

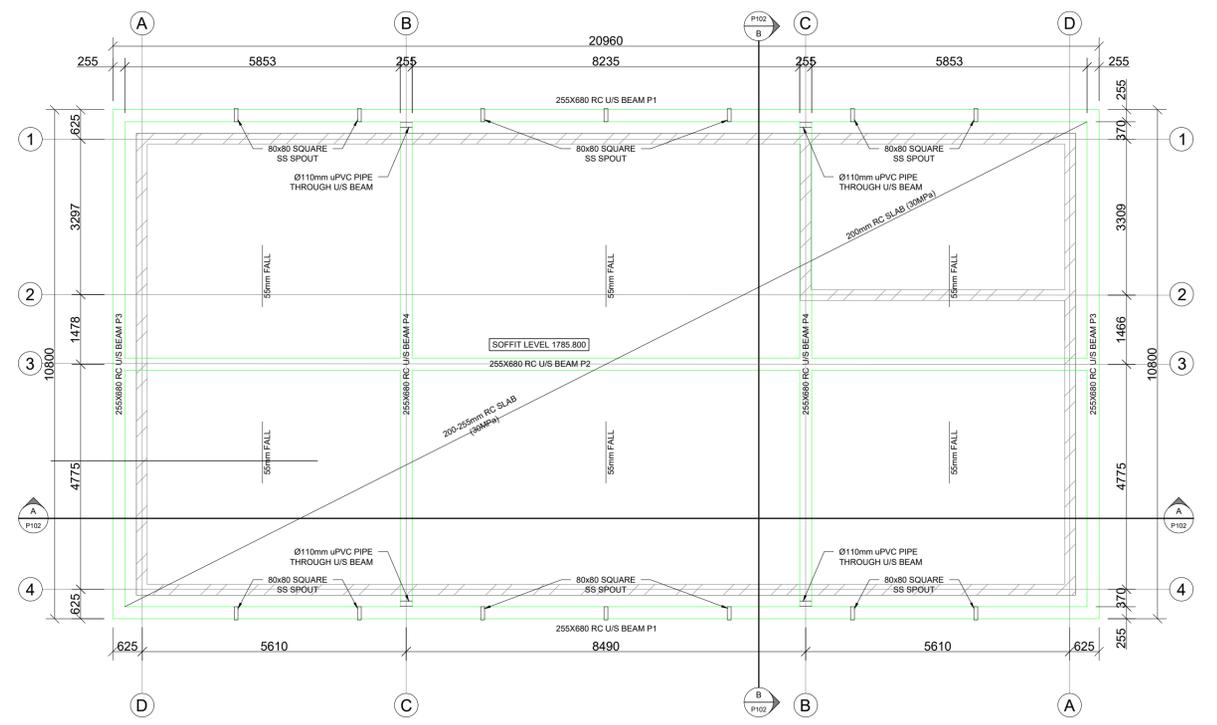
- 1. GENERAL NOTES**
- The copyright on this dwg, including the design and details shown hereon, is reserved by the Consulting Engineers.
  - No scaling of dimensions from drawings allowed.
  - All dimensions and levels are to be verified on site by the contractor before commencing any work.
- 2. EARTHWORKS NOTES**
- All excavations to follow SANS 10400 PART G: Excavations
  - Lateral support and shoring of deep excavations to be designed and certified by a professional
  - Compacted fill in layers not exceeding 150mm to 97% MOD AASHTO
  - Approved insecticide & weedkiller to SABS spec. Code 0124 to sides and under foundations, surface-beds & paving. 10 year underwritten guarantee in favour of client supplied by specialist contractor.
  - All foundation excavations to be approved by the Engineer prior to placement of any concrete
  - Min. ground bearing pressure - 150kPa

- 3. CONCRETE NOTES**
- All reinforced concrete to be vibrated
  - All column corners to receive chamfers
  - Half bricks or building debris may not be used as rebar spacers
  - Concrete Cube strength at 28 days
    - Blinding.....15MPa
    - Bases.....25MPa
    - Strip Footings.....25MPa
    - Surface Bed.....25MPa
    - 1st & 2nd floors.....30MPa
    - Roof Slab.....30MPa
    - Columns.....35MPa
  - Concrete cover to reinforcement measured to stirrups
    - Base bottom.....75mm
    - Base sides.....50mm
    - Columns.....40mm
    - Beams.....30mm
    - Suspended slabs.....25mm
  - Proposed mix designs to be approved by the engineer prior to placement of any concrete

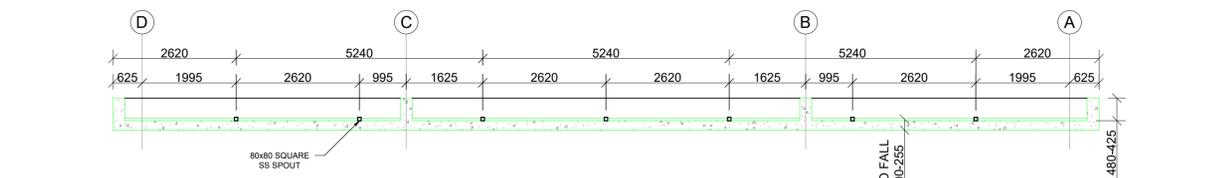
- 4. REINFORCEMENT NOTES**
- Reinforcement detailing based on SANS 10144
  - Minimum lapping of reinforcement: 50 x smaller diameter. All laps to be staggered
  - Reinforcement to be securely wired at all intersections
  - Reinforcement must be formed around, and as close as allowed to holes, and must not be cut. All holes and voids to be checked and approved by the Engineer prior to the placement of any concrete
  - Mild steel (R) to comply with SABS 920 type A - Grade 3. High tensile steel (Y) to comply SABS 920 type C - Grade 1
  - Bending dimensions in accordance with sabs 282:2011. Dimensions are all outside dimensions. Dimension d must always be greater than 2 x bar dia. Radius of all bends are standard unless r is given
  - All reinforcement to be checked and approved by the Engineer prior to the placement of any concrete. **Any reinforcing not inspected before concrete is poured will not be signed off by VBL.**
  - Reinforcement abbreviations:
    - BW - Both Ways
    - EF - Each Face
    - NF - Near Face
    - FF - Far Face
    - EW - Each Way
    - SF - Side Face
    - T1 - Highest of top layers
    - T2 - Second highest of top layers
    - B1 - Lowest of bottom layers
    - B2 - Second lowest of bottom layers
    - ALT - Alternative
    - ABR - Alternative Bar Reversed

- 5. STRUCTURAL STEEL NOTES**
- All steel to be of grade 300WA
  - All bolts to be grade 8.8 unless noted
  - All welds to be 6mm fillet welds unless noted
  - No site welding shall be permitted without the prior consent of the Engineer
  - All holes to be drilled, NO flame cutting allowed
  - All steelwork to be painted within 6 hours after cleaning with one coat red oxide
  - Engineer to inspect manufactured steel components prior to delivery to site**

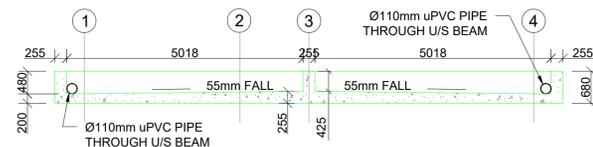
**KEY PLAN**  
SCALE 1:75



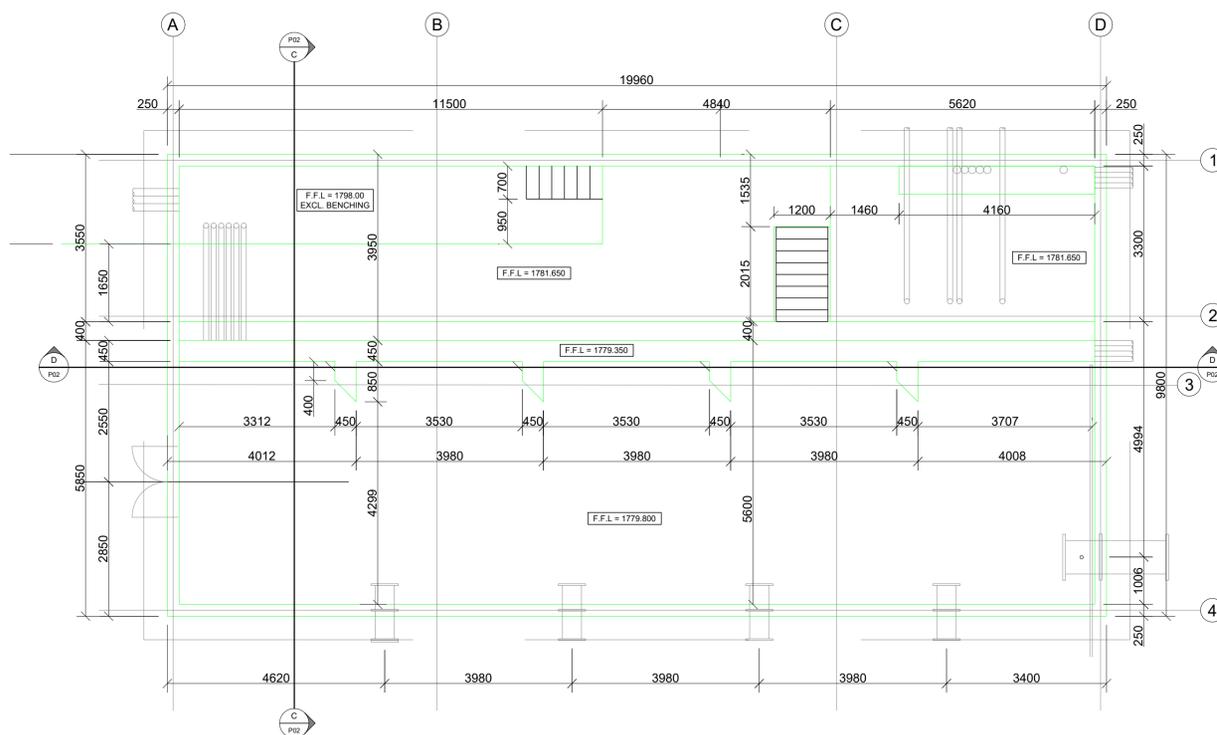
**CONCRETE ROOF SLAB LAYOUT**  
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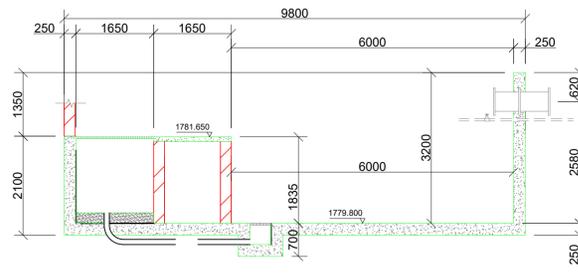
**SECTION A-A**  
SCALE 1:75



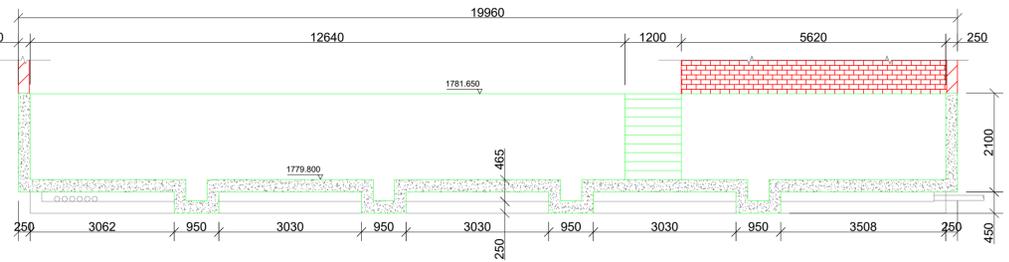
**SECTION B-B**  
SCALE 1:75



**CONCRETE FLOOR LAYOUT**  
SCALE 1:75



**SECTION C-C**  
SCALE 1:75



**SECTION D-D**  
SCALE 1:75

FOR TENDER ONLY

CONSULTING ENGINEERS: TRI-M CONSULTING ENGINEERS WEWORK 155 WEST STREET SANDTON, JOHANNESBURG	DESIGNED	P. S. Botha	05/08/2024
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**Turffontein Corridors of Freedom**  
Water Upgrade  
Foresthill Tower and Pump station

**PUMP STATION  
CONCRETE DETAILS**

SURVEY INFORMATION		APPROVAL BY JW DEPOT		SCALE	AMENDMENTS	
PROJECT SURVEYOR:		CHECKED		1:75	REV:	DESCRIPTION
DATE:		APPROVED BY:			0	TENDER PURPOSES
		SIGNATURE				DATE:
		DATE				05/08/2024
CCTV INFORMATION		APPROVAL BY JW PLANNING				
CCTV COMPANY:		CHECKED				
DATE:		APPROVED BY:				
		SIGNATURE				
		DATE				

JW14402	P02	0
CONTRACT NUMBER	DRAWING No.	REV.
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