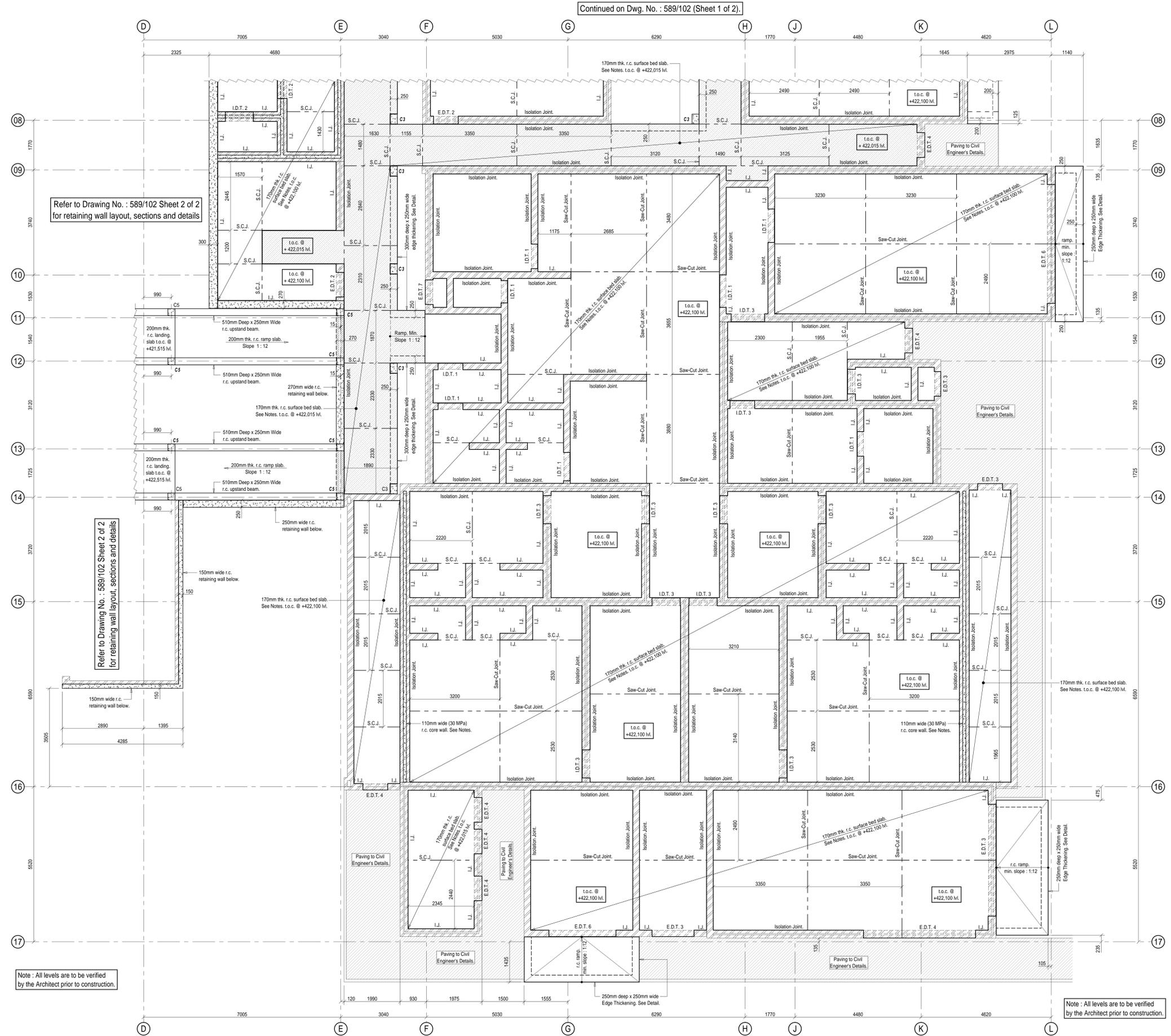


KEY PLAN



Refer to Drawing No. : 589/102 Sheet 2 of 2 for retaining wall layout, sections and details

Refer to Drawing No. : 589/102 Sheet 2 of 2 for retaining wall layout, sections and details

Note : All levels are to be verified by the Architect prior to construction.

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PLAN : MAIN BUILDING
GROUND LEVEL : SURFACE BED SLAB LAYOUT

See Drawing No. 586 / 103 for Section and Details.

| COLUMN SCHEDULE | |
|-----------------|---------------|
| NAME | SIZE |
| C1 | 300mm Ø |
| C2 | 270mm x 270mm |
| C3 | 225mm x 350mm |
| C4 | 225mm x 270mm |
| C5 | 270mm x 510mm |
| C6 | 255mm x 250mm |

170mm thk. Surface Bed Slab :
170mm thk. x 25 MPa powerfloated (wood float finish) concrete surface bed slab reinforced with Mesh Ref. 245 (min. 300mm laps) placed at 55mm cover from the top of the slab on 250µm SABS approved DPM on min. 150mm thk. G5 quality soil material compacted to 95% Mod AASHTO on engineered layerworks as per Civil Engineers layouts. Top mesh will be sitting on R10 stools (75mm high) @ 800mm centres both ways and each leg of the stool will be supported on (2 No. off) 25mm cover blocks. Soil to be poisoned in accordance with SABS 1165. Certificate must be provided.

25mm x 25mm chamfers to all exposed reinforced concrete elements.
Note :
No thickening required in surface bed slab for 170mm thk. slab. All internal 110mm wide walls are to be built directly onto the 170mm thk. surface bed slab.

Note : R.C. Core Walls :
All r.c. core walls are to be constructed in separate lifts of maximum 850mm high (10 brick courses). The Contractor must ensure that each lift (brickwork and concrete core) has cured and is stable to carry the next lift above.

A. Classification of Concrete Finish to Top Surfaces of R.C. Slabs :
The following 'finish' is to be applied to all the top surfaces of the concrete :
CF1 - The following 'finish' is to be applied to all suspended r.c. slabs and r.c. surface bed slabs :
The top surfaces of the slabs are to be powerfloated (with a woodfloat finish) to Degree of Accuracy II as per SABS 1200 G specification.

- GENERAL NOTES :**
- All levels and dimensions to be checked on site.
 - This drawing is to be read in conjunction with the Architectural drawings.
 - All concrete work is to comply with SABS 1200G.
 - Concrete Class :
 - a) Strip Footings & Bases = 25 MPa
 - b) Columns & Staircases = 30 MPa
 - c) Slabs & Beams = 25 MPa
 - d) Retaining Walls = 30 MPa
 - e) Surface Bed Slabs = 25 MPa
 - f) Blinding = 10 MPa
 - Cover to reinforcement :
 - a) Strip Footing & Bases = 50mm
 - b) Columns (Below Ground) = 50mm
 - c) Columns (Above Ground) = 40mm
 - d) Slabs, Beams & Staircases = 30mm
 - e) Slabs (On the Ground) - Bottom Mat = 50mm
 - f) Slabs (On the Ground) - Top Mat = 30mm
 - g) Retaining Walls (Earth Face) = 50mm
 - h) Retaining Walls (Front Face) = 40mm
 - All foundation excavations are to be inspected by the Engineer prior to casting of concrete.
 - All reinforcing fixing is to be inspected by the Structural Engineer prior to casting of concrete.
 - Six concrete cubes to be taken per pour. Three cubes to be tested at seven days, the remainder at twenty eight days. The results are to be forwarded to the Engineer for review and approval.
 - The Contractor is to construct a blinding layer if soil conditions result in reinforcement cover not being maintained.
 - All structural concrete is to be cured for a minimum of five days.
 - All brickwork shown 'hatched' are load bearing. All load bearing brickwork is to be 14MPa NFX bricks in Class 2 mortar. The top of all load bearing brickwork (at all concrete interfaces) is to receive 2 layers of 3 ply method placed on a smooth rendered surface.
 - All single skin brickwork is to be stopped 2 courses below the soffit of the slab and completed after the props have been removed.
 - All concrete plaster and brickwork plaster interfaces to receive V-joints.
 - The Engineer requires 24 hours notice for all inspections.

- Brickwork Notes :**
- All solid brick walls are 220mm wide or 110mm wide with brickface built in every course below surface bed level, above all window and door openings, and every 3rd course above surface bed level with 150mm wide x 2.8mm thk. NHRBC Galvanized Brickface for 220mm wide walls and 75mm wide x 2.8mm thk. NHRBC Galvanized Brickface for 110mm wide walls.
 - All cavity brick walls are 270mm wide with 110mm wide inner & outer skin brickwork with 50mm wide central cavity with brickface built in every course below surface bed level, above all window and door openings, and every 3rd course above surface bed level with 220mm wide x 2.8mm thk. NHRBC Galvanized Brickface.
 - All brickwork to be min. 14MPa NFX bricks in Class 2 mortar.
 - All 110mm wide walls are to be constructed directly onto the 170mm thk. surface bed slabs.
 - All load bearing brickwork and concrete interfaces to receive a 'Slip Joint' of which consists of the following : 2 layers of 3 ply method on a smooth rendered surface on top of the load bearing brickwork.

A. Classification of Concrete Finish to Top Surfaces of R.C. Slabs :
The following 'finish' is to be applied to all the top surfaces of the concrete :
CF1 - The following 'finish' is to be applied to all suspended r.c. slabs and r.c. surface bed slabs :
The top surfaces of the slabs are to be powerfloated (with a woodfloat finish) to Degree of Accuracy II as per SABS 1200 G specification.

- Penetration Specification : Waterproofing Specification for all R.C. Retaining Walls (and all R.C. Elements where one face of the concrete element is in direct contact with soil and the other face of the concrete element is exposed) :**
- All R.C. Retaining Walls (30 MPa) are to be waterproofed with Penetron Admix with Tracer, 20 year warranty, dosed at 0.8% by weight of cementitious content, all to manufacturer's specifications and details.
 - All formwork ferrule tubes are to be removed by drilling a slightly larger hole than the ferrule hole. Then prime the ferrule hole with a Penetron Slurry Coat. Repair the ferrule hole by completely filling the hole with Penetron Mortar / Penetron Slurry combination, all to manufacturer's specifications and details.
 - Penetron Penetbar SV150 Type 'A' is to be installed with Penetbar Primer, along all R.C. Wall and R.C. Footing interfaces, along all construction joints (vertically and horizontally) and is to be installed by an approved applicator and all installed in accordance with the manufacturer's specifications and details.

| REV | DESCRIPTION | BY | DATE |
|-----|-------------------------|------|------------|
| T1 | FOR TENDER | S.N. | 11/04/2025 |
| P1 | PRELIMINARY FOR PRICING | S.N. | 18/09/2024 |

Professional Person: M. NAR. PrTechEng ECSA Registration No.: 200670211

CLIENT : IMPLEMENTING AGENTS :

PROJECT MANAGERS :

ARCHITECTS :

PROJECT :
**19/1/9/159 TB (22)
PROPOSED MSINSINI
POLICE STATION IN KZN**

DETAILS :
**POLICE STATION BUILDING :
GROUND LEVEL
SURFACE BED SLAB LAYOUT**

DISCIPLINE : STRUCTURAL ENGINEERING

Scale: G31A, Ground Floor, Business Partners Centre, 23 Jan Hofmeyr Road, Westville, 3630
Email: adm@mapafrica.co.za
Fax: (031) 3092929 TEL: (031) 3095631

| DESIGNED | S.N. | COPYRIGHT RESERVED | SCALE |
|----------|------|--------------------|-------------------|
| DRAWN | S.N. | | 1:50 |
| APPROVED | M.N. | PL | DATE : 18/09/2024 |

DRAWING NO. : 589 / 102 (2 OF 2) REV. T1

This Drawing is to be read in conjunction with the latest Architectural Drawings and any discrepancies are to be reported to the Architect and/or Structural Engineer.

FOR TENDER