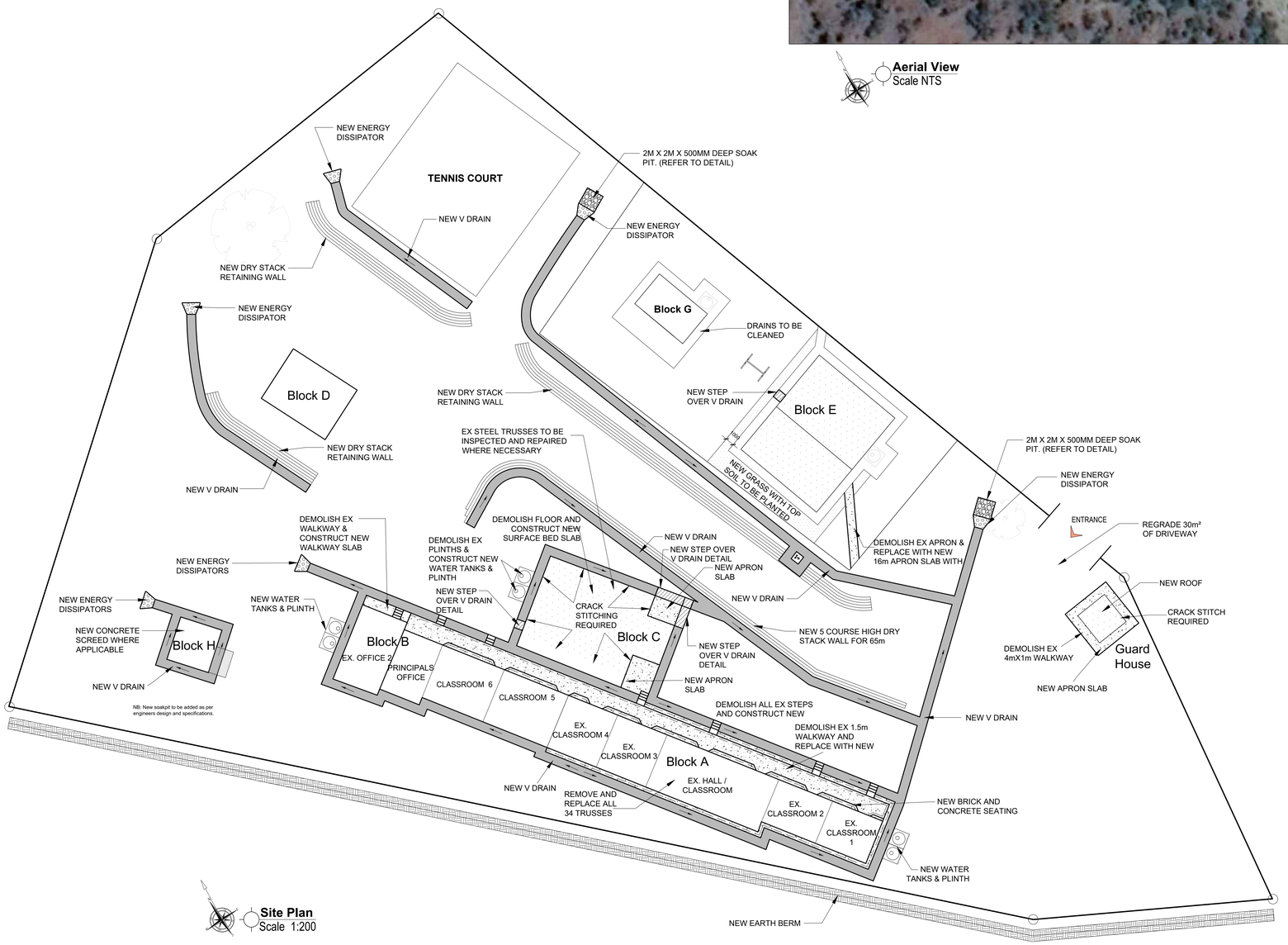
BUILDING NO.	DESCRIPTION
A & B	6 Classroom Block & Offices(62.9m x 6.5m)
C	Church block (15.6m x 9.5m)
[redacted]	
E	E.C.D Classroom (11m x 13.6m)
F	Security Guard Office (3.2m x 2.5m)
G	Ablution block (6.9m x 4.3m)
H	Store Rooms (4.8m x 4.5m)

CO-ORDINATES :
LATITUDE : 28°57'20.24"S
LONGITUDE : 30° 8'3.43"E

Aerial View
Scale NTS



Site Plan
Scale 1:200

GENERAL NOTES:

1. All dimensions to be checked before work commences. Architect to be notified immediately of any discrepancies, errors, omissions, etc.
2. Only figured dimensions to be taken: drawings are not to be scaled. All dimensions in mm's unless otherwise stated.
3. All levels to be checked on site before any work commences.
4. All reinforced concrete work to be strictly in accordance with structural engineers detail and specification.
5. Damproof course to comply with S.A.N.S. 10-400 requirements.
6. All walls to be reinforced with two courses brickforce at cill and wall plate levels.
7. Workmanship is to be of the highest standard throughout.
8. The contractor is to locate and identify any / all existing services and to protect these from damage whilst on site throughout the contract period.
9. The contractor is responsible for the correct setting out of all works, particularly boundaries, building lines servitude's, etc.
10. All work to be executed in strict accordance to S.A.N.S. 10-400 and LOCAL AUTHORITY BY-LAWS.
11. All materials to be used in strict accordance to manufacturers specification
12. Soil poisoning to be used under all new concrete work and new water tank stands.
13. Screed to be applied as directed, to Engineers detail.
14. Polyclosures to be installed as indicated in drawings, and to be confirmed on site.
15. Roof element sizes and specifications as per drawings and to be confirmed on site (trusses, purlins, rafters, roof sheeting, fascia, barge board brandering, ceilings, trap doors and cornices), and to match existing where applicable.
16. Removal of asbestos to be in strict accordance with The Department of Labour and OHS regulations and procedures.
17. Soil Poisoning to be applied where specified, for all new work and existing where applicable, to manufacturer's specification and to Engineers detail.

NOTE:

***- All STRUCTURAL, CIVIL and ELECTRICAL* work to be professional Engineers detail.**
***- All STRUCTURAL, CIVIL & ELECTRICAL ENGINEERS* details to take preference over structural, civil & electrical details indicated on this drawing.**

GENERAL SPECIFICATION /CONSTRUCTION NOTES:

ROOF:

All roofs are to comply with "Part L" of the S.A.N.S 10-400.

0.53mm thick, Aluminium-Zinc IBR (AZ150) profile 'colorplus' roof sheeting or other approved finish to both sides. (Colour on top: to be confirmed and factory standard grey to underside), or similar approved. Sheets to be fixed to every purlin using appropriate self drilling/ tapping screws. At the ridge and eave purlins, fixing to be at every crown. Purlins spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Holes in sheets to be drilled not punched. Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).
OR
0.53mm thick, Aluminium-Zinc Corrugated (AZ150) profile 'colorplus' roof sheeting or other approved finish to both sides, or similar approved. Thickness of sheeting to be confirmed on site where matching existing. (Colour on top: to be confirmed and factory standard grey to underside). Sheets to be fixed to every purlin using appropriate self drilling/ tapping screws. At the ridge and eave purlins, fixing to be at every crown.Purlins spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Holes in sheets to be drilled not punched. Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).
OR
0.53mm thick, Aluminium-Zinc Kliplok 700 (AZ150) profile 'colorplus' interlocking roof sheeting or other approved finish to both sides, or similar approved. Thickness of sheeting to be confirmed on site where matching existing. (Colour on top: to be confirmed and factory standard grey to underside)
Sheets shall be fixed to every purlin using galvanized steel "KL700" clips. "KL700" clips to be fixed to purlins using the appropriate self drilling / tapping screws. At the ridge and eave purlins, fixing to be at every crown.Purlins to be spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).

General roof notes:
Roof to be installed in strict accordance with manufacturers specification. All sheeting to be handled with care, no scratched or damaged sheeting shall be installed. All scratched or damaged sheets to be removed off site immediately. Sheeting to be installed by manufacturer approved installer. Manufacturer to inspect sheeting after installation and supply certification.

Reflective foil insulation underlay (economical, durable, double sided reflective foil laminate with advanced fire retardant properties FR405 or Similar approved) over trusses and under purlins on training lape on both ends.

Roof trusses to be tied down to walls with 30mm x 1.6mm thick and 1.6m long galvanised hoop iron straps built into brickwork as per S.A.N.S. 10-400 requirements prior to erection of trusses. Reflective foil insulation not to extend into eaves. Reflective foil insulation to be installed where specified. Trusses spaced as per engineers specification and resting on 114 x 38mm wall plates.

-Hurricane clips to be used at all purlin/ truss nodes, and to be doubled at eave and ridge purlins (diagonally), as directed on site.
- Polyclosures (polyethylene) or similar approved to be installed at the ridge and eaves. Where new roof sheeting is being installed, polyclosures are to be installed at the ridge and eaves. Where a portion of sheeting is being replaced, or the ridge is being re-installed or replaced polyclosures are to be added at the ridge only.
-Broadflute closure or similar approved is to be installed for all IBR and Kliplok roof sheeting at the ridge, profile, colour and material is to match the roof sheeting.
Flexible wax and resin impregnated polyurethane foam to be installed at the ridge when installing ridge cap (Corrugated roof sheeting) and/or broadflute closure and ridge cap (IBR and Kliplok roof sheeting).
-Roof pitch to match existing and be confirmed on site.
-All exposed timber to be painted with carbolineum, painting to be completed prior to installation.
-Appropriate ridge cap to be installed as per roof sheeting specification. Colour to match roof sheet.
-114 x 38mm false rafters to be installed, at every alternative truss for the full length on both sides of the eave (fascia board support) as well as both gable ends (barge board support).
-Beam fill purlins to be installed at ridges and gable ends, as directed on site.
-Roof sheeting as specified above or similar approved.
-Roof Screws:
Timber application with corrugated sheeting: 12x65 timberfix hex head washer flange EPDM seal.
Timber application with IBR sheeting: 12x65 timberfix hex head washer flange EPDM seal.
new roofs to use these screws with the washer (26mm) supplied by the supplier, existing roofs to use the beveled metal/rubber washer.
-Gutter bolts to be added where there are excessive holes, that are not fixing holes, to be directed on site.
-A020 re-enforced aluminum foil tape to be added on the underside and on top of sisilation where sheets overlaps on both sides

AIR-BRICKS:

229 x 152mm Terra-cotta vermin proofed air-bricks, or similar approved built into brick beam fill. Install as specified on drawings, or similar approved.

BARGE BOARD:

Fibre cement 225mm x 10mm fascia boards, joined together with 225mm x 10mm Plastic H-Profile Fascia Joiners. Fix 76 x 50mm timber trimmer batten to underside of purlin ends for barge board fixing. Drill for and fix fascia board to trimmer batten with hot-dipped galvanised screws and washers. 200 x 100mm aluminum flashing fixed on , Item as above or similar approved. Where specified and to be confirmed on site, Item as above or similar approved.

FASCIA BOARD:

Medium density plain fibre cement 225 X 10mm un-grooved fascia board, or similar approved with H-profile plastic fascia joiners. Drill for and fix with hot-dip galvanised drive screws and washers. Item as above or similar approved. Where specified and to be confirmed on site, item as above or similar approved.

PREPARE AND PAINT BARGE & FASCIA BOARDS WITH UNIVERSAL ENAMEL AS DESCRIBED BELOW:

SURFACE PREPARATION:
Ensure that substrates as well as primed and undercoated surfaces are clean, sound and dry.
NEW WORK:
Prime with PLASTER PRIMER or MULTI-SURFACE PRIMER. Apply liberally in order to obtain an unbroken barrier coat to seal surface properly.
FILLING: Fill defects with a good wall crack filler.
UNDERCOAT: To all surfaces prepared and primed as above, apply a coat of UNIVERSAL UNDERCOAT.
APPLICATION:
Apply one or more coats to achieve complete obliteration. Colour to Architects choice.

GUTTERS:

150 x 150mm seamless aluminium gutters with end closers and drop box. Gutters to be adequately supported and fixed to building Or otherwise stated on drawings, to match existing.

DOWN-PIPES:

100 x 75mm seamless aluminium down-pipe. Down-pipe to be adequately fixed to wall. Shoes to be provided to bottom of down-pipes.
Or otherwise stated on drawings, to match existing.

CEILINGS:

9mm thick fibre cement plain boards, fixed to 38 x 50 on edge timber brandering at max 600mm centres with timber cover strips at joins. Cross brandering to be used at 150mm centres at joints, ends of sheets, cornices and light fittings. All nail heads to be stopped & sanded level and fixed to trusses at max 1420mm centres. Cornices to be 75mm fibre cement, glued to ceiling board and wall with a good adhesive. Ceiling and cornice to be prepared adequately and painted 2 coats Super Acrylic Polvin matt WHITE paint. Items as above or similar approved.

CEILING TRAP DOORS:

Provide 1 x 900 x 900mm fibre cement trap door. Item indicated on drawings and position to be confirmed on site.

WALLS:

All walls are to comply with "Part K" of the S.A.N.S 10-400.
New walls or infill walls to match existing, brick or block walls to be constructed as per construction standards, be to indicated by responsible individual as required.
All founding and / or retaining walls to Structural Engineers details.
P.C. lintols to be installed over all new openings where walls to be plastered and painted, as specified on drawings and to be confirmed on site.
All fire walls to underside of roof sheeting. Walls to be constructed as per existing and where specified.
Wall stitching to be strictly in accordance to Engineers detail.

MASONRY WALL: INTERNAL AND EXTERNAL (PLASTER & PAINT)

NEW PLASTERED WALLS:
Two coat steel trowelled rendered plaster with smooth finish. Prepare and paint walls as specified below. Prepare and paint with a water-based satin finish paint as described below:
SURFACE PREPARATION:
Ensure that substrates as well as primed and undercoated surfaces are clean, sound and dry.
NEW WORK:
Prime with PLASTER PRIMER or MULTI-SURFACE PRIMER to form an unbroken barrier coat to seal alkaline surfaces properly.
FILLING:
Fill defects with a good wall crack filler as appropriate.
APPLICATION:
Water-based paint is ready for use and is best applied by brush. Apply generous full coats so that brush marks flow out to a smooth-even coat. Apply one or more coats to achieve complete obliteration. - Paint colour: To match existing and to be confirmed on site.

FLASHING / WATERPROOFING:

Aluminum flashing and paint on waterproofing membrane or similar approved to be installed as specified on drawings, colour to match sheeting finish.

GMS POST:

100Ø gms steel post to be installed as indicated, fixing to Engineer's detail. Posts to be fixed to concrete and not screed, using basing appropriate base plate and to be fixed to truss or beam above using appropriate channel.

WINDOWS:

New windows to be hot dipped galvanised steel windows or to match existing as indicated on drawings, to be confirmed on site. All new windows to be installed with 6mm toughened safety glass. Putty to be painted to match window frame, colour to be confirmed on site.

GLAZING PANELS:

New glazing panels to be 6mm Toughened safety glass. New putty to be installed as per manufactures specifications, hardener to be applied once putty is smooth and applied correctly. Putty to be painted to match existing window frame, colour to be confirmed on site.
** All glazing to be measured and confirmed on site prior to installation.

DOORS:

New doors as indicated on schedule, to be confirmed on site. All external doors to be solid meranti hardwood, internal doors to be hollow core.

SKIRTING:

18mm x 76mm Meranti skirting, or similar approved with 19mm timber quadrant sanded smooth and pre-varnished in mahogany, then fixed to wall. Item as above or similar approved as required on drawings.

FLOOR COVERING:

Refer to drawings for location of new floor covering.
Supply and fix 2.5mm thick x 300mm x 300mm semi-flexible vinyl tiles, manufactured in accordance with SANS 581, laid in acrylic adhesive, spread with a 'Vicker A24F' trowel at the rate of between 5.5m² and 6.5m² per litre, depending on the sub-floor porosity, laid on screed to fall, made with waterproof admixture.

The newly laid floor after 72 hours must be stripped using a good Stripper, rinsed using a good Rinse and then sealed with 3 coats of a good Sealer.
-Tile colour: to be confirmed. Item as above or as per existing.

OR

Screed floors to Engineers detail, includes removal of existing screed and application of new. Above is as specified on drawings.

IN-SITU CHANNELS:

Concrete aprons and v-drains laid to fall and in panels, not exceeding 1.8m in length with control joints as specified by engineer on fill compacted to MOD AASHTO 95% or as specified & approved by engineer. Control joints sealed with 12mm polysulphide sealant with backing strip and impregnated softboard. All to Engineers detail.

Ex. in-situ channels (v-drains and aprons) where action needs to be taken due to vegetation growth, then the following shall apply. Excess soil / vegetation to be removed from all gaps, area to be treated with soil poisoning as per manufacture's specification. Gaps to be sealed with polysulphide sealant (with backing strip and impregnated softboard where applicable), to be confirmed on site, to Engineers detail.

BACKFILL:

Filling to be approved clean earth, well watered and rammed in layers not exceeding 150mm in depth and thoroughly consolidated, all to engineers detail.

WATER TANK AND PLINTH:

Water tank plinth constructed to Engineers detail, with 2500 litre polyethylene water tank with 20mm ball valve with 90deg elbow tied down with twisted galvanised wire fixed to eye hooks cast into concrete slab - All to Engineers detail. Tap to be installed as per manufacturer's instruction. Rainwater downpipes to be inserted as indicated on drawings and supplied with overflow pipe and lid with vermin proof vent. Threaded PVC ball valve tap to be installed as per BOQ. Screed to fall around tank once installed. The above fixing method also applies to existing water tanks on existing or new plinths.

BRICK WORK:

Corobrik® (Lawley-Gauteng) 20-30 MPa Montana Traventine FSB clay facebrick, bedded and jointed in Class II mortar and pointed with flush vertical and flush horizontal joints and perpends, suitable for exposure zones 1-2:

Brickwork of NFX bricks (14 MPa nominal compressive strength) in class II mortar:

ELECTRICAL:

Electrical as per drawings, to match existing where appropriate and to be confirmed on site.

SECURITY GATE AND BURGLAR FLAT BARS:

Galvanised gate to be installed as directed on site, drawings to be provided.
Burglar bars - 30mmx3mm gms flat bars to be welded to the existing window frame, all welding joints to be treated with a protective anti rust protection spray or cold galvanised paint coating as per manufactures specifications.

CHALKBOARD:

1140mm (high) x 2400mm (long) wall mounted board, complete with aluminium chalk rail and fixing brackets plugged and screwed to wall as per manufacturer's instructions.

CHALK BOARDS REPLACED WITH WHITE BOARDS:

Fixed projection white board (NON REFLECTIVE), Aluminium framed, magnetic surface (Centre board) complete with 2 x Swing leaf Aluminium framed magnetic chalk board(without any lines or graphics etc) with heavy duty hinges and one complete aluminium pen tray for the full length of the centre board. Centre board sizes to be = 2410x 1220 mm with Swing leaf chalk boards sizes to be 1220x 1210 mm. Aluminium pen tray length 2250mm fitted to Centre board.
1 Complete full set of magnetic starter pack consisting of the following for each board supplied:
4 x white board markers Red, Green , Black , Blue,
1x cleaning Cloth
1x Magnetic Eraser
1x Cleaning Fluid 250 ml
4 x moulded magnets d day

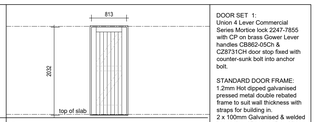
PINING BOARD:

1200mm (high) x 2400mm (long) wall mounted board, complete with aluminium edges and fixing brackets plugged and screwed to wall as per manufacturer's instructions.

DADO RAILS:

New 19mm x 120mm timber shutter board Dado rail fixed into walls @ every 400mm c/c , with a 5 x 40mm fixing screw in nylon plug suitable for walls and timber purpose. All fixing holes to be covered with a wood filler and sanded down smoothly before painting with an approved colour on site. All Dado rail heights to be at max. height of 800mm high, subjected, to match all table and chair heights on site.

All information is to be confirmed on site and directed by the responsible individual, items as above or similar approved, and to match existing where applicable. Any discrepancies to be brought to the consultants attention prior to the commencement of any work.



TYPE:	D1
FRAME:	1.2mm thick pressed double rebated mild steel door frame
FRAME FINISH:	Hot dipped galvanised. Not painted
DOOR:	2032 x 813 x 40mm Meranti hardwood timber framed, ledged, braced & battened door with 110 x 40mm styles & top rail. 150 x 20mm middle ledge, 225 x 20mm bottom ledge, 110 x 20mm braces & min. x 20 T.G. & V painted battens
DOOR FINISH:	Door: Sand smooth and dust off. Seal knots with "KNOT SEAL (PK 2)", then prime with "PLASCON WOOD PRIMER (UC 2)" there after apply one or more coats of "Plascon ENAMEL DOORS & TRIMS" to achieve complete obliteration. Colour: Calypso, code: G 127.
FURNITURE:	Door set 1
NOTES:	• Contractor to check n/a required against drawings and schedules. • Any discrepancies to be brought to the Architects attention immediately.
SCALE: 1:50	DETAIL DESCRIPTION: DOOR SCHEDULE

DOOR SET 1:
Union 4 Lever Commercial Series Mortice lock 2247-7855 with CP on brass Gower Lever handles CB862-05Ch & CZ8731CH door stop fixed with counter-sunk bolt into anchor bolt.

STANDARD DOOR FRAME:
1.2mm Hot dipped galvanised pressed metal double rebated frame to suit wall thickness with straps for building in.
2 x 100mm Galvanised & welded loose - butt hinges, adjustable chrome striking plate & 2 rubber buffers. Frame to be well rammed with mortar mix to protect from denting when bumped

KZN Department of Public Works Stamp and Signature

Signature: Date:
Consultant:

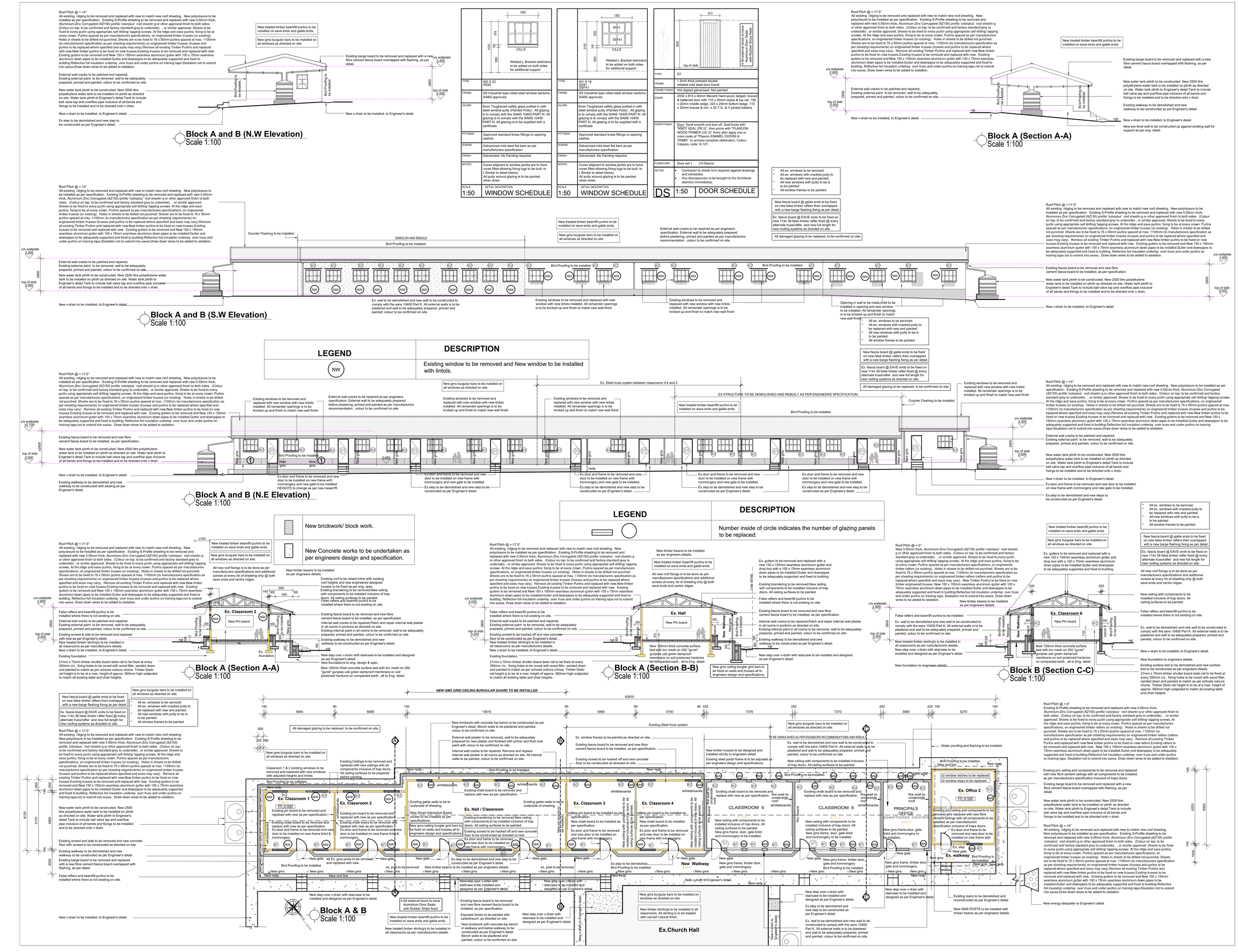
REALISING CONTINENTAL POTENTIAL

Signature: Date:

public works
Department:
Public Works
PROVINCE OF KWAZULU-NATAL

Project Title:
PHASE 14: REPAIRS AND RENOVATIONS TO STORM DAMAGED SCHOOLS - KZN MIDLANDS REGION - CLUSTER 103 - FLORENCE BOOTH PRIMARY
Drawing Description:
Site plan for Florence Booth Primary

Drawn: T.S / M.K	Date: 2022/10/12
Scales: 1:100	
Consultant Drawing No: 1362-18 WD01	Revision:
DOPW Drawing No: 063880	Revision: -
DOPW WIMS No: WIMS : 063880	
Stamped by Design Review Committee	



Sheet 2 of 5 (A0)

GENERAL NOTES:

1. All dimensions to be checked before work commences. Architect to be notified immediately of any discrepancies, errors, omissions, etc.
2. Only figured dimensions to be taken; drawings are not to be scaled. All dimensions in mm's unless otherwise stated.
3. All levels to be checked on site before any work commences.
4. All reinforced concrete work to be strictly in accordance with structural engineers detail and specification.
5. Damproof course to comply with S.A.N.S. 10-400 requirements.
6. All walls to be reinforced with two courses brickforce at cill and wall plate levels.
7. Workmanship is to be of the highest standard through-out.
8. The contractor is to locate and identify any / all existing services and to protect these from damage whilst on site throughout the contract period.
9. The contractor is responsible for the correct setting out of all works, particularly boundaries, building lines servitude's, etc.
10. All work to be executed in strict accordance to S.A.N.S. 10-400 and LOCAL AUTHORITY BY-LAWS.
11. All materials to be used in strict accordance to manufacturers specification
12. Soil poisoning to be used under all new concrete work and new water tank stands.
13. Screed to be applied as directed, to Engineers detail.
14. Polysiloxanes to be installed as indicated in drawings, and to be confirmed on site.
15. Roof element sizes and specifications as per drawings and to be confirmed on site (trusses, purlins, rafters, roof sheeting, fascia, barge board brandering, ceilings, trap doors and cornices), and to match existing where applicable.
16. Removal of asbestos to be in strict accordance with The Department of Labour and OHS regulations and procedures.
17. Soil Poisoning to be applied where specified, for all new work and existing where applicable, to manufacturer's specification and to Engineers detail.

NOTE:

- ***All STRUCTURAL, CIVIL and ELECTRICAL*** **work to professional Engineers detail.**
- ***All STRUCTURAL, CIVIL & ELECTRICAL ENGINEERS*** **details to take preference over structural, civil & electrical details indicated on this drawing.**

For General specification/construction notes please view Site Plan.

KZN Department of Public Works Stamp and Signature

Signature: Date:

Consultant:

Signature: Date:

REALISING CONTINENTAL POTENTIAL

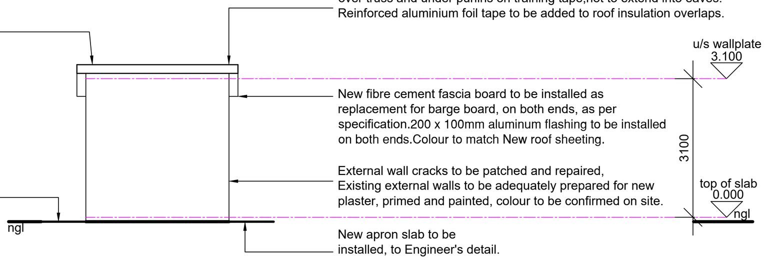
public works
Department:
Public Works
PROVINCE OF KWAZULU-NATAL

Project Title:
PHASE 14: REPAIRS AND RENOVATIONS TO STORM DAMAGED SCHOOLS - KZN MIDLANDS REGION - CLUSTER 103 - FLORENCE BOOTH PRIMARY

Drawing Description:
Construction drawing for Florence Booth Primary School - Block A & B: Plan;Section, Elevations, Window & Door Schedule.

Drawn: T.S / M.K	Date: 2022/10/12
Scales: 1:100	
Consultant Drawing No: 1362-18 WD02	Revision:
DOPW Drawing No: 063880	Revision: -
DOPW WIMS No: WIMS : 063880	

Stamped by Design Review Committee



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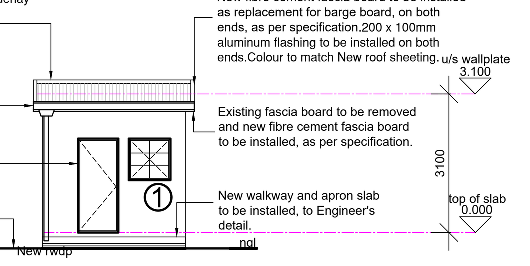

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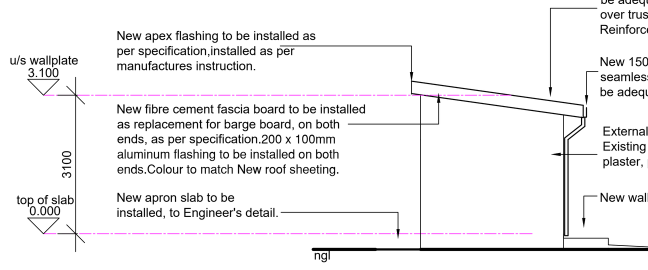

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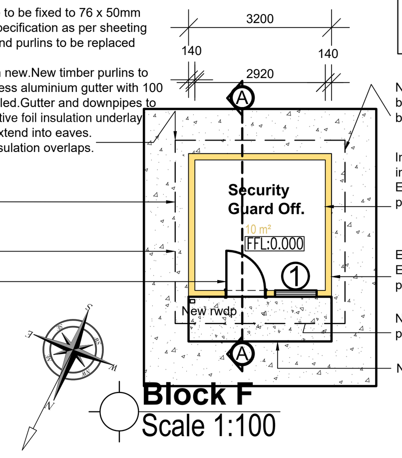

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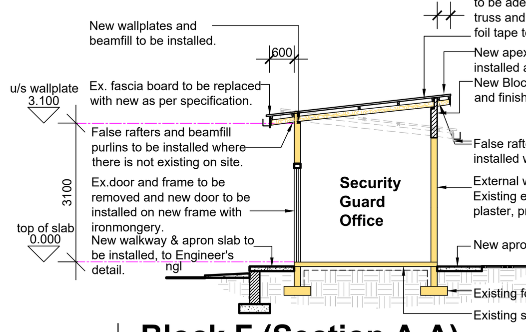

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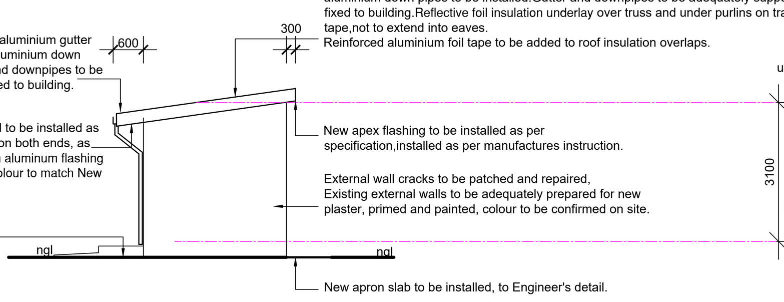

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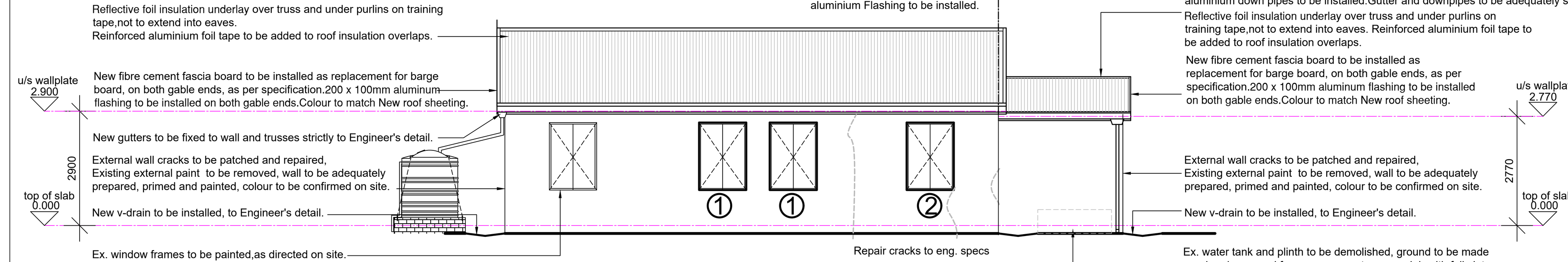

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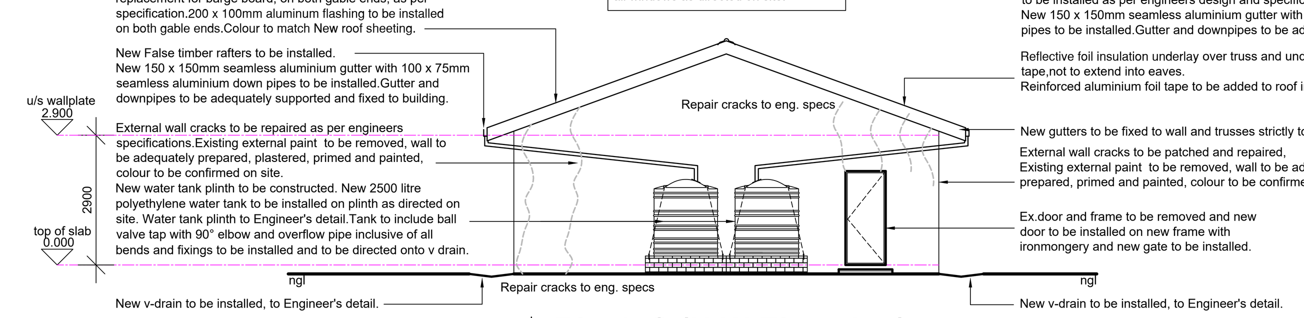

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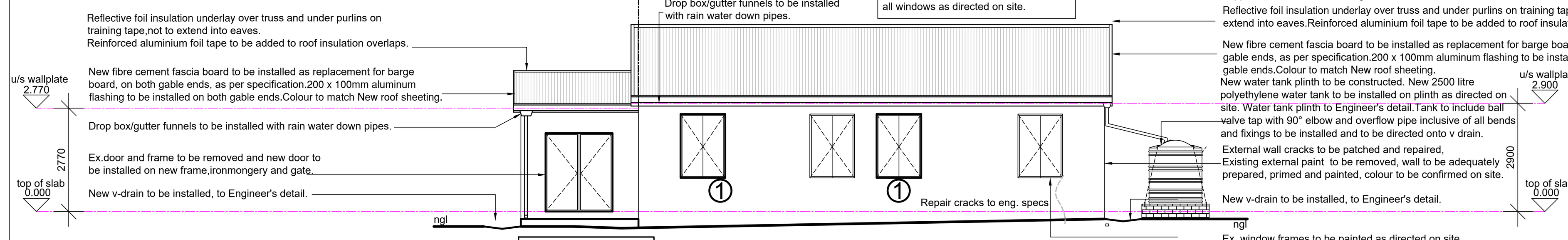

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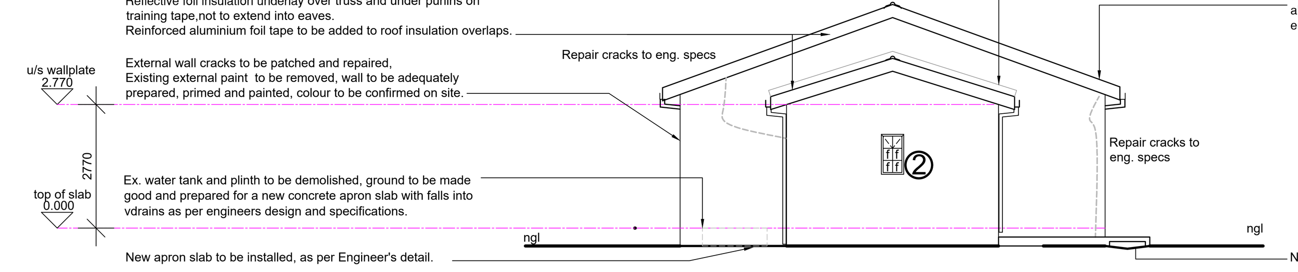

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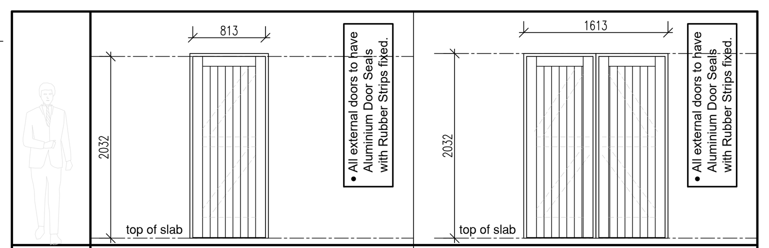
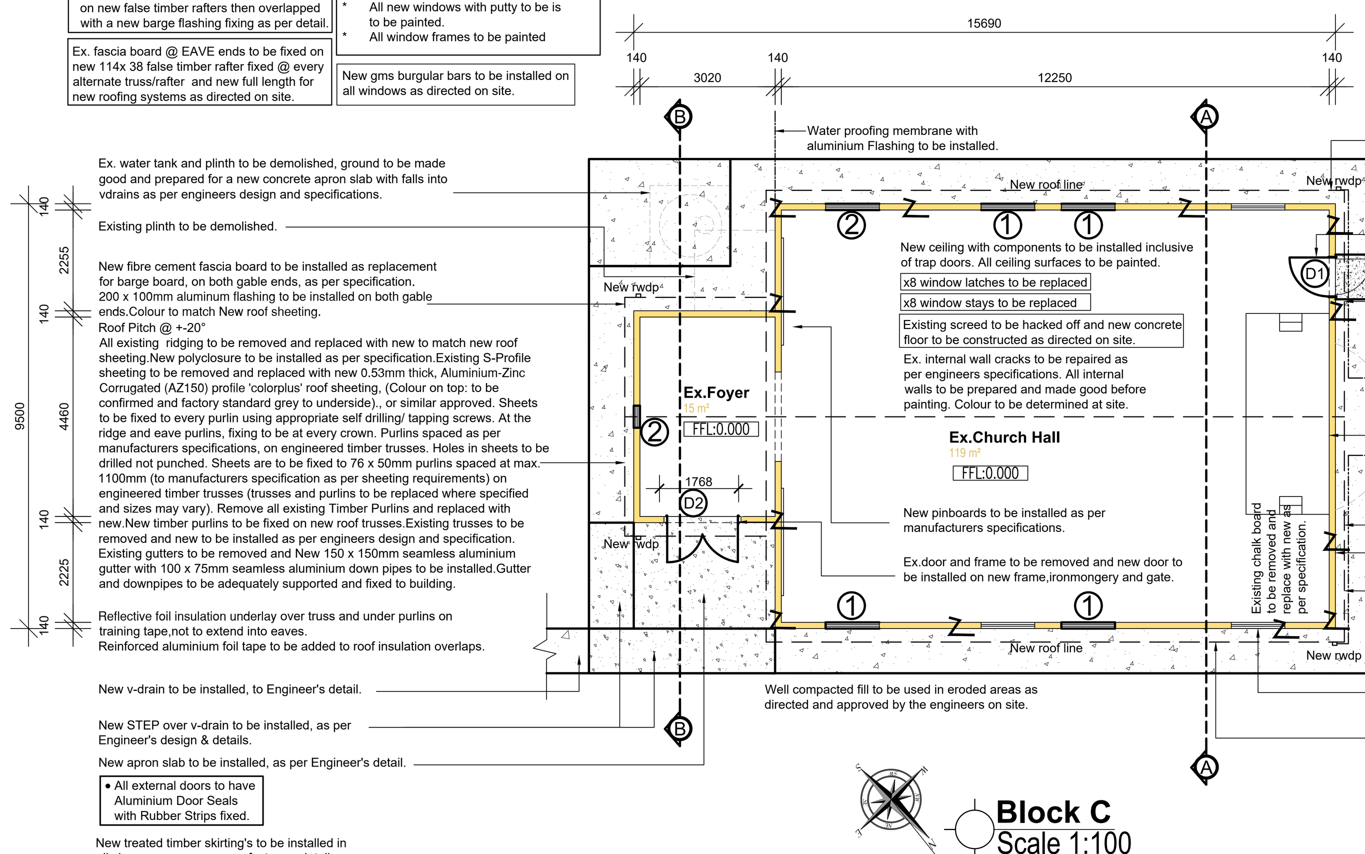
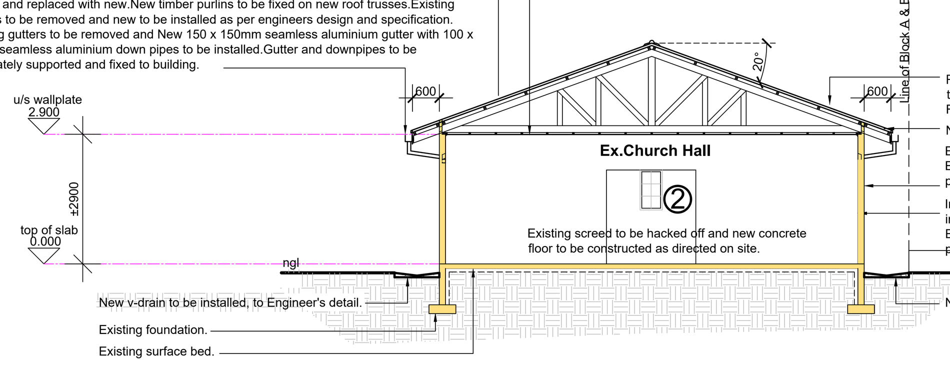


	D1	D2
TYPE:	D1	D2
FRAME:	1.2mm thick pressed double rebated mild steel door frame	1.2mm thick pressed double rebated mild steel door frame
FRAME FINISH:	Hot dipped galvanised. Not painted	Hot dipped galvanised. Not painted
DOOR:	2032 x 813 x 40mm Meranti Hard wood, ledged, braced & battened door with 110 x 40mm styles & top rail. 150 x 20mm middle ledge, 225 x 20mm bottom ledge, 110 x 20mm braces & min. x 20 T.G. & V jointed battens	2032 x 1613 x 42mm Meranti Hard wood, ledged, braced & battened door with 110 x 40mm styles & top rail. 150 x 20mm middle ledge, 225 x 20mm bottom ledge, 110 x 20mm braces & min. x 20 T.G. & V jointed battens
DOOR FINISH:	Door: Sand smooth and dust off. Seal knots with "KNOT SEAL (PK 2)", then prime with "PLASCON WOOD PRIMER (UC 2)" there after apply one or more coats of "Plascon ENAMEL DOORS & TRIMS" to achieve complete obliteration. Colour: Calypso, code: G 127.	Door: Sand smooth and dust off. Seal knots with "KNOT SEAL (PK 2)", then prime with "PLASCON WOOD PRIMER (UC 2)" there after apply one or more coats of "Plascon ENAMEL DOORS & TRIMS" to achieve complete obliteration. Colour: Calypso, code: G 127.
FURNITURE:	Door set 1 (2 Door)	Door set 1 (1 Doors)
NOTES:	• Contractor to check no's required against drawings and schedules. • Any discrepancies to be brought to the Architects attention immediately.	• Contractor to check no's required against drawings and schedules. • Any discrepancies to be brought to the Architects attention immediately.
DS	1:50 DOOR SCHEDULE	1:50 DOOR SCHEDULE



Block C
Scale 1:100



Block C (Section A-A)
Scale 1:100

GENERAL NOTES:

1. All dimensions to be checked before work commences. Architect to be notified immediately of any discrepancies, errors, omissions, etc.
2. Only figured dimensions to be taken: drawings are not to be scaled. All dimensions in mm's unless otherwise stated.
3. All levels to be checked on site before any work commences.
4. All reinforced concrete work to be strictly in accordance with structural engineers detail and specification.
5. Damproof course to comply with S.A.N.S. 10-400 requirements.
6. All walls to be reinforced with two courses brickforce at cill and wall plate levels.
7. Workmanship is to be of the highest standard through-out.
8. The contractor is to locate and identify any / all existing services and to protect these from damage whilst on site throughout the contract period.
9. The contractor is responsible for the correct setting out of all works, particularly boundaries, building lines servitude's, etc.
10. All work to be executed in strict accordance to S.A.N.S. 10-400 and LOCAL AUTHORITY BY-LAWS.
11. All materials to be used in strict accordance to manufacturers specification
12. Soil poisoning to be used under all new concrete work and new water tank stands.
13. Screed to be applied as directed, to Engineers detail.
14. Polyclosurers to be installed as indicated in drawings, and to be confirmed on site.
15. Roof element sizes and specifications as per drawings and to be confirmed on site (trusses, purlins, rafters, roof sheeting, fascia, barge board brandering, ceilings, trap doors and cornices), and to match existing where applicable.
16. Removal of asbestos to be in strict accordance with The Department of Labour and OHS regulations and procedures.
17. Soil Poisoning to be applied where specified, for all new work and existing where applicable, to manufacturer's specification and to Engineers detail.

NOTE:
- *All STRUCTURAL, CIVIL and ELECTRICAL* work to professional Engineers detail.
- *All STRUCTURAL, CIVIL & ELECTRICAL ENGINEERS* details to take preference over structural, civil & electrical details indicated on this drawing.

GENERAL SPECIFICATION /CONSTRUCTION NOTES:

ROOF:
All roofs are to comply with "Part L" of the S.A.N.S 10-400.

0.53mm thick, Aluminium-Zinc IBR (AZ150) profile 'colorplus' roof sheeting or other approved finish to both sides. (Colour on top: to be confirmed and factory standard grey to underside), or similar approved. Sheets to be fixed to every purlin using appropriate self drilling/ tapping screws. At the ridge and eave purlins, fixing to be at every crown. Purlins spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Holes in sheets to be drilled not punched. Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).
OR
0.53mm thick, Aluminium-Zinc Corrugated (AZ150) profile 'colorplus' roof sheeting or other approved finish to both sides, or similar approved. Thickness of sheeting to be confirmed on site where matching existing. (Colour on top: to be confirmed and factory standard grey to underside). Sheets to be fixed to every purlin using appropriate self drilling/ tapping screws. At the ridge and eave purlins, fixing to be at every crown.Purlins spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Holes in sheets to be drilled not punched. Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).
OR
0.53mm thick, Aluminium-Zinc Kliplok 700 (AZ150) profile 'colorplus' interlocking roof sheeting or other approved finish to both sides, or similar approved. Thickness of sheeting to be confirmed on site where matching existing. (Colour on top: to be confirmed and factory standard grey to underside) Sheets shall be fixed to every purlin using galvanized steel "KL700" clips. "KL700" clips to be fixed to purlins using the appropriate self drilling / tapping screws. At the ridge and eave purlins, fixing to be at every crown.Purlins to be spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).

General roof notes:
Roof to be installed in strict accordance with manufacturers specification. All sheeting to be handled with care, no scratched or damaged sheeting shall be installed. All scratched or damaged sheets to be removed off site immediately. Sheeting to be installed by manufacturer approved installer. Manufacturer to inspect sheeting after installation and supply certification.

Reflective foil insulation underlay (economical, durable, double sided reflective foil laminate with advanced fire retardant properties FR405 or Similar approved) over trusses and under purlins on training tape on both ends.

Roof trusses to be tied down to walls with 30mm x 1.6mm thick and 1.6m long galvanised hoop iron straps built into brickwork as per S.A.N.S. 10-400 requirements prior to erection of trusses. Reflective foil insulation not to extend into eaves. Reflective foil insulation to be installed where specified. Trusses spaced as per engineers specification and resting on 114 x 38mm wall plates.

-Hurricane clips to be used at all purlin/ truss nodes, and to be doubled at eave and ridge purlins (diagonally), as directed on site.
- Polyclosures (polyethylene) or similar approved to be installed at the ridge and eaves. Where new roof sheeting is being installed, polyclosures are to be installed at the ridge and eaves. Where a portion of sheeting is being replaced, or the ridge is being re-installed or replaced polyclosures are to be added at the ridge only.
-Broadflute closure or similar approved is to be installed for all IBR and Kliplok roof sheeting at the ridge, profile, colour and material is to match the roof sheeting.
Flexible wax and resin impregnated polyurethane foam to be installed at the ridge when installing ridge cap (Corrugated roof sheeting) and/or broadflute closure and ridge cap (IBR and Kliplok roof sheeting).
-Roof pitch to match existing and be confirmed on site.
-All exposed timber to be painted with carbolineum, painting to be completed prior to installation.
-Appropriate ridge cap to be installed as per roof sheeting specification. Colour to match roof sheet.
-114 x 38mm false rafters to be installed, at every alternative truss for the full length on both sides of the eave (fascia board support) as well as both gable ends (barge board support).
-Beam fill purlins to be installed at ridges and gable ends, as directed on site.
-Roof sheeting as specified above or similar approved.
-Roof Screws:
Timber application with corrugated sheeting: 12x65 timberfix hex head washer flange EPDM seal.
Timber application with IBR sheeting: 12x85 timberfix hex head washer flange EPDM seal. new roofs to use these screws with the washer (26mm) supplied by the supplier, existing roofs to use the beveled metal/rubber washer.
-Gutter bolts to be added where there are excessive holes, that are not fixing holes, to be directed on site.
-A020 re-enforced aluminum foil tape to be added on the underside and on top of sisilation where sheets overlaps on both sides

AIR-BRICKS:
229 x 152mm Terra-cotta vermin proofed air-bricks, or similar approved built into brick beam fill. Install as specified on drawings, or similar approved.

BARGE BOARD:
Fibre cement 225mm x 10mm fascia boards, joined together with 225mm x 10mm Plastic H-Profile Fascia Joiners. Fix 76 x 50mm timber trimmer batten to underside of purlin ends for barge board fixing. Drill for and fix fascia board to trimmer batten with hot-dipped galvanised screws and washers. 200 x 100mm aluminum flashing fixed on . Item as above or similar approved. Where specified and to be confirmed on site, item as above or similar approved.

FASCIA BOARD:
Medium density plain fibre cement 225 X 10mm un-grooved fascia board, or similar approved with H-profile plastic fascia joiners. Drill for and fix with hot-dip galvanised drive screws and washers. Item as above or similar approved. Where specified and to be confirmed on site, item as above or similar approved.

PREPARE AND PAINT BARGE & FASCIA BOARDS WITH UNIVERSAL ENAMEL AS DESCRIBED BELOW:
SURFACE PREPARATION:
Ensure that substrates as well as primed and undercoated surfaces are clean, sound and dry.
NEW WORK:
Prime with PLASTER PRIMER or MULTI-SURFACE PRIMER. Apply liberally in order to obtain an unbroken barrier coat to seal surface properly.
FILLING: Fill defects with a good wall crack filler.
UNDERCOAT: To all surfaces prepared and primed as above, apply a coat of UNIVERSAL UNDERCOAT.
APPLICATION:
Apply one or more coats to achieve complete obliteration. Colour to Architects choice.

GUTTERS:
150 x 150mm seamless aluminium gutters with end closers and drop box. Gutters to be adequately supported and fixed to building Or otherwise stated on drawings, to match existing.

DOWN-PIPES:
100 x 75mm seamless aluminium down-pipe. Down-pipe to be adequately fixed to wall. Shoes to be provided to bottom of down-pipes.
Or otherwise stated on drawings, to match existing.

CEILINGS:
9mm thick fibre cement plain boards, fixed to 38 x 50 on edge timber brandering at max 600mm centres with timber cover strips at joins. Cross brandering to be used at 150mm centres at joints, ends of sheets, cornices and light fittings. All nail heads to be stopped & sanded level and fixed to trusses at max 1420mm centres. Cornices to be 75mm fibre cement, glued to ceiling board and wall with a good adhesive. Ceiling and cornice to be prepared adequately and painted 2 coats Super Acrylic Polvin matt WHITE paint. Items as above or similar approved.

CEILING TRAP DOORS:
Provide 1 x 900 x 900mm fibre cement trap door. Item indicated on drawings and position to be confirmed on site.

WALLS:
All walls are to comply with "Part K" of the S.A.N.S 10-400.
New walls or infill walls to match existing, brick or block walls to be constructed as per construction standards, be to indicated by responsible individual as required.
All founding and / or retaining walls to Structural Engineers details.
P.C. lintols to be installed over all new openings where walls to be plastered and painted, as specified on drawings and to be confirmed on site.
All fire walls to underside of roof sheeting. Walls to be constructed as per existing and where specified.
Wall stitching to be strictly in accordance to Engineers detail.

MASONRY WALL: INTERNAL AND EXTERNAL (PLASTER & PAINT)
NEW PLASTERED WALLS:
Two coat steel trowelled rendered plaster with smooth finish. Prepare and paint walls as specified below. Prepare and paint with a water-based satin finish paint as described below:
SURFACE PREPARATION:
Ensure that substrates as well as primed and undercoated surfaces are clean, sound and dry.
NEW WORK:
Prime with PLASTER PRIMER or MULTI-SURFACE PRIMER to form an unbroken barrier coat to seal alkaline surfaces properly.
FILLING:
Fill defects with a good wall crack filler as appropriate.
APPLICATION:
Water-based paint is ready for use and is best applied by brush. Apply generous full coats so that brush marks flow out to a smooth even coat. Apply one or more coats to achieve complete obliteration. - Paint colour: To match existing and to be confirmed on site.

FLASHING / WATERPROOFING:
Aluminum flashing and paint on waterproofing membrane or similar approved to be installed as specified on drawings, colour to match sheeting finish.

GMS POST:
100Ø gms steel post to be installed as indicated, fixing to Engineer's detail. Posts to be fixed to concrete and not screed, using basing appropriate base plate and to be fixed to truss or beam above using appropriate channel.

WINDOWS:
New windows to be hot dipped galvanised steel windows or to match existing as indicated on drawings, to be confirmed on site. All new windows to be installed with 6mm toughened safety glass. Putty to be painted to match window frame, colour to be confirmed on site.

GLAZING PANELS:
New glazing panels to be 6mm Toughened safety glass. New putty to be installed as per manufacturers specifications, hardener to be applied once putty is smooth and applied correctly. Putty to be painted to match existing window frame, colour to be confirmed on site.
**All glazing to be measured and confirmed on site prior to installation.

DOORS:
New doors as indicated on schedule, to be confirmed on site. All external doors to be solid meranti hardwood, internal doors to be hollow core.

SKIRTING:
18mm x 75mm Meranti skirting, or similar approved with 19mm timber quadrant sanded smooth and pre-varnished in mahogany, then fixed to wall. Item as above or similar approved as required on drawings.

FLOOR COVERING:
Refer to drawings for location of new floor covering.
Supply and fix 2.5mm thick x 300mm x 300mm semi-flexible vinyl tiles, manufactured in accordance with SANS 581, laid in acrylic adhesive, spread with a 'Vicker A24F' trowel at the rate of between 5.5m² and 6.5m² per litre, depending on the sub-floor porosity, laid on screed to fall, made with waterproof admixture.

The newly laid floor after 72 hours must be stripped using a good Stripper, rinsed using a good Rinse and then sealed with 3 coats of a good Sealer.
-Tile colour: to be confirmed. Item as above or as per existing.

OR

Screed floors to Engineers detail, includes removal of existing screed and application of new. Above is as specified on drawings.

IN-SITU CHANNELS:
Concrete aprons and v-drains laid to fall and in panels, not exceeding 1.8m in length with control joints as specified by engineer on fill compacted to MOD AASHTO 95% or as specified & approved by engineer. Control joints sealed with 12mm polysulphide sealant with backing strip and impregnated softboard. All to Engineers detail.

Ex. in-situ channels (v-drains and aprons) where action needs to be taken due to vegetation growth, then the following shall apply. Excess soil / vegetation to be removed from all gaps, area to be treated with soil poisoning as per manufacturer's specification. Gaps to be sealed with polysulphide sealant (with backing strip and impregnated softboard where applicable), to be confirmed on site, to Engineers detail.

BACKFILL:
Filling to be approved clean earth, well watered and rammed in layers not exceeding 150mm in depth and thoroughly consolidated, all to engineers detail.

WATER TANK AND PLINTH:
Water tank plinth constructed to Engineers detail, with 2500 litre polyethylene water tank with 20mm ball valve with 90deg elbow tied down with twisted galvanised wire fixed to eye hooks cast into concrete slab - All to Engineers detail. Tap to be installed as per manufacturer's instruction. Rainwater downpipes to be inserted as indicated on drawings and supplied with overflow pipe and lid with vermin proof vent. Threaded PVC ball valve tap to be installed as per BOQ. Screed to fall around tank once installed. The above fixing method also applies to existing water tanks on existing or new plinths.

BRICK WORK:
Corobrik® (Lawley-Gauteng) 20-30 MPa Montana Traventine FSB clay facebrick, bedded and jointed in Class II mortar and pointed with flush vertical and flush horizontal joints and perpends, suitable for exposure zones 1-2:

Brickwork of NFX bricks (14 MPa nominal compressive strength) in class II mortar:

ELECTRICAL:
Electrical as per drawings, to match existing where appropriate and to be confirmed on site.

SECURITY GATE AND BURGLAR FLAT BARS:
Galvanised gate to be installed as directed on site, drawings to be provided.
Burglar bars - 30mmx3mm gms flat bars to be welded to the existing window frame, all welding joints to be treated with a protective anti rust protection spray or cold galvanised paint coating as per manufacturers specifications.

CHALKBOARD:
1140mm (high) x 2400mm (long) wall mounted board, complete with aluminium chalk rail and fixing brackets plugged and screwed to wall as per manufacturer's instructions.

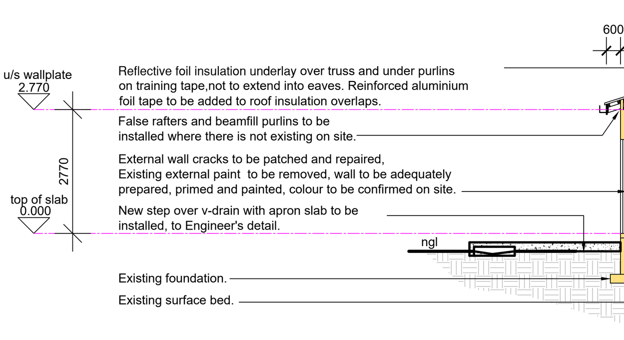
CHALK BOARDS REPLACED WITH WHITE BOARDS:
Fixed projection white board (NON REFLECTIVE) , Aluminium framed, magnetic surface (Centre board) complete with 2 x Swing leaf Aluminium framed magnetic chalk boards(without any lines or graphics etc) with heavy duty hinges and one complete aluminium pen tray for the full length of the centre board. Centre board sizes to be = 2420x 1220 mm with Swing leaf chalk boards sizes to be 1220x 1210 mm. Aluminium pen tray length 2250mm fitted to Centre board.
1 Complete full set of magnetic starter pack consisting of the following for each board supplied:
4 x white board markers Red, Green , Black , Blue,
1x cleaning Cloth
1x Magnetic Eraser
1x Cleaning Fluid 250 ml
4 x moulded magnets d day

PINING BOARD:
1200mm (high) x 2400mm (long) wall mounted board, complete with aluminium edges and fixing brackets plugged and screwed to wall as per manufacturer's instructions.

DADO RAILS:
New 19mm x 120mm timber shutter board Dado rail fixed into walls @ every 400mm c/c , with a 5 x 40mm fixing screw in nylon plug suitable for walls and timber purpose. All fixing holes to be covered with a wood filler and sanded down smoothly before painting with an approved colour on site. All Dado rail heights to be at max. height of 800mm high, subjected, to match all table and chair heights on site.

All information is to be confirmed on site and directed by the responsible individual, items as above or similar approved, and to match existing where applicable. Any discrepancies to be brought to the consultants attention prior to the commencement of any work.

LEGEND	DESCRIPTION
(window symbol) ◯	Number inside of circle indicates the number of glazing panels to be replaced.



Block C (Section B-B)
Scale 1:100

KZN Department of Public Works Stamp and Signature

Signature: Date:

Consultant:

REALISING CONTINENTAL POTENTIAL

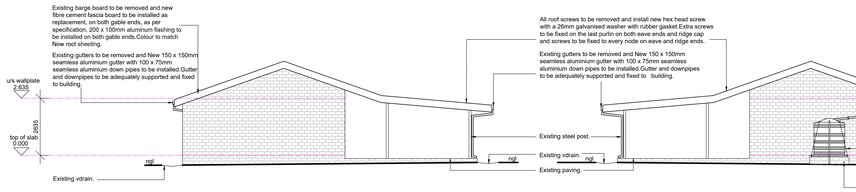
Signature: Date:

public works
Department: Public Works
PROVINCE OF KWAZULU-NATAL

Project Title:
PHASE 14: REPAIRS AND RENOVATIONS TO STORM DAMAGED SCHOOLS - KZN MIDLANDS REGION - CLUSTER 103 - FLORENCE BOOTH PRIMARY

Drawing Description:
Construction drawing for Florence Booth Primary School - Block C & F: Plan;Section and Elevations

Drawn: T.S / M.K	Date: 2022/10/12
Scales: 1:100	
Consultant Drawing No: 1362-18 WD03	Revision: .
DOPW Drawing No: 063880	Revision: .
DOPW WIMS No: WIMS : 063880	
Stamped by Design Review Committee	



Block E (N.W Elevation)
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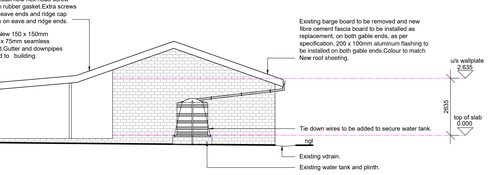

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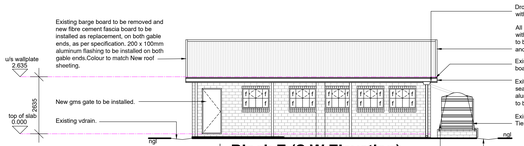

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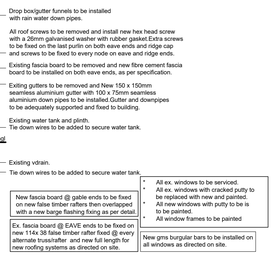


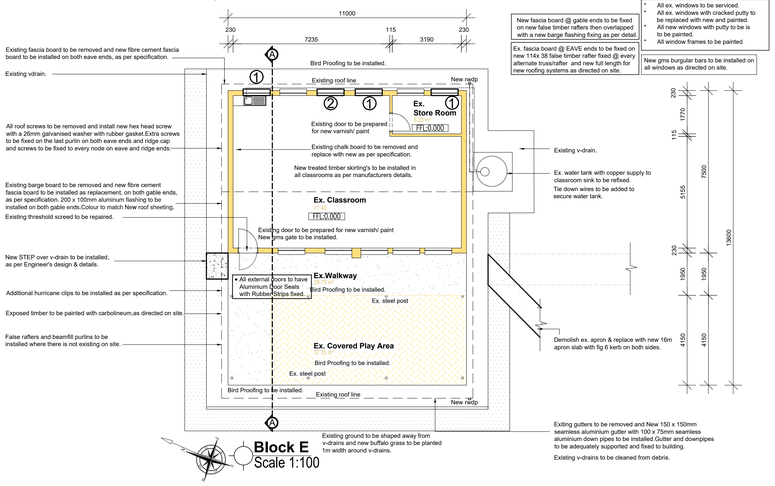
Block E (N.E Elevation)
Scale 1:100

New fascia board @ gable ends to be fixed on new false timber rafters then overlapped with a new barge flashing fixing as per detail.

Ex. fascia board @ EAVE ends to be fixed on new 114x 38 false timber rafter fixed @ every alternate truss/rafter and new full length for new roofing systems as directed on site.

- All ex. windows to be serviced.
- All ex. windows with cracked putty to be replaced with new and painted.
- All new windows with putty to be is to be painted.
- All window frames to be painted

New gms burglar bars to be installed on all windows as directed on site.



Block E
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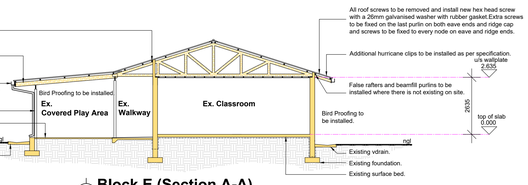

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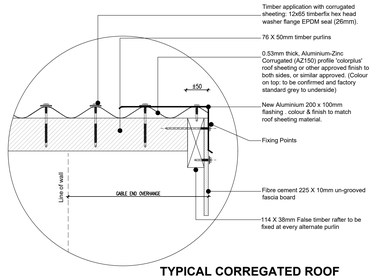
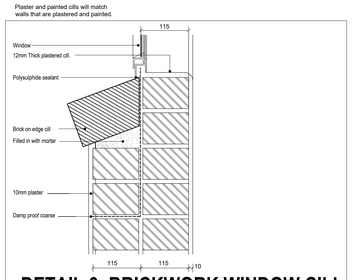
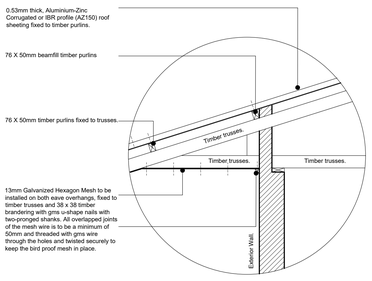


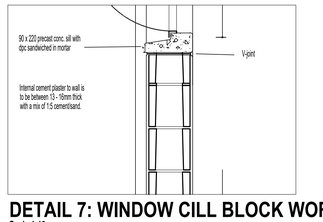
TYPICAL CORREGATED ROOF FLASHING DETAIL
Scale 1:5



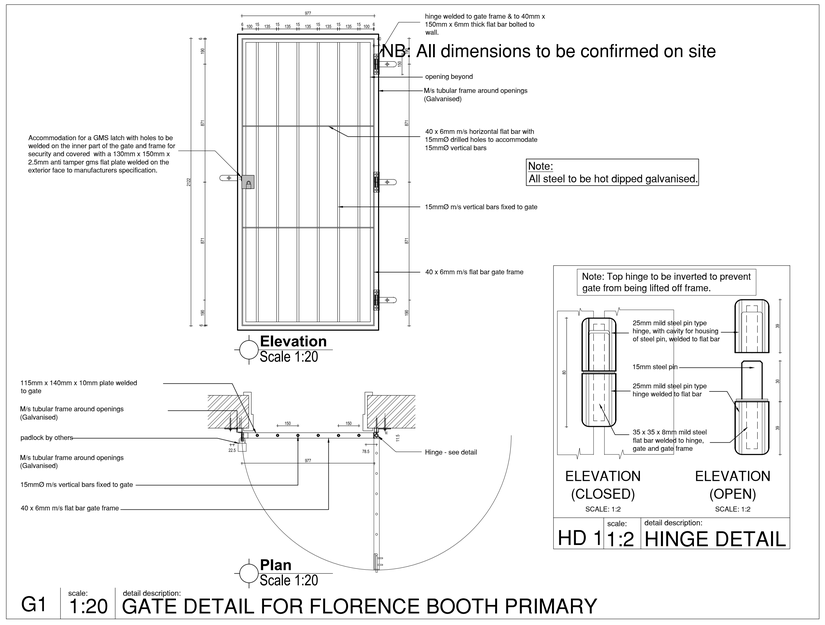
DETAIL 6: BRICKWORK WINDOW CILL
Scale 1:5



Typical bird proofing detail
Scale 1:5



DETAIL 7: WINDOW CILL BLOCK WORK
Scale 1:10



G1	scale: 1:20	detail description: GATE DETAIL FOR FLORENCE BOOTH PRIMARY
		HD 1 1:2 HINGE DETAIL

GENERAL NOTES:

1. All dimensions to be checked before work commences. Architect to be notified immediately of any discrepancies, errors, omissions, etc.
2. Only figured dimensions to be taken: drawings are not to be scaled. All dimensions in mm's unless otherwise stated.
3. All levels to be checked on site before any work commences.
4. All reinforced concrete work to be strictly in accordance with structural engineers detail and specification.
5. Dampcoat course to comply with S.A.N.S. 10-400 requirements.
6. All walls to be reinforced with two courses brickforce at cill and wall plate levels.
7. Workmanship is to be of the highest standard through-out.
8. The contractor is to locate and identify any / all existing services and to protect these from damage whilst on site throughout the contract period.
9. The contractor is responsible for the correct setting out of all works, particularly boundaries, building lines servitude's, etc.
10. All work to be executed in strict accordance to S.A.N.S. 10-400 and LOCAL AUTHORITY BY-LAWS.
11. All materials to be used in strict accordance to manufacturers specification
12. Soil poisoning to be used under all new concrete work and new water tank stands.
13. Screed to be applied as directed, to Engineers detail.
14. Polyclosures to be installed as indicated in drawings, and to be confirmed on site.
15. Roof element sizes and specifications as per drawings and to be confirmed on site (trusses, purlins, rafters, roof sheeting, fascia, barge board brandering, ceilings, trap doors and cornices), and to match existing where applicable.
16. Removal of asbestos to be in strict accordance with The Department of Labour and OHS regulations and procedures.
17. Soil Poisoning to be applied where specified, for all new work and existing where applicable, to manufacturer's specification and to Engineers detail.

NOTE:

- *All STRUCTURAL, CIVIL and ELECTRICAL* work to be professional Engineers detail.

- *All STRUCTURAL, CIVIL & ELECTRICAL ENGINEERS* details to take preference over structural, civil & electrical details indicated on this drawing.

GENERAL SPECIFICATION /CONSTRUCTION NOTES:

ROOF:

All roofs are to comply with "Part L" of the S.A.N.S 10-400.

0.53mm thick, Aluminium-Zinc IBR (AZ150) profile 'colorplus' roof sheeting or other approved finish to both sides. (Colour on top: to be confirmed and factory standard grey to underside), or similar approved. Sheets to be fixed to every purlin using appropriate self drilling/ tapping screws. At the ridge and eave purlins, fixing to be at every crown. Purlins spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Holes in sheets to be drilled not punched. Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).
OR
0.53mm thick, Aluminium-Zinc Corrugated (AZ150) profile 'colorplus' roof sheeting or other approved finish to both sides, or similar approved. Thickness of sheeting to be confirmed on site where matching existing. (Colour on top: to be confirmed and factory standard grey to underside). Sheets to be fixed to every purlin using appropriate self drilling/ tapping screws. At the ridge and eave purlins, fixing to be at every crown.Purlins spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Holes in sheets to be drilled not punched. Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).
OR
0.53mm thick, Aluminium-Zinc Klplok 700 (AZ150) profile 'colorplus' interlocking roof sheeting or other approved finish to both sides, or similar approved. Thickness of sheeting to be confirmed on site where matching existing. (Colour on top: to be confirmed and factory standard grey to underside)
Sheets shall be fixed to every purlin using galvanized steel "KL700" clips. "KL700" clips to be fixed to purlins using the appropriate self drilling / tapping screws. At the ridge and eave purlins, fixing to be at every crown.Purlins to be spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).

General roof notes:
Roof to be installed in strict accordance with manufacturers specification. All sheeting to be handled with care, no scratched or damaged sheeting shall be installed. All scratched or damaged sheets to be removed off site immediately. Sheeting to be installed by manufacturer approved installer. Manufacturer to inspect sheeting after installation and supply certification.

Reflective foil insulation underlay (economical, durable, double sided reflective foil laminate with advanced fire retardant properties FR405 or Similar approved) over trusses and under purlins on training tape on both ends.

Roof trusses to be tied down to walls with 30mm x 1.6mm thick and 1.6m long galvanised hoop iron straps built into brickwork as per S.A.N.S. 10-400 requirements prior to erection of trusses. Reflective foil insulation not to extend into eaves. Reflective foil insulation to be installed where specified. Trusses spaced as per engineers specification and resting on 114 x 38mm wall plates.

-Hurricane clips to be used at all purlin/ truss nodes, and to be doubled at eave and ridge purlins (diagonally), as directed on site.
- Polyclosures (polyethylene) or similar approved to be installed at the ridge and eaves. Where new roof sheeting is being installed, polyclosures are to be installed at the ridge and eaves. Where a portion of sheeting is being replaced, or the ridge is being re-installed or replaced polyclosures are to be added at the ridge only.
-Broadflute closure or similar approved is to be installed for all IBR and Kliplok roof sheeting at the ridge, profile, colour and material is to match the roof sheeting.
Flexible wax and resin impregnated polyurethane foam to be installed at the ridge when installing ridge cap (Corrugated roof sheeting) and/or broadflute closure and ridge cap (IBR and Kliplok roof sheeting).
-Roof pitch to match existing and be confirmed on site.
-All exposed timber to be painted with carbolineum, painting to be completed prior to installation.
-Appropriate ridge cap to be installed as per roof sheeting specification. Colour to match roof sheet.
-114 x 38mm false rafters to be installed, at every alternative truss for the full length on both sides of the eave (fascia board support) as well as both gable ends (barge board support).
-Beam fill purlins to be installed at ridges and gable ends, as directed on site.
-Roof sheeting as specified above or similar approved.
-Roof Screws:
Timber application with corrugated sheeting: 12x65 timberfix hex head washer flange EPDM seal.
Timber application with IBR sheeting: 12x85 timberfix hex head washer flange EPDM seal.
new roofs to use these screws with the washer (26mm) supplied by the supplier, existing roofs to use the beveled metal/rubber washer.
-Gutter bolts to be added where there are excessive holes, that are not fixing holes, to be directed on site.
-A020 re-enforced aluminum foil tape to be added on the underside and on top of sisilation where sheets overlaps on both sides

AIR-BRICKS:

229 x 152mm Terra-cotta vermin proofed air-bricks, or similar approved built into brick beam fill. Install as specified on drawings, or similar approved.

BARGE BOARD:

Fibre cement 225mm x 10mm fascia boards, joined together with 225mm x 10mm Plastic H-Profile Fascia Joiners. Fix 76 x 50mm timber trimmer batten to underside of purlin ends for barge board fixing. Drill for and fix fascia board to trimmer batten with hot-dipped galvanised screws and washers. 200 x 100mm aluminum flashing fixed on . Item as above or similar approved. Where specified and to be confirmed on site, item as above or similar approved.

FASCIA BOARD:

Medium density plain fibre cement 225 X 10mm un-grooved fascia board, or similar approved with Hi-profile plastic fascia joiners. Drill for and fix with hot-dip galvanised drive screws and washers. Item as above or similar approved. Where specified and to be confirmed on site, item as above or similar approved.

PREPARE AND PAINT BARGE & FASCIA BOARDS WITH UNIVERSAL ENAMEL AS DESCRIBED BELOW:

SURFACE PREPARATION:
Ensure that substrates as well as primed and undercoated surfaces are clean, sound and dry.
NEW WORK:
Prime with PLASTER PRIMER or MULTI-SURFACE PRIMER. Apply liberally in order to obtain an unbroken barrier coat to seal surface properly.
FILLING: Fill defects with a good wall crack filler.
UNDERCOAT: To all surfaces prepared and primed as above, apply a coat of UNIVERSAL UNDERCOAT.
APPLICATION:
Apply one or more coats to achieve complete obliteration. Colour to Architects choice.

GUTTERS:

150 x 150mm seamless aluminium gutters with end closers and drop box. Gutters to be adequately supported and fixed to building Or otherwise stated on drawings, to match existing.

DOWN-PIPES:

100 x 75mm seamless aluminium down-pipe. Down-pipe to be adequately fixed to wall. Shoes to be provided to bottom of down-pipes.
Or otherwise stated on drawings, to match existing.

CEILINGS:

9mm thick fibre cement plain boards, fixed to 38 x 50 on edge timber brandering at max 600mm centres with timber cover strips at joins. Cross brandering to be used at 150mm centres at joints, ends of sheets, cornices and light fittings. All nail heads to be stopped & sanded level and fixed to trusses at max 1420mm centres. Cornices to be 75mm fibre cement, glued to ceiling board and wall with a good adhesive. Ceiling and cornice to be prepared adequately and painted 2 coats Super Acrylic Polvin matt WHITE paint. Items as above or similar approved.

CEILING TRAP DOORS:

Provide 1 x 900 x 900mm fibre cement trap door. Item indicated on drawings and position to be confirmed on site.

WALLS:

All walls are to comply with "Part K" of the S.A.N.S 10-400.
New walls or infill walls to match existing, brick or block walls to be constructed as per construction standards, be to indicated by responsible individual as required.
All founding and / or retaining walls to Structural Engineers details.
P.C. lintols to be installed over all new openings where walls to be plastered and painted, as specified on drawings and to be confirmed on site.
All fire walls to underside of roof sheeting. Walls to be constructed as per existing and where specified.
Wall stitching to be strictly in accordance to Engineers detail.

MASONRY WALL: INTERNAL AND EXTERNAL (PLASTER & PAINT)

NEW PLASTERED WALLS:
Two coat steel trowelled rendered plaster with smooth finish. Prepare and paint walls as specified below. Prepare and paint with a water-based satin finish paint as described below:
SURFACE PREPARATION:
Ensure that substrates as well as primed and undercoated surfaces are clean, sound and dry.
NEW WORK:
Prime with PLASTER PRIMER or MULTI-SURFACE PRIMER to form an unbroken barrier coat to seal alkaline surfaces properly.
FILLING:
Fill defects with a good wall crack filler as appropriate.
APPLICATION:
Water-based paint is ready for use and is best applied by brush. Apply generous full coats so that brush marks flow out to a smooth even coat. Apply one or more coats to achieve complete obliteration. - Paint colour: To match existing and to be confirmed on site.

FLASHING / WATERPROOFING:

Aluminum flashing and paint on waterproofing membrane or similar approved to be installed as specified on drawings, colour to match sheeting finish.

GMS POST:

100Ø gms steel post to be installed as indicated, fixing to Engineer's detail. Posts to be fixed to concrete and not screed, using basing appropriate base plate and to be fixed to truss or beam above using appropriate channel.

WINDOWS:

New windows to be hot dipped galvanised steel windows or to match existing as indicated on drawings, to be confirmed on site. All new windows to be installed with 6mm toughened safety glass. Putty to be painted to match window frame, colour to be confirmed on site.

GLAZING PANELS:

New glazing panels to be 6mm Toughened safety glass. New putty to be installed as per manufactures specifications, hardener to be applied once putty is smooth and applied correctly. Putty to be painted to match existing window frame, colour to be confirmed on site.
** All glazing to be measured and confirmed on site prior to installation.

DOORS:

New doors as indicated on schedule, to be confirmed on site. All external doors to be solid meranti hardwood, internal doors to be hollow core.

SKIRTING:

18mm x 75mm Meranti skirting, or similar approved with 19mm timber quadrant sanded smooth and pre-varnished in mahogany, then fixed to wall. Item as above or similar approved as required on drawings.

FLOOR COVERING:

Refer to drawings for location of new floor covering.
Supply and fix 2.5mm thick x 300mm x 300mm semi-flexible vinyl tiles, manufactured in accordance with SANS 581, laid in acrylic adhesive, spread with a 'Vicker Ad-Hoc' trowel at the rate of between 5.5m² and 6.5m² per litre, depending on the sub-floor porosity, laid on screed to fall, made with waterproof admixture.

The newly laid floor after 72 hours must be stripped using a good Stripper, rinsed using a good Rinse and then sealed with 3 coats of a good Sealer.
-Tile colour: to be confirmed. Item as above or as per existing.

OR

Screed floors to Engineers detail, includes removal of existing screed and application of new. Above is as specified on drawings.

IN-SITU CHANNELS:

Concrete aprons and v-drains laid to fall and in panels, not exceeding 1.8m in length with control joints as specified by engineer on fill compacted to MOD AASHTO 95% or as specified & approved by engineer. Control joints sealed with 12mm polysulphide sealant with backing strip and impregnated softboard. All to Engineers detail.

Ex. in-situ channels (v-drains and aprons) where action needs to be taken due to vegetation growth, then the following shall apply. Excess soil / vegetation to be removed from all gaps, area to be treated with soil poisoning as per manufacture's specification. Gaps to be sealed with polysulphide sealant (with backing strip and impregnated softboard where applicable), to be confirmed on site, to Engineers detail.

BACKFILL:

Filling to be approved clean earth, well watered and rammed in layers not exceeding 150mm in depth and thoroughly consolidated, all to engineers detail.

WATER TANK AND PLINTH:

Water tank plinth constructed to Engineers detail, with 2500 litre polyethylene water tank with 20mm ball valve with 90deg elbow fed down with twisted galvanised wire fixed to eye hooks cast into concrete slab - All to Engineers detail. Tap to be installed as per manufacturer's instruction. Rainwater downpipes to be inserted as indicated on drawings and supplied with overflow pipe and lid with vermin proof vent. Threaded PVC ball valve tap to be installed as per BOQ. Screed to fall around tank once installed. The above fixing method also applies to existing water tanks on existing or new plinths.

BRICK WORK:

Corobrik® (Lawley-Gauteng) 20-30 MPa Montana Traventine FSB clay facebrick, bedded and jointed in Class II mortar and pointed with flush vertical and flush horizontal joints and perpends, suitable for exposure zones 1-2:

Brickwork of NFX bricks (14 MPa nominal compressive strength) in class II mortar:

ELECTRICAL:

Electrical as per drawings, to match existing where appropriate and to be confirmed on site.

SECURITY GATE AND BURGLAR FLAT BARS:

Galvanised gate to be installed as directed on site, drawings to be provided.
Burglar bars - 30mmx3mm gms flat bars to be welded to the existing window frame, all welding joints to be treated with a protective anti rust protection spray or cold galvanised paint coating as per manufacturers specifications.

CHALKBOARD:

1140mm (high) x 2400mm (long) wall mounted board, complete with aluminium chalk rail and fixing brackets plugged and screwed to wall as per manufacturer's instructions.

CHALK BOARDS REPLACED WITH WHITE BOARDS:

Fixed projection white board (NON REFLECTIVE), Aluminium framed, magnetic surface (Centre board) complete with 2 x Swing leaf Aluminium framed magnetic chalk boards(without any lines or graphics etc) with heavy duty hinges and one complete aluminium pen tray for the full length of the centre board. Centre board sizes to be = 2420x 1220 mm with Swing leaf chalk boards sizes to be 1220x 1210 mm. Aluminium pen tray length 2250mm fitted to Centre board.
1 Complete full set of magnetic starter pack consisting of the following for each board supplied:
4 x white board markers Red, Green, Black , Blue,
1x cleaning Cloth
1x Magnetic Eraser
1x Cleaning Fluid 250 ml
4 x moulded magnets d-day

PINING BOARD:

1200mm (high) x 2400mm (long) wall mounted board, complete with aluminium edges and fixing brackets plugged and screwed to wall as per manufacturer's instructions.

DADO RAILS:

New 19mm x 120mm timber shutter board Dado rail fixed into walls @ every 400mm c/c , with a 5 x 40mm fixing screw in nylon plug suitable for walls and timber purpose. All fixing holes to be covered with a wood filler and sanded down smoothly before painting with an approved colour on site. All Dado rail heights to be at max. height of 800mm high, subjected, to match all table and chair heights on site.

All information is to be confirmed on site and directed by the responsible individual, items as above or similar approved, and to match existing where applicable. Any discrepancies to be brought to the consultants attention prior to the commencement of any work.

KZN Department of Public Works Stamp and Signature

Signature: Date:

Consultant:

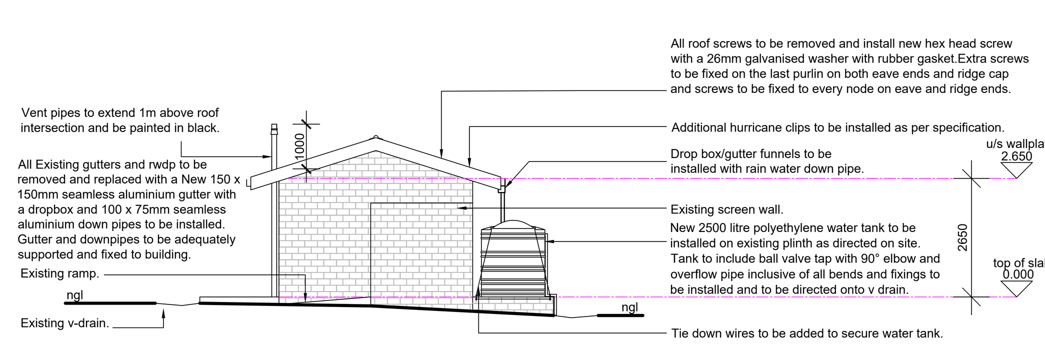
Signature: Date:

public works
Department:
Public Works
PROVINCE OF KWAZULU-NATAL

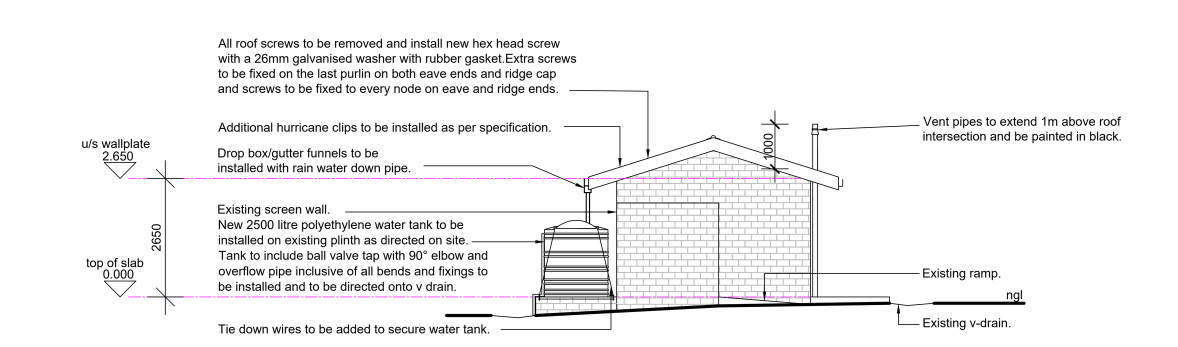
Project Title:
PHASE 14: REPAIRS AND RENOVATIONS TO STORM DAMAGED SCHOOLS - KZN MIDLANDS REGION - CLUSTER 103 - FLORENCE BOOTH PRIMARY

Drawing Description:
Construction drawing for Florence Booth Primary School - Block E : Plans,Section,Elevations, General Details & Gate Detail

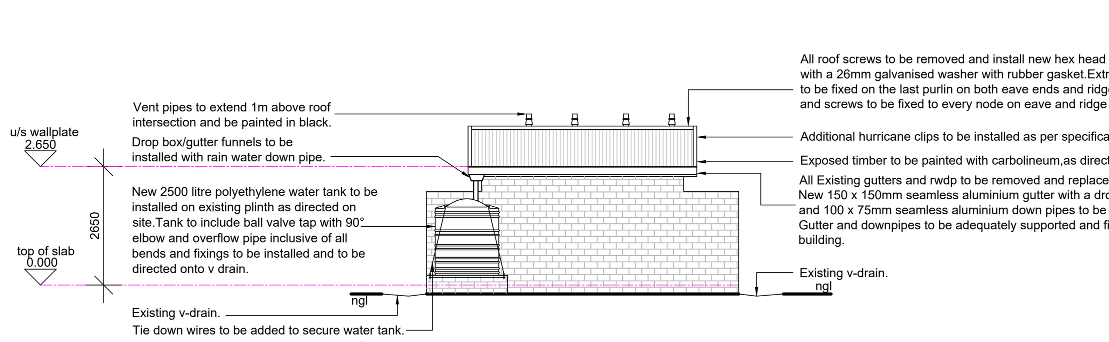
Drawn: T.S / M.K	Date: 2022/10/12
Scales: 1:100	
Consultant Drawing No: 1362-18 WD04	Revision: .
DOPW Drawing No: 063880	Revision: .
DOPW WMS No: WIMS : 063880	
Stamped by Design Review Committee	



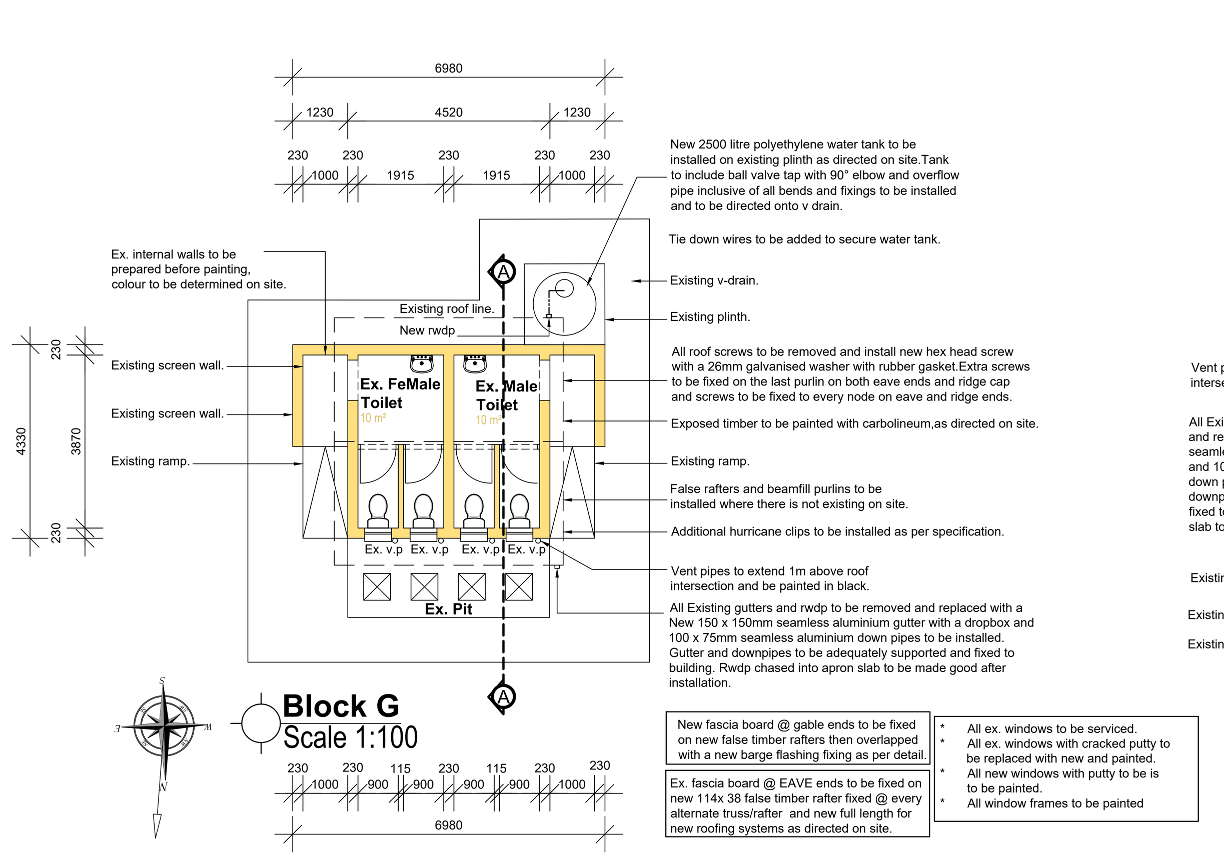
Block G (West Elevation)
Scale 1:100



Block G (East Elevation)
Scale 1:100



Block G (South Elevation)
Scale 1:100

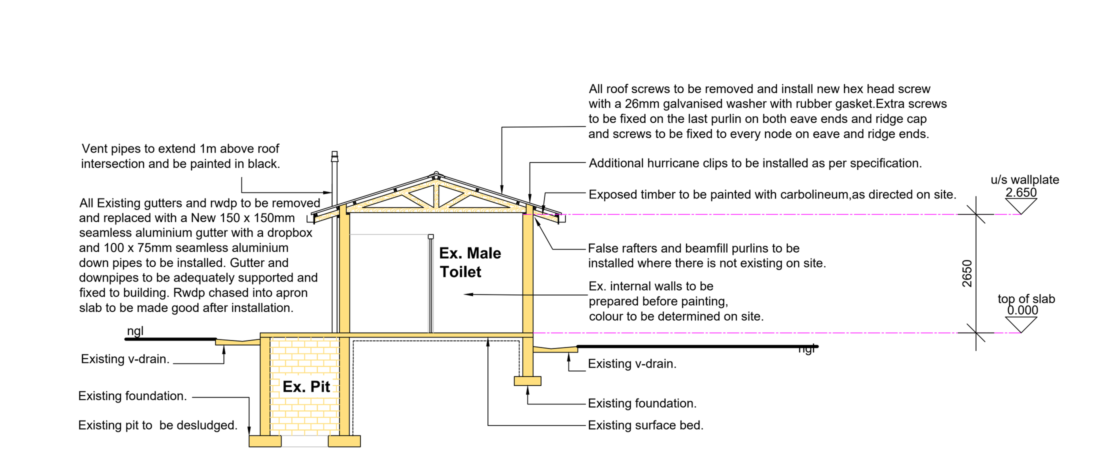


Block G
Scale 1:100

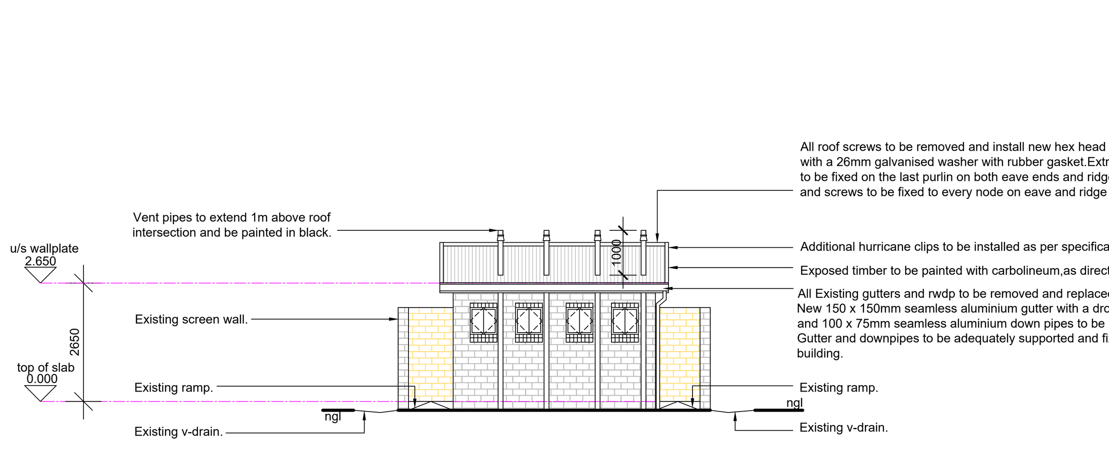
New fascia board @ gable ends to be fixed on new false timber rafters then overlapped with a new barge flashing fixing as per detail.

Ex. fascia board @ EAVE ends to be fixed on new 114x 38 false timber rafter fixed @ every alternate truss/rafter and new full length for new roofing systems as directed on site.

- All ex. windows to be serviced.
- All ex. windows with cracked putty to be replaced with new and painted.
- All new windows with putty to be is to be painted.
- All window frames to be painted



Block G (Section A-A)
Scale 1:100



Block G (North Elevation)
Scale 1:100

GENERAL NOTES:

1. All dimensions to be checked before work commences. Architect to be notified immediately of any discrepancies, errors, omissions, etc.
2. Only figured dimensions to be taken: drawings are not to be scaled. All dimensions in mm's unless otherwise stated.
3. All levels to be checked on site before any work commences.
4. All reinforced concrete work to be strictly in accordance with structural engineers detail and specification.
5. Damproof course to comply with S.A.N.S. 10-400 requirements.
6. All walls to be reinforced with two courses brickforce at cill and wall plate levels.
7. Workmanship is to be of the highest standard through-out.
8. The contractor is to locate and identify any / all existing services and to protect these from damage whilst on site throughout the contract period.
9. The contractor is responsible for the correct setting out of all works, particularly boundaries, building lines servitude's, etc.
10. All work to be executed in strict accordance to S.A.N.S. 10-400 and LOCAL AUTHORITY BY-LAWS.
11. All materials to be used in strict accordance to manufacturers specification
12. Soil poisoning to be used under all new concrete work and new water tank stands.
13. Screed to be applied as directed, to Engineers detail.
14. Polyclosurers to be installed as indicated in drawings, and to be confirmed on site.
15. Roof element sizes and specifications as per drawings and to be confirmed on site (trusses, purlins, rafters, roof sheeting, fascia, barge board brandering, ceilings, trap doors and cornices), and to match existing where applicable.
16. Removal of asbestos to be in strict accordance with The Department of Labour and OHS regulations and procedures.
17. Soil Poisoning to be applied where specified, for all new work and existing where applicable, to manufacturer's specification and to Engineers detail.

NOTE:
- *All STRUCTURAL, CIVIL and ELECTRICAL* work to professional Engineers detail.
- *All STRUCTURAL, CIVIL & ELECTRICAL ENGINEERS* details to take preference over structural, civil & electrical details indicated on this drawing.

GENERAL SPECIFICATION /CONSTRUCTION NOTES:

ROOF:

All roofs are to comply with "Part L" of the S.A.N.S 10-400.

0.53mm thick, Aluminium-Zinc IBR (AZ150) profile 'colorplus' roof sheeting or other approved finish to both sides. (Colour on top: to be confirmed and factory standard grey to underside), or similar approved. Sheets to be fixed to every purlin using appropriate self drilling/ tapping screws. At the ridge and eave purlins, fixing to be at every crown. Purlins spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Holes in sheets to be drilled not punched. Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).
OR
0.53mm thick, Aluminium-Zinc Corrugated (AZ150) profile 'colorplus' roof sheeting or other approved finish to both sides, or similar approved. Thickness of sheeting to be confirmed on site where matching existing. (Colour on top: to be confirmed and factory standard grey to underside). Sheets to be fixed to every purlin using appropriate self drilling/ tapping screws. At the ridge and eave purlins, fixing to be at every crown.Purlins spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Holes in sheets to be drilled not punched. Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).
OR
0.53mm thick, Aluminium-Zinc Kliplok 700 (AZ150) profile 'colorplus' interlocking roof sheeting or other approved finish to both sides, or similar approved. Thickness of sheeting to be confirmed on site where matching existing. (Colour on top: to be confirmed and factory standard grey to underside)
Sheets shall be fixed to every purlin using galvanized steel "KL700" clips. "KL700" clips to be fixed to purlins using the appropriate self drilling / tapping screws. At the ridge and eave purlins, fixing to be at every crown.Purlins to be spaced as per manufacturers specifications, on engineered timber trusses (or existing).
Sheets are to be fixed to 76 x 50mm purlins spaced at max. 1100mm (to manufacturers specification as per sheeting requirements) on engineered timber trusses (trusses and purlins to be replaced where specified and sizes may vary).

General roof notes:
Roof to be installed in strict accordance with manufacturers specification. All sheeting to be handled with care, no scratched or damaged sheeting shall be installed. All scratched or damaged sheets to be removed off site immediately. Sheeting to be installed by manufacturer approved installer. Manufacturer to inspect sheeting after installation and supply certification.

Reflective foil insulation underlay (economical, durable, double sided reflective foil laminate with advanced fire retardant properties FR405 or Similar approved) over trusses and under purlins on training tape on both ends.

Roof trusses to be tied down to walls with 30mm x 1.6mm thick and 1.6m long galvanised hoop iron straps built into brickwork as per S.A.N.S. 10-400 requirements prior to erection of trusses. Reflective foil insulation not to extend into eaves. Reflective foil insulation to be installed where specified. Trusses spaced as per engineers specification and resting on 114 x 38mm wall plates.

-Hurricane clips to be used at all purlin/ truss nodes, and to be doubled at eave and ridge purlins (diagonally), as directed on site.
- Polyclosures (polyethylene) or similar approved to be installed at the ridge and eaves. Where new roof sheeting is being installed, polyclosures are to be installed at the ridge and eaves. Where a portion of sheeting is being replaced, or the ridge is being re-installed or replaced polyclosures are to be added at the ridge only.
-Broadflute closure or similar approved is to be installed for all IBR and Kliplok roof sheeting at the ridge, profile, colour and material is to match the roof sheeting.
Flexible wax and resin impregnated polyurethane foam to be installed at the ridge when installing ridge cap (Corrugated roof sheeting) and/or broadflute closure and ridge cap (IBR and Kliplok roof sheeting).
-Roof pitch to match existing and be confirmed on site.
-All exposed timber to be painted with carbolineum, painting to be completed prior to installation.
-Appropriate ridge cap to be installed as per roof sheeting specification. Colour to match roof sheet.
-114 x 38mm false rafters to be installed, at every alternative truss for the full length on both sides of the eave (fascia board support) as well as both gable ends (barge board support).
-Beam fill purlins to be installed at ridges and gable ends, as directed on site.
-Roof sheeting as specified above or similar approved.
-Roof Screws:
Timber application with corrugated sheeting: 12x65 timberfix hex head washer flange EPDM seal.
Timber application with IBR sheeting: 12x85 timberfix hex head washer flange EPDM seal.
new roofs to use these screws with the washer (26mm) supplied by the supplier, existing roofs to use the beveled metal/rubber washer.
-Gutter bolts to be added where there are excessive holes, that are not fixing holes, to be directed on site.
-A020 re-enforced aluminum foil tape to be added on the underside and on top of sisilation where sheets overlaps on both sides

AIR-BRICKS:

229 x 152mm Terra-cotta vermin proofed air-bricks, or similar approved built into brick beam fill. Install as specified on drawings, or similar approved.

BARGE BOARD:

Fibre cement 225mm x 10mm fascia boards, joined together with 225mm x 10mm Plastic H-Profile Fascia Joiners. Fix 76 x 50mm timber trimmer batten to underside of purlin ends for barge board fixing. Drill for and fix fascia board to trimmer batten with hot-dipped galvanised screws and washers. <u>200 x 100mm aluminum flashing fixed on</u> . Item as above or similar approved. Where specified and to be confirmed on site, item as above or similar approved.

FASCIA BOARD:

Medium density plain fibre cement 225 X 10mm un-grooved fascia board, or similar approved with H-profile plastic fascia joiners. Drill for and fix with hot-dip galvanised drive screws and washers. Item as above or similar approved. Where specified and to be confirmed on site, item as above or similar approved.

PREPARE AND PAINT BARGE & FASCIA BOARDS WITH UNIVERSAL ENAMEL AS DESCRIBED BELOW:

SURFACE PREPARATION:
Ensure that substrates as well as primed and undercoated surfaces are clean, sound and dry.
NEW WORK:
Prime with PLASTER PRIMER or MULTI-SURFACE PRIMER. Apply liberally in order to obtain an unbroken barrier coat to seal surface properly.
FILLING: Fill defects with a good wall crack filler.
UNDERCOAT: To all surfaces prepared and primed as above, apply a coat of UNIVERSAL UNDERCOAT.
APPLICATION:
Apply one or more coats to achieve complete obliteration. Colour to Architects choice.

GUTTERS:

150 x 150mm seamless aluminium gutters with end closers and drop box. Gutters to be adequately supported and fixed to building Or otherwise stated on drawings, to match existing.

DOWN-PIPES:

100 x 75mm seamless aluminium down-pipe. Down-pipe to be adequately fixed to wall. Shoes to be provided to bottom of down-pipes.
Or otherwise stated on drawings, to match existing.

CEILINGS:

9mm thick fibre cement plain boards, fixed to 38 x 50 on edge timber brandering at max 600mm centres with timber cover strips at joins. Cross brandering to be used at 150mm centres at joints, ends of sheets, cornices and light fittings. All nail heads to be stopped & sanded level and fixed to trusses at max 1420mm centres. Cornices to be 75mm fibre cement, glued to ceiling board and wall with a good adhesive. Ceiling and cornice to be prepared adequately and painted 2 coats Super Acrylic Polvin matt WHITE paint. Items as above or similar approved.

CEILING TRAP DOORS:

Provide 1 x 900 x 900mm fibre cement trap door. Item indicated on drawings and position to be confirmed on site.

WALLS:

All walls are to comply with "Part K" of the S.A.N.S 10-400.
New walls or infill walls to match existing, brick or block walls to be constructed as per construction standards, be to indicated by responsible individual as required.
All founding and / or retaining walls to Structural Engineers details.
P.C. lintols to be installed over all new openings where walls to be plastered and painted, as specified on drawings and to be confirmed on site.
All fire walls to underside of roof sheeting. Walls to be constructed as per existing and where specified.
Wall stitching to be strictly in accordance to Engineers detail.

MASONRY WALL: INTERNAL AND EXTERNAL (PLASTER & PAINT)

NEW PLASTERED WALLS:
Two coat steel trowelled rendered plaster with smooth finish. Prepare and paint walls as specified below. Prepare and paint with a water-based satin finish paint as described below:
SURFACE PREPARATION:
Ensure that substrates as well as primed and undercoated surfaces are clean, sound and dry.
NEW WORK:
Prime with PLASTER PRIMER or MULTI-SURFACE PRIMER to form an unbroken barrier coat to seal alkaline surfaces properly.
FILLING:
Fill defects with a good wall crack filler as appropriate.
APPLICATION:
Water-based paint is ready for use and is best applied by brush. Apply generous full coats so that brush marks flow out to a smooth even coat. Apply one or more coats to achieve complete obliteration. - Paint colour: To match existing and to be confirmed on site.

FLASHING / WATERPROOFING:

Aluminum flashing and paint on waterproofing membrane or similar approved to be installed as specified on drawings, colour to match sheeting finish.

GMS POST:

100Ø gms steel post to be installed as indicated, fixing to Engineer's detail. Posts to be fixed to concrete and not screed, using basing appropriate base plate and to be fixed to truss or beam above using appropriate channel.

WINDOWS:

New windows to be hot dipped galvanised steel windows or to match existing as indicated on drawings, to be confirmed on site. All new windows to be installed with 6mm toughened safety glass. Putty to be painted to match window frame, colour to be confirmed on site.

GLAZING PANELS:

New glazing panels to be 6mm Toughened safety glass. New putty to be installed as per manufacturers specifications, hardener to be applied once putty is smooth and applied correctly. Putty to be painted to match existing window frame, colour to be confirmed on site.
**All glazing to be measured and confirmed on site prior to installation.

DOORS:

New doors as indicated on schedule, to be confirmed on site. All external doors to be solid meranti hardwood, internal doors to be hollow core.

SKIRTING:

18mm x 75mm Meranti skirting, or similar approved with 19mm timber quadrant sanded smooth and pre-varnished in mahogany, then fixed to wall. Item as above or similar approved as required on drawings.

FLOOR COVERING:

Refer to drawings for location of new floor covering.
Supply and fix 2.5mm thick x 300mm x 300mm semi-flexible vinyl tiles, manufactured in accordance with SANS 581, laid in acrylic adhesive, spread with a 'Vicker A24F' trowel at the rate of between 5.5m² and 6.5m² per litre, depending on the sub-floor porosity, laid on screed to fall, made with waterproof admixture.

The newly laid floor after 72 hours must be stripped using a good Stripper, rinsed using a good Rinse and then sealed with 3 coats of a good Sealer.
-Tile colour: to be confirmed. Item as above or as per existing.

OR

Screed floors to Engineers detail, includes removal of existing screed and application of new. Above is as specified on drawings.

IN-SITU CHANNELS:

Concrete aprons and v-drains laid to fall and in panels, not exceeding 1.8m in length with control joints as specified by engineer on fill compacted to MOD AASHTO 95% or as specified & approved by engineer. Control joints sealed with 12mm polysulphide sealant with backing strip and impregnated softboard. All to Engineers detail.

Ex. in-situ channels (v-drains and aprons) where action needs to be taken due to vegetation growth, then the following shall apply. Excess soil / vegetation to be removed from all gaps, area to be treated with soil poisoning as per manufacturer's specification. Gaps to be sealed with polysulphide sealant (with backing strip and impregnated softboard where applicable), to be confirmed on site, to Engineers detail.

BACKFILL:

Filling to be approved clean earth, well watered and rammed in layers not exceeding 150mm in depth and thoroughly consolidated, all to engineers detail.

WATER TANK AND PLINTH:

Water tank plinth constructed to Engineers detail, with 2500 litre polyethylene water tank with 20mm ball valve with 90deg elbow tied down with twisted galvanised wire fixed to eye hooks cast into concrete slab - All to Engineers detail. Tap to be installed as per manufacturer's instruction. Rainwater downpipes to be inserted as indicated on drawings and supplied with overflow pipe and lid with vermin proof vent. Threaded PVC ball valve tap to be installed as per BOQ. Screed to fall around tank once installed. The above fixing method also applies to existing water tanks on existing or new plinths.

BRICK WORK:

Corobrik® (Lawley-Gauteng) 20-30 MPa Montana Traventine FSB clay facebrick, bedded and jointed in Class II mortar and pointed with flush vertical and flush horizontal joints and perpends, suitable for exposure zones 1-2:

Brickwork of NFX bricks (14 MPa nominal compressive strength) in class II mortar:

ELECTRICAL:

Electrical as per drawings, to match existing where appropriate and to be confirmed on site.

SECURITY GATE AND BURGLAR FLAT BARS:

Galvanised gate to be installed as directed on site, drawings to be provided.
Burglar bars - 30mmx3mm gms flat bars to be welded to the existing window frame, all welding joints to be treated with a protective anti rust protection spray or cold galvanised paint coating as per manufacturers specifications.

CHALKBOARD:

1140mm (high) x 2400mm (long) wall mounted board, complete with aluminium chalk rail and fixing brackets plugged and screwed to wall as per manufacturer's instructions.

CHALK BOARDS REPLACED WITH WHITE BOARDS:

Fixed projection white board (NON REFLECTIVE) , Aluminium framed, magnetic surface (Centre board) complete with 2 x Swing leaf Aluminium framed magnetic chalk boards(without any lines or graphics etc) with heavy duty hinges and one complete aluminium pen tray for the full length of the centre board. Centre board sizes to be = 2420x 1220 mm with Swing leaf chalk boards sizes to be 1220x 1210 mm. Aluminium pen tray length 2250mm fitted to Centre board.
1 Complete full set of magnetic starter pack consisting of the following for each board supplied:
4 x white board markers Red, Green , Black , Blue,
1x cleaning Cloth
1x Magnetic Eraser
1x Cleaning Fluid 250 ml
4 x moulded magnets d day

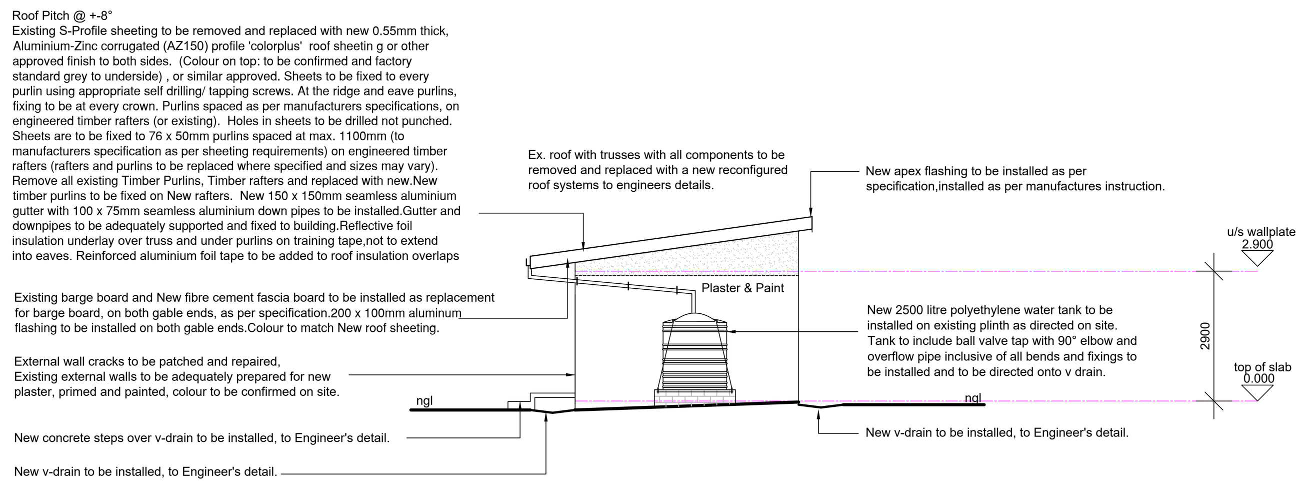
PINING BOARD:

1200mm (high) x 2400mm (long) wall mounted board, complete with aluminium edges and fixing brackets plugged and screwed to wall as per manufacturer's instructions.

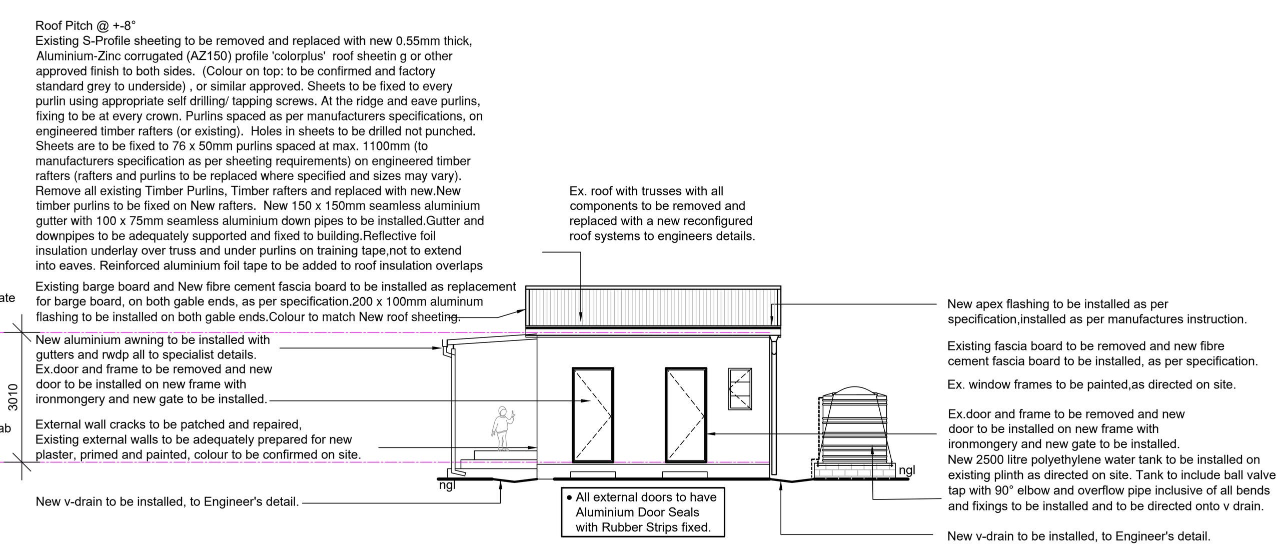
DADO RAILS:

New 19mm x 120mm timber shutter board Dado rail fixed into walls @ every 400mm c/c , with a 5 x 40mm fixing screw in nylon plug suitable for walls and timber purpose. All fixing holes to be covered with a wood filler and sanded down smoothly before painting with an approved colour on site. All Dado rail heights to be at max. height of 800mm high, subjected, to match all table and chair heights on site.

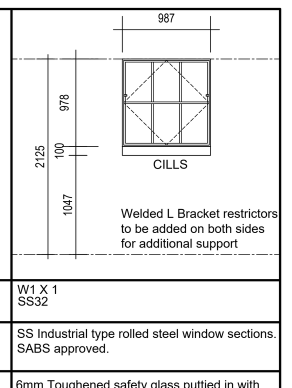
All information is to be confirmed on site and directed by the responsible individual, items as above or similar approved, and to match existing where applicable. Any discrepancies to be brought to the consultants attention prior to the commencement of any work.



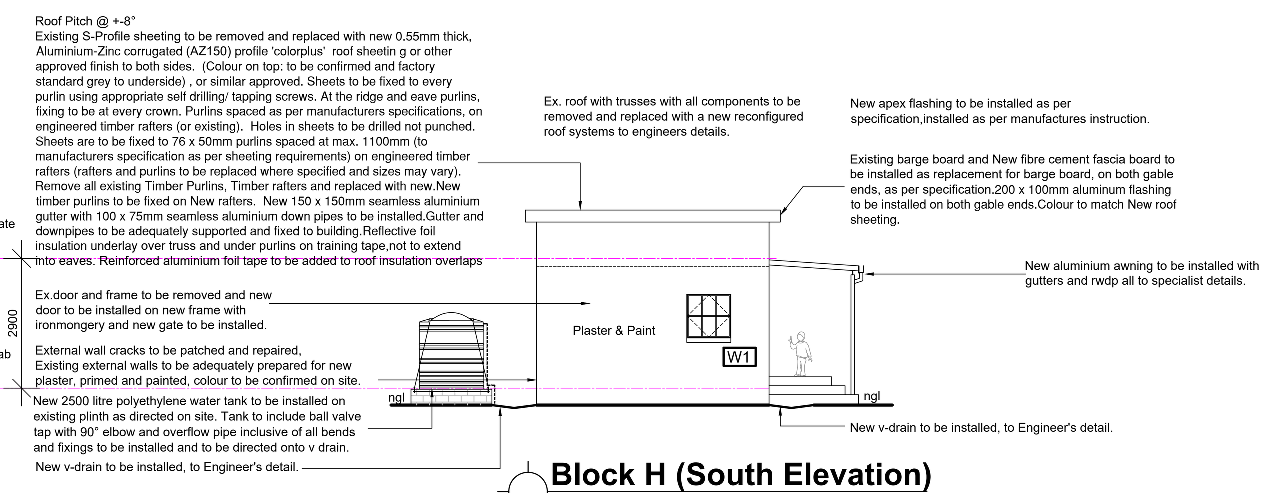
Block H (West Elevation)
Scale 1:100



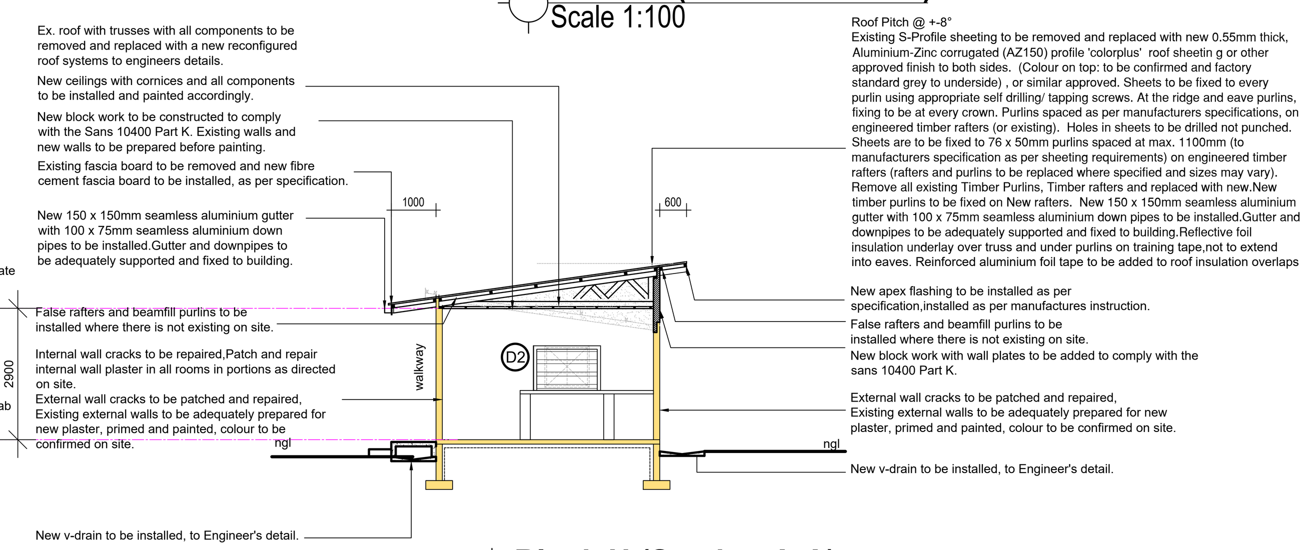
Block H (North Elevation)
Scale 1:100



TYPE:	W1 X 1 SS32
FRAME:	SS Industrial type rolled steel window sections. SABS approved.
GLASS:	6mm Toughened safety glass puttied in with steel window putty (Painted Putty) . All glazing is to comply with the SANS 10400 PART N. All glazing is to comply with the SANS 10400 PART N. All glazing is to be supplied with a certificate.
FITTINGS:	Approved standard brass fittings to opening sashes
B.BARS:	Galvanized mild steel flat bars as per manufacturers specification
FINISH:	Galvanised. No Painting required.
NOTES:	Cores adjacent to window jambs are to have cores filled allowing fixing lugs to be built -in (Similar to detail below). All putty around glazing is to be painted when dried.
SCALE: 1:50	DETAIL DESCRIPTION. WINDOW SCHEDULE



Block H (South Elevation)
Scale 1:100

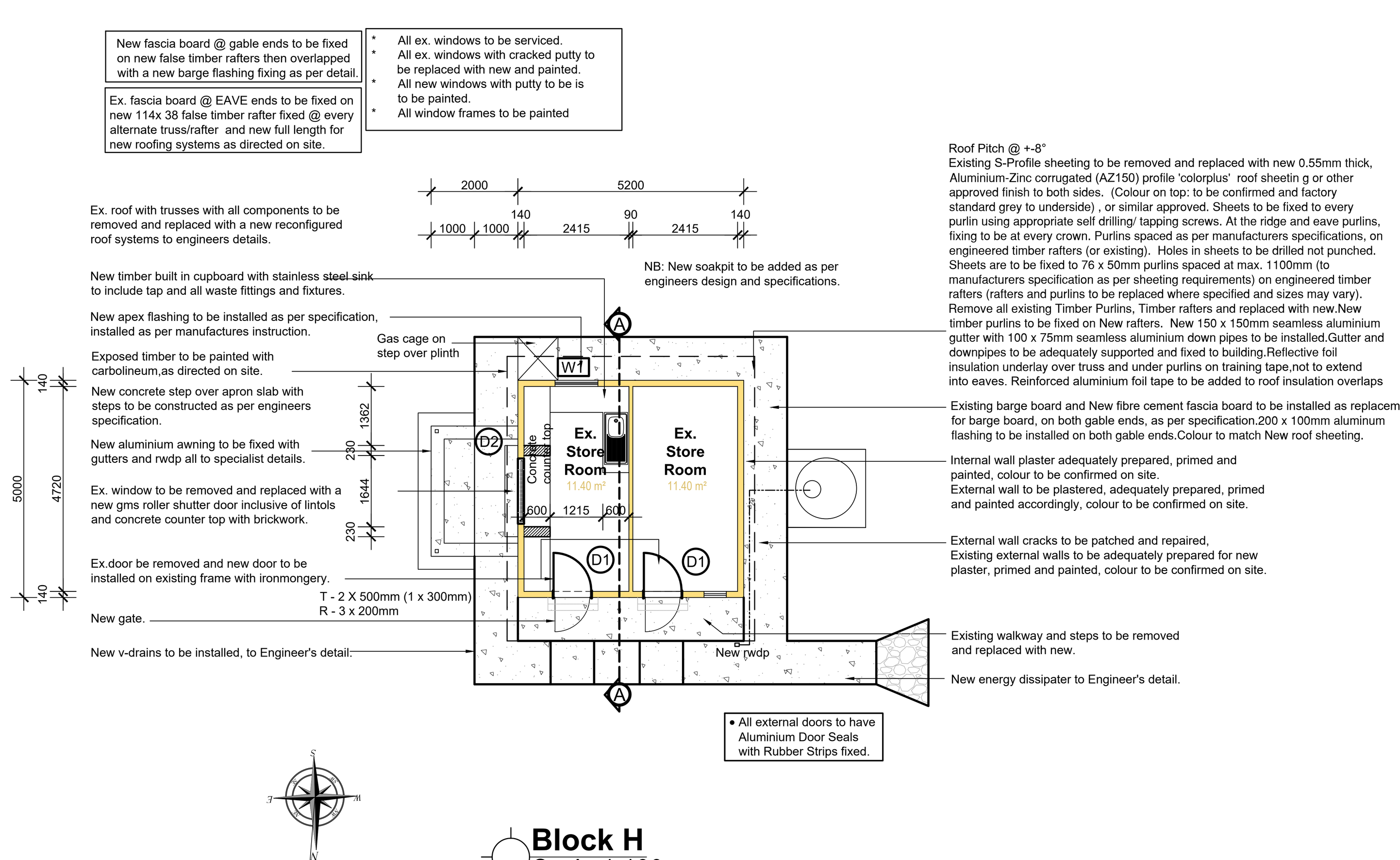


Block H (Section A-A)
Scale 1:100

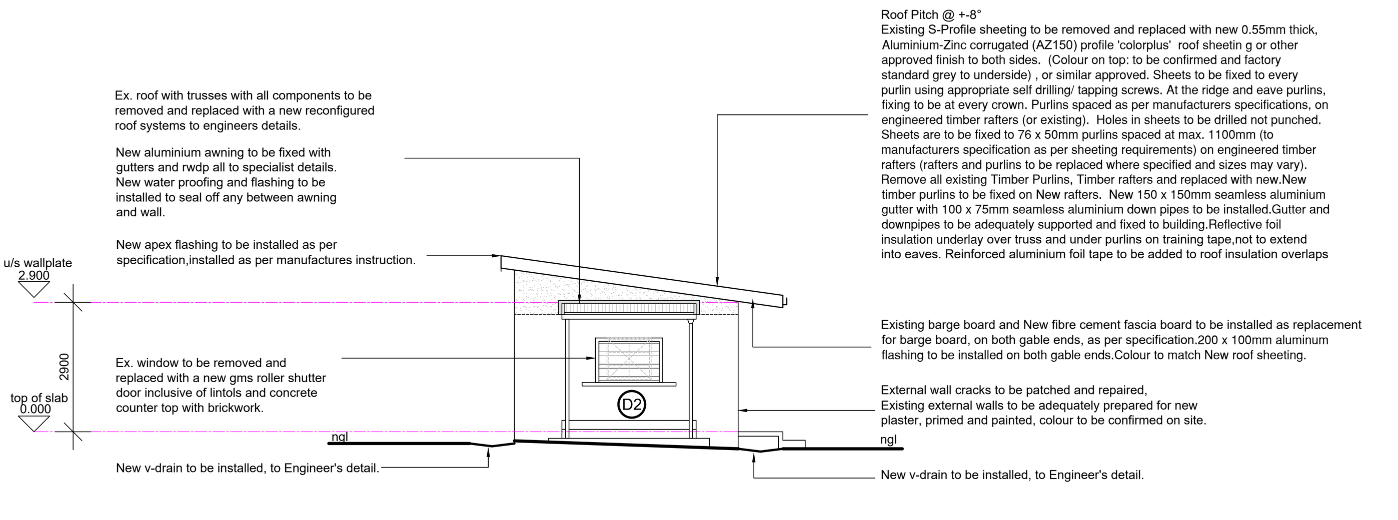
New fascia board @ gable ends to be fixed on new false timber rafters then overlapped with a new barge flashing fixing as per detail.

Ex. fascia board @ EAVE ends to be fixed on new 114x 38 false timber rafter fixed @ every alternate truss/rafter and new full length for new roofing systems as directed on site.

- All ex. windows to be serviced.
- All ex. windows with cracked putty to be replaced with new and painted.
- All new windows with putty to be is to be painted.
- All window frames to be painted



Block H
Scale 1:100



Block H (East Elevation)
Scale 1:100

KZN Department of Public Works Stamp and Signature

Signature: Date:

Consultant:

REALISING CONTINENTAL POTENTIAL

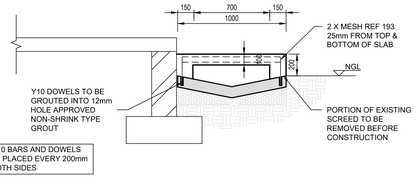
Signature: Date:

public works
Department: Public Works
PROVINCE OF KWAZULU-NATAL

Project Title:
PHASE 14: REPAIRS AND RENOVATIONS TO STORM DAMAGED SCHOOLS - KZN MIDLANDS REGION - CLUSTER 103 - FLORENCE BOOTH PRIMARY

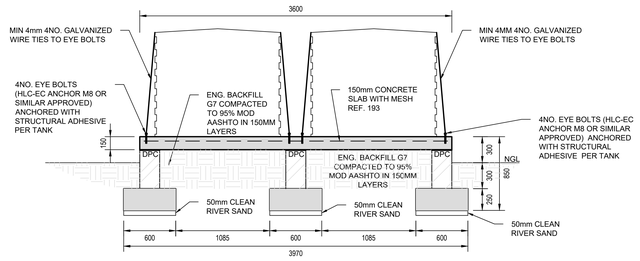
Drawing Description:
Construction drawing for Florence Booth Primary School - Block G & H: Plan;Section and Elevations

Drawn: T.S / M.K	Date: 2022/10/12
Scales: 1:100	
Consultant Drawing No: 1362-18 WD05	Revision: .
DOPW Drawing No: 063880	Revision: .
DOPW WIMS No: WIMS : 063880	
Stamped by Design Review Committee	



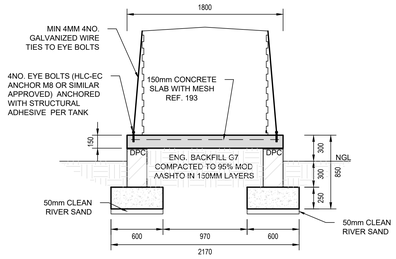
DETAIL OF STEP OVER V DRAIN

SCALE 1:20



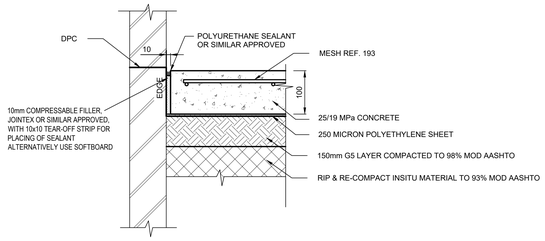
SECTION B-B

SCALE 1:25



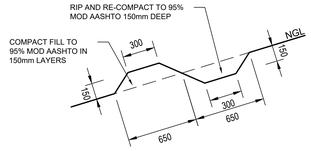
SECTION B-B

SCALE 1:25



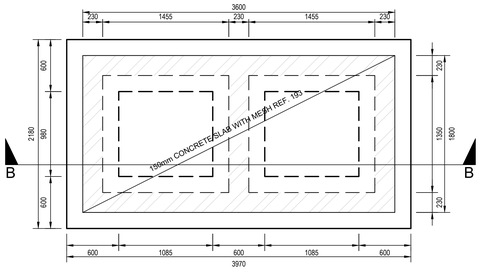
SURFACE BED SLAB AND ISOLATION JOINT (I.J) DETAILS

SCALE 1:10



TYPICAL DETAIL OF CUT OFF EARTH BERM

SCALE 1:20



WATER TANK SLAB DETAIL (DOUBLE)

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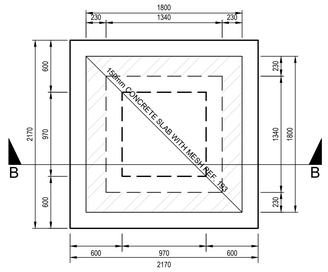

WATER TANK SLAB DETAIL (SINGLE)

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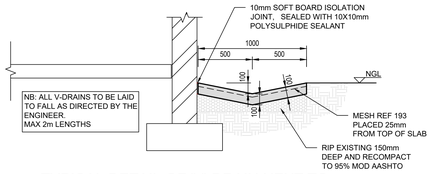
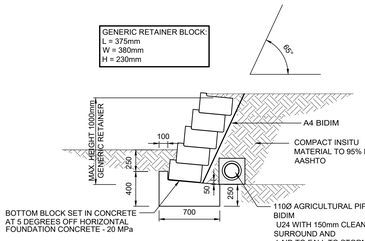


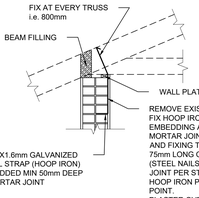
TYPICAL DETAIL OF 'V'-DRAIN NEXT TO EXISTING BUILDING

SCALE 1:20



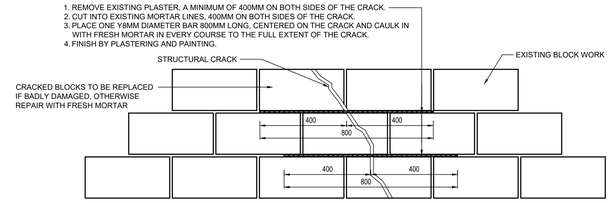
Wall height 1m

1 : 25



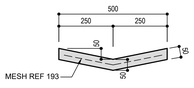
TYPICAL DETAIL OF ROOF CONNECTION TO EXISTING BUILDING - STRAP TYPE

SCALE 1:20



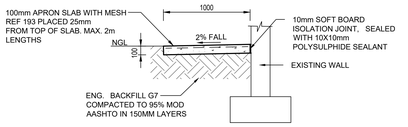
WALL CRACK STITCHING DETAIL

SCALE 1:10



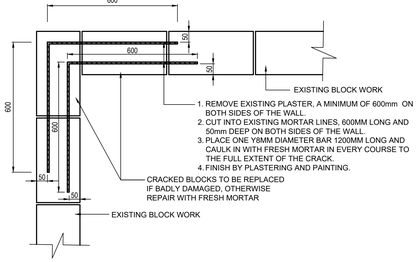
500mm WIDE 'V' DRAIN DETAIL

Scale 1:10



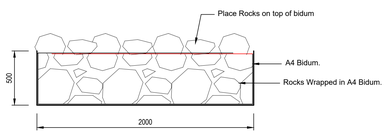
APRON SLAB DETAIL

SCALE 1:25



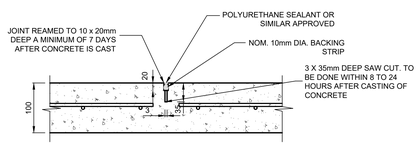
WALL CORNER CRACK STITCHING DETAIL

SCALE 1:10



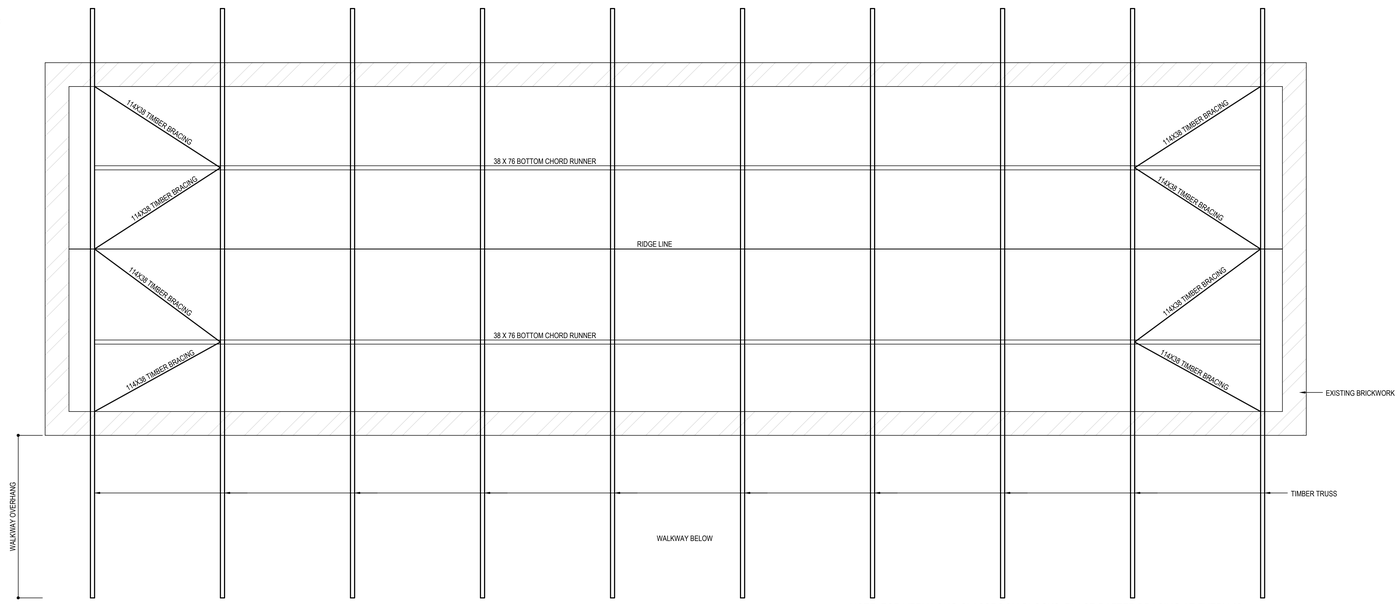
TYPICAL ELEVATION OF SOAK PIT DETAIL

SCALE 1:20



TYPICAL SAW-CUT JOINT (S.J)

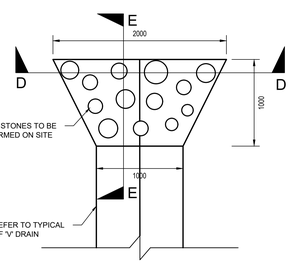
SCALE 1:10



NOTE: FOR VERY LONG CLASSROOM BLOCKS, PLACE RAFTER BRACING AT EVERY 10m

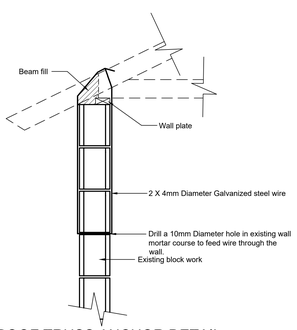
TYPICAL BRACING PLAN

SCALE 1:20



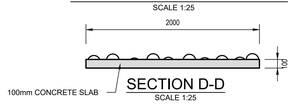
ENERGY DISSIPATOR DETAIL

SCALE 1:25



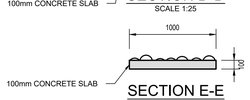
ROOF TRUSS ANCHOR DETAIL WIRE DETAIL

SCALE 1:10



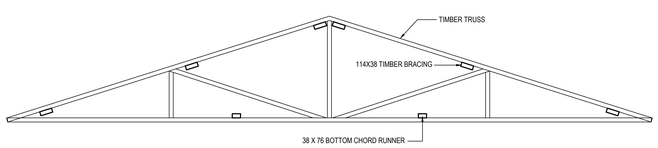
SECTION D-D

SCALE 1:25



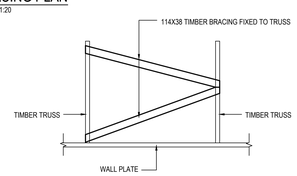
SECTION E-E

SCALE 1:25



TYPICAL FIXING POINTS FOR RAFTER BRACING AND LONGITUDINAL TIES DETAIL

SCALE 1:20



RAFTER BRACING DETAIL

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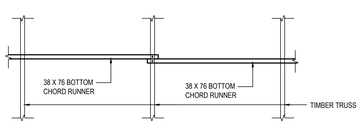


LONGITUDINAL TIE DETAIL

SCALE 1:20

REV	DATE	DESCRIPTION

GENERAL

1. ALL WORK SHALL BE EXECUTED IN STRICT ACCORDANCE WITH SANS 2001-CC1VAND THE PROJECT SPECIFICATIONS IN THE CONTRACT DOCUMENTATION.
2. THE CONTRACTOR SHALL ENSURE THAT WATERPROOFING MATERIALS ARE NOT DAMAGED DURING BACKFILLING OPERATIONS AND FIXING OF STEEL.
   REPLACING OF MATERIAL DUE TO DAMAGE FOR CONTRACTOR'S COST.

FOUNDATIONS AND EARTHWORKS

1. ALL EARTHWORKS SHALL BE IN ACCORDANCE WITH SANS 1200 D INCLUDING THE LATEST REVISIONS.
2. ALL EXCAVATIONS MUST BE INSPECTED AND APPROVED BY THE ENGINEER BEFORE PLACING OF ANY CONCRETE FOUNDATION, BLINDING. WATERPROOFING OR GEOFABRIC MEMBRANE.
3. NO FOUNDATION SHALL BE CAST ON NON-ENGINEERED FILL OR BACKFILL MATERIAL.PORTIONS THAT ARE OVER-EXCAVATED BEYOND THE DEPTH REQUIRED BY THE GEOTECHNICAL / RESIDENT ENGINEER, TO BE FILLED WITH MASS CONCRETE (20MPa / 19mm) AT THE CONTRACTOR'S EXPENSE.

BRICKWORK & BLOCKWORK:

1. ALL BRICKWORK, BLOCKWORK, ANCHORS, WALL TIES AND STRAPS SHALL BE IN ACCORDANCE WITH SANS 0400 – 1990 AND SANS 0164 – 1980 INCLUDING THE LATEST REVISIONS.
2. THE MINIMUM CRUSHING STRENGTH OF ALL LOAD BEARING BRICKWORK SHALL BE 14 MPa.
3. THE MINIMUM CRUSHING STRENGTH OF MORTAR SHALL BE AS FOR CLASS II MORTAR IN ACCORDANCE WITH TABLE 1 SANS 0164 PART I - 1980.
4. LOAD BEARING BRICKWORK SHALL BE REINFORCED WITH AN APPROVED BRICKFORCE EVERY FOURTH LAYER UNLESS OTHERWISE SPECIFIED ON DRAWINGS.
5. IN ADDITION, BRICKFORCE IS REQUIRED IN EVERY LAYER FOR THE FIRST FOUR LAYERS ON TOP OF THE FOUNDATIONS & SLABS AS WELL AS OVER DOOR AND WINDOW OPENINGS (MIN. LAPS = 300mm)
6. ALL BRICK ANCHORS, WALL TIES AND STRAPS SHALL BE HOT DIP GALVANIZED.
7. V-JOINTS ARE TO BE MADE THROUGH PLASTERWORK WHERE BRICKWORK / BLOCKWORK AND CONCRETE JOIN.

CONCRETE:

1. CONCRETE GRADES:

REINFORCED CONCRETE	=	30 MPa/19mm
MASS CONCRETE	=	20 MPa/19mm
BLINDING	=	15 MPa/19mm
SURFACE BEDS	=	30 MPa/19mm

2. 20 X 20 CHAMFER TO BE PROVIDED ON ALL EXPOSED EDGES
3. COVER TO REINFORCEMENT:

ROOF & FLOOR SLABS	=	25mm
FOUNDATION BASES	=	50mm

4. ALL CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENTS OF SANS 2001-CC1.
5. CONCRETE TOLERANCE IN GENERAL SHALL BE OF DEGREE OF ACCURACY NO. II AS SPECIFIED IN SANS 2001-CC1.
6. ALL CASTING PROCEDURES, CONSTRUCTION METHODS AND POSITIONS OF CONSTRUCTION JOINTS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF THE PROJECT.
7. THE CONTRACTOR MUST CO-ORDINATE ALL SERVICES DRAWINGS FOR DETAILS AND POSITIONS OF OPENINGS AND SLEEVES REQUIRED FOR STORMWATER, SEWERAGE, DRAINAGE, ELECTRICAL, MECHANICAL AND OTHER SERVICES
8. THE CONTRACTOR MUST OBTAIN PERMISSION FROM THE ENGINEER BEFORE ANY OPENINGS OR SERVICES LARGER THAN 150 mm DIA OR 150 X 150 mm WHICH ARE NOT INDICATED ON THE DRAWINGS MAY BE INTRODUCED THROUGH ANY STRUCTURAL ELEMENT.
9. CURING OF CONCRETE SHALL BE CARRIED OUT STRICTLY IN ACCORDANCE WITH SANS 2001-CC1.
10. THE STRENGTH OF CONCRETE COVER BLOCKS SHALL AT LEAST BE EQUAL TO THE CONCRETE STRENGTH OF THE STRUCTURAL ELEMENT IN WHICH THEY ARE USED. THE SIZE AND FIXING METHOD OF COVER BLOCKS SHALL BE DISCUSSED IN ADVANCE WITH THE ENGINEER.
11. STRIPPING TIMES OF SHUTTERING AND PROPPING SHALL BE IN ACCORDANCE WITH SANS 2001-CC1.
12. CONCRETE MIX DESIGNS FOR ALL GRADES OF CONCRETE INCLUDING SCREED MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO PLACING OF ANY CONCRETE.
13. COLD CONSTRUCTION JOINTS ; MAIN AGGREGATE MUST BE EXPOSED, CLEANED AND THOROUGHLY WETTED BEFORE CASTING OF NEW CONCRETE. NO CEMENT GROUT SHALL BE USED. LOCATION OF JOINTS TO BE APPROVED BY THE ENGINEER IF DEVIATED FROM THE DRAWINGS.

SURFACE BEDS:

1. PROVIDE 12mm ISOLATION JOINTS (I.J.) AROUND ALL CONCRETE COLUMNS AND AGAINST BRICK WALLS. AFTER CONCRETE HAS SET, JOINTEX TO BE RAKED OUT 10mm DEEP AND SEALED WITH APPROVED JOINT SEALANT – REFER TO STANDARD DETAILS.
2. SAW-CUT JOINTS TO BE DONE AS SOON AS CONCRETE IS FIRM ENOUGH TO NOT DAMAGE THE EDGES. USUALLY BETWEEN 6 TO 16 HOURS.
3. ALL BACKFILL TO BE COMPACTED IN LAYERS NOT EXCEEDING 150mm. COMPACTION EFFORT : AS INDICATED
4. FLOOR SLABS ARE WOOD FLOAT FINISHED AND SCREED TOPPING TO HAVE A STEEL TROWEL FINISH

REINFORCEMENT:

1. ALL REINFORCEMENT SHALL COMPLY WITH THE REQUIREMENTS OF SANS 920-2011.
2. THE CONTRACTOR SHALL INSPECT AND APPROVE THE FIXED REINFORCEMENT BEFORE THE ENGINEER IS NOTIFIED. ALL REINFORCEMENT SHALL BE INSPECTED AND APPROVED BY THE ENGINEER BEFORE CASTING OF CONCRETE MAY COMMENCE.
3. THE CONTRACTOR SHALL GIVE AT LEAST 24 HOURS (3 WORKING DAYS) NOTICE TO THE ENGINEER FOR REBAR INSPECTIONS THAT ARE REQUIRED.
4. BEND-OUT BARS AT CONSTRUCTION JOINTS SHALL BE BENT OUT WITH A SUITABLE PIPE SO THAT NO KINK IS FORMED IN THE BARS.
5. NO HEAT TREATMENT, FLAME CUTTING OR WELDING OF REBAR WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER SHALL BE ALLOWED.

KZN Department of Education Stamp and Signature

Signature: Date:

Consultant:

REALISING CONTINENTAL POTENTIAL

Signature: Date:

public works

Department:
Public Works
PROVINCE OF KWAZULU-NATAL

Project Title:
PHASE 14: REPAIRS AND RENOVATIONS TO STORM DAMAGED SCHOOLS - KZN MIDLANDS REGION - CLUSTER 103 - FLORENCE BOOTH PRIMARY

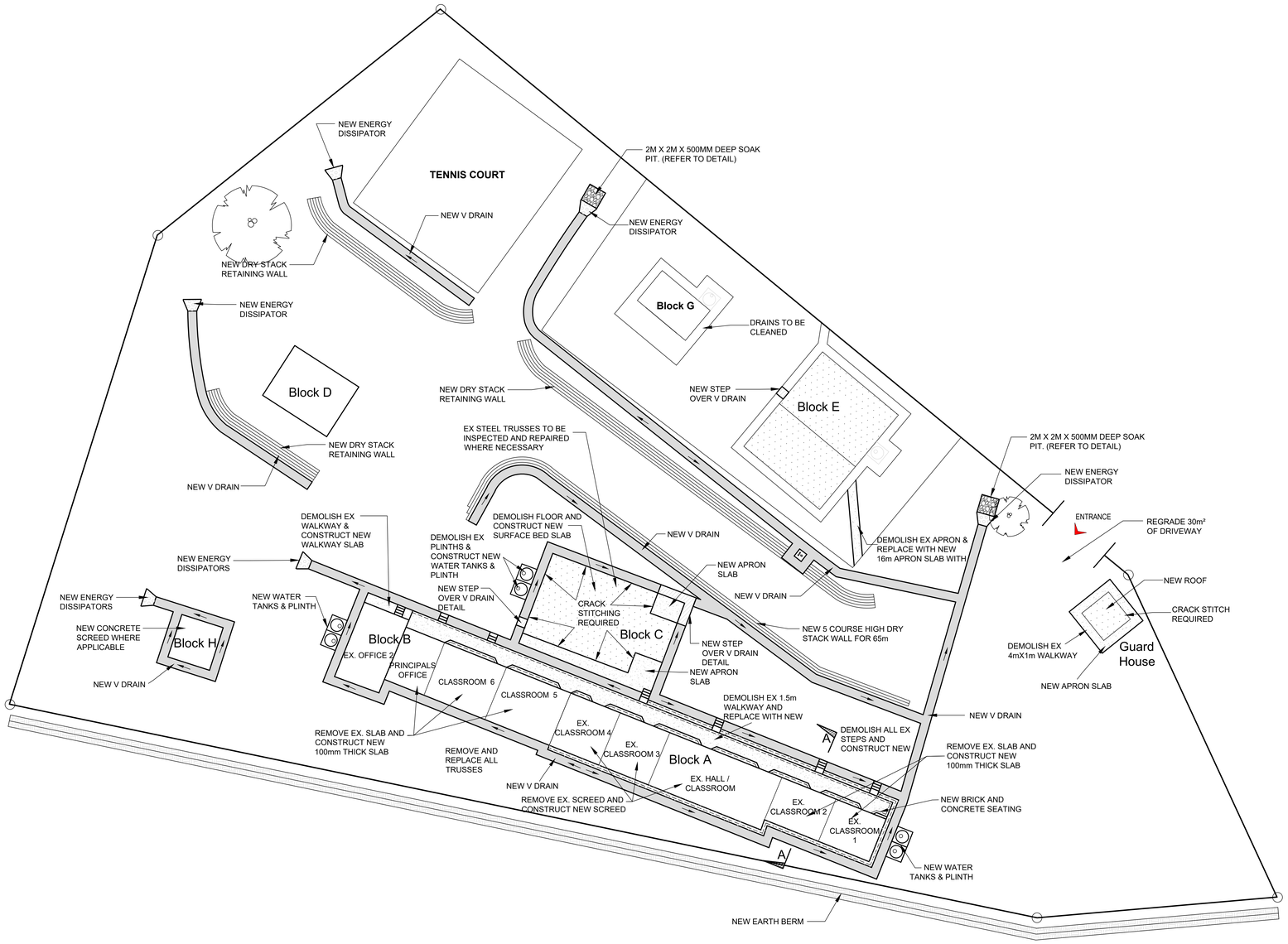
Drawing Description:
TYPICAL ENGINEERING DETAILS

Drawn: K. Chetty Date: 2020/07/13
Scales: As Shown

Consultant Drawing No: V16-0539-034 | Revision: 0
DOPW CONTRACT No: ZNTL04771W
DOPW WIMS No: WIMS : 063880

Stamped by Design Review Committee

BUILDING NO.	DESCRIPTION
A & B	6 CLASSROOM BLOCK & OFFICES (62.9m x 6.5m)
C	CHURCH HALL (156m x 9.5m)
D	MISSION HOUSE (8.5m x 6.6m)
E	ECD CLASSROOM (11m x 13.6m)
F	GUARD HOUSE (3.2m x 2.5m)
G	ECD ABLUTIONS (6.9m x 4.3m)
H	SHELTER (4.8m x 4.5m)



Site Plan

Scale 1:200

REV	DATE	DESCRIPTION

GENERAL

1. ALL WORK SHALL BE EXECUTED IN STRICT ACCORDANCE WITH SANS 2001-CC1\AND THE PROJECT SPECIFICATIONS IN THE CONTRACT DOCUMENTATION.
2. THE CONTRACTOR SHALL ENSURE THAT WATERPROOFING MATERIALS ARE NOT DAMAGED DURING BACKFILLING OPERATIONS AND FIXING OF STEEL. REPLACING OF MATERIAL DUE TO DAMAGE FOR CONTRACTOR'S COST.

FOUNDATIONS AND EARTHWORKS

1. ALL EARTHWORKS SHALL BE IN ACCORDANCE WITH SANS 1200 D INCLUDING THE LATEST REVISIONS.
2. ALL EXCAVATIONS MUST BE INSPECTED AND APPROVED BY THE ENGINEER BEFORE PLACING OF ANY CONCRETE FOUNDATION, BLINDING ,WATERPROOFING OR GEOFABRIC MEMBRANE.
3. NO FOUNDATION SHALL BE CAST ON NON-ENGINEERED FILL OR BACKFILL MATERIAL PORTIONS THAT ARE OVER-EXCAVATED BEYOND THE DEPTH REQUIRED BY THE GEOTECHNICAL / RESIDENT ENGINEER, TO BE FILLED WITH MASS CONCRETE (20MPa / 19mm) AT THE CONTRACTOR'S EXPENSE.

BRICKWORK & BLOCKWORK:

1. ALL BRICKWORK, BLOCKWORK, ANCHORS, WALL TIES AND STRAPS SHALL BE IN ACCORDANCE WITH SANS 0400 – 1990 AND SANS 0164 – 1980 INCLUDING THE LATEST REVISIONS.
2. THE MINIMUM CRUSHING STRENGTH OF ALL LOAD BEARING BRICKWORK SHALL BE 14 MPa.
3. THE MINIMUM CRUSHING STRENGTH OF MORTAR SHALL BE AS FOR CLASS II MORTAR IN ACCORDANCE WITH TABLE 1 SANS 0164 PART I – 1980.
4. LOAD BEARING BRICKWORK SHALL BE REINFORCED WITH AN APPROVED BRICKFORCE EVERY FOURTH LAYER UNLESS OTHERWISE SPECIFIED ON DRAWINGS.
5. IN ADDITION, BRICKFORCE IS REQUIRED IN EVERY LAYER FOR THE FIRST FOUR LAYERS ON TOP OF THE FOUNDATIONS & SLABS AS WELL AS OVER DOOR AND WINDOW OPENINGS (MIN. LAPS = 300mm)
6. ALL BRICK ANCHORS, WALL TIES AND STRAPS SHALL BE HOT DIP GALVANIZED.
7. V–JOINTS ARE TO BE MADE THROUGH PLASTERWORK WHERE BRICKWORK / BLOCKWORK AND CONCRETE JOIN.

CONCRETE:

1. CONCRETE GRADES:

REINFORCED CONCRETE	=	30 MPa/19mm
MASS CONCRETE	=	20 MPa/19mm
BLINDING	=	15 MPa/19mm
SURFACE BEDS	=	30 MPa/19mm

2. 20 X 20 CHAMFER TO BE PROVIDED ON ALL EXPOSED EDGES
3. COVER TO REINFORCEMENT:

ROOF & FLOOR SLABS	=	25mm
FOUNDATION BASES	=	50mm

4. ALL CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENTS OF SANS 2001-CC1.
5. CONCRETE TOLERANCE IN GENERAL SHALL BE OF DEGREE OF ACCURACY NO. II AS SPECIFIED IN SANS 2001-CC1
6. ALL CASTING PROCEDURES, CONSTRUCTION METHODS AND POSITIONS OF CONSTRUCTION JOINTS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF THE PROJECT.
7. THE CONTRACTOR MUST CO-ORDINATE ALL SERVICES DRAWINGS FOR DETAILS AND POSITIONS OF OPENINGS AND SLEEVES REQUIRED FOR STORMWATER, SEWERAGE, DRAINAGE, ELECTRICAL, MECHANICAL AND OTHER SERVICES
8. THE CONTRACTOR MUST OBTAIN PERMISSION FROM THE ENGINEER BEFORE ANY OPENINGS OR SERVICES LARGER THAN 150 mm DIA OR 150 X 150 mm WHICH ARE NOT INDICATED ON THE DRAWINGS MAY BE INTRODUCED THROUGH ANY STRUCTURAL ELEMENT.
9. CURING OF CONCRETE SHALL BE CARRIED OUT STRICTLY IN ACCORDANCE WITH SANS 2001-CC1.
10. THE STRENGTH OF CONCRETE COVER BLOCKS SHALL AT LEAST BE EQUAL TO THE CONCRETE STRENGTH OF THE STRUCTURAL ELEMENT IN WHICH THEY ARE USED. THE SIZE AND FIXING METHOD OF COVER BLOCKS SHALL BE DISCUSSED IN ADVANCE WITH THE ENGINEER.
11. STRIPPING TIMES OF SHUTTERING AND PROPPING SHALL BE IN ACCORDANCE WITH SANS 2001-CC1.
12. CONCRETE MIX DESIGNS FOR ALL GRADES OF CONCRETE INCLUDING SCREED MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO PLACING OF ANY CONCRETE.
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SURFACE BEDS:

1. PROVIDE 12mm ISOLATION JOINTS (I.J.) AROUND ALL CONCRETE COLUMNS AND AGAINST BRICK WALLS. AFTER CONCRETE HAS SET, JOINTEX TO BE RAKED OUT 10mm DEEP AND SEALED WITH APPROVED JOINT SEALANT – REFER TO STANDARD DETAILS.
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3. ALL BACKFILL TO BE COMPACTED IN LAYERS NOT EXCEEDING 150mm. COMPACTION EFFORT : AS INDICATED
4. FLOOR SLABS ARE WOOD FLOAT FINISHED AND SCREED TOPPING TO HAVE A STEEL TROWEL FINISH

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KZN Department of Education Stamp and Signature

Signature: Date:

Consultant:

REALISING CONTINENTAL POTENTIAL

Signature: Date:

public works

Department:
Public Works
PROVINCE OF KWAZULU-NATAL

Project Title:
PHASE 14: REPAIRS AND RENOVATIONS TO STORM DAMAGED SCHOOLS - KZN MIDLANDS REGION - CLUSTER 103 - FLORENCE BOOTH

Drawing Description:

Illustration Site Plan of Engineering works for Florence Booth School

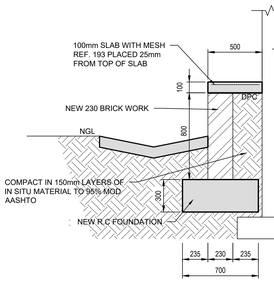
Drawn: I.GAFOOR Date: 2020/07/13

Scales: As Shown

Consultant Drawing No:	Revision:
V16-0539-034a	0
DOPW CONTRACT No: ZNTL04771W	Revision:

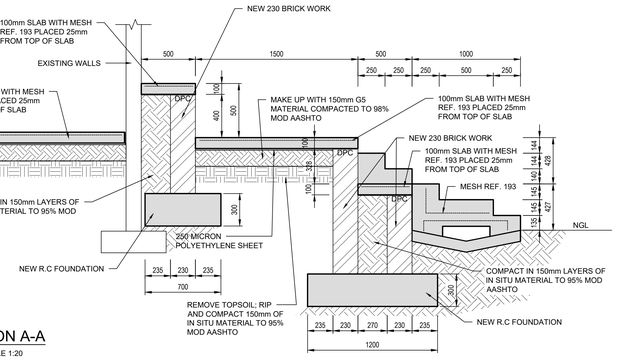
DOPW WIMS No:
WIMS : 063880

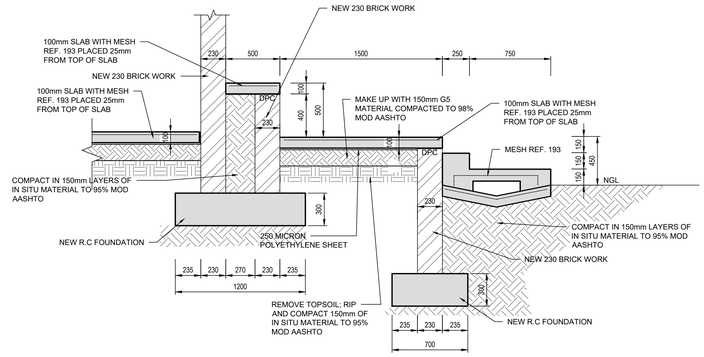
Stamped by Design Review Committee



SECTION A-A

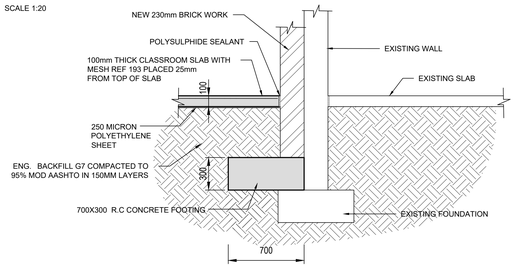
SCALE 1:20





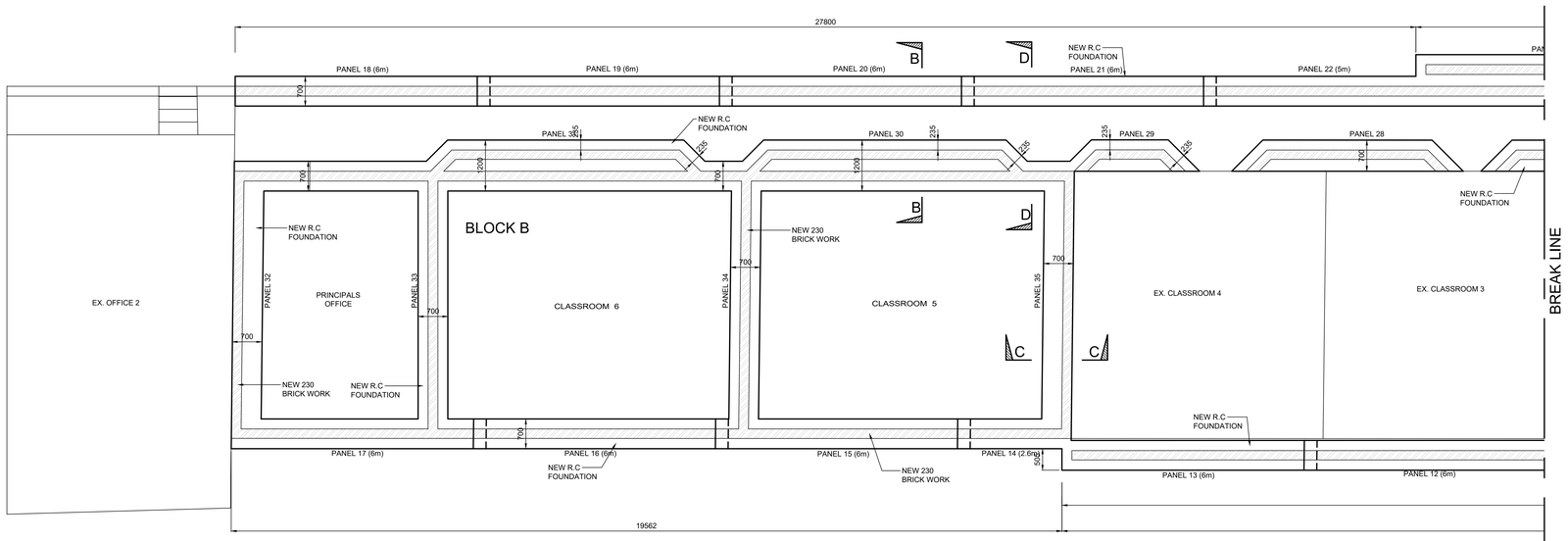
SECTION B-B

SCALE 1:20



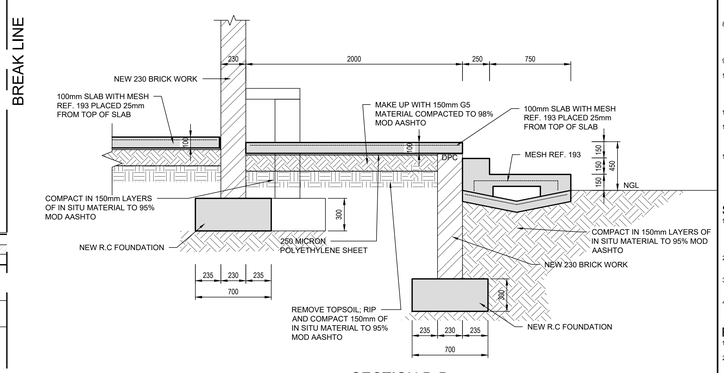
SECTION C-C

SCALE 1:20



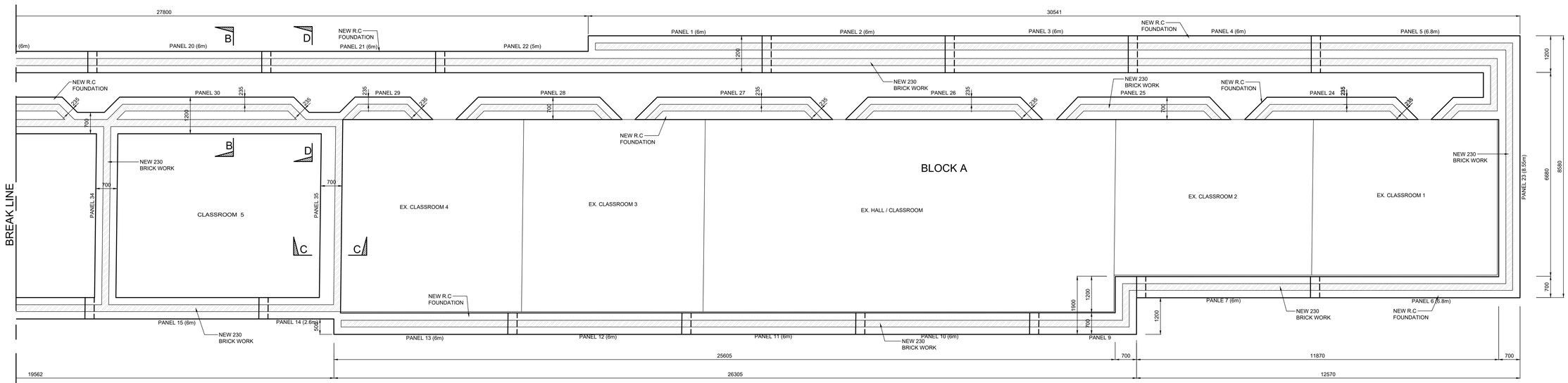
BLOCK A AND B FOUNDATION LAYOUT

SCALE 1:50



SECTION D-D

SCALE 1:20



BLOCK A AND B FOUNDATION LAYOUT

SCALE 1:50

REV	DATE	DESCRIPTION

GENERAL

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CONCRETE:

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BLINDING	=	15 MPa/19mm
SURFACE BEDS	=	30 MPa/19mm

2. 20 X 20 CHAMFER TO BE PROVIDED ON ALL EXPOSED EDGES
3. COVER TO REINFORCEMENT:

ROOF & FLOOR SLABS	=	25mm
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REINFORCEMENT:

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KZN Department of Education Stamp and Signature

Signature: Date:

Consultant:

REAISING CONTINENTAL POTENTIAL

Signature: Date:

public works

Department:
Public Works
PROVINCE OF KWAZULU-NATAL

Project Title:
PHASE 14: REPAIRS AND RENOVATIONS TO STORM DAMAGED SCHOOLS - KZN MIDLANDS REGION - CLUSTER 103 - FLORENCE BOOTH PRIMARY

Drawing Description:
BLOCK A AND B FOUNDATION LAYOUT AND DETAILS

Drawn: K. Chetty Date: 2023/03/01
Scales: As Shown

Consultant Drawing No: V16-0539-034b
Revision: 0
DOPW CONTRACT No: ZNTL04771W
DOPW WIMS No: WIMS : 063880
Stamped by Design Review Committee

Member	Num of	Bars per Memb	Type Dia	Tot Nr	Bar Mark	Cut Length	SC	A [mm]	B [mm]	C [mm]	D [mm]	E/r [mm]
PANEL 1 - 4	4	8	Y12	32	01	5900	20	5900				
		20	Y10	80	02	2800	60	200	1100			
PANEL 5 - 6	2	8	Y12	16	03	6740	20	6740				
		23	Y10	46	04	2800	60	200	1100			
PANEL 7,10,11,12, 13,15,16,17, 18,19,20,21	12	20	Y10	240	05	1800	60	200	600			
		6	Y12	72	06	5900	20	5900				
PANEL 9	1	22	Y10	22	07	1800	60	200	600			
		6	Y12	6	08	3405	20	3405				
		6	Y12	6	09	1795	20	1795				
		6	Y12	6	10	900	20	900				
PANEL 14	1	9	Y10	9	11	1800	60	200	600			
		6	Y12	6	12	2575	20	2575				
PANEL 22	1	17	Y10	17	13	1800	60	200	600			
		6	Y12	6	14	5600	20	5600				
PANEL 23	1	9	Y10	9	15	2800	60	200	1100			
		24	Y10	24	16	1800	60	200	600			
		12	Y12	12	17	4550	20	4550				
		4	Y12	4	18	2645	20	2645				
		2	Y12	2	19a	2090	20	2090				
		2	Y12	2	19b	2455	20	2450				
		2	Y12	2	19c	2815	20	2815				
PANEL 24,25	2	15	Y10	30	20	1800	60	200	600			
		2	Y12	4	21a	4200	20	4200				
		2	Y12	4	21b	4850	20	4850				
		2	Y12	4	21c	5500	20	5500				
PANEL 26,27	2	17	Y10	34	22	1800	60	200	600			
		2	Y12	4	23a	5000	20	5000				
		2	Y12	4	23b	5610	20	5610				
		2	Y12	4	23c	6220	20	6220				
PANEL 28	1	13	Y10	13	24	1800	60	200	600			
		2	Y12	2	25a	4030	20	4030				
		2	Y12	2	25b	4635	20	4630				
		2	Y12	2	25c	5235	20	5235				
PANEL 29	1	7	Y10	7	26	1800	60	200	600			
		2	Y12	2	27a	1795	20	1795				
		2	Y12	2	27b	2350	20	2350				
		2	Y12	2	27c	2900	20	2900				

	6	8	10	12	16	20	25	32	40	TOT
R										
Y			663	923						1586
TOT			663	923						1586

REINFORCEMENT (PANEL 1 - 4, PANEL 5 - 6, PANEL 7,10,11,12,13,15,16,17,18,19,20,21, PANEL 9, PANEL 22, PANEL 23, PANEL 24,25, PANEL 26,27, PANEL 28, PANEL 29)

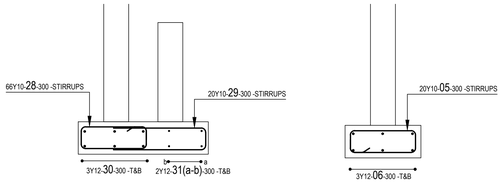
Date	06-03-2023
Det. by	K.D.C
Revision	0
Schedule No	R01

Member	Num of	Bars per Memb	Type Dia	Tot Nr	Bar Mark	Cut Length	SC	A [mm]	B [mm]	C [mm]	D [mm]	E/r [mm]
PANEL 30	1	66	Y10	66	28	1800	60	200	600			
		20	Y10	20	29	1850	38	850	200	850		
		18	Y12	18	30	7000	20	7000				
		2	Y12	2	31a	5655	20	5655				
		2	Y12	2	31b	6560	20	6560				
PANEL 31	1	19	Y10	19	32	1650	38	750	200	750		
		2	Y12	2	33a	5460	20	5460				
		2	Y12	2	33b	6445	20	6445				
PANEL 32	1	23	Y10	23	36	1800	60	200	600			
		6	Y12	6	37	6675	20	6675				
PANEL 33	1	23	Y10	23	36	1800	60	200	600			
		6	Y12	6	37	6675	20	6675				
PANEL 34	1	23	Y10	23	38	1800	60	200	600			
		6	Y12	6	39	6675	20	6675				
PANEL 35	1	23	Y10	23	38	1800	60	200	600			
		6	Y12	6	39	6675	20	6675				

	6	8	10	12	16	20	25	32	40	TOT
R										
Y			215	297						512
TOT			215	297						512

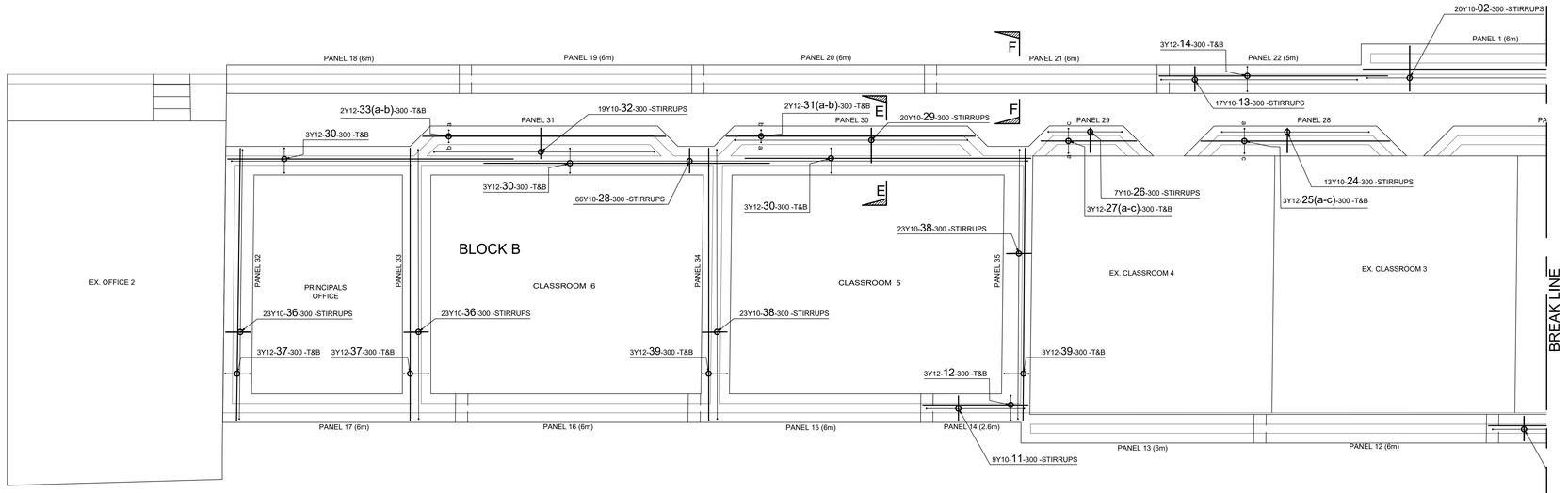
REINFORCEMENT MASSES [kg] (PANEL 30, PANEL 31, PANEL 32, PANEL 33, PANEL 34, PANEL 35)

Date	06-03-2023
Det. by	K.D.C
Revision	0
Schedule No	R02



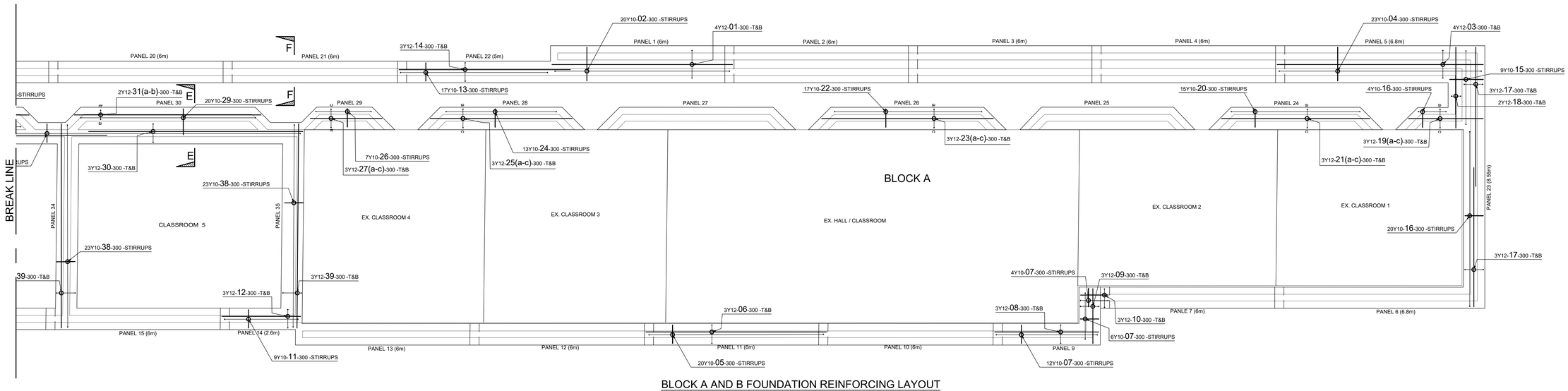
SECTION E-E

SECTION F-F



BLOCK A AND B FOUNDATION REINFORCING LAYOUT

SCALE 1:50



BLOCK A AND B FOUNDATION REINFORCING LAYOUT

SCALE 1:50

REV	DATE	DESCRIPTION

GENERAL

1. ALL WORK SHALL BE EXECUTED IN STRICT ACCORDANCE WITH SANS 2001-CC1VAND THE PROJECT SPECIFICATIONS IN THE CONTRACT DOCUMENTATION.
2. THE CONTRACTOR SHALL ENSURE THAT WATERPROOFING MATERIALS ARE NOT DAMAGED DURING BACKFILLING OPERATIONS AND FIXING OF STEEL.
   REPLACING OF MATERIAL DUE TO DAMAGE FOR CONTRACTOR'S COST.

FOUNDATIONS AND EARTHWORKS

1. ALL EARTHWORKS SHALL BE IN ACCORDANCE WITH SANS 1200 D INCLUDING THE LATEST REVISIONS.
2. ALL EXCAVATIONS MUST BE INSPECTED AND APPROVED BY THE ENGINEER BEFORE PLACING OF ANY CONCRETE FOUNDATION, BLINDING ,WATERPROOFING OR GEOFABRIC MEMBRANE.
3. NO FOUNDATION SHALL BE CAST ON NON-ENGINEERED FILL OR BACKFILL MATERIAL PORTIONS THAT ARE OVER-EXCAVATED BEYOND THE DEPTH REQUIRED BY THE GEOTECHNICAL / RESIDENT ENGINEER. TO BE FILLED WITH MASS CONCRETE (20MPa / 19mm) AT THE CONTRACTOR'S EXPENSE.

BRICKWORK & BLOCKWORK:

1. ALL BRICKWORK, BLOCKWORK, ANCHORS, WALL TIES AND STRAPS SHALL BE IN ACCORDANCE WITH SANS 0400 – 1990 AND SANS 0164 – 1980 INCLUDING THE LATEST REVISIONS.
2. THE MINIMUM CRUSHING STRENGTH OF ALL LOAD BEARING BRICKWORK SHALL BE 14 MPa.
3. THE MINIMUM CRUSHING STRENGTH OF MORTAR SHALL BE AS FOR CLASS II MORTAR IN ACCORDANCE WITH TABLE 1 SANS 0164 PART I – 1980.
4. LOAD BEARING BRICKWORK SHALL BE REINFORCED WITH AN APPROVED BRICKFORCE EVERY FOURTH LAYER UNLESS OTHERWISE SPECIFIED ON DRAWINGS.
5. IN ADDITION, BRICKFORCE IS REQUIRED IN EVERY LAYER FOR THE FIRST FOUR LAYERS ON TOP OF THE FOUNDATIONS & SLABS AS WELL AS OVER DOOR AND WINDOW OPENINGS (MIN. LAPS = 300mm).
6. ALL BRICK ANCHORS, WALL TIES AND STRAPS SHALL BE HOT DIP GALVANIZED.
7. V-JOINTS ARE TO BE MADE THROUGH PLASTERWORK WHERE BRICKWORK / BLOCKWORK AND CONCRETE JOIN.

CONCRETE:

1. CONCRETE GRADES:
   REINFORCED CONCRETE = 30 MPa/19mm
   MASS CONCRETE = 20 MPa/19mm
   BLINDING = 15 MPa/19mm
   SURFACE BEDS = 30 MPa/19mm
2. 20 X 20 CHAMFER TO BE PROVIDED ON ALL EXPOSED EDGES
3. COVER TO REINFORCEMENT:
   ROOF & FLOOR SLABS = 25mm
   FOUNDATION BASES = 50mm
4. ALL CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENTS OF SANS 2001-CC1.
5. CONCRETE TOLERANCE IN GENERAL SHALL BE OF DEGREE OF ACCURACY NO. II AS SPECIFIED IN SANS 2001-CC1.
6. ALL CASTING PROCEDURES, CONSTRUCTION METHODS AND POSITIONS OF CONSTRUCTION JOINTS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF THE PROJECT.
7. THE CONTRACTOR MUST CO-ORDINATE ALL SERVICES DRAWINGS FOR DETAILS AND POSITIONS OF OPENINGS AND SLEEVES REQUIRED FOR STORMWATER, SEWERAGE, DRAINAGE, ELECTRICAL, MECHANICAL AND OTHER SERVICES
8. THE CONTRACTOR MUST OBTAIN PERMISSION FROM THE ENGINEER BEFORE ANY OPENINGS OR SERVICES LARGER THAN 150 mm DIA OR 150 X 150 mm WHICH ARE NOT INDICATED ON THE DRAWINGS MAY BE INTRODUCED THROUGH ANY STRUCTURAL ELEMENT.
9. CURING OF CONCRETE SHALL BE CARRIED OUT STRICTLY IN ACCORDANCE WITH SANS 2001-CC1.
10. THE STRENGTH OF CONCRETE COVER BLOCKS SHALL AT LEAST BE EQUAL TO THE CONCRETE STRENGTH OF THE STRUCTURAL ELEMENT IN WHICH THEY ARE USED. THE SIZE AND FIXING METHOD OF COVER BLOCKS SHALL BE DISCUSSED IN ADVANCE WITH THE ENGINEER.
11. STRIPPING TIMES OF SHUTTERING AND PROPPING SHALL BE IN ACCORDANCE WITH SANS 2001-CC1.
12. CONCRETE MIX DESIGNS FOR ALL GRADES OF CONCRETE INCLUDING SCREED MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO PLACING OF ANY CONCRETE.
13. COLD CONSTRUCTION JOINTS ; MAIN AGGREGATE MUST BE EXPOSED, CLEANED AND THOROUGHLY WETTED BEFORE CASTING OF NEW CONCRETE. NO CEMENT GROUT SHALL BE USED. LOCATION OF JOINTS TO BE APPROVED BY THE ENGINEER IF DEVIATED FROM THE DRAWINGS.

SURFACE BEDS:

1. PROVIDE 12mm ISOLATION JOINTS (I.J.) AROUND ALL CONCRETE COLUMNS AND AGAINST BRICK WALLS. AFTER CONCRETE HAS SET, JOINTEX TO BE RAKED OUT 10mm DEEP AND SEALED WITH APPROVED JOINT SEALANT – REFER TO STANDARD DETAILS.
2. SAW-CUT JOINTS TO BE DONE AS SOON AS CONCRETE IS FIRM ENOUGH TO NOT DAMAGE THE EDGES. USUALLY BETWEEN 6 TO 16 HOURS.
3. ALL BACKFILL TO BE COMPACTED IN LAYERS NOT EXCEEDING 150mm. COMPACTION EFFORT : AS INDICATED.
4. FLOOR SLABS ARE WOOD FLOAT FINISHED AND SCREED TOPPING TO HAVE A STEEL TROWEL FINISH

REINFORCEMENT:

1. ALL REINFORCEMENT SHALL COMPLY WITH THE REQUIREMENTS OF SANS 920-2011.
2. THE CONTRACTOR SHALL INSPECT AND APPROVE THE FIXED REINFORCEMENT BEFORE THE ENGINEER IS NOTIFIED . ALL REINFORCEMENT SHALL BE INSPECTED AND APPROVED BY THE ENGINEER BEFORE CASTING OF CONCRETE MAY COMMENCE.
3. THE CONTRACTOR SHALL GIVE AT LEAST 24 HOURS (3 WORKING DAYS) NOTICE TO THE ENGINEER FOR REBAR INSPECTIONS THAT ARE REQUIRED.
4. BEND-OUT BARS AT CONSTRUCTION JOINTS SHALL BE BENT OUT WITH A SUITABLE PIPE SO THAT NO KINK IS FORMED IN THE BARS.
5. NO HEAT TREATMENT, FLAME CUTTING OR WELDING OF REBAR WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER SHALL BE ALLOWED.

KZN Department of Education Stamp and Signature

Signature: Date:

Consultant:

REALISING CONTINENTAL POTENTIAL

Signature: Date:

public works

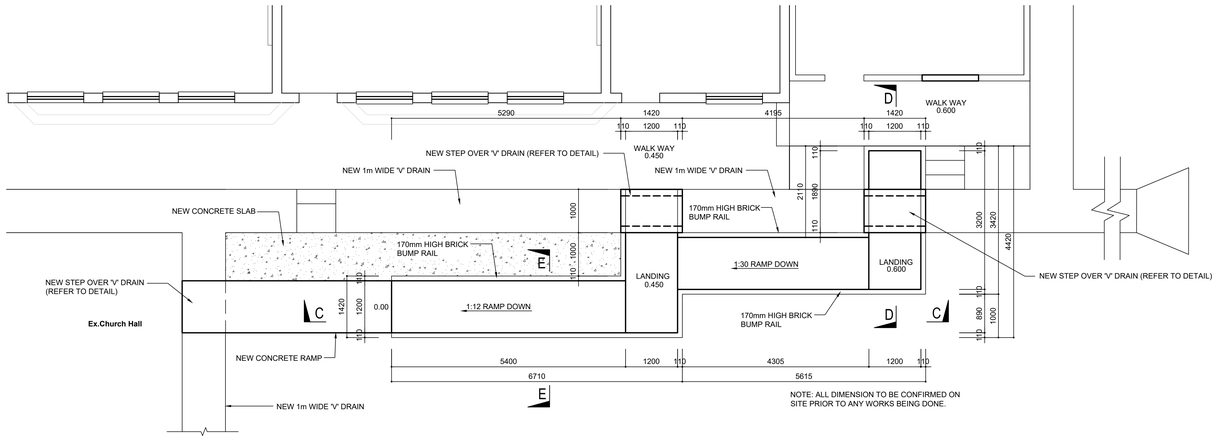
Department:
Public Works
PROVINCE OF KWAZULU-NATAL

Project Title:
PHASE 14: REPAIRS AND RENOVATIONS TO STORM DAMAGED SCHOOLS - KZN MIDLANDS REGION - CLUSTER 103 - FLORENCE BOOTH PRIMARY

Drawing Description:
BLOCK A AND B FOUNDATION REINFORCING LAYOUT AND DETAILS

Drawn: K. Chetty Date: 2023/03/01
Scales: As Shown

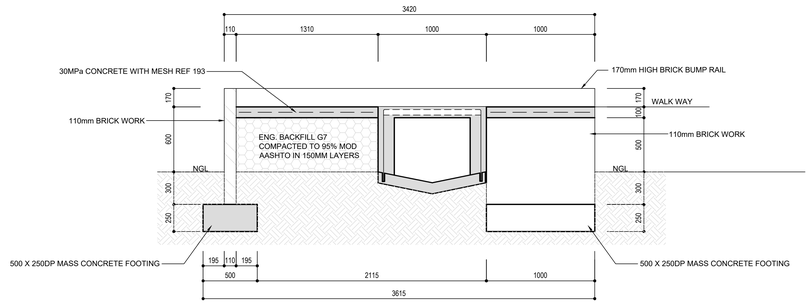
Consultant Drawing No: V16-0539-034c
Revision: 0
DOPW CONTRACT No: ZNTL04771W
DOPW WIMS No: WIMS : 063880
Stamped by Design Review Committee



NOTE: ALL DIMENSION TO BE CONFIRMED ON SITE PRIOR TO ANY WORKS BEING DONE.

SLAB LAYOUT PLAN - DISABLED RAMP DETAIL

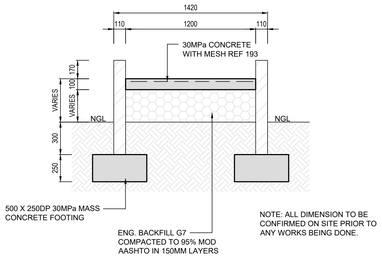
SCALE 1:50



NOTE: ALL DIMENSION TO BE CONFIRMED ON SITE PRIOR TO ANY WORKS BEING DONE.

SECTION D-D - DISABLED RAMP DETAIL

SCALE 1:20



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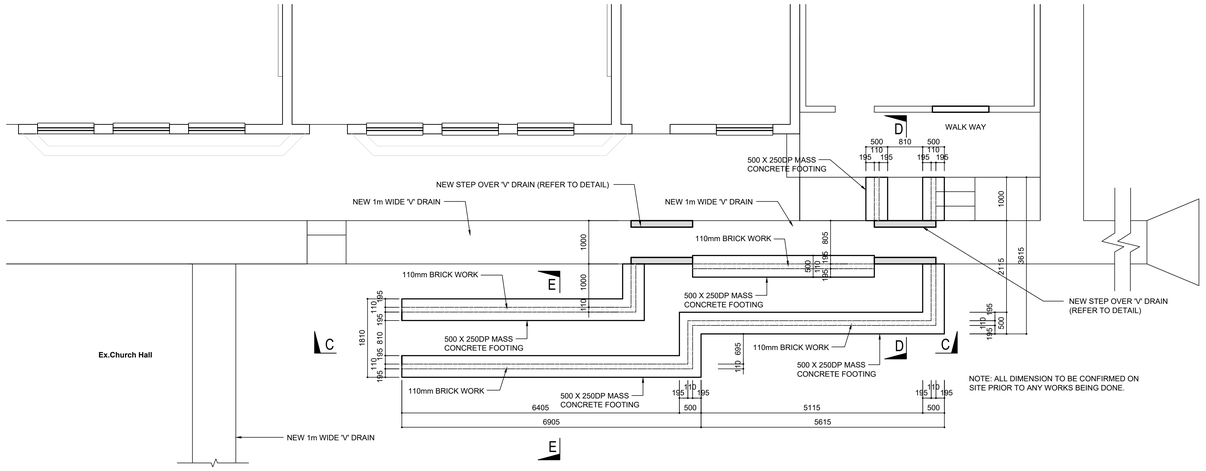
SECTION E-E - DISABLED RAMP DETAIL

SCALE 1:20



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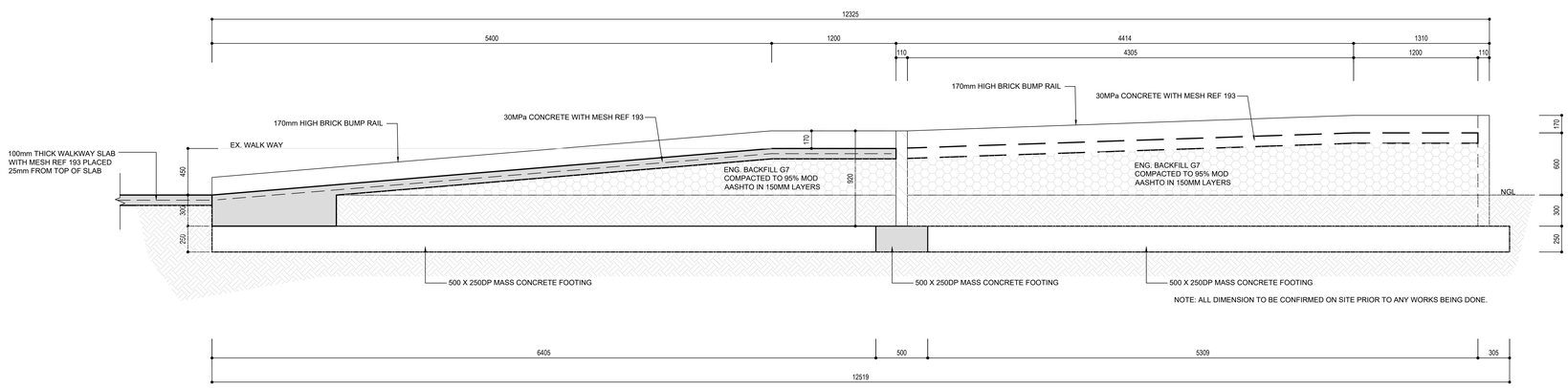
FOUNDATION PLAN - DISABLED RAMP DETAIL

SCALE 1:50



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SECTION C-C - DISABLED RAMP DETAIL

SCALE 1:20

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SURFACE BEDS	=	30 MPa/19mm

2. 20 X 20 CHAMFER TO BE PROVIDED ON ALL EXPOSED EDGES
3. COVER TO REINFORCEMENT:

ROOF & FLOOR SLABS	=	25mm
FOUNDATION BASES	=	50mm

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KZN Department of Education Stamp and Signature

Signature: Date:

Consultant:

REALIGNING CONTINENTAL POTENTIAL

Signature: Date:

public works

Department:
Public Works
PROVINCE OF KWAZULU-NATAL

Project Title:
PHASE 14: REPAIRS AND RENOVATIONS TO STORM DAMAGED SCHOOLS - KZN MIDLANDS REGION - CLUSTER 103 - FLORENCE BOOTH PRIMARY

Drawing Description:
DISABLED RAMP LAYOUT AND DETAILS AT BLOCK B

Drawn: K. Chetty Date: 2020/07/13
Scales: As Shown

Consultant Drawing No: V16-0539-034b
Revision: 0
DOPW CONTRACT No: ZNTL0477IW
DOPW WIMS No: WIMS : 063880
Stamped by Design Review Committee

SCHEDULE NO. 01

1	**NAME**	:	DISTRIBUTION BOARD
2	**LOCATION**	:	GROUND FLOOR AS INDICATED ON DRAWINGS
3	**FED FROM**	:	MAIN DB
4	**FEEDER**	:	10mm² /2 CORE CONCENTRIC CABLE WITH EARTH
5	**MAIN SWITCH**	:	63A DOUBLE POLE ISOLATOR
6	**FAULT LEVEL**	:	5kA
7	**MOUNTING**	:	FLUSH MOUNT/ @1800mm AFFL TO TOP OD DB
8	**TYPE**	:	LOCKABLE DOORS WITH ACCESSIBLE MAIN SWITCH
9	**COLOUR**	:	WHITE

10 SINGLE POLE CIRCUIT BREAKERS

Circuits 1 - 2	2 x 15A	-	External Lighting
Circuits 3 - 5	3 x 15A	-	Internal Lighting
Circuits 6 - 9	4 x 20A	-	Switched Socket Outlets
Circuit 10	1 x 20A	-	Dedicated Socket Outlets
Circuit 11	1 x 20A	-	Hydroboil Isolator
Circuit 12	1 x 5A	-	Bypass Switch
Circuit 13	1 x 45A	-	Feed to Next Block

11 OTHER EQUIPMENT

1 x set 63A Single phase and neutral busbars
1 x 30mA, 60A double pole earth leakage units without overload protection
Earth bars
Typed legend cards
Engraved trofolyte main labels reflecting items 1, 3, 4, 5 & 6 above

12 SPECIAL INSTRUCTIONS

Distribution board to have a minimum 30% spare capacity in all sections