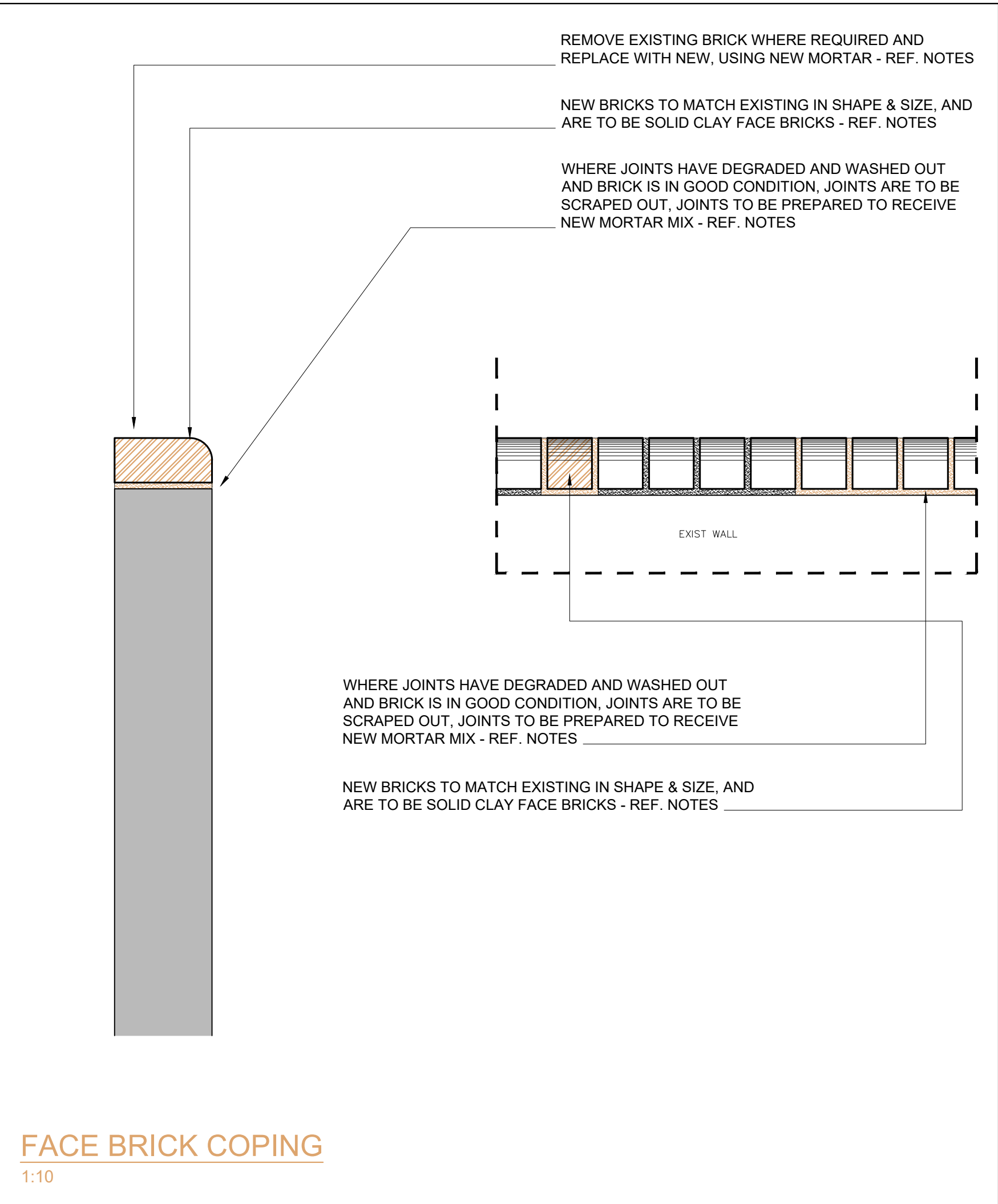
TYPICAL DETAILS - BOX GUTTER & FLAT ROOFS

Drawn: REC P	Date: JUL 2023	Stage:
Scale/s: 1:10 @ A1	Checked:	Const.
Drawing number:	5044 - 212	Revision: 00

TYPICAL BOX GUTTER (PROFILE VARIES, SITE DEPENDANT)

1:10





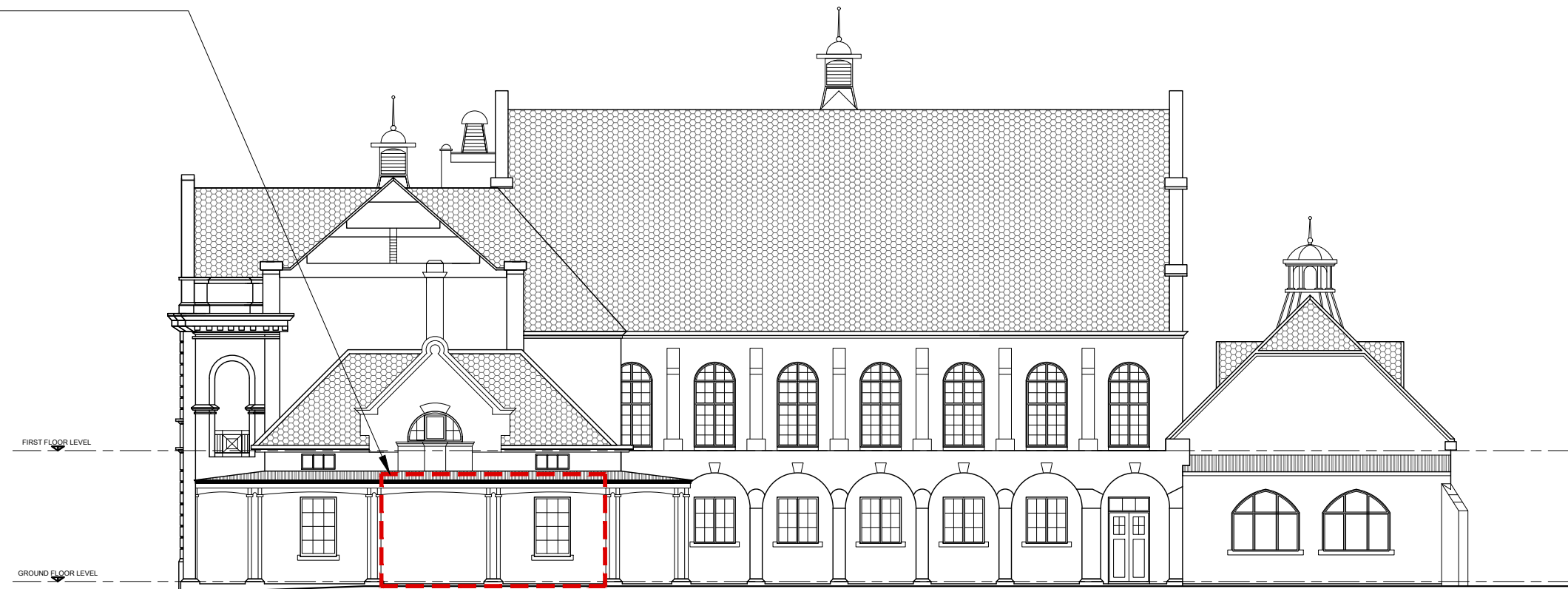
GENERAL NOTES		
DRAWING MUST BE USED AND READ IN CONJUNCTION WITH - <b>ROOF LEAK REPAIR SPECIFICATIONS AND METHODOLOGY REPORT</b>		
Occupancy Classification : C2		
Owner: Name: uMSUNDUZI MUSEUM Sign: _____ Date: _____		
Architect: Name: JA Meintjes Sign: _____ Date: _____ Professional registration No.: 6428		
<b>BARTSCH</b> LADYSMITH: TEL(036) 631 1888, P.O.BOX. 1097, LADYSMITH 3370 QUEENSTOWN: TEL(045) 839 5728, HARRISMITH: TEL(058) 623 471 EAST LONDON : TEL(043) 727 0765, BLOEMFONTEIN: TEL(051) 300 547 CAPE TOWN : TEL(021) 252 225, PRETORIA: TEL(012) 346 0526 WINDHOEK : TEL(0926461) 237 403, PMB: TEL(033) 347 1329		
Project: PROPOSED REFURBISHMENT AND MAINTENANCE OF ROOFS & WATERPROOFING: MAIN BUILDING (BLOCK M) - uMSUNDUZI MUSEUM, ERF 2535, 351 LANGALIBALELE STREET, PIETERMARITZBURG, KZN, 3201		
Drawing Description: TYPICAL DETAILS - COPING, EAVE & BARGE BOARD		
Drawn: REC P	Date: JUL 2023	Stage: Const.
Scale/s: 1:10 @ A1	Checked:	Revision: 00
Drawing number: 5044 - 213		



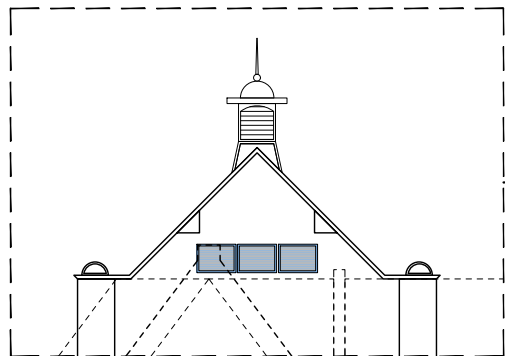


SOUTH EAST ELEVATION

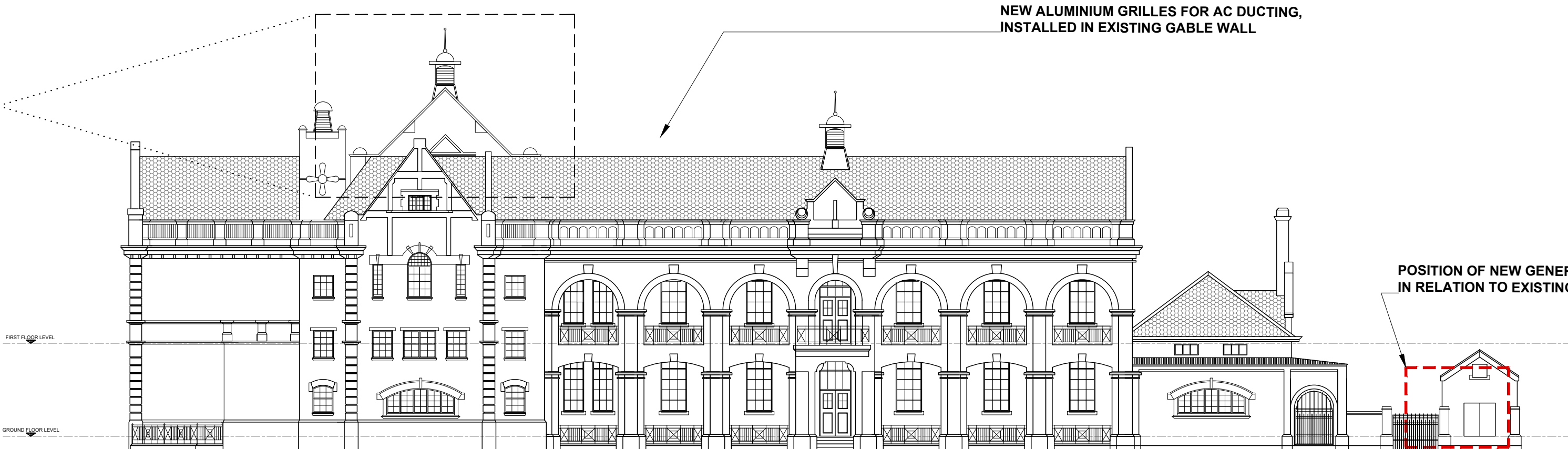
POSITION OF NEW GENERATOR HOUSING,  
IN RELATION TO EXISTING BUILDINGS



NORTH WEST ELEVATION



EXISTING GABLE WALL SITS BEHIND  
THE ROOF APEX OF THE STREET  
FACING ROOF SECTION, THESE  
GRILLES WILL NOT BE VISIBLE FROM  
THE STREET OR THE OUTSIDE AREAS  
OF THE MUSEUM, AND THEREFORE  
DO NOT HAVE AN IMPACT ON THE  
ARCHITECTURAL AESTHETIC OF THE  
BUILDING  
(GABLE LOCATION SHOWN ON ROOF  
LAYOUT IN RED DASHED BOX)



NORTH EAST ELEVATION

POSITION OF NEW GENERATOR HOUSING,  
IN RELATION TO EXISTING BUILDINGS



SOUTH WEST ELEVATION

NO CHANGE TO EXISTING ELEVATION

NO CHANGE TO EXISTING ELEVATION

NO CHANGE TO EXISTING ELEVATION

GENERAL NOTES

**STEEL:**  
ST1. ALL STEEL TO BE MILD STEEL, PLASCON EPOXY  
PAINTED WITH 4 COAT SYSTEM (PRIMER,  
UNIVERSAL UNDERCOAT, 2x FINISH COATS)  
ST2. ALL STEEL TO BE FULL SANDBLASTED CLEAN  
FREE OF CONTAMINATES PRIOR TO PAINT  
APPLICATION  
ST3. ALL WELDS TO BE NEAT CONTINUOUS FILLET  
WELDS, CONSISTENT IN THICKNESS AND  
UNIFORMITY  
ST4. STEEL SHOP DRAWINGS TO BE ISSUED TO  
ARCHITECT FOR APPROVAL, PRIOR TO ANY  
FABRICATION OR INSTALLATION

**MISCELLANEOUS:**  
M1. ANY DAMAGE TO SURROUNDING FINISHES,  
FITTINGS, SERVICES, EQUIPMENT ETC. TO BE  
REPAIRED AND/ OR REPLACED BY CONTRACTOR.  
M2. NO ORIGINAL CIRCA 1905-1965 BUILDING FITTINGS  
TO REMOVED, IF REMOVED THEN THEY MUST BE  
DONE WITH EXTREME SENSITIVITY/ CARE & STORED  
IN A SAFE LOCATION TO BE REINSTATED/  
INSTALLED ONCE WORK IS COMPLETE.  
M3. STEEL PAINT FINISH, 4 COAT SYSTEM DULUX  
EPOXY - (1xPRIMER & 1x UNDERCOAT & 2x FINISH  
COATS)  
M4. REFUGE DOOR - 2HR FIRE RATED CLASS B  
PYROPANEL DOORSET (950x2030x48), WITH  
VIEWING PANEL, IN STRICT ACCORDANCE WITH  
MANUFACTURERS INSTRUCTIONS AND IN  
COMPLIANCE TO 'SABS1253:2033' AND WITH ALL  
RELEVANT 'SABS' MARKS FOR 120min, WITH 3.6mm  
TREATED COMMERCIAL PLY, INCLUDING  
INTUMESCENT STRIP TO TOP OF DOOR, HARDWARE  
EDGES, SPECIFIED IRONMONGERY AND HINGED  
ONE SIDE TO SUITABLE 1.6mm GAUGE MILD STEEL  
GALV & PRIMED FRAME FOR 230 BRICK WALL  
M5. ALL COPING TO BE IN-SITU PLASTER COPING,  
MUST BE A EXTRA STRENGTH PLASTER MIX, WITH  
SIKALITE ADD MIXTURE  
M6. ALL COPING TO HAVE SIKATOP SEAL-107 ZA  
APPLIED TO TOP OF WALLS PRIOR TO BEING CAST  
M7. ALL DRAWINGS TO BE READ IN CONJUNCTION  
WITH EACH OTHER AND TO BE READ IN  
CONJUNCTION WITH THE SPECIFICATION & METHOD  
DOCUMENT.

GENERAL NOTES

**SITE:**  
S1. SET OUT TO BE DONE BY LAND SURVEYOR  
S2. ALL LAYER WORKS AND SITE WORK TO BE IN  
ACCORDANCE TO ENGINEERS DETAILS AND  
SPECIFICATIONS. ENGINEERS DRAWINGS AND  
ARCHITECTS DRAWINGS TO BE READ IN  
CONJUNCTION WITH EACH OTHER AT ALL TIMES  
S3. ALL STORM WATER TO ENGINEERS DETAILS AND  
SPECIFICATIONS  
S4. ALL SITE HEALTH & SAFETY TO BE COMPLIED TO IN  
TERMS OF THE SANS-10400 NATIONAL BUILDING  
REGULATIONS AND AGREED BUILDING CONTRACT  
S5. SOLID HOARDING TO BE IN PLACE AT SECTIONS TO  
BE WORKED ON PRIOR TO ANY WORK  
COMMENCING ON SITE

**FOUNDATIONS:**  
F1. ALL FOUNDATIONS, SURFACE BEDS, SLABS, RAFTS,  
RETAINING WALLS ETC TO BE IN ACCORDANCE TO  
ENGINEERS DETAILS AND SPECIFICATIONS. ALL TO  
BE ON WELL COMPACTED LAYER WORKS & 250  
MICRON DPMs & TO HAVE SOIL POISON TREATMENT  
WITH 5 YEAR GUARANTEE  
F2. ALL FOUNDATIONS NOT DESIGNED BY  
PROFESSIONAL ENGINEER TO BE IN ACCORDANCE  
WITH THE SANS-10400 NATIONAL BUILDING  
REGULATIONS

**WALLS:**  
W1. WALLS TO BE 230 & 115 COROBRIK FBX CLAY  
BRICK WALLS (EXTERNAL) & 230 CLAY BRICK WITH  
PLASTER WALLS (INTERNAL)  
W2. EXTERNAL WALLS TO BE RED FACE BRICK,  
COROBRIK FIRELIGHT SATIN FBX, WHERE NEW  
WALL MEETS OLD ALL COURSES TO BE PROPERLY  
TOOTHED IN.  
W3. INTERNAL WALLS TO BE REPAIRED AND  
PLASTERED WHERE REPAIR IS BEING DONE (IF  
NEED BE), PLASTER MIX TO BE AS PER APPROVED  
MIXTURE RATIO, ALL READY TO RECEIVE A 3 COAT  
PAINT SYSTEM.  
W4. PLASTER WALL & WALL COPING PAINT - 1x COAT  
DULUX TRADE PLASTER PRIMER, 2X COATS DULUX  
PEARLGLO.

**ROOF:**  
R1. GRS 0.53mm ALU-ZINC COATED (COLORPLUS -  
SLATE) 'IBR' PROFILE ROOF SHEETS, ON 76mm  
TIMBER PURLINS ON 252mm TIMBER RAFTERS - TO  
ENGINEERS DETAILS & SPECIFICATIONS (TIMBER TO  
BE FULLY TREATED HIGH GRADE SA-PINE) &  
PAINTED TIMBER EXTERNAL - 1x COAT DULUX  
WOOD PRIMER, 1x COAT DULUX TRADE UNIVERSAL  
UNDERCOAT, 1x DULUX TRADE GLOSS 100 ENAMEL,  
TIMBER TO BE FULLY PAINTED ON AREAS WHERE  
SUPPORT FIXINGS ARE PRIOR TO INSTALLING  
R2. 170mm THICK CONCRETE ROOF, PLASTED AND  
PAINTED - 1x COAT DULUX TRADE PLASTER  
PRIMER, 2X COATS DULUX PEARLGLO.  
R3. ALL ROOFS TO HAVE 'SISALATION 405' REFLECTIVE  
FOIL UNDER PURLIN UNDERLAY THROUGHOUT, ALL  
TO HAVE 150mm HEAD LAPS  
R4. NEW ROOF TO HAVE 30mmØ PVC RAIN WATER  
DOWNPIPE, FITTED TO WALL WITH STANDARD PVC  
MOUNTING BRACKETS  
R5. NEW ROOF TO HAVE STANDARD OGEE SEAMLESS  
ALU. GUTTER, TO MATCH ROOF SHEET.  
R6. NEW ROOF TO HAVE 22x22mm FASCIA BOARD  
FIXED TO RAFTERS, TO BE PAINTED SAME AS  
RAFTERS

**CEILINGS:**  
C1. CEILINGS TO BE PELICAN JUMBO SUSPENDED  
GRID, SCREW-UP SKIMMED JOINT 9mm THICK  
GYPSUM BOARD, IN ACCORDANCE TO 'SABISA',  
WITH TIMBER CORNICE TO MATCH EXISTING  
CORNICE IN PROFILE EXACTLY.  
C2. ALL BULKHEADS TO BE 22mm MDF BOARDS ON  
SAME GRID SYSTEM AS CEILINGS, TO BE PAINTED  
SAME AS CEILING, WITH 25x25mm 'L' CORNICE ON  
WALLS  
C3. ALL PENETRATIONS THROUGH EXISTING  
SUSPENDED MESH AND PLASTER CEILING, TO BE  
KEPT TO A MINIMUM AND DONE WITH EXTREME  
CAUTION, ALL TO HAVE REINFORCED SUB-FRAME  
INSTALLED PRIOR TO CUTTING, PERIMETER OF CUT  
TO HAVE NEW SURROUND EDGE TRIM DONE USING  
45x8mm TIMBER STRIPS (PAINTED FINISH)  
C4. REFUGE ROOM TO HAVE PLASTERED SOFFIT, 15mm  
THICK, PAINTED TO MATCH CEILING.  
C5. CEILING PAINT - 1x COAT DULUX PLASTER/ TIMBER  
PRIMER, 2x COATS DULUX TRADE 65 MATT.

**PLUMBING:**  
P1. ALL PLUMBING TO BE DONE BY REGISTERED  
PLUMBER, PLUMBING SIGN-OFF TO BE ISSUED AT  
END OF CONTRACT  
P2. ALL PLUMBING TO COMPLY WITH SANS 10400-P &  
10400-XA & SANS 10252-1:2004, SANS 1307, SANS  
10106, SANS 10254 & SANS 10252-1.

**FLOORING:**  
FL1. CONCRETE FLOOR WITH HARDENED SCREED AND  
ANTI-DUSTING AGENT, TO HAVE SMOOTH TROWEL  
FINISH.  
FL2. CONCRETE RAMP WITH HARDENED SCREED AND  
ANTI-DUSTING AGENT, TO HAVE NON-SLIP FLOAT  
FINISH.  
FL3. REFUGE FLOOR TO BE 30mm GRANO ANTI  
DUSTING SCREED ON EXISTING CONCRETE FLOOR  
FL4. ALL SOIL TO BE TREATED WITH APPROVED  
TERMITE TREATMENT, PRIOR TO FOUNDATIONS  
BEING CAST AND PAVING BEING LAID, WITH A 5  
YEAR GUARANTEE ISSUED.

**WINDOWS & DOORS:**  
W1. ALL EXISTING WINDOWS AND DOORS TO BE FULLY  
PROTECTED AT ALL TIMES, ANY DAMAGE TO THESE  
WILL BE RECTIFIED AT THE CONTRACTORS COST  
W2. PAINTED TIMBER INTERNAL - 1x COAT DULUX  
WOOD PRIMER, 1x COAT DULUX TRADE UNIVERSAL  
UNDERCOAT, 1x DULUX TRADE EGGSHELL ENAMEL  
W3. PAINTED TIMBER EXTERNAL - 1x COAT DULUX  
WOOD PRIMER, 1x COAT DULUX TRADE UNIVERSAL  
UNDERCOAT, 1x DULUX TRADE GLOSS 100 ENAMEL  
W4. NEW ALUMINIUM GABLE GRILLES TO BE INSTALLED  
(AS PER NE ELEVATION) ALL TO THE MECHANICAL  
ENGINEERS DRAWINGS & SPECIFICATIONS.

MUNICIPAL STAMPS

**MECHANICAL & ELECTRICAL:**  
M1. ALL MECHANICAL EXTRACTION AND VENTILATION  
TO BE DONE IN ACCORDANCE WITH THE  
MECHANICAL ENGINEERS DESIGN AND DETAILS.  
E1. ALL LIGHTING AND ELECTRICAL RETICULATION TO  
BE DONE IN ACCORDANCE TO ELECTRICAL  
ENGINEERS DESIGN AND DETAILS.

Occupancy Classification : C2

Owner:  
Name: uMSUNDUZI MUSEUM  
Sign: Date:

Architect:  
Name: JA Meintjes  
Sign: Date:  
Professional registration No.: 6428

**BARTSCH**

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QUEENSTOWN: TEL(045) 839 5728, HARRISMITH: TEL(058) 623 471  
EAST LONDON : TEL(043) 727 0765, BLOEMFONTEIN: TEL(051) 300 547  
CAPE TOWN : TEL(021) 252 225, PRETORIA: TEL(012) 346 0526  
WINDHOEK : TEL(0926461) 237 405, PMB: TEL(033) 347 1325

Project:  
PROPOSED UPGRADES AND INSTALLATION  
OF ELECTRICAL & MECHANICAL WORKS:  
MAIN BUILDING (BLOCK M) - UMSUNDUZI  
MUSEUM, ERF 2535, 351 LANGALIBALELE  
STREET, PIETERMARITZBURG, KZN, 3201

Drawing Description:  
ELEVATIONS - EXISTING ELEVATIONS FOR  
BLOCK M

Drawn: REC P	Date: AUG 2022	Stage:
Scale/s: 1:200 @ A1	Checked:	Const.
Drawing number:	5044 - 300	Revision: 00








## **Refurbishment and Upgrading of uMsunduzi Museums Buildings**

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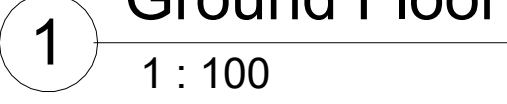
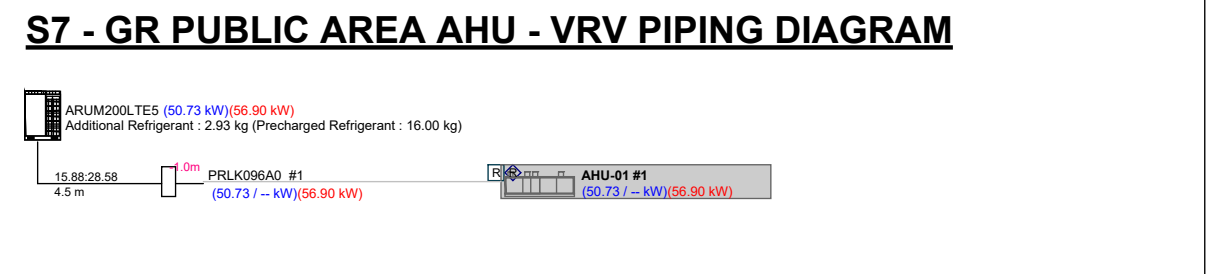
### **HVAC Drawings**



COLOUR LEGEND	
	AC SUPPLY AIR / LIQUID PIPING
	RETURN AIR / GAS PIPING
	EXTRACT AIR
	FRESH AIR
	CONDENSATE DRAINAGE

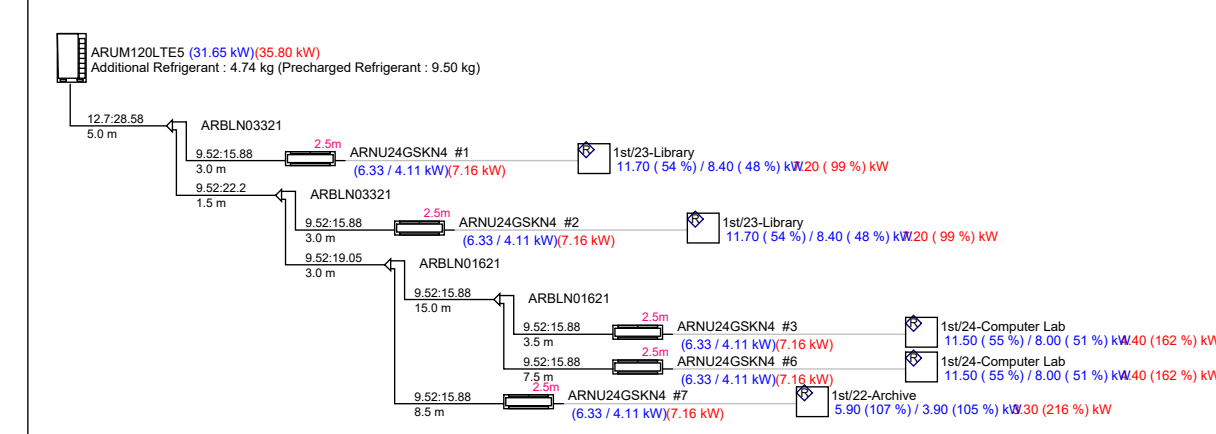
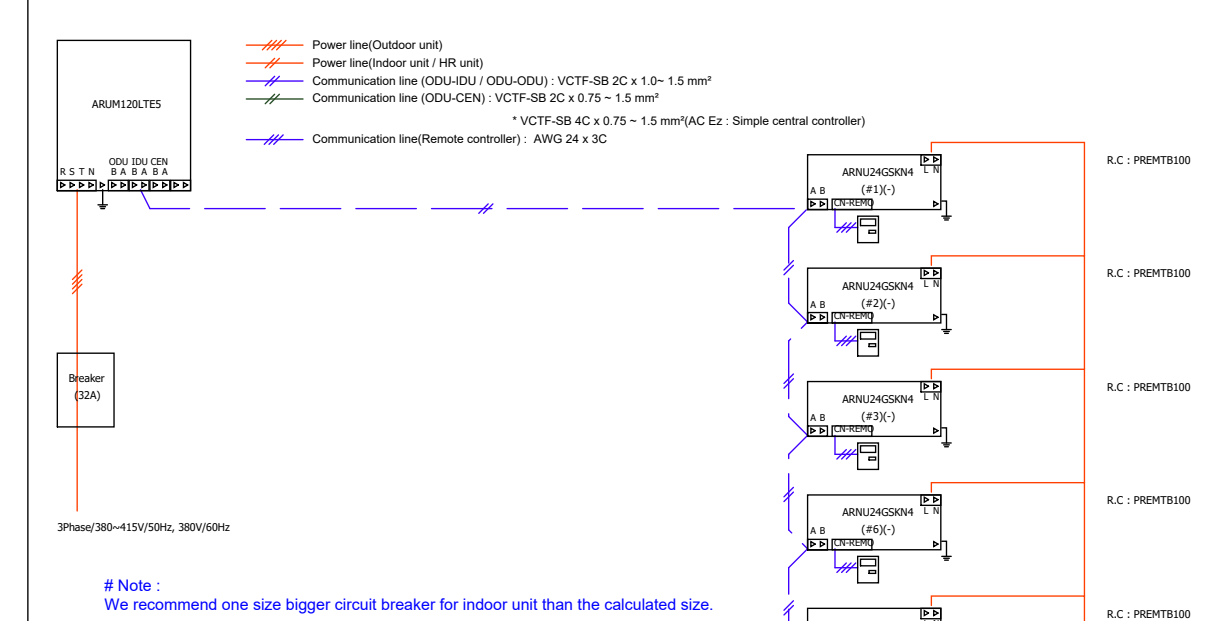
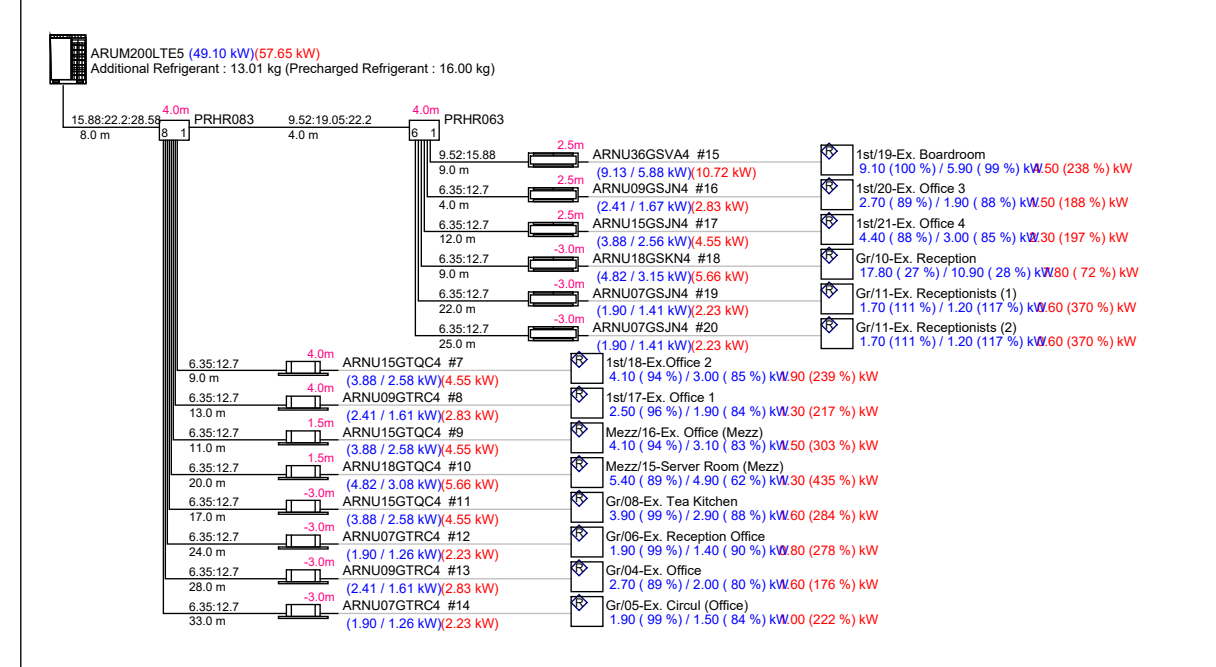
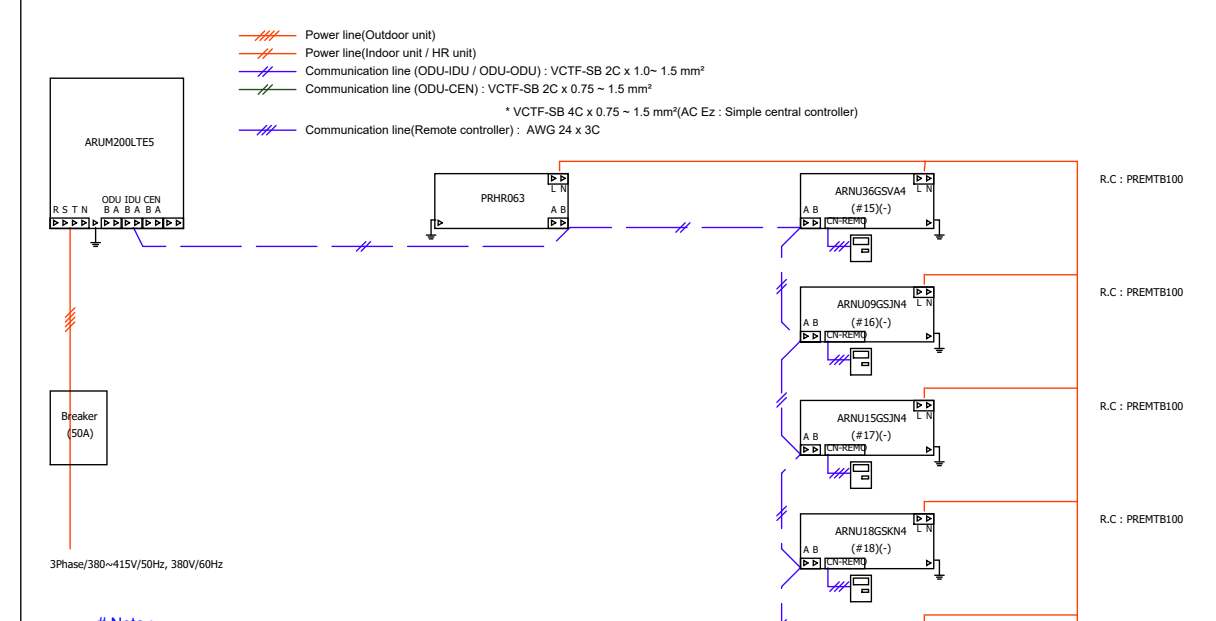
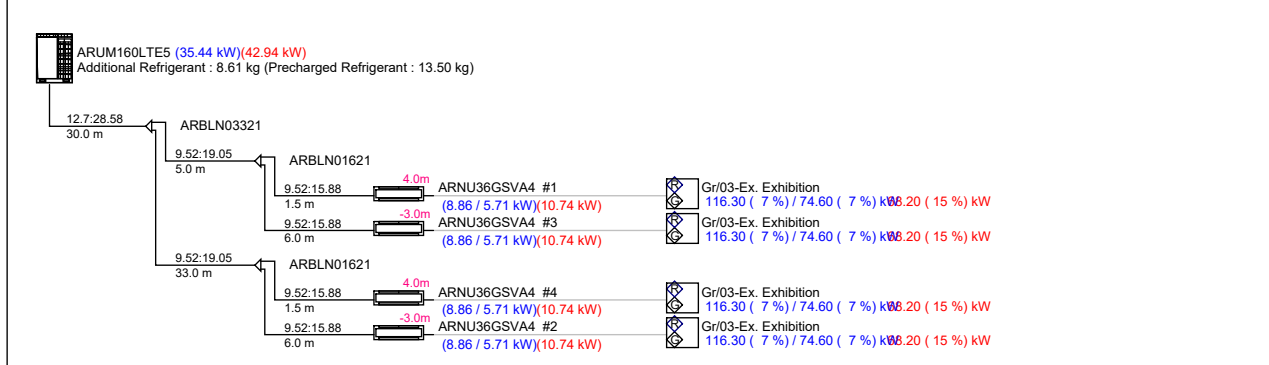
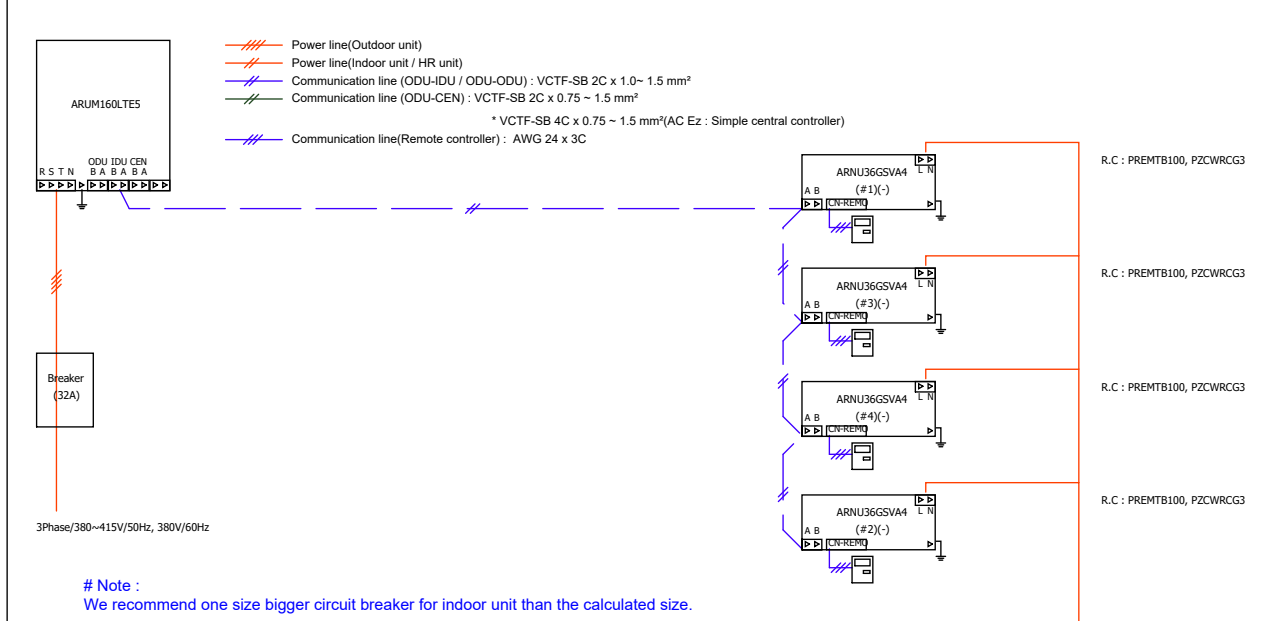
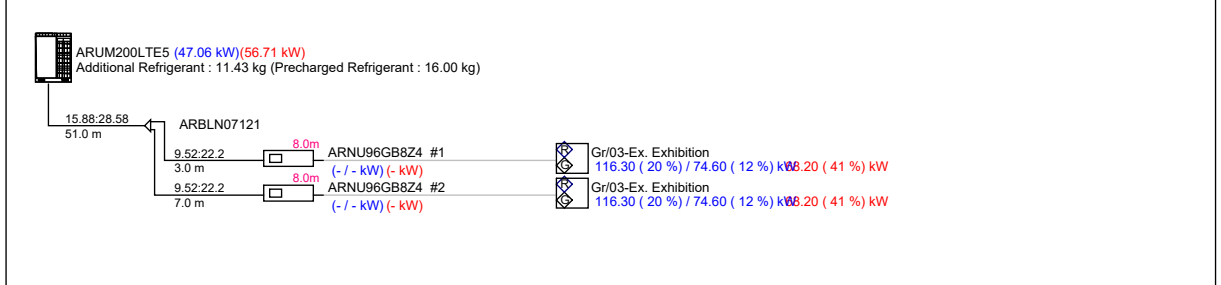
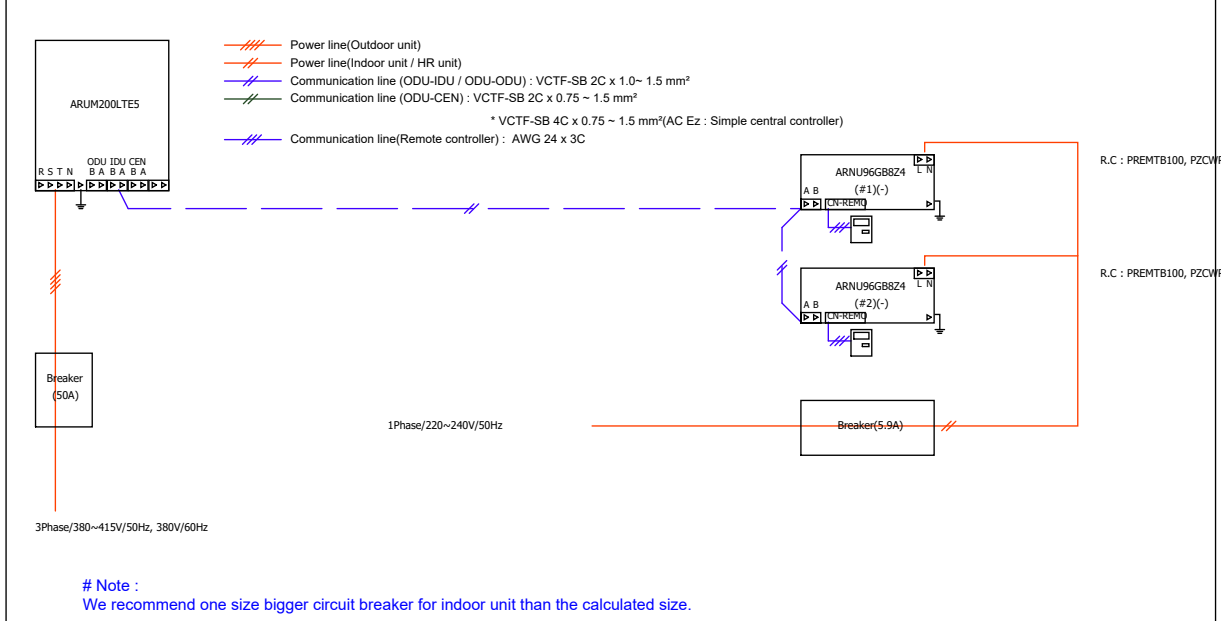
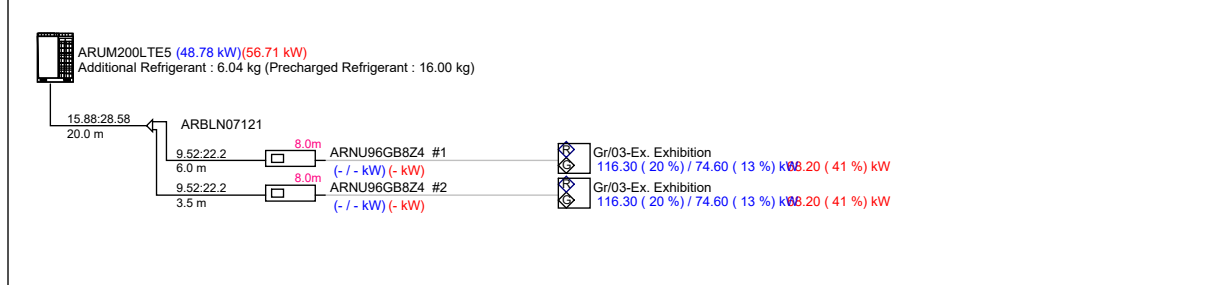
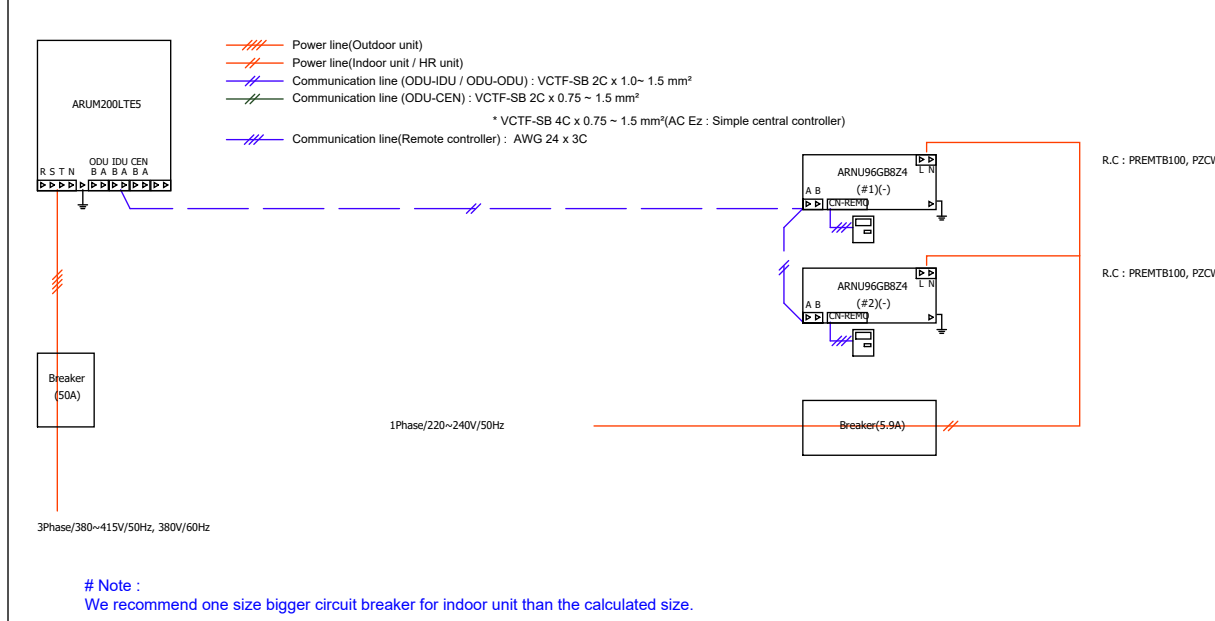
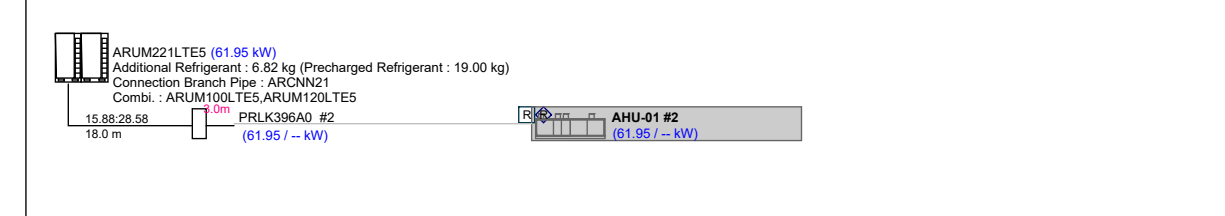
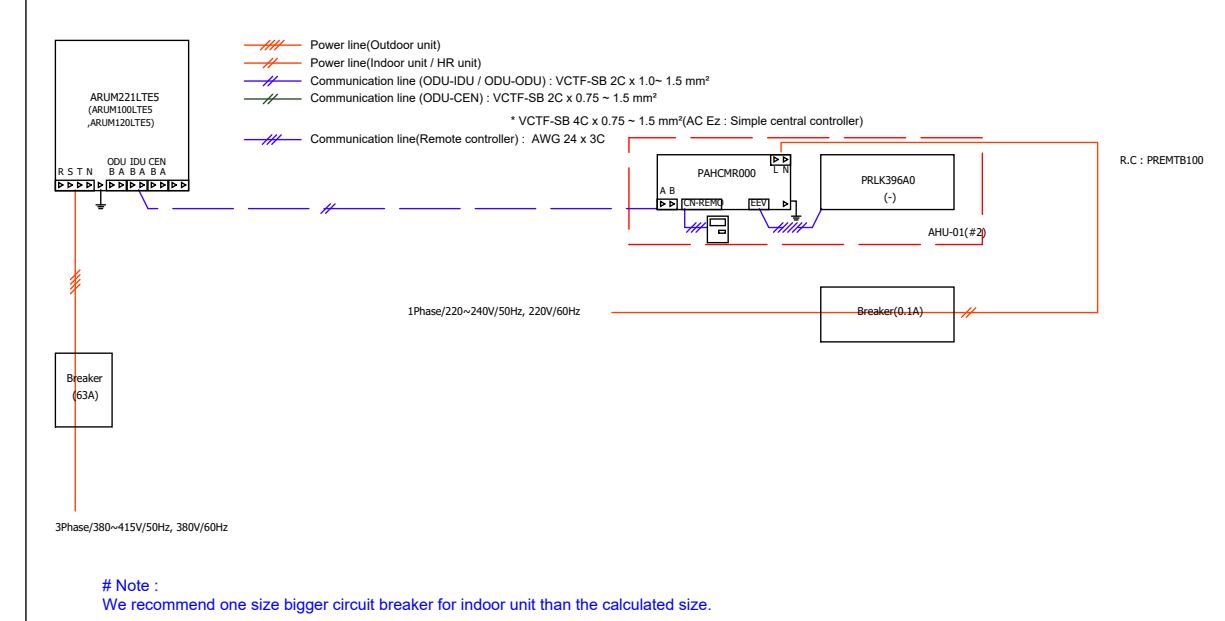
1. ALL FRESH AIR & EXTRACTION, INCLUDING AIR HANDLING UNITS, TO BE CONNECTED TO THE FIRE SIGNAL AND AUTOMATICALLY SHUT DOWN IN THE






AC & FAN SCHEDULE (G)										
REF	NO.	DESCRIPTION	MODEL	COOLING CAPACITY	AIR FLOW	ESP	WEIGHT	RATED CURRENT	MOUNTING POSITION	
CDU-4	1	"LG MULTI VRS" VR* OUTDOOR UNIT - HEAT PUMP	ARJUM20L7E5	56 kW	-	-	330 kg	3Ph, 400V, 50Hz, 40A	ROOF - SUPPORT REQUIRED / BALCONY - PLINTH REQUIRED	
ADU-1	2	"LG MULTI VRS" VR* INDOOR UNIT - MID-WALL	ARJ007GSJN4	2.2 kW	-	-	10 kg	230V, 500V, 0.04	1/ WALL	
ADU-2	3	"LG MULTI VRS" VR* INDOOR UNIT - MID-WALL	ARJ007GSJN4	5.6 kW	-	-	15 kg	230V, 500V, 0.02A	1/ WALL	
ADU-6	2	"LG MULTI VRS" VR* INDOOR UNIT - MID-WALL	ARJ006SJM4	10.4 kW	-	-	20 kg	230V, 500V, 0.04A	1/ WALL	
ADU-7	2	"LG MULTI VRS" VR* INDOOR UNIT - CEILING CASSETTE	ARJ007GSC4	2.2 kW	-	-	10 kg	230V, 500V, 0.04	1/ SOFFIT / TRUSS	
ADU-8	3	"LG MULTI VRS" VR* INDOOR UNIT - CEILING CASSETTE	ARJ007GSC4	2.8 kW	-	-	15 kg	230V, 500V, 0.04	1/ SOFFIT / TRUSS	
ADU-9	1	"LG MULTI VRS" VR* INDOOR UNIT - CEILING CASSETTE	ARJ015GSC4	4.5 kW	-	-	20 kg	230V, 500V, 0.02A	1/ SOFFIT / TRUSS	
ARU-1	1	AIR HANDLING UNIT - VERTICAL	-	56.2 kW	3320 l/s	250 Pa	800 kg	230V, 500V, 50Hz	GROUND - PLINTH REQUIRED	
ARU-2	1	AIR HANDLING UNIT - HORIZONTAL	-	61.6 kW	3000 l/s	250 Pa	800 kg	230V, 500V, 10Hz	GROUND - PLINTH REQUIRED	
EEV-1	1	"LG MULTI VRS" VR* ELECTRONIC EXPANSION VALVE	PKJL96840	96.3 kW	-	-	10 kg	-	ON UNIT	
EEV-2	1	"LG MULTI VRS" VR* ELECTRONIC EXPANSION VALVE	PKJL36640	112.5 kW	-	-	10 kg	-	ON UNIT	
SP-1	1	SYSTEM UNIT - MID-WALL	M36AH	9.8 kW	-	-	75kg (Out) + 20 kg (In)	230V, 500V, 17A	WALL / WALL	
SU-2	1	"SPURTRIM" SUPPLY AIR FAN - CIRCULAR BLINE FAN	Pro Select SP 150E2	-	90-145 l/s	200 Pa	65 kg	230V, 500V, 1A	SOFFIT / TRUSS	
EF-1	1	"XPRLAR" CEILING MOUNTED EXTRACTOR FAN	QX2	-	333 l/s	-	5 kg	230V, 500V, 0.02A	WALL	
EF-2	1	"XPRLAR" WINDOW MOUNTED EXTRACTOR FAN	QX2	-	145 l/s	-	5 kg	230V, 500V, 0.02A	WINDOW	
EF-3	1	"XPRLAR" WINDOW MOUNTED EXTRACTOR FAN	QX9	-	171 l/s	-	5 kg	230V, 500V, 0.02A	WINDOW	
EF-4	1	"XPRLAR" WINDOW MOUNTED EXTRACTOR FAN	QX12	-	208 l/s	-	5 kg	230V, 500V, 0.04A	WINDOW	





DRAWING INFORMATION	
DRAWING TITLE: HVAC Layout - Ground Floor	
DRAWING SCALE: As indicated	SHEET SIZE: A0
DRAWING NUMBER: <b>LSG-2204-HVAC-100</b>	REVISION: <b>T0</b>

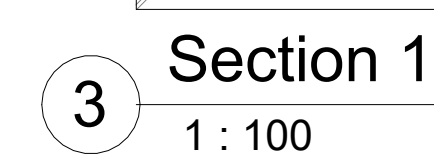
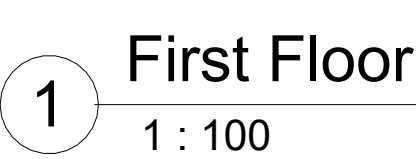




COLOUR LEGEND	
	AC SUPPLY AIR / LIQUID PIPING
	RETURN AIR / GAS PIPING
	EXTRACT AIR
	FRESH AIR
	CONDENSATE DRAINAGE

ELECTRICAL LEGEND	
	1PH POWER SUPPLY AND ISOLATOR. TO BE WEATHER PROOF IF EXPOSED TO THE ELEMENTS. REQUIREMENTS AS PER EQUIPMENT SCHEDULES.
	3PH POWER SUPPLY AND ISOLATOR. TO BE WEATHER PROOF IF EXPOSED TO THE ELEMENTS. REQUIREMENTS AS PER EQUIPMENT SCHEDULES.

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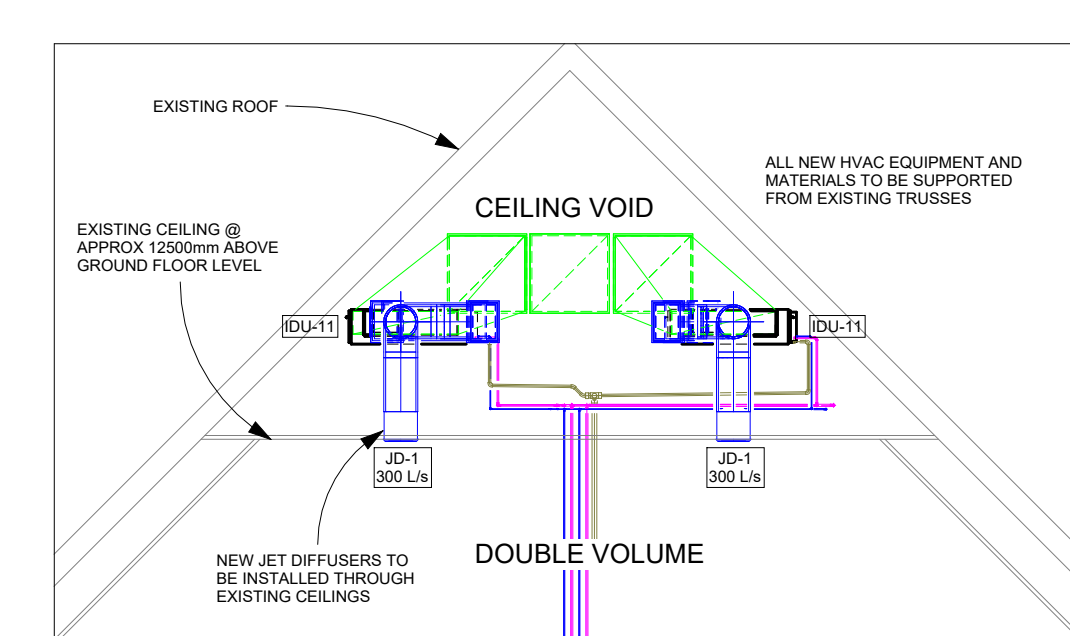


AC & FAN SCHEDULE (1)									
REF	NO.	DESCRIPTION	MODEL	COOLING CAPACITY	AIR FLOW	ESP	WEIGHT	RATED CURRENT	MOUNTING POSITION
ODU-1	1	"LO MULTI.V" VRF OUTDOOR UNIT - HEAT PUMP	ARJUM100TES	29 kW	-	-	240 kg	3Ph, 400V, 50Hz, 28A	ROOF - SUPPORT REQUIRED
ODU-2	2	"LO MULTI.V" VRF OUTDOOR UNIT - HEAT PUMP	ARJUM100TES	33.6 kW	-	-	240 kg	3Ph, 400V, 50Hz, 28A	ROOF - SUPPORT REQUIRED / BAL CONY - PLINTIN REQUIRED
ODU-3	1	"LO MULTI.V" VRF OUTDOOR UNIT - HEAT PUMP	ARJUM100TES	44.8 kW	-	-	260 kg	3Ph, 400V, 50Hz, 28A	ROOF - SUPPORT REQUIRED / BAL CONY - PLINTIN REQUIRED
ODU-4	2	"LO MULTI.V" VRF OUTDOOR UNIT - HEAT PUMP	ARJUM100TES	56 kW	-	-	330 kg	3Ph, 400V, 50Hz, 40A	BAL CONY - PLINTIN REQUIRED
ODU-5	1	"LO MULTI.V" VRF OUTDOOR UNIT - HEAT RECOVERY	ARJUM100TES	56 kW	-	-	330 kg	3Ph, 400V, 50Hz, 40A	BAL CONY - PLINTIN REQUIRED
ODU-2	2	"LO MULTI.V" VRF INDOOR UNIT - MID WALL	ARNJUSG10A	10.4 kW	-	-	19 kg	2Ph, 230V, 50Hz, 1.1A WALL	
ODU-3	1	"LO MULTI.V" VRF INDOOR UNIT - MID WALL	ARNJUSG15A	4.5 kW	-	-	10 kg	2Ph, 230V, 50Hz, 0.2A WALL	
ODU-4	1	"LO MULTI.V" VRF INDOOR UNIT - MID WALL	ARNJUSG10A	11.7 kW	-	-	20 kg	2Ph, 230V, 50Hz, 1.1A WALL	
ODU-6	3	"LO MULTI.V" VRF INDOOR UNIT - MID WALL	ARNJUSG15A	10.4 kW	-	-	20 kg	2Ph, 230V, 50Hz, 0.4A WALL	
ODU-8	1	"LO MULTI.V" VRF INDOOR UNIT - CEILING CASSETTE	ARNJUSG12CA	2.8 kW	-	-	15 kg	2Ph, 230V, 50Hz, 1A SOFFIT / TRUSS	
ODU-9	1	"LO MULTI.V" VRF INDOOR UNIT - CEILING CASSETTE	ARNJUSG12CA	4.5 kW	-	-	20 kg	2Ph, 230V, 50Hz, 1A SOFFIT / TRUSS	
ODU-10	1	"LO MULTI.V" VRF INDOOR UNIT - CEILING CASSETTE	ARNJUSG12CA	5.6 kW	-	-	20 kg	2Ph, 230V, 50Hz, 0.4A SOFFIT / TRUSS	
ODU-4	4	"LO MULTI.V" VRF INDOOR UNIT - VRF AIR INTAKE	ARNJUSG10A	29 kW	585 l/s	216 Pa	80 kg	3Ph, 230V, 50Hz, 1.6A TRUSS	
IRU-1	1	"LO MULTI.V" VRF HEAT RECOVERY BOX - 6 PORT	PHR06GA	-	-	-	35 kg	2Ph, 230V, 50Hz, 0.4A TRUSS	
IRU-2	1	"LO MULTI.V" VRF HEAT RECOVERY BOX - 6 PORT	PHR06GA	-	-	-	35 kg	2Ph, 230V, 50Hz, 0.4A TRUSS	
BU-1	1	SPILT UNIT - MID WALL	MMAR6	6.45 kW	-	-	45 (30) kg	2Ph, 230V, 50Hz, 10A SPLIT WALL	
SF-1	2	"SYSTEMAIR" SUPPLY AIR FAN - CIRCULAR IN-LINE FAN	Phb Ssn 35 105EC	5.8 kw	90-145 l/s	200 Pa	5 kg	2Ph, 230V, 50Hz, 1.5A SPLIT	
SF-2	1	"SYSTEMAIR" SUPPLY AIR FAN - CIRCULAR IN-LINE FAN	Phb 35 EC	-	885 l/s	200 Pa	10 kg	2Ph, 230V, 50Hz, 2.5A SOFFIT	
EF-2	2	"XELAIR" WINDOW MOUNTED EXHAUST FAN	GIAC	-	145 l/s	-	5 kg	2Ph, 230V, 50Hz, 0.4A WINDOW	
EF-3	2	"XELAIR" WINDOW MOUNTED EXHAUST FAN	GIAC	-	145 l/s	-	5 kg	2Ph, 230V, 50Hz, 0.4A WINDOW	

AIR DISTRIBUTION EQUIPMENT SCHEDULE (1)					
REF	NO.	DESCRIPTION	SIZE	MODEL	COMMENTS
SG	-1	"T"ROX SUPPLY DOUBLE DEFLECTION GRILLE CW PLENUM A O & B	200x200 AT		
SG	-2	"T"ROX SUPPLY DOUBLE DEFLECTION GRILLE CW PLENUM A O & B	200x200 AT		
SG	-3	"T"ROX SUPPLY DOUBLE DEFLECTION GRILLE CW PLENUM A O & B	550x250 AT		
BD	-1	"T"ET DIFFUSER, ADJUSTABLE CW EXTERNAL ELECTRIC ACTUATOR & CONTROLS	1000x1000	DUK 1014	
BD	-2	"T"ET DIFFUSER, ADJUSTABLE CW EXTERNAL ELECTRIC ACTUATOR & CONTROLS	1000x1000	DUK 1014	
RAFF	-1	"T"ROX RETURN AIR GRILLE CW HINGED FRAME, PLENUM, FILTER AND O & B	1200x600	2-15-V200	0200mm SPIGOTDUCT/FLEX
WL	-1	ALUMINUM WEATHER LOUVRE CW W M S	200x550	AWR	
WL	-2	ALUMINUM WEATHER LOUVRE CW W M S	250x250	AWR	
WL	-3	ALUMINUM WEATHER LOUVRE CW W M S	1000x1000	AWR	
ELD	-1	EXISTING LOUVRE DOOR TO BE REFORMISHED	3000x1500		PAINTED TO MATCH ARCHITECTS APPROVAL

<b>REF</b>	<b>NO.</b>	<b>DESCRIPTION</b>	<b>SIZE</b>
FF-1	1	FRESH AIR PRIMARY FILTER C/W SLIDING FRAME	200x550
FF-2	2	FRESH AIR PRIMARY FILTER C/W SLIDING FRAME	250x250
FF-3	4	FRESH AIR PRIMARY FILTER C/W SLIDING FRAME	1000x1000
ATT-1	2	ROUND SOUND ATTENUATOR	635x1560L
ATT-2	4	RECTANGULAR SOUND ATTENUATOR	360x450x500L
BD-1	1	BALANCING DAMPER	250x350
BD-3	1	BALANCING DAMPER	350x350

CONTROLLER SCHEDULE (1)		
REF.	NO.	DESCRIPTION
C1	19	LG STANDARD WALL CONTROLLER



<b>CONSULTANT INFORMATION</b>	
	<b>LSG CONSULTING ENGINEERS INC.</b> <i>Consulting Mechanical &amp; Wet Services Engineers</i>
<hr/>	
<i>Head Office (Q72)</i> Unit T&B Doncaster Park, 10 Darby Place, Darby Dorems Office Park, Warrleib, 3630	<i>Branch (P77)</i> 230 Lange Street, Nuera Mucklenorsk, Pictoria, 0181
Tel: +27 (11) 285 2335	Tel: +27 (12) 346 8676

DESIGN INFORMATION			
DRAWN:	DESIGNED:	CHECKED:	DATE:
PL	SG	GG	08/25/22

CLIENT INFORMATION	
CLIENT LOGO:	CLIENT NAME:
	Msunduzi Museum

PROJECT INFORMATION
PROJECT DESCRIPTION: Building / HVAC Upgrade
PROJECT NAME: Msunduzi Complex Main Museum
ADDRESS: 351 Langalibalele St, Pietermaritzburg

DRAWING INFORMATION		
DRAWING TITLE: HVAC Layouts - First & Mezzanine		
DRAWING SCALE: As indicated	SHEET SIZE: A0	
DRAWING NUMBER: LSG-2204-HVAC-101	REVISION: T0	



[illegible]

1 North East Elevation (Boshoff Street)  
1 : 100



2 North West Elevation  
1 : 100



3 South East Elevation (Longmarket Street)  
1 : 100

4 South West Elevation  
1 : 100

CONSULTANT INFORMATION			
		<b>L&amp;S CONSULTING ENGINEERS INC.</b> <i>Consulting Mechanical &amp; Fire Protection Engineers</i>	
<i>(Head Office/RSZ)</i> 104 West Terrace Road, #01-01, 104 West Terrace Office Park, Westcoast, SG Tel: (65) 9387 2310		<i>Branch 177A</i> 239 Langkat Road, #01-01, West Block, Princeville, 1114 Tel: (65) 222 966 683	
DESIGN INFORMATION			
DRAWN <b>PL</b>	DESIGNED <b>SG</b>	CHECKED <b>GG</b>	DATE <b>05/10/22</b>
CLIENT INFORMATION			
CLIENT LOGO 		CLIENT NAME <b>Muzandzi Museum</b>	
PROJECT INFORMATION			
PROJECT DESCRIPTION <b>Building / HVAC Upgrade</b>			
PROJECT NAME <b>Muzandzi Complex Main Museum</b>			
ADDRESS <b>351 Langalibale Street, St. Pietermaritzburg</b>			
SITE DESCRIPTION <b>Museum</b>			
DRAWING INFORMATION			
DRAWING TITLE <b>HVAC Elevations</b>			
DRAWING SCALE <b>1 : 100</b>		SHEET SIZE <b>A0</b>	
DRAWING NUMBER <b>LSG-2204-HVAC-110</b>			REVISION <b>0</b>



## **Refurbishment and Upgrading of uMsunduzi Museums Buildings**

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### **Lift Drawings**







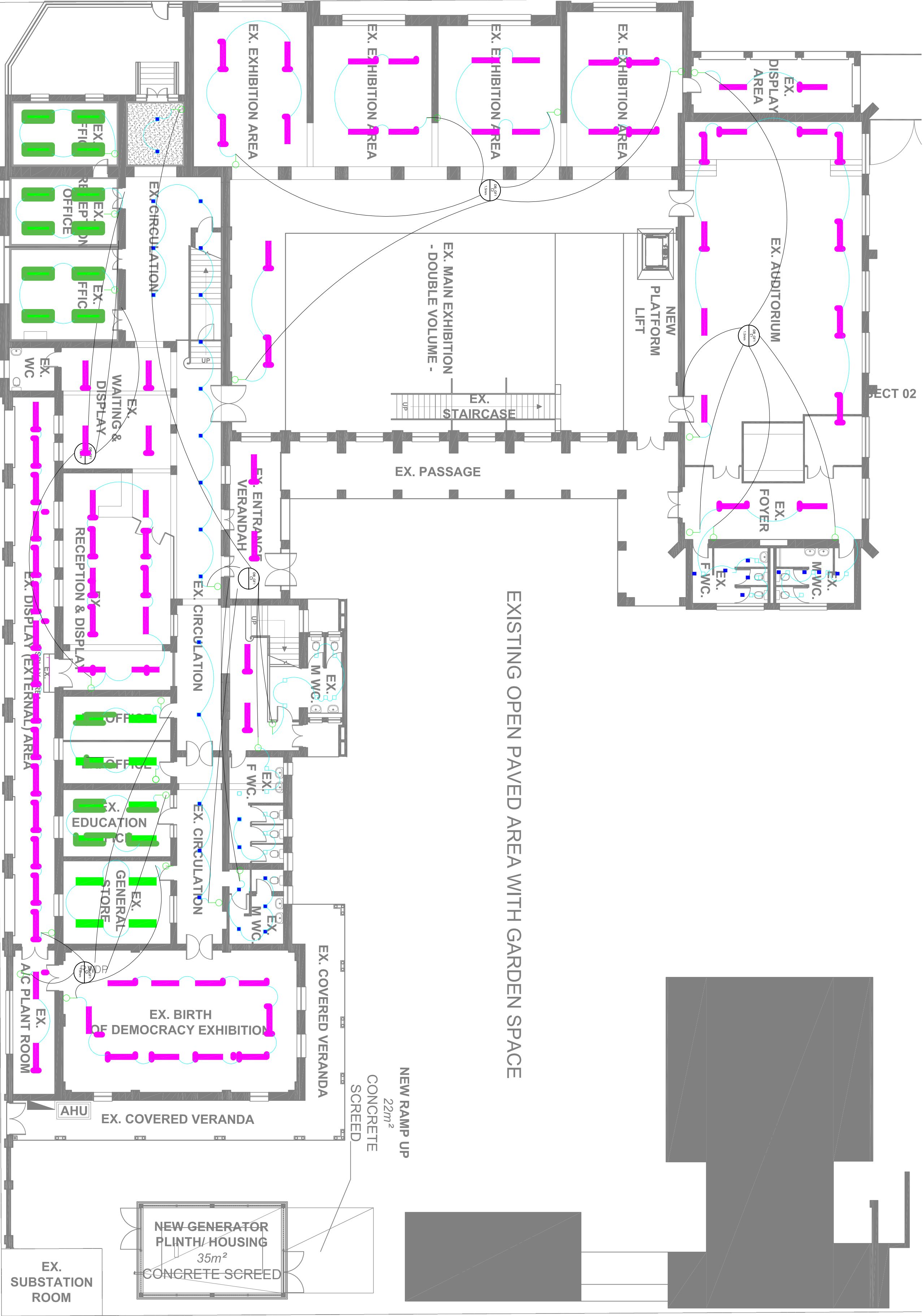
## **Refurbishment and Upgrading of uMsunduzi Museums Buildings**

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### **Electrical Drawings**





ELECTRICAL LEGEND

- 48W SUSPENDED LINEAR LED
- 40W SURFACE LINEAR LED
- 12W ATOM DIFFUSE DOWNLIGHT
- 1 LEVER 1 WAY SWITCH
- 1 LEVER 2 WAY SWITCH

ELECTRICAL NOTES

- EXISTING LIGHTING POINTS TO BE UTILISED.
- EXISTING SWITCHING POINTS TO BE UTILISED.

ISSUED FOR INFORMATION

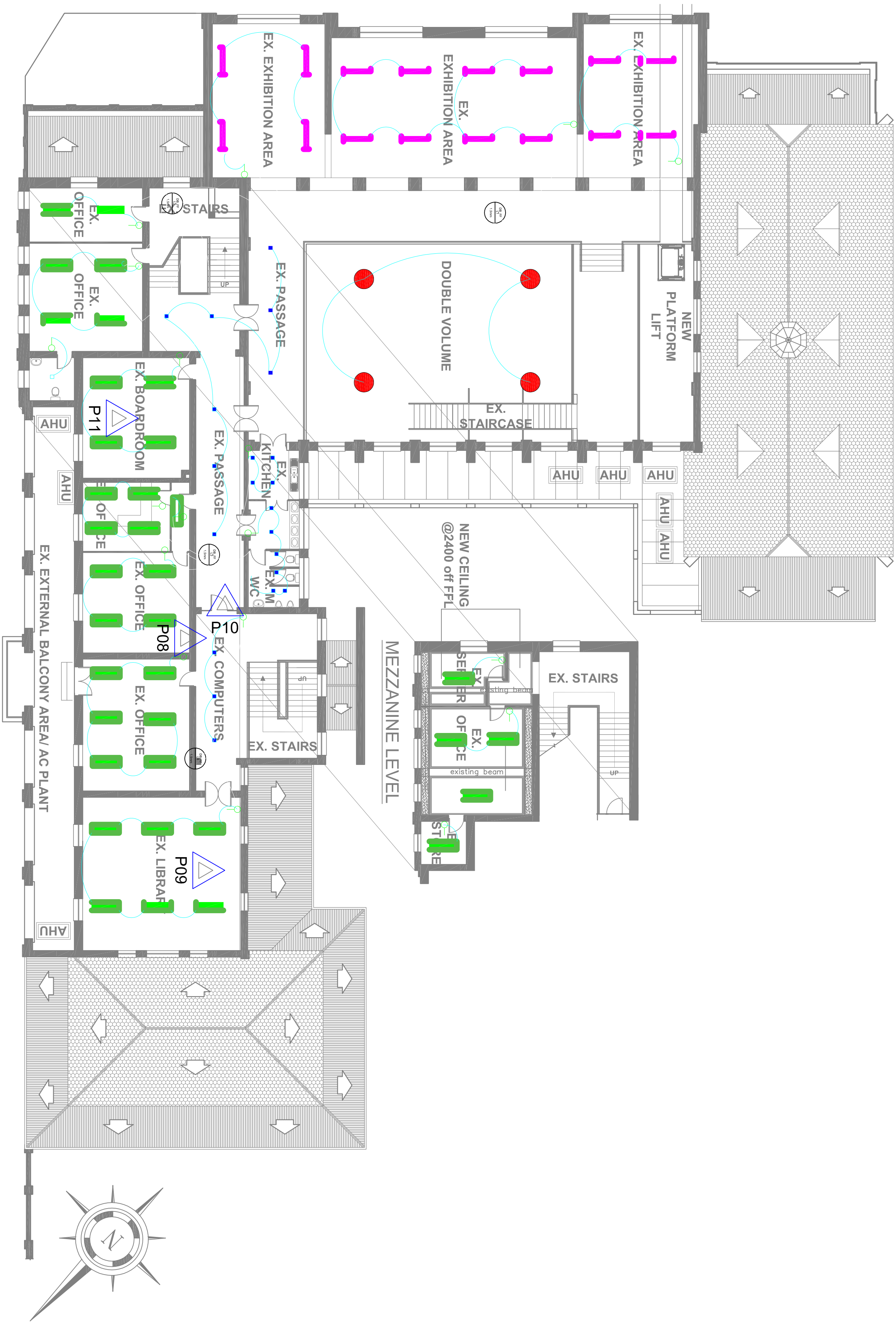
TEL: 031 572 5723  
FAX: 086 650 6477  
EMAIL: [Damiane@hamsaeng.co.za](mailto:Damiane@hamsaeng.co.za)

MSUNDUZI MUSEUM

GROUND FLOOR LIGHTING LAYOUT

Drawn	DM	Date	
Scale	1:150	Revision	31/03/2023
Drawing number	WD001	Revision	0





ELECTRICAL LEGEND

- 48W SUSPENDED LINEAR LED
- 40W SURFACE LINEAR LED
- 12W ATOM DIFFUSE DOWNLIGHT
- 144W SUSPENDED PENDANT
- 1 LEVER 1 WAY SWITCH
- 1 LEVER 2 WAY SWITCH

ELECTRICAL NOTES

- EXISTING LIGHTING POINTS TO BE UTILISED.
- EXISTING SWITCHING POINTS TO BE UTILISED.

ISSUED FOR INFORMATION

TEL: 031 572 5723  
FAX: 086 650 6477  
EMAIL: [Daniane@hamsaeng.co.za](mailto:Daniane@hamsaeng.co.za)

Project  
MSUNDUZI MUSEUM

Drawing description

FIRST FLOOR LIGHTING LAYOUT

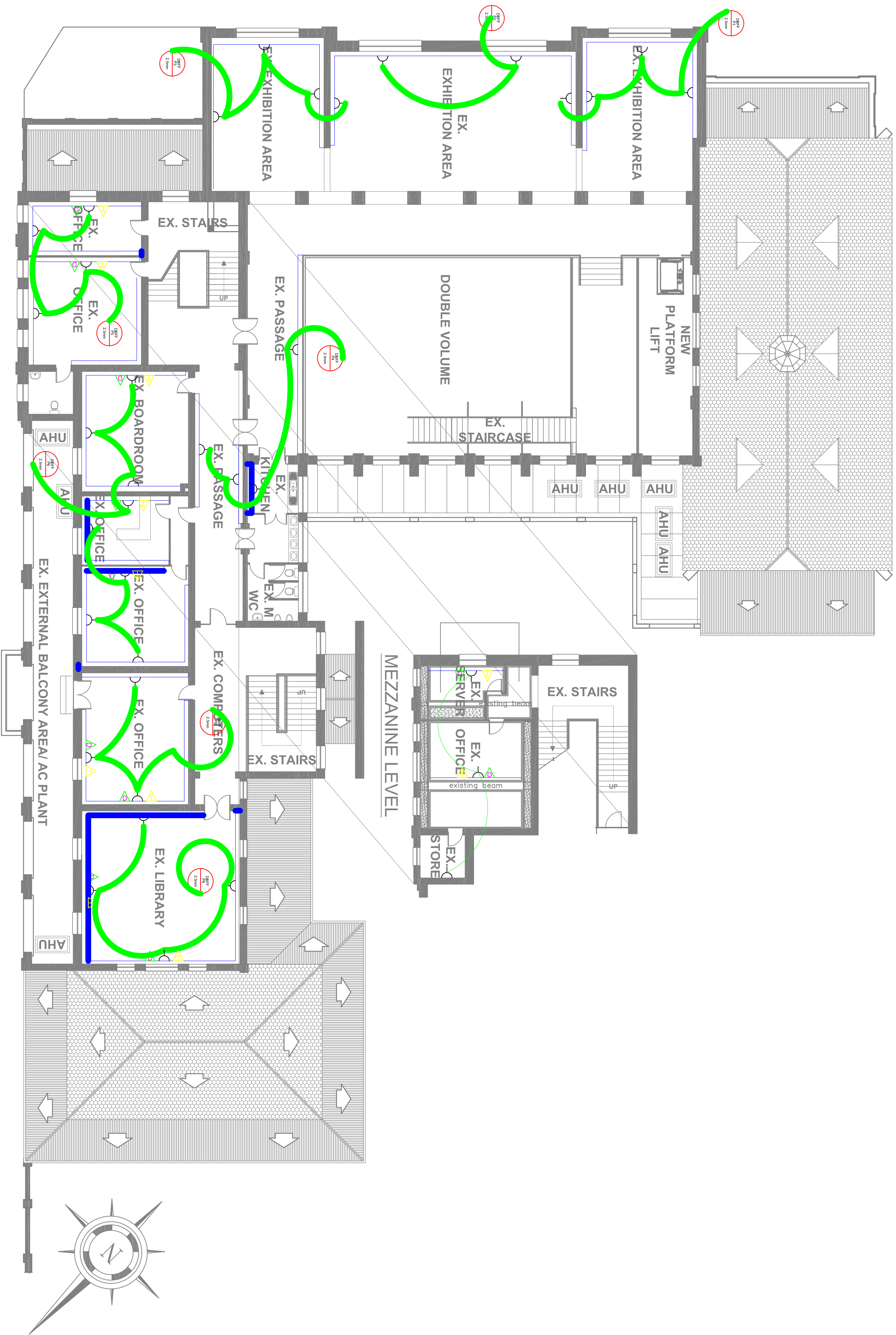
Drawn	DM	Date
Scale	1:150	31/03/2023
Drawing number	WD002	Revision
		0





FAX: 086 650 6477





ELECTRICAL LEGEND

- SWITCH SOCKET OUTLET
- DEDICATED SWITCH SOCKET OUTLET
- TELEPHONE POINT
- NETWORK POINT
- DISTRIBUTION BOARD
- 2 CHANNEL POWER SKIRTING

ELECTRICAL NOTES

1. SOCKET OUTLETS TO BE WIRED AS PER SANS 10142
2. EXISTING SOCKET OUTLET POSITIONS TO BE UTILISED, EXISTING WIREWAYS TO ALSO BE UTILISED.
3. NEW WIRE TO ALL NEW ELECTRICAL OUTLETS.

ISSUED FOR INFORMATION

TEL: 031 572 5723  
FAX: 086 650 6477  
EMAIL: [Daniene@hamsaeng.co.za](mailto:Daniene@hamsaeng.co.za)

Project  
MSUNDUZI MUSEUM

Drawing description

POWER\_LAYOUT  
FIRST\_FLOOR

Drawn	By	Date
Scale	1:150	31/03/2023
Drawing number	Revision	
WD 004	0	



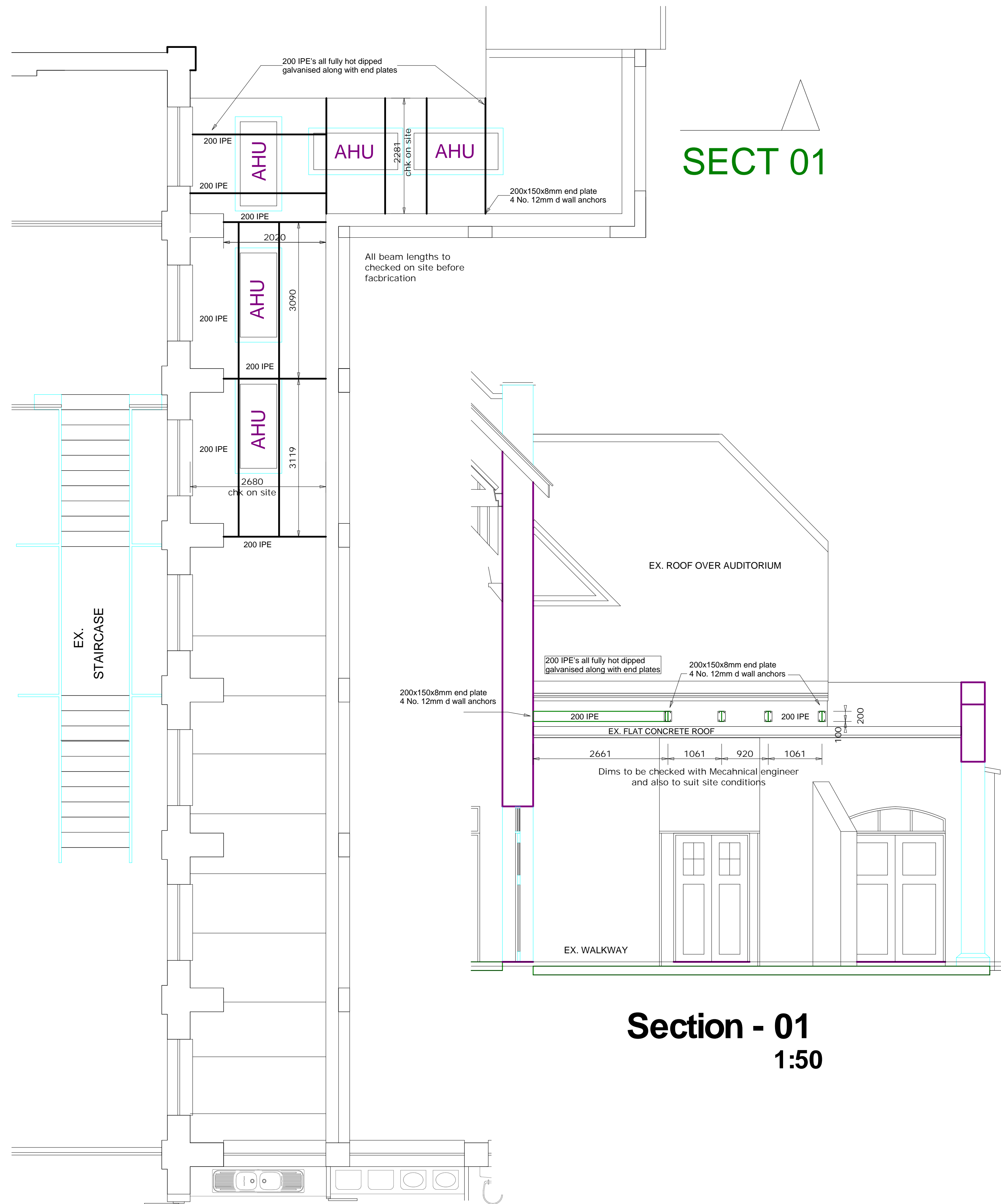
## **Refurbishment and Upgrading of uMsunduzi Museums Buildings**

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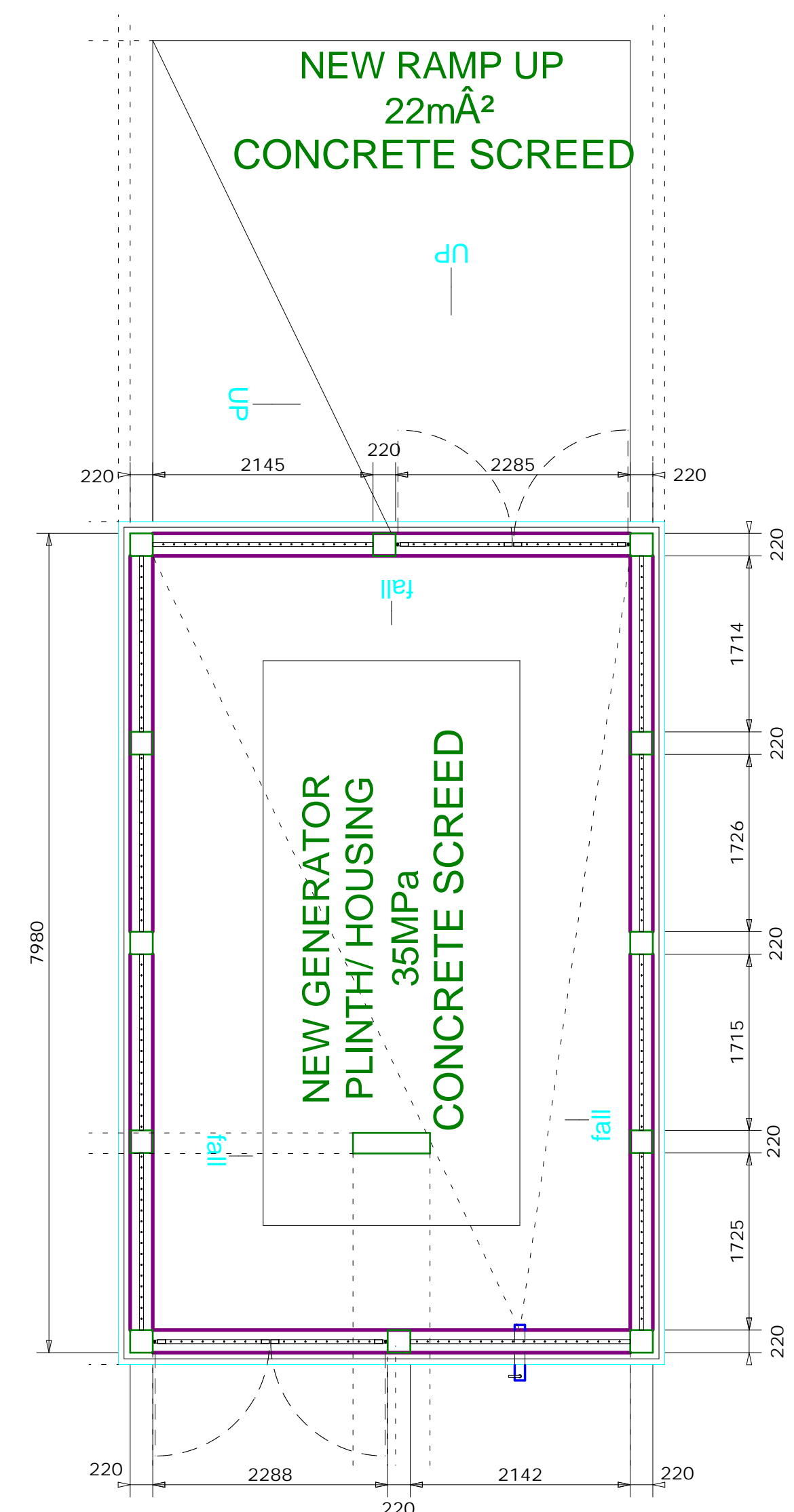
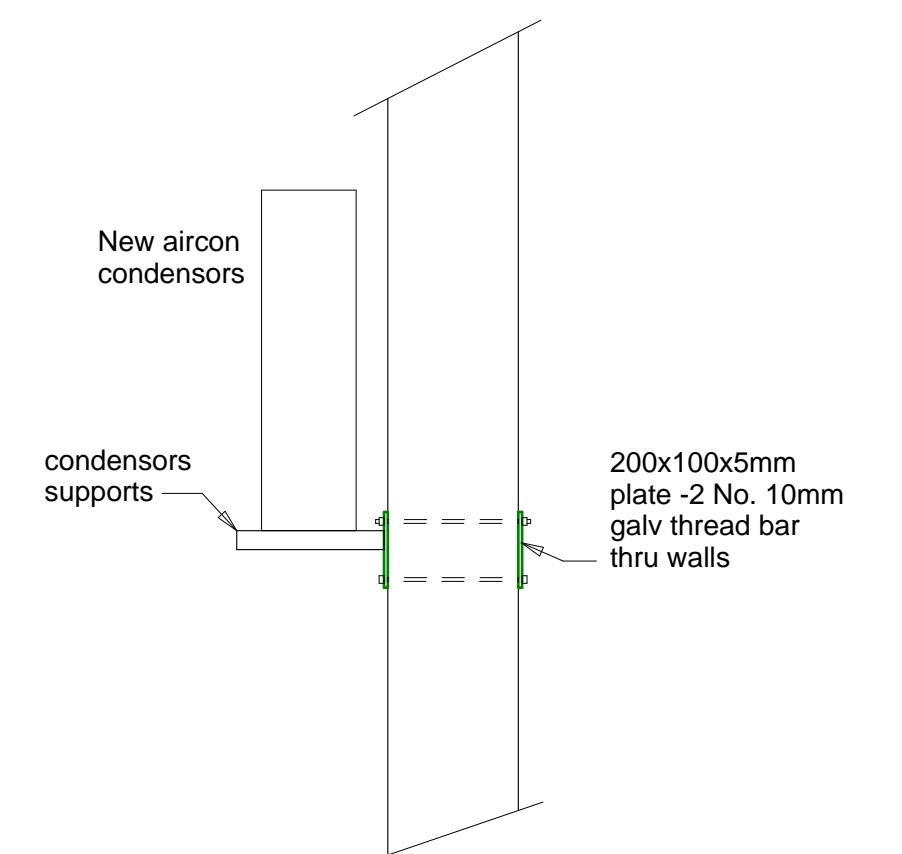
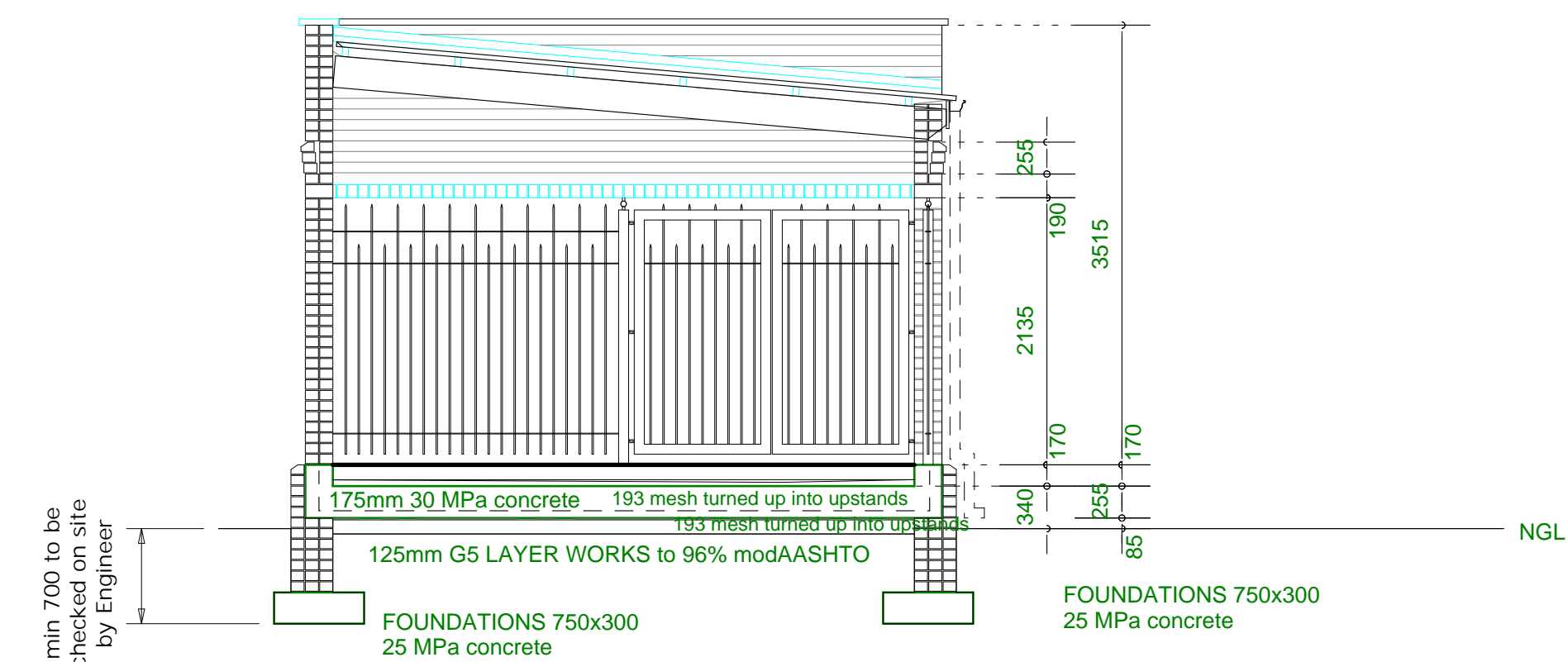
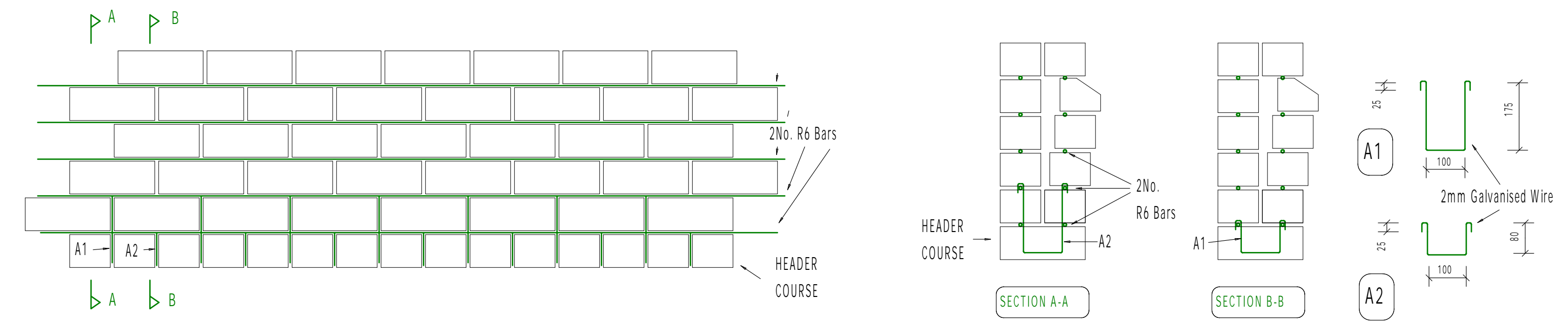
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## **STRUCTURAL DRAWINGS**



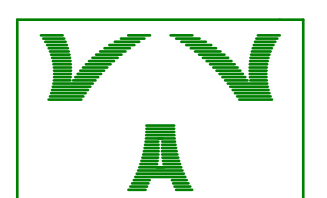


## Plan on lean-to roof



uMsunduzi  
Museum

## Structural info



22 Montrose park Blvd VCCE , Pietermaritzburg, 3201  
P. O. Box 325, Pietermaritzburg, 3200  
Ph 033 3473606 : Fax 033 347 5715  
email : dpv1@mweb.co.za

**Consulting Civil & Structural Engineers**

Pr. Eng. No. 970155

Drawing  
Y2023-007-01

Rev  
A