بسم الله الرحمن الرحيم

ކުޅުދުއްފުށި ސިޓީ ކައުންސިލްގެ ރިފާރިންސް

ކުޅުދުއްފުށި، ދިވެހިރާއްޖެ

ދަށްކުރުމުގެ ކައުންސިލް

ކަނޑައެޅުނު ތަފްސީލުތަކުގެ

ފަރާތުން ކުޅުދުއްފުށި ސިޓީ ކައުންސިލްގެ ކައުންސިލް ތަރުތީބުގެ ދަށުން ފާސްކުރެވުނު ކައުންސިލް ރިފާރިންސް ނަންބަރ 2024/R/1 ގެ ދަށުން ދަށްކުރަން ކައުންސިލް ގޮތެއް ކަނޑައަޅައިފި.

1. ދަށްކުރާ ގޮތާއި ކުރިއަށް ގެންދާނެ ގޮތް:

1.1 ކައުންސިލްގެ ކައުންސިލް ތަރުތީބުގެ ދަށުން ކުރިއަށް ގެންދާ ކަންތައްތަކުގެ ތެރެއިން ކައުންސިލްގެ ބަޖެޓުގެ ދަށުން ކުރިއަށް ގެންދާ ކަންތައްތަކުގެ ދަށްކުރުން ކުރިއަށް ގެންދާނެ ގޮތް ކަނޑައަޅައިފި.

1.2 ދަށް ކުރުމުގެ ކަންތައްތަކުގެ ތަފްޞީލު ކައުންސިލްގެ ކައުންސިލް ތަރުތީބުގެ ދަށުން ކުރިއަށް ގެންދާ ކަންތައްތަކުގެ ތަފްޞީލުގައި ހިމެނުން ކުރިއަށް ގެންދާނެ ގޮތް ކަނޑައަޅައިފި.

1.3 ދަށްކުރާ ކަންތައްތަކުގެ ތަފްޞީލު، ތަކުރާރުތަކާ، ތަކުރާރުކުރާ ގޮތް ކަނޑައަޅައި ދަށްކުރާ ކަންތައްތަކުގެ ލިސްޓެއް ތައްޔާރުކުރުން ކުރިއަށް ގެންދާނެ ގޮތް ކަނޑައަޅައިފި. ދަށްކުރާ/ހުއްޓާ ލިސްޓުގެ ތެރެއަށް ކަންތައްތައް ހިމަނާ ހުއްޓުވާ ގޮތް ކަނޑައަޅައިފި.

1.4 ކަންތައްތަކުގެ ތަފްޞީލުތައް ތަކުރާރުކުރާ ގޮތް ކަނޑައަޅައި ތަކުރާރުކުރާ ގޮތް ކަނޑައަޅައިފި.

1.5 ކައުންސިލްގެ ކައުންސިލް ތަރުތީބުގެ ދަށުން ކުރިއަށް ގެންދާ ކަންތައްތަކުގެ ތަފްޞީލު ތަކުރާރުކުރާ ގޮތް ކަނޑައަޅައިފި.

1.6 ކަންތައްތަކުގެ ތަފްޞީލު ތަކުރާރުކުރާ ގޮތް ކަނޑައަޅައި ތަކުރާރުކުރާ ގޮތް ކަނޑައަޅައިފި. ލިޔުންތަކާ ކަންތައްތަކުގެ ތަފްޞީލު ތަކުރާރުކުރާ ގޮތް ކަނޑައަޅައިފި.

1.7 ކަންތައްތަކުގެ ތަފްޞީލު ތަކުރާރުކުރާ ގޮތް ކަނޑައަޅައި ތަކުރާރުކުރާ ގޮތް ކަނޑައަޅައިފި. ލިޔުންތަކާ ކަންތައްތަކުގެ ތަފްޞީލު ތަކުރާރުކުރާ ގޮތް ކަނޑައަޅައިފި.

1.8 ކުރިއަށް ގެންދާ ކަންތައްތަކާ ގުޅޭ ތަފާތު ގޮތްތަކާ ގުޅޭ ކަންތައްތަކުގެ ތަފްޞީލު ކައުންސިލްގެ ކައުންސިލް ތަރުތީބުގެ ދަށުން ކުރިއަށް ގެންދާ ގޮތް ކަނޑައަޅައިފި.

2. ދަށްކުރާ ކަންތައްތަކުގެ ތަފްޞީލު ތަކުރާރުކުރާ ގޮތް:

2.1 ކުރިއަށް ދަށްކުރާ ކަންތައްތަކާ ގުޅޭ ތަފާތު ގޮތްތަކާ ގުޅޭ ކަންތައްތަކުގެ ތަފްޞީލު ތަކުރާރުކުރާ ގޮތް ކަނޑައަޅައި ތަކުރާރުކުރާ ގޮތް ކަނޑައަޅައިފި.

2.2 ދަށްކުރާ ކަންތައްތަކުގެ ތަފްޞީލު ތަކުރާރުކުރާ ގޮތް ކަނޑައަޅައި ތަކުރާރުކުރާ ގޮތް ކަނޑައަޅައިފި.

2.3 ދަށްކުރާ ކަންތައްތަކުގެ ތަފްޞީލު ތަކުރާރުކުރާ ގޮތް ކަނޑައަޅައި ތަކުރާރުކުރާ ގޮތް ކަނޑައަޅައިފި.

2.4 ދަށްކުރާ ކަންތައްތަކުގެ ތަފްޞީލު ތަކުރާރުކުރާ ގޮތް ކަނޑައަޅައި ތަކުރާރުކުރާ ގޮތް ކަނޑައަޅައިފި.

652 8831 info@kulhudhuffushicity.gov.mv www.kulhudhuffushicity.gov.mv @kfcitycouncil

2.5 ދަތުރުފުރުމަށް ބޭނުންވާ ބަޔަކު ބޭނުންވާ ތަނަކަށް ދާ ގޮތް ބަލައި ކުރިން ބުއްދިވެރިކަމާ ދުރުހެލިވެ ދަތުރު ކުރުމަށް ކުރިއަށް ގެން

Technical Specification:

Instruction Note for Contractor: Construction Methodology

1. Foundation Construction

Types of Foundation: Shallow

Methodology for Shallow Foundation:

1. **Site Preparation**:
   - Clear site of debris and vegetation.
   - Conduct soil investigation for load-bearing capacity.
2. **Excavation**:
   - Excavate to specified depth and dimensions.
   - Ensure excavation is level and free of loose material.
3. **Base Preparation**:
   - Lay a 50-75 mm thick blinding layer of lean concrete.
4. **Formwork**:
   - Install sturdy and properly aligned formwork.
5. **Reinforcement**:
   - Place reinforcement bars as per design specifications.
6. **Concrete Pouring**:
   - Mix concrete (1 part cement, 2 parts sand, 3 parts gravel, 0.5 parts water).
   - Pour concrete into forms, ensuring no voids or air pockets.
   - Use vibrators to compact the concrete.
7. **Curing**:
   - Keep concrete moist for at least 7 days.
   - Cover with wet burlap or plastic sheets.
8. **Formwork Removal**:
   - Remove formwork after 24-48 hours, avoiding damage to concrete.
9. **Backfilling**:
   - Backfill around the foundation with suitable material, compacting in layers.

2. Column Construction

1. **Site Preparation**:
   - Ensure foundation is ready.
   - Mark column positions on foundation.
2. **Formwork**:
   - Construct formwork using plywood/steel forms or any other suitable material.
   - Ensure forms are plumb and properly braced.
3. **Reinforcement**:
   - Place vertical reinforcement bars inside formwork as per design.
   - Tie horizontal ties or stirrups at specified intervals.
4. **Concrete Pouring**:
   - Mix concrete (1 part cement, 2 parts sand, 3 parts gravel, 0.5 parts water).
   - Pour concrete into formwork continuously to avoid cold joints.
   - Use vibrators to compact concrete and remove air pockets.
5. **Curing**:
   - Keep concrete moist by wrapping columns in wet burlap or plastic sheets.
   - Allow curing for at least 7 days.
6. **Formwork Removal**:

- Remove formwork after ensuring concrete has set, usually after 24-48 hours.

3. Concrete Slab Making

1. **Site Preparation**:
   - Clear and level the area.
   - Install formwork to required dimensions.
2. **Reinforcement**:
   - Place steel reinforcement mesh or rebar in formwork.
3. **Concrete Mixing**:
   - Mix concrete (1 part cement, 2 parts sand, 3 parts gravel, 0.5 parts water).
4. **Concrete Mixer Usage**:
   - All concrete work must be carried out using a concrete mixer. Manual mixing of concrete is strictly prohibited to ensure consistency and quality.
5. **Time Frame for Concrete Use**:
   - Concrete should be used within 30 minutes after mixing. Any concrete mix that exceeds this time frame must not be used for the project.

   Ensuring these guidelines are followed will help maintain the integrity and quality of the concrete structures. Failure to comply with these instructions may result in rework at the contractor's expense.

6. **Pouring Concrete**:
   - Pour concrete into formwork.
   - Use vibrators to remove air pockets and compact concrete.
7. **Leveling and Smoothing**:
   - Use a screed to level concrete.
   - Smooth surface with a trowel.
8. **Curing**:
   - Keep concrete moist for at least 7 days.
   - Cover with wet burlap or plastic sheets.
9. **Formwork Removal**:
   - Remove formwork after 24-48 hours, avoiding damage to concrete.

4. Masonry Wall Making

1. **Site Preparation**:
   - Clear site of debris.
   - Ensure foundation is ready.
2. **Layout**:
   - Mark layout of wall using chalk lines or string lines.
   - Check for right angles and proper dimensions.
3. **Material Preparation**:
   - Use bricks or concrete blocks.
   - Prepare mortar mix (1 part cement, 4-6 parts sand, water).
4. **Laying the First Course**:
   - Lay first course of bricks/blocks on a bed of mortar.
   - Ensure first course is level and aligned.
5. **Building the Wall**:
   - Apply mortar to ends of each brick/block and set in place.
   - Use a spirit level and plumb bob to keep wall straight and level.

652 8831 info@kulhudhuffushicity.gov.mv www.kulhudhuffushicity.gov.mv @kfcitycouncil

- Stagger joints for added strength (stretcher bond).
6. **Jointing**:
   - Finish joints with a jointer tool to smooth mortar and create a neat appearance.
7. **Curing**:
   - Keep wall moist for 7 days for proper curing.

5. Plastering

1. **Surface Preparation**:
   - Clean wall surface of dust, dirt, and loose material.
   - Ensure that all electrical wiring, plumbing, and network cabling are properly installed and secured beneath the surface before commencing plastering. Apply bonding agent if needed.
   - lower edges of windows should be sloped to ensure proper drainage and prevent water accumulation.
2. **Applying the Scratch Coat**:
   - Mix plaster (1 part cement, 3 parts sand, water).
   - Apply a 10-12 mm thick layer with a trowel.
   - Scratch surface to provide a key for next coat.
3. **Applying the Second Coat**:
   - After scratch coat sets, apply a 6-8 mm thick finishing coat.
   - Smooth surface with a trowel.
4. **Curing**:
   - Keep plastered surface moist for at least 7 days.

6. Flooring

1. **Subfloor Preparation**:
   - Clean and level subfloor.
   - Apply damp-proof membrane if necessary.
2. **Laying the Base Layer**:
   - Spread and compact a layer of sand or fine gravel.
3. **Concrete Screed**:
   - Mix and pour a concrete screed (1:3 cement to sand ratio).
   - Level and smooth screed with a trowel.
4. **Curing**:
   - Allow screed to cure for at least 7 days.

7. Tiling

1. **Surface Preparation**:
   - Ensure surface is clean, dry, and level.
2. **Layout Planning**:
   - Plan tile layout to minimize cutting and ensure symmetry.
3. **Applying Adhesive**:
   - Apply tile adhesive using a notched trowel.
   - Spread evenly over small areas to prevent drying out.
4. **Laying Tiles**:
   - Place tiles into adhesive, pressing firmly.
   - Use spacers to ensure even gaps between tiles.
5. **Grouting**:
   - After adhesive sets, apply grout to fill gaps.

- Clean excess grout with a damp sponge.

6. **Sealing**:
    - Apply sealant to protect grout and tiles.

8. Painting – (Matt white)

1. **Surface Preparation**:
    - Clean surface and fill holes or cracks.
    - Sand surface to ensure smooth finish.
2. **Priming**:
    - Apply primer coat suitable for surface material (samhwa/sigma or beggar)
3. **Painting**:
    - Apply first coat of paint using roller or brush.
    - Allow to dry and apply additional coats as needed.
4. **Finishing**:
    - Inspect for touch-ups and clean up area.

9. Services (Plumbing and Electrical)

Plumbing

1. **Planning**:
    - Create detailed plumbing layout plan.
    - Mark locations for pipes, fixtures, and connections.
2. **Installation**:
    - Install main supply and drainage pipes first.
    - Connect fixtures and ensure proper sealing.
3. **Testing**:
    - Test for leaks and proper flow.
    - Make necessary adjustments.

Electrical

1. **Planning**:
    - Mark locations for outlets, switches, and fixtures as in plan (refer to drawing.
2. **Wiring**:
    - Run conduit and pull wires as per plan.
    - Connect outlets, switches, and fixtures.
3. **Safety Check**:
    - Test all connections for safety and proper operation.
    - Ensure compliance with electrical codes.

Safety Precautions

- **Personal Protective Equipment (PPE)**: Safety goggles, gloves, steel-toe boots, hard hats, and masks.
- **Handling Materials**: Avoid skin contact with chemicals. Use proper lifting techniques.
- **Tool Use**: Follow manufacturer instructions. Keep hands and clothing away from moving parts.
- **Work Environment**: Clear of trip hazards, good ventilation, and proper lighting.
- **Emergency Procedures**: First aid kits available, emergency contact numbers displayed.

652 8831 info@kulhudhuffushicity.gov.mv www.kulhudhuffushicity.gov.mv @kfcitycouncil

Maintaining Proper Work Discipline

- **Training**: Ensure all workers are properly trained.
- **Communication**: Maintain clear and effective communication.
- **Supervision**: Regular oversight by supervisors.
- **Housekeeping**: Keep work areas clean and organized.
- **Inspection**: Regularly check tools and equipment.
- **Time Management**: Adhere to project schedules.

Mixing Ratio and Standards

Concrete Mix Ratio:

- 1 part cement, 2 parts sand, 3 parts gravel, 0.5 parts water.

Standards:

- ASTM, ACI, and OSHA standards as previously detailed.

652 8831 info@kulhudhuffushicity.gov.mv www.kulhudhuffushicity.gov.mv @kfcitycouncil

Instruction Note for Contractor: Waterproofing and Additional Construction Considerations

Waterproofing Instructions

Waterproofing of Concrete Slab

1. **Surface Preparation**:
   - Clean the concrete slab to remove dust, dirt, and debris.
   - Ensure the surface is dry and free from moisture.
2. **Repair**:
   - Fill any cracks or holes with suitable repair mortar.
3. **Priming**:
   - Apply a primer coat as recommended by the waterproofing material manufacturer.
   - Allow primer to dry as per manufacturer's instructions.
4. **Application of Waterproofing Membrane**:
   - **Liquid Membrane**:
     - Apply a liquid waterproofing membrane using a brush, roller, or spray.
     - Apply the first coat evenly and allow it to dry.
     - Apply a second coat perpendicular to the first for complete coverage.
   - **Sheet Membrane**:
     - Roll out the sheet membrane over the primed surface.
     - Use a torch or adhesive as per manufacturer's instructions to bond the membrane to the slab.
     - Overlap seams by at least 50 mm and ensure a watertight seal.
5. **Protection**:
   - Cover the waterproofing layer with protective screed or insulation board to prevent damage during construction.
6. **Curing**:
   - Follow the manufacturer's recommended curing time before subjecting the slab to further construction activities.

Waterproofing of Walls

1. **Surface Preparation**:
   - Clean the wall surface to remove dust, dirt, and debris.
   - Ensure the surface is dry and free from moisture.
2. **Repair**:
   - Fill any cracks or holes with suitable repair mortar.
3. **Priming**:
   - Apply a primer coat as recommended by the waterproofing material manufacturer.
   - Allow primer to dry as per manufacturer's instructions.
4. **Application of Waterproofing Membrane**:
   - **Liquid Membrane**:
     - Apply a liquid waterproofing membrane using a brush, roller, or spray.
     - Apply the first coat evenly and allow it to dry.
     - Apply a second coat perpendicular to the first for complete coverage.
   - **Sheet Membrane**:
     - Roll out the sheet membrane over the primed surface.
     - Use a torch or adhesive as per manufacturer's instructions to bond the membrane to the wall.
     - Overlap seams by at least 50 mm and ensure a watertight seal.
5. **Protection**:

652 8831 info@kulhudhuffushicity.gov.mv www.kulhudhuffushicity.gov.mv @kcitycouncil

- Cover the waterproofing layer with protective plaster or insulation board to prevent damage.

6. **Curing**:
   - Follow the manufacturer's recommended curing time before subjecting the wall to further construction activities.

Additional Construction Considerations

General Construction Work

1. **Quality Control**:
   - Follow all relevant construction codes and standards.
   - Use quality materials and check for defects before use.
   - Ensure proper mixing ratios for concrete and mortar.
2. **Worksite Safety**:
   - Ensure all workers wear appropriate personal protective equipment (PPE).
   - Keep the site clean and free from hazards.
   - Follow safety protocols for operating machinery and handling materials.
3. **Site Management**:
   - Maintain a well-organized site with clear areas for storage and work.
   - Schedule tasks to avoid congestion and interference between different trades.
   - Provide proper waste disposal methods.
4. **Documentation and Records**:
   - Keep detailed records of materials used, work performed, and inspections conducted.
   - Document any deviations from plans and how they were addressed.
   - Ensure all work is inspected and approved by relevant authorities.

Specific Areas to Monitor

1. **Structural Integrity**:
   - Regularly inspect formwork, rebar placement, and concrete pouring processes.
   - Check for proper curing of concrete to avoid cracks and structural weaknesses.
2. **Electrical and Plumbing**:
   - Ensure proper routing and securing of electrical conduits and plumbing pipes.
   - Test all connections and fixtures before covering them with walls or flooring.
   - Follow electrical codes and safety standards to prevent hazards.
3. **Finishing Work**:
   - Ensure smooth and level surfaces before applying finishes.
   - Use appropriate primers and sealants to enhance adhesion and durability.
   - Inspect finished work for defects and correct them promptly.
4. **Environmental Protection**:
   - Implement measures to control dust and noise.
   - Manage waste and recycling properly.
   - Ensure compliance with local environmental regulations.

652 8831 info@kulhudhuffushicity.gov.mv www.kulhudhuffushicity.gov.mv @kfcitycouncil

Standards for Materials Used in Construction

1. Cement

- **Type of Cement**: Portland cement (Type I, Type II, Type III, etc., as per ASTM C150 or equivalent standards) or BS12.
- **Physical Properties**:
  - **Fineness**: Specific surface area should typically be in the range of 300 to 400 m^2/kg.
  - **Setting Time**: Initial setting time should be not less than 45 minutes, and final setting time should not exceed 10 hours.

2. Fine Aggregate (Sand)

- **Size**: Passing through a 4.75 mm sieve (No. 4 sieve).
- **Grading**: Generally should conform to ASTM C33 or local standards.
- **Cleanliness**: Should be free from organic matter and other impurities.
- **Particle Shape**: Generally angular or sub-angular.
- **Absorption**: Typically, absorption should not exceed 3% by mass.

3. Coarse Aggregate (Gravel)

- **Size**: Generally ranges from 4.75 mm to 75 mm (No. 4 to 3 inches).
- **Grading**: Should conform to ASTM C33 or local standards.
- **Cleanliness**: Free from organic matter and other deleterious substances.
- **Particle Shape**: Should be angular or rounded.

4. Paint

- **As an undercourt of all walls , a shamwa, betec, bager or a wall sealer of this standard should be attached.** Wall sealers and finishing colors should be of the same brand.
- Wall sealer and color (SAMHWA, BETEK, BEGER,) or the same level of color.

652 8831 info@kulhudhuffushicity.gov.mv www.kulhudhuffushicity.gov.mv @kfcitycouncil

Electrical Wiring:

1. Electrical wiring must be done according to the drawing, Fenaka standards, and Energy Authority regulations.
2. A permanent 3-phase electricity meter must be installed in the building.
3. Three-phase power must be supplied to all distribution boards in the building. 6mm cables must be used for power supply to the DBs.
4. All DB boards must have load balancing using 3-phase busbar.
5. Distribution boxes must be Hager brand or equivalent quality wall-embedded distribution boxes. DB locations are marked in the drawings.
6. Ceiling and wall-embedded wires must be installed in 25mm conduit pipes.
7. Underground cables must be installed in conduits and metal pipes.
8. Interior and exterior lighting and socket circuits must comply with Maldives Electricity Bureau regulations.
9. Lighting circuits must be 6 ampere, socket circuits 10 ampere, and AC socket circuits 16 ampere.
10. All ELCB circuits or other electrical breakers must be Hager brand or equivalent quality. Sockets and switches must be Hager, ABB, T&J or equivalent quality brands.
11. Switch and socket designs must be approved in consultation with the project supervisor.
12. Ceiling fans must be 1400mm diameter from Usha, Orient, Panasonic, KDK brands or equivalent quality.
13. Electrical work must be done by personnel authorized by Maldives Electricity Bureau.
14. 2.5mm cables must be used for wiring.
15. One switch must not control more than 2 lights.
16. Lights must be Philips, Panasonic or Osram brands.
17. Unless otherwise specified, interior lighting must use 18-watt ceiling mount round lights.
18. All exterior lights must be waterproof and weatherproof warm white lights.
19. Lights must be installed as per drawing.
20. Light fixtures must be approved in consultation with the project supervisor.

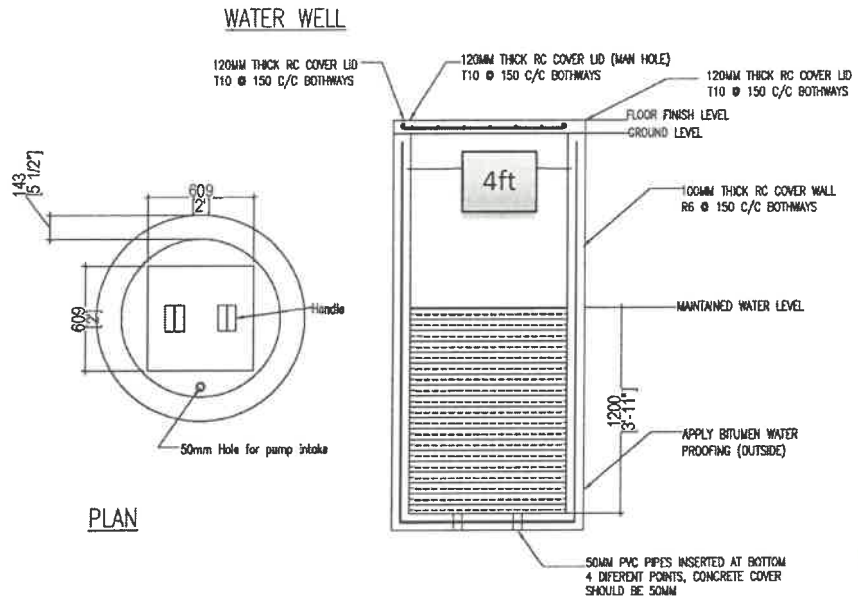
652 8831 info@kulhudhuffushicity.gov.mv www.kulhudhuffushicity.gov.mv @kfcitycouncil

Network and Security Camera:

1. Cat 6 cable must be used as the network cable. (Brand)
2. Network and security camera cables must be routed through a separate conduit.
3. Network points and camera mounting points will be included in the drawing.
4. An NVR (Network Video Recorder) must be installed to connect the network and cameras.
5. The NVR location shall be approved in consultation with the Council's Project Supervisor.

Plumbing and Sewerage Work:

1. The building must have an MWSC water meter and sewerage connection installed.
2. Connections must be installed from the north side of the building (consultation with the project supervisor.)
3. Connections will be made under the Council's name. The Council office will sign and stamp the forms. However, all form submission work will be done by the contractor.
4. 25mm PVC high-pressure pipes shall be used for water piping.
5. Water lines to taps and individual points shall be done using 12.5mm high-pressure pipes.
6. Bathrooms in the building must have dual-line plumbing. Valves must be installed to separately connect well water and water supply.
7. A 4ft Well need to be installed beneath the suface. (Location as specified in the drawing)



- A well must be installed as shown in the drawing. Connections must be made as specified.

- The well should be constructed with concrete. And a 6mm steel mesh must be installed inside.

- To extract water for the building, a 1200mm well must be constructed and dug to maintain water at 1200mm depth. The bottom of this well must have a concrete sheet. And there must be 4 holes of 50mm at the bottom of the well.

- Concrete covers must be made and fixed on the wells. And the cover must have a 600×600mm removable grid.

8. A 0.8 to 1 horsepower water pump shall be used for well water extraction.
9. After installing water lines, pressure testing must be done before cementing and sealing the pipes.
10. After plumbing installation, bathroom sets, floor drains, and water pumps must be approved in consultation with the project supervisor.
11. 4-inch PVC pipes shall be used for bathroom sewerage lines.
12. 3-inch PVC pipes shall be used for shower areas and laundry drainage.
13. Sewerage pipes must be installed at an appropriate slope to prevent water stagnation inside.
14. Shower area drainage must be connected to separate catch pits that can be cleaned independently.

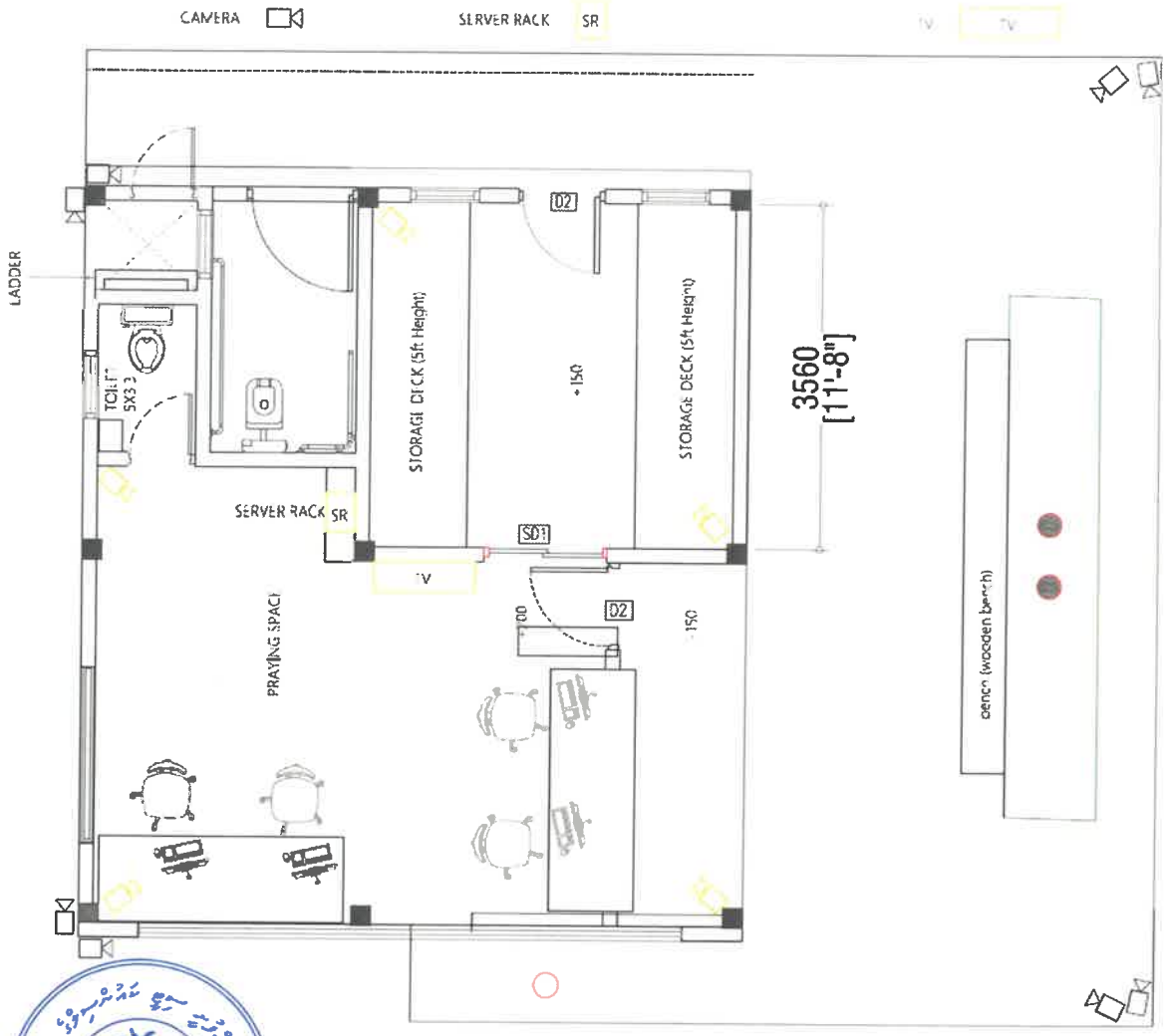
652 8831 info@kulhudhuffushicity.gov.mv www.kulhudhuffushicity.gov.mv @kfcitycouncil

بسم الله الرحمن الرحيم

ކުޅުދުއްފުށީ ސިޓީ ކައުންސިލްގެ އިދާރާ
ކުޅުދުއްފުށި، ދިވެހިރާއްޖެ

1. ސީސީޓީވީ ކެމެރާ ސިސްޓަމްގެ ހަރުދަނާކުރުން

2. ކުރެހުން



2.1. މިމަސައްކަތަށް ބޭނުންވާ ހުރިހާ ތަކެއްޗެއްވެސް ގެންނަންވާނީ ބީލަން ކާމިޔާބުވާ ފަރާތުންނެވެ.

2.2. ކެމެރާ ހަރުކުރަންވާނީ ކުރެހުމުގައި ފާހަގަކޮށްފައިވާ ޖާގަތަކުގައެވެ.

2.3. ހޯލާއި އޮފީހުގައި ހަރުކުރަންވާނީ ޖުމްލަ 13 ކެމެރާއެވެ.

2.4. މިއިމާރާތުގެ އެތެރޭގައި ހަރުކުރަންވާނީ ޑޯމް ކެމެރާއެވެ. އަދި ވާރޭ ފެނާ ގުޅޭ ބޭރުގައި ހުންނަ ތަންތަނުގައި ހަރު ކުރަންވާނީ ފުން
ނުވަތަ ބުލެޓް ކެމެރާއެވެ.

2.5. އައުޓް ޑޯރ ކެމެރާ ހަރުކުރާއިރު ފެންނުވަންނާނެ ގޮތަށް ރަނގަޅަށް ސީލް ކުރަންވާނެއެވެ.

2.6. އެން.ވީ.އާރުތަކާއި އެކު ޔޫޕީއެސް ބެކަޕް ހަރުކުރަންވާނެއެވެ. ޔޫޕީއެސް ބެކަޕް ސަޕްލައި މަދުވެގެން 1400VA / 700W ވާންވާނެއެވެ.

2.7. އެން.ވީ.އާރާއި ނެޓްވޯކް ސްވިޗްތައް އަދި ޔޫޕީއެސް ބެކަޕް ހަރުކުރަންވާނީ ކުރެހުމުގައި ފާހަގަކޮށްފައިވާ ޖާގައިގައި އޮފީހުގެ ސަރވަރ
ރެކަކަށް ލައިގެނެވެ. މަސައްކަތް ނިމުމުން ސަރވަރ ރެކްގެ ތަޅުދަނޑި މިއިދާރާއަށް ހަވާލުކުރަންވާނެއެވެ.

2.8. ސަރވަރ ރެކަށް ބޭނުންވާ ކަރަންޓް ޕޮއިންޓް އަޅަންވާނެއެވެ.

2.9. އަދި އެން.ވީ.އާރުއިން ފެނިގެން ޓީވީ ހުންނަ ރިސާބަން އެޗް.ޑީ.އެމް.އައި (HDMI) ކޭބަލް އަޅަންވާނެއެވެ. އަދި ޓީވީ ކައިރިއަށް ދިމުރު ހުސް ޖަގަހް ސޮކެޓްއެއް ހަރުކުރަންވާނެއެވެ. މި ސޮކެޓަށް ފުރުމަކުން 20 އެމްޕިއަރ ކަރަންޓު ދޭންވާނެއެވެ.

2.10. ސީސީޓީވީ ކެމެރާ ހަރުކުރާއިރު ބޭނުންކުރަންވާނީ 01 (އެކެއް) އެންވީއާރު NVR އެކެވެ.

2.11. އެން.ވީ.އާރު އަށް ވަންނަ ނެޓްވޯކް ކޭބަލްތަކުގައި ރަނގަޅަށް ލޭބަލް ކުރެވިފައި ހުންނަންވާނެއެވެ.

2.12. އެންވީއާރުގައި 1 މަސް ދުވަހުގެ ސީސީޓީވީ ފޫޓޭޖް ރައްކާ ކުރެވޭންވާނެއެވެ.

2.13. ސީސީޓީވީ ކެމެރާއަށް ކޭބަލް އަޅަންވާނީ ކެޓެގަރީ 6 ގެ ނެޓްވޯކް ކޭބަލްއެވެ.

2.14. ކެމެރާތަކަށް އަޅާ ކޭބަލްތައް ފާރުތަކުގައި 20 އެމްއެމް ކޮންޑިއުޓް ޕައިޕަށް ލާން ވާނެއެވެ.

2.15. އަދި ސީލިންގް މައްޗަށް ކޭބަލް އަޅާއިރު ކޮންޑިއުޓް ޕައިޕު އަށް ލާންވާނެއެވެ.

2.16. ކޭބަލްތައް އަޅާފައި ހުންނަންވާނީ ރަނގަޅަށް ފެނޭގޮތަށް އަދި ރިޕެއަރ ބައި ކުރަންޖެހޭ ތަންތަނުގައި ބަދަލުކޮށްލެވޭގޮތަށެވެ.

2.17. ކެމެރާތައް މޮނިޓަރކުރުމަށް 42" އިންޗިގެ ފުލް ޓީވީއެއް ކޮންޓްރޯލް ރޫމުގައި ފަރާތްތަކަށް ތަނުގައި ފުރުގައި ހަރުކުރަންވާނެއެވެ.

2.18. މިމަސައްކަތުގެ ނިމުނުކަމަށް ބެލެހެއްޓުމަށް ކައުންސިލްގެ ސްޓާފުންނަށް ސޮފްޓްވެއަރގެ ކޮންސެޕްޓާއި ހުރިހާ ކަމެއް ވީއޭ ބޭސިކް އެޑްމިން ކެމެރާތައް އޮޕަރޭޓްކުރާނެ ސޮފްޓްވެއަރ ދަސްކޮށްދޭންވާނެއެވެ. އަދި އެންވީއާރުގެ ޕާސްވޯޑް ކައުންސިލުގެ މުވައްޒަފަކާ ހަވާލުކުރަންވާނެއެވެ.

Technical Specifications

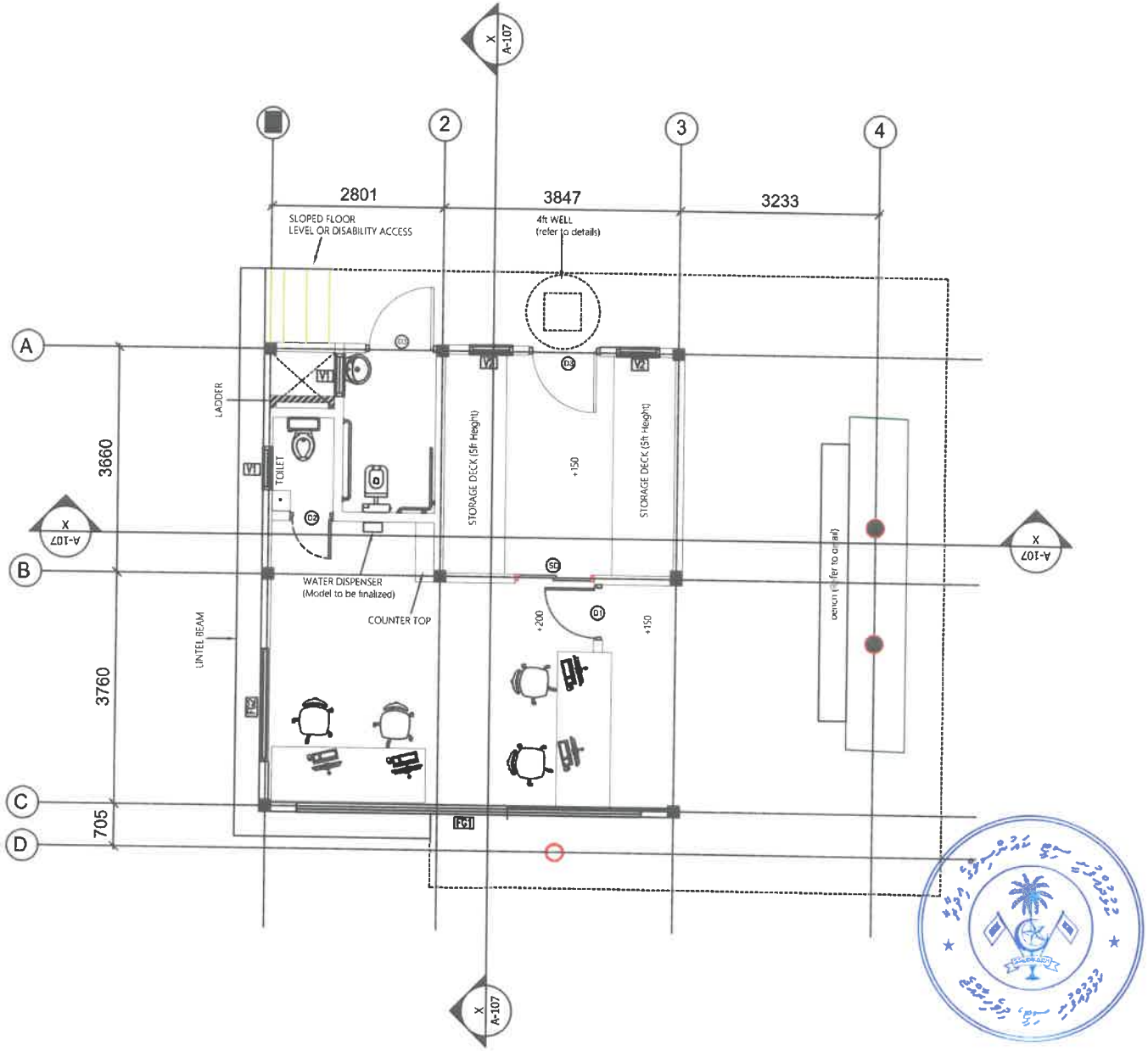
NVR Specifications

Supported Browsers	IE(IE10/11) for Windows
	Firefox (version 52.0 and above) for Windows
	Chrome (version 45 and above) for Windows
	Edge (version 79 and above) for Windows
General Alarms	Motion, Tampering, Human Body Detection, Video Loss, Alarm Input, Audio Det
Features	Support Ultra265/H.265/H.264 video formats
	Manageable with EZ Station
	Support HDMI and VGA simultaneous output
	ANR technology to enhance the storage reliability when the network is disconnected
	Support cloud upgrade

Network Switch, Camera and UPS Backup Specifications

Item	Details
Network Switch Port	16-Port PoE/PoE+
Camera Resolution	8 Mega pixels
UPS Backup	1400VA / 700W

HARBOR SITE OFFICE
JAN 2025



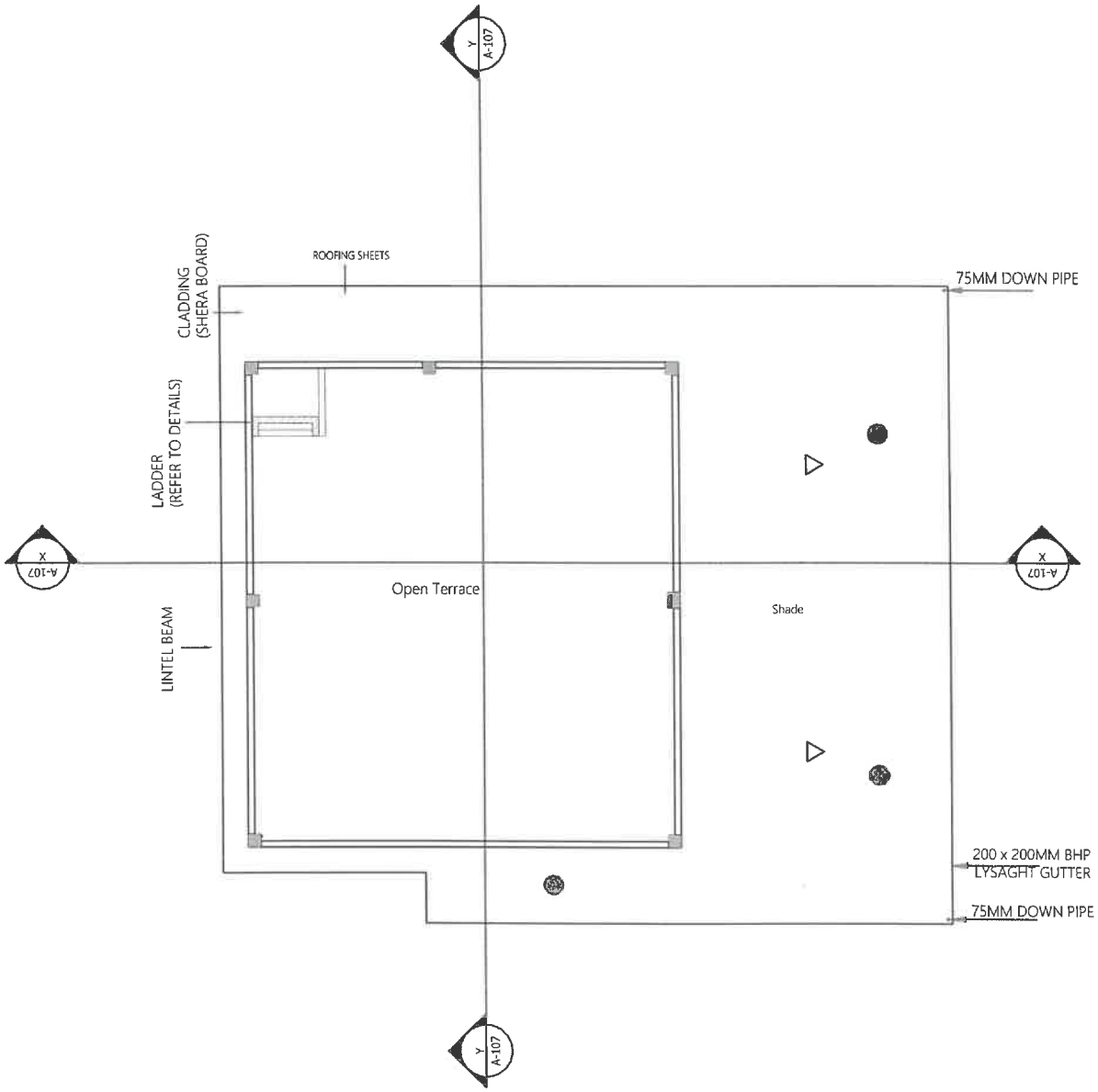
GROUND FLOOR PLAN

PROJECT TITLE:
HARBOR SITE OFFICE

CLIENT:
KULHUDHUFFUSHI CITY COUNCIL

DATE:
JAN 2025

SHEET NO.:



TERRACE FLOOR PLAN

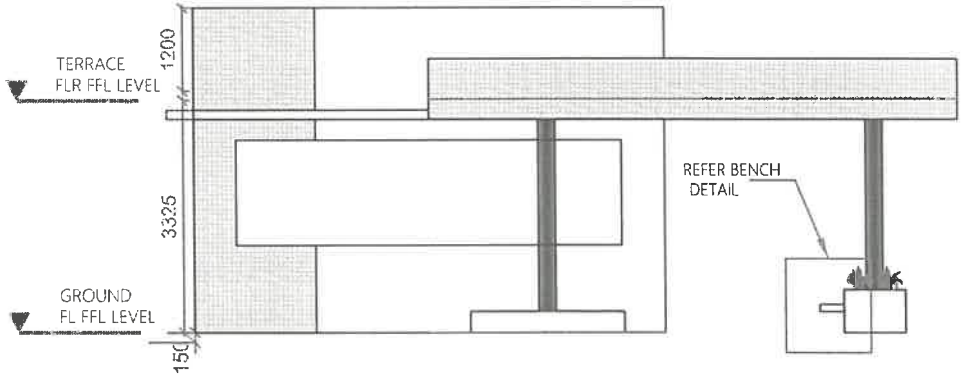
SCALE 1:100

PROJECT TITLE:
HARBOR SITE OFFICE

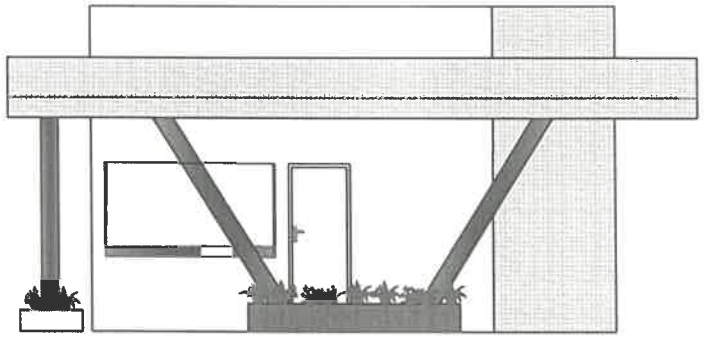
CLIENT:
KULHUDHUFFUSHI CITY COUNCIL

DATE:
JAN 2025

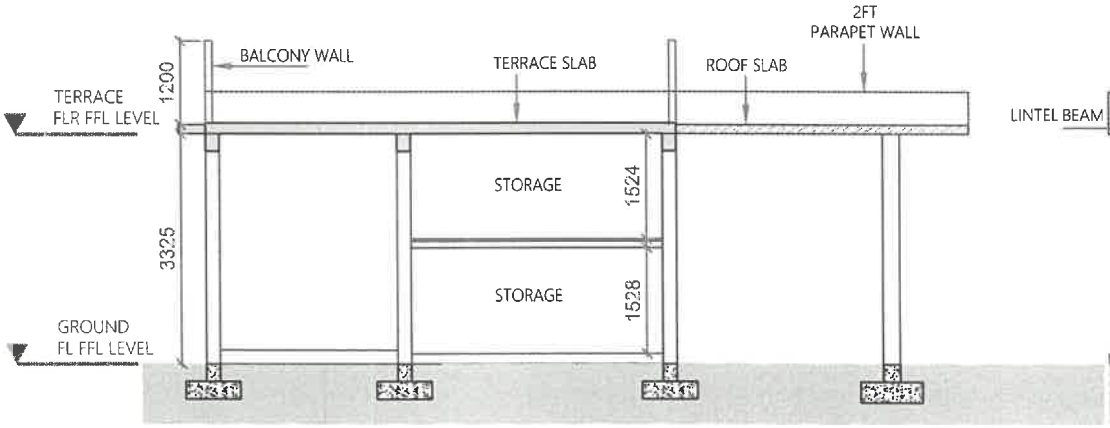
SHEET NO.:

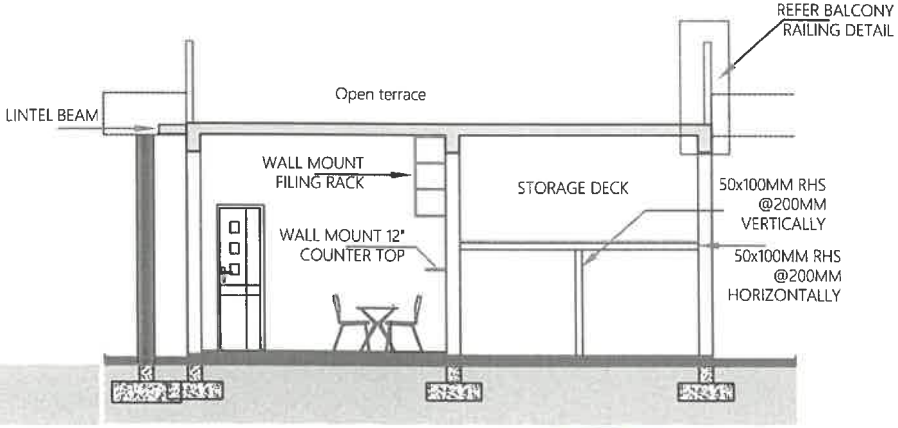


ELEVATION 1
SCALE 1:100



ELEVATION 1
SCALE 1:100





SECTION
SCALE 1:100

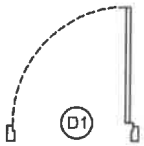
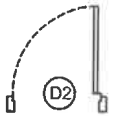
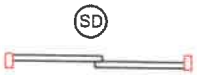
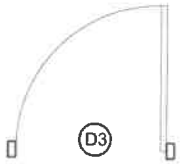
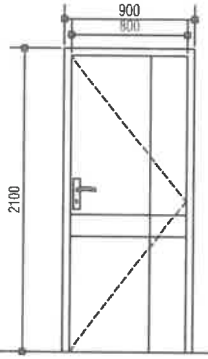
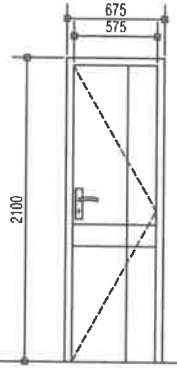
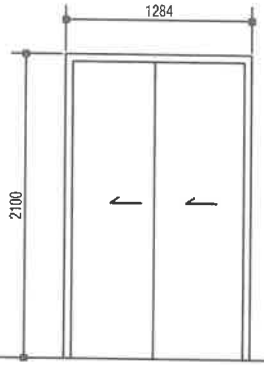
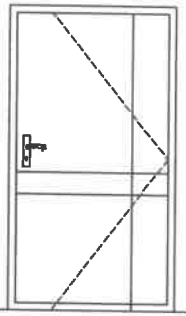
PROJECT TITLE:
HARBOR SITE OFFICE

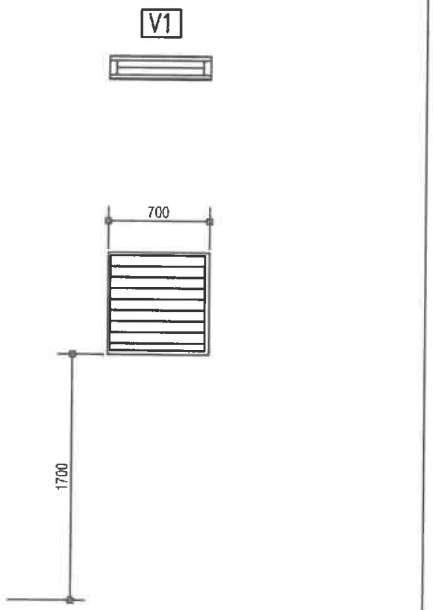
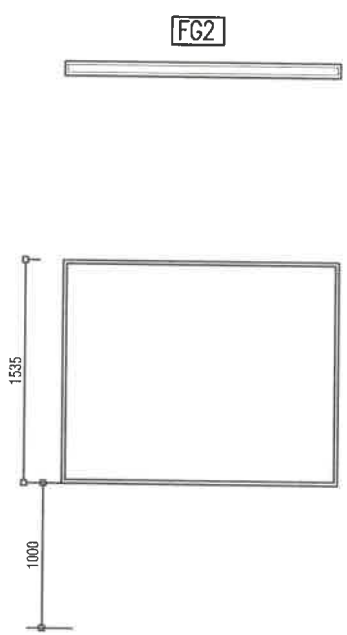
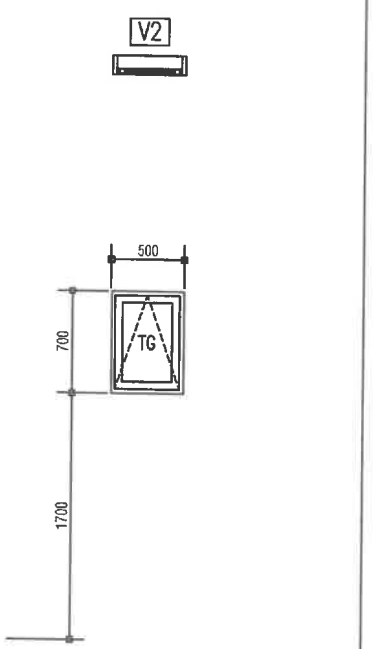
CLIENT:
KULHUDHUFFUSHI CITY COUNCIL

DATE:
JAN 2025

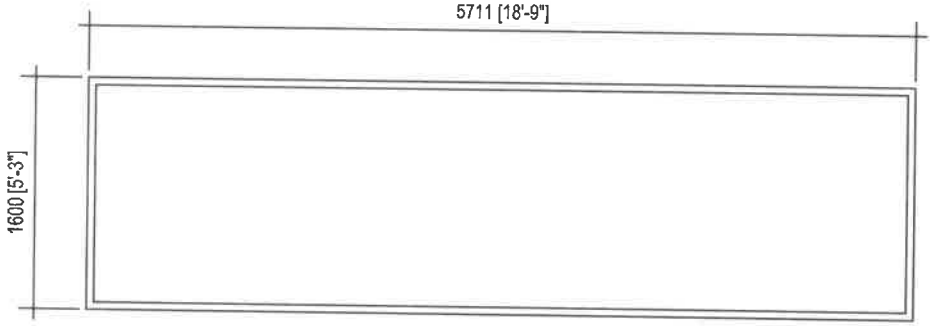
SHEET NO.:

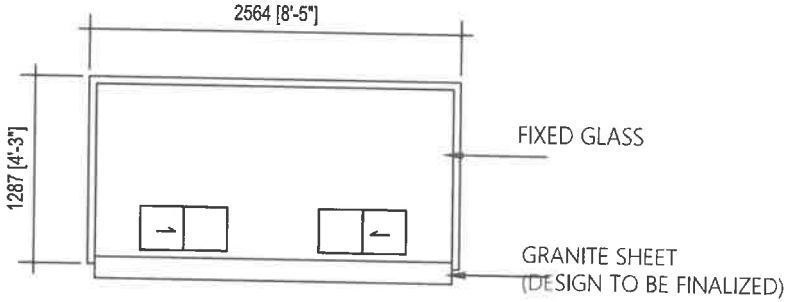
DOOR / WINDOW SHEDULE

PLAN::				
F.F.L				
DOOR / WIND NO:				
DESCRIPTION:	ALUMINUM FRAMED OPENABLE DOOR (DESIGN TO BE FINALIZED)	ALUMINUM FRAMED OPENABLE DOOR (DESIGN TO BE FINALIZED)	ALUMINUM FRAMED SLIDING DOOR	ALUMINUM FRAMED OPENABLE WINDOW
FRAME:	80 MICRON POWDER COATED ALUMINUM FRAME	80 MICRON POWDER COATED ALUMINUM FRAME	80 MICRON POWDER COATED ALUMINUM FRAME	80 MICRON POWDER COATED ALUMINUM FRAME
DOOR PANEL:	ALUMINIUM	ALUMINIUM	ALUMINIUM	01 NOS. OPENABLE WINDOW PANEL
HARDWARE:	04 NOS. HINGES. 01 NO. LOCK / DOOR HANDLES	04 NOS. HINGES. 01 NO. LOCK / DOOR HANDLES	06 NOS. HINGES. 01 NO. LOCK / DOOR HANDLES	02 NOS. HINGES 01 NOS. LOCK / DOOR HANDLES
GLAZING:				6MM THICK TINTED GLASS

PLAN::	V1 	FG2 	V2 
F.F.L			
DOOR / WIND NO:			
DESCRIPTION:	ALUMINUM FRAMED LOUVERS	ALUMINUM FRAMED FIXED GLASS WINDOW	ALUMINUM FRAMED OPENABLE WINDOW
FRAME:	80 MICRON POWDER COATED ALUMINUM FRAME	80 MICRON POWDER COATED ALUMINUM FRAME	80 MICRON POWDER COATED ALUMINUM FRAME
DOOR PANEL:			01 NOS. OPENABLE WINDOW PANEL
HARDWARE:			02 NOS. HINGES 01 NOS. LOCK / DOOR HANDLES
GLAZING:	12MM THICK laminated and toughened glass	9MM THICK TINTED GLASS	6MM THICK TINTED GLASS

DOOR / WINDOW SHEDULE





F.F.L

DOOR / WIND NO: FIXED GLASS WINDOW FG1

DESCRIPTION: ALUMINUM FRAMED LAMINATED AND TOUGHENED GLASS WINDOW

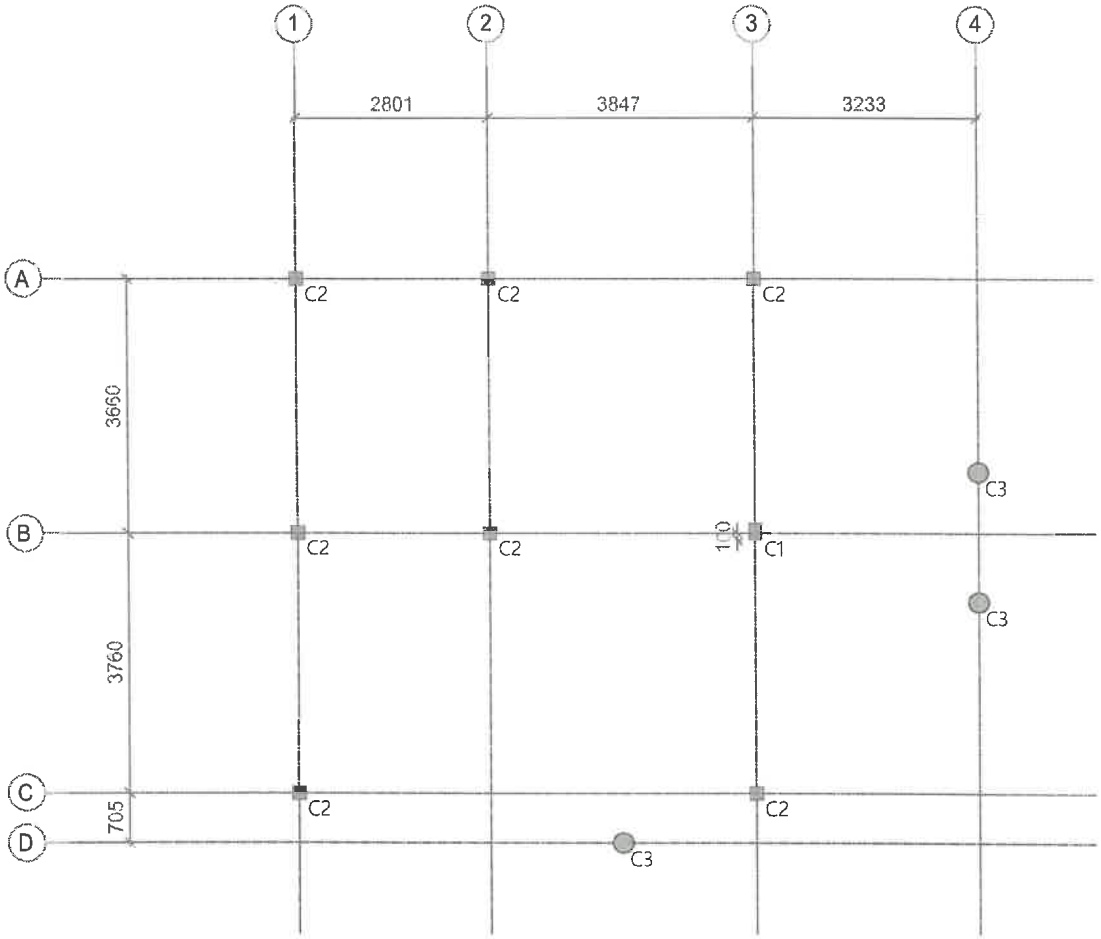
FRAME: 80 MICRON POWDER COATED ALUMINUM FRAME

DOOR PANEL: ALUMINIUM

HARDWARE:

GLAZING: 12MM THICK laminated and toughened glass

WINDOW AND COUNTER DETAIL



COLUMN LOCATION PLAN

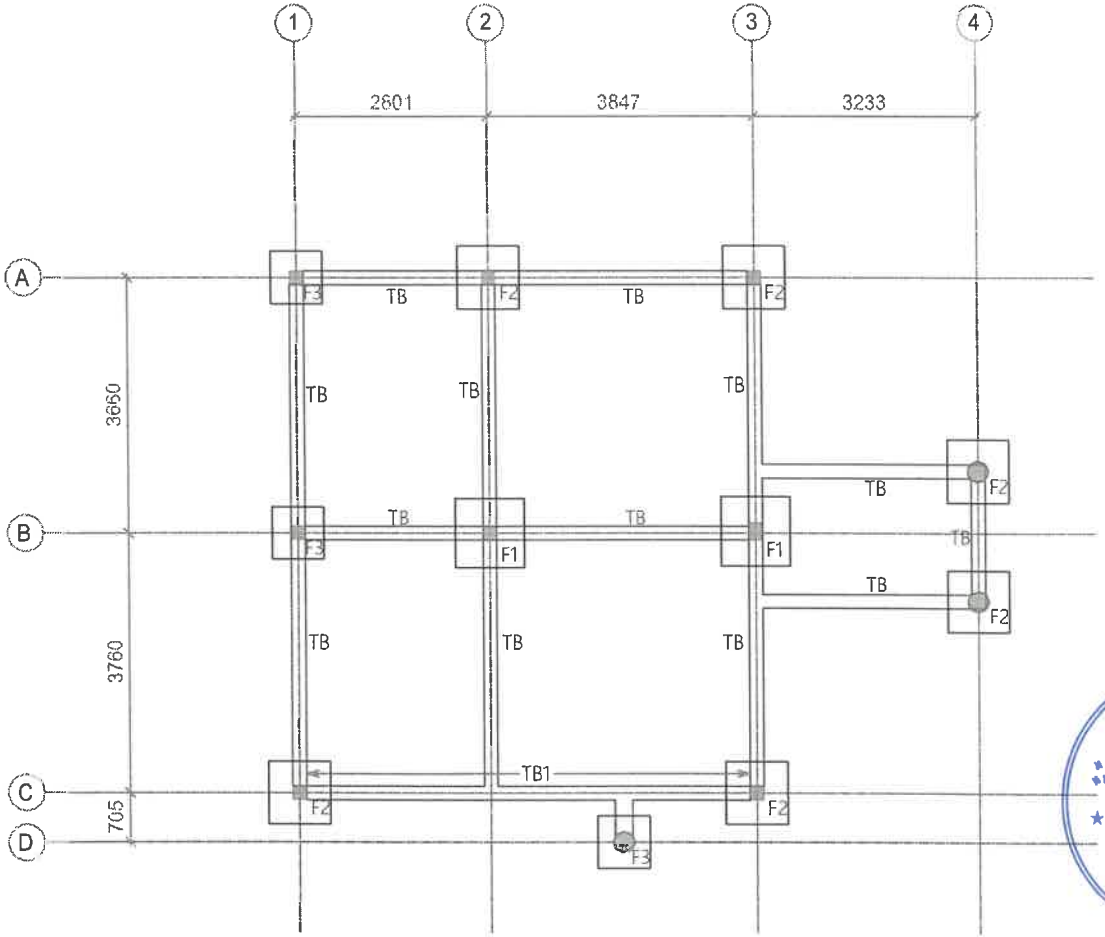
SCALE 1:100

PROJECT TITLE:
HARBOR SITE OFFICE

CLIENT:
KULHUDHUFFUSHI CITY COUNCIL

DATE:
JAN 2025

SHEET NO.:



FOOTING	DIMENSIONS (LXBXH)	REINFORCEMENT
F1	1000MM X 1000MM X 250MM	T10@150C/C BW BOTTOM
F2	900MM X 900MM X 250MM	T10 @150C/C BW BOTTOM
F3	750MM X 750MM X 250MM	T10 @150C/C BW BOTTOM

FOUNDATION DEPTH= 900MM FROM NGL

FOUNDATION PLAN

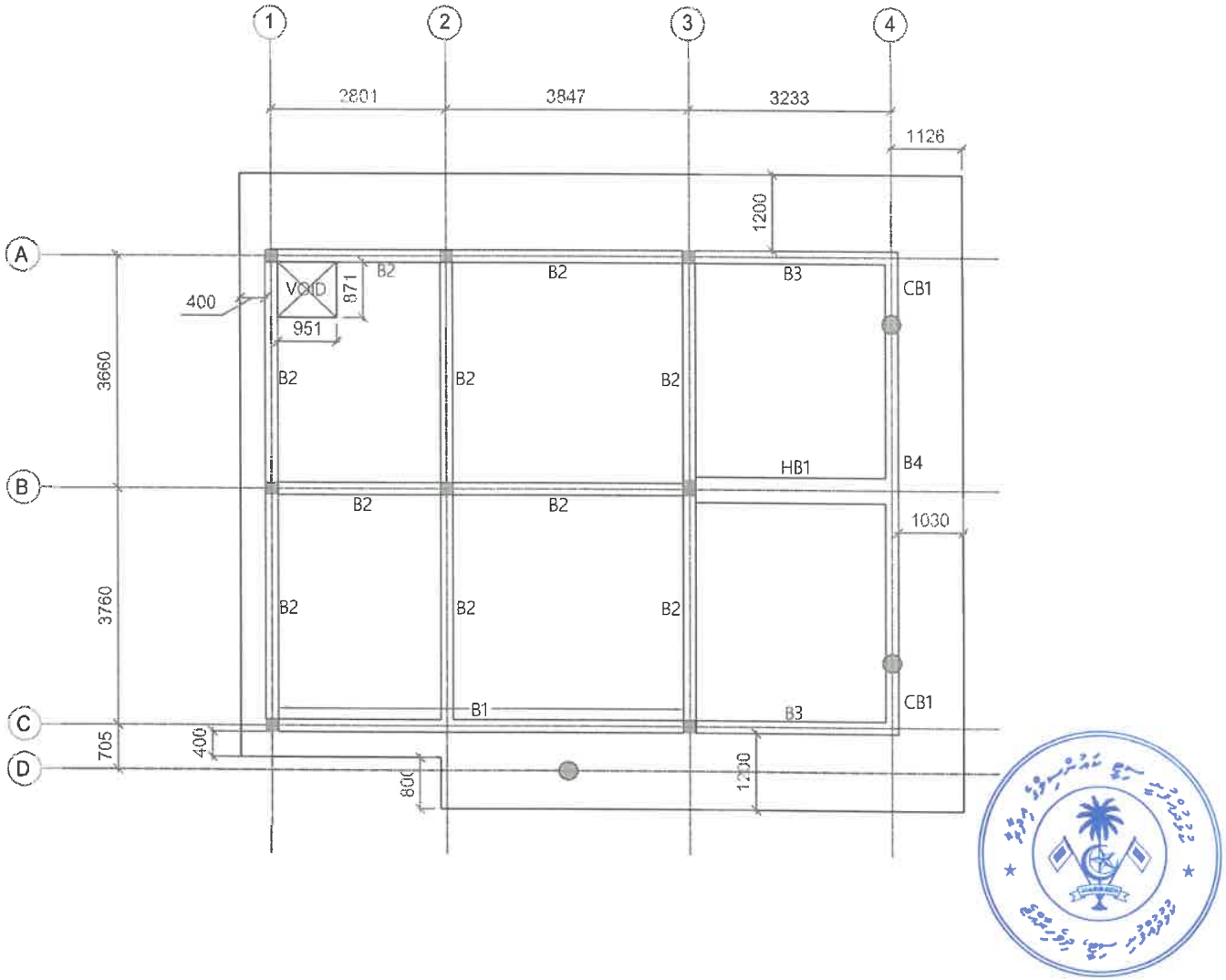
SCALE 1:100

PROJECT TITLE:
HARBOR SITE OFFICE

CLIENT:
KULHUDHUFFUSHI CITY COUNCIL

DATE:
JAN 2025

SHEET NO.:



ROOF SLAB BEAM PLAN

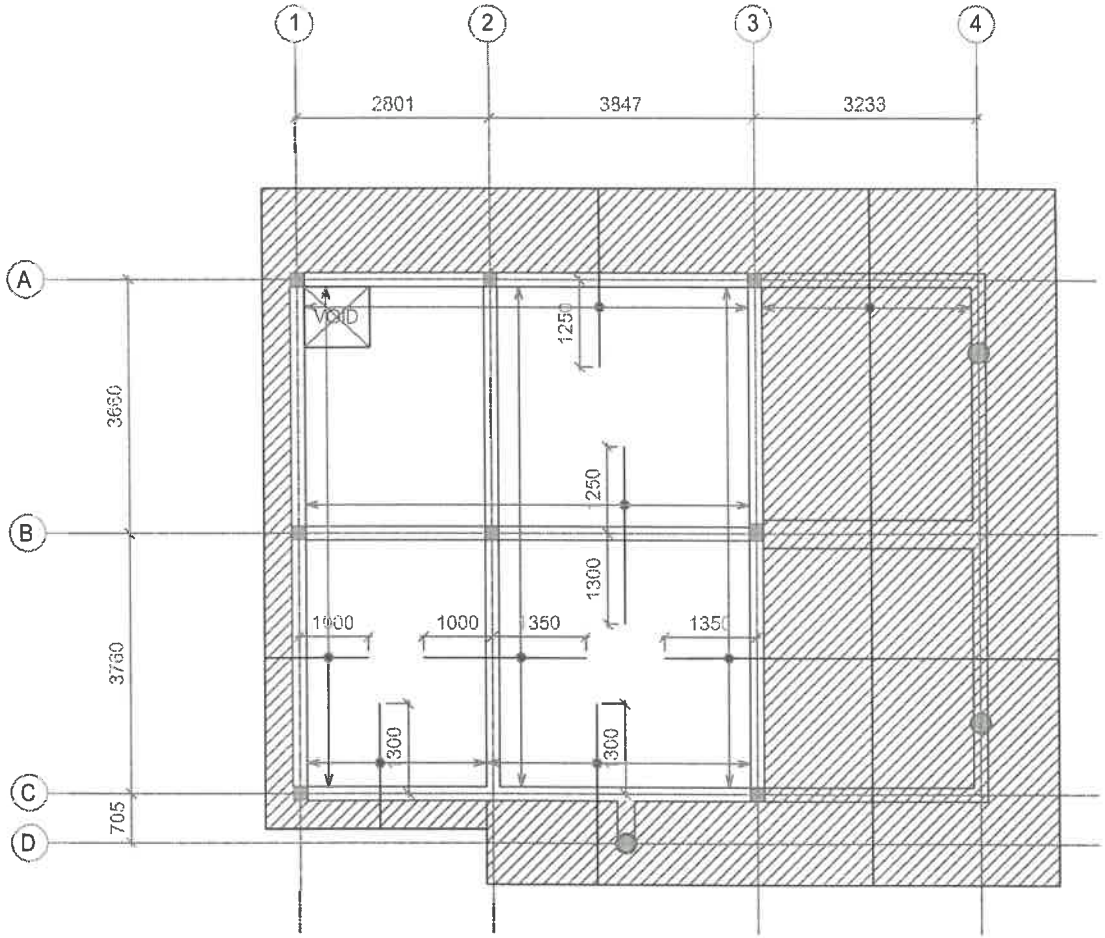
SCALE 1:100

PROJECT TITLE:
HARBOR SITE OFFICE

CLIENT:
KULHUDHUFFUSHI CITY COUNCIL

DATE:
JAN 2025

SHEET NO.:



GENERAL SLAB THICKNESS=130MM

HATCHED SLAB THICKNESS=150MM

BOTTOM REINFORCEMENT=T10 @150 C/C E/W
TOP REINFORCEMENT=T10 @150 C/C (AS SHOWN)
DISTRIBUTION BARS=T10 @300 C/C
CONCRETE COVER=25-30MM
BARS DISCONTINUOUS OVER VOIDS

ROOF SLAB REINFORCEMENT PLAN

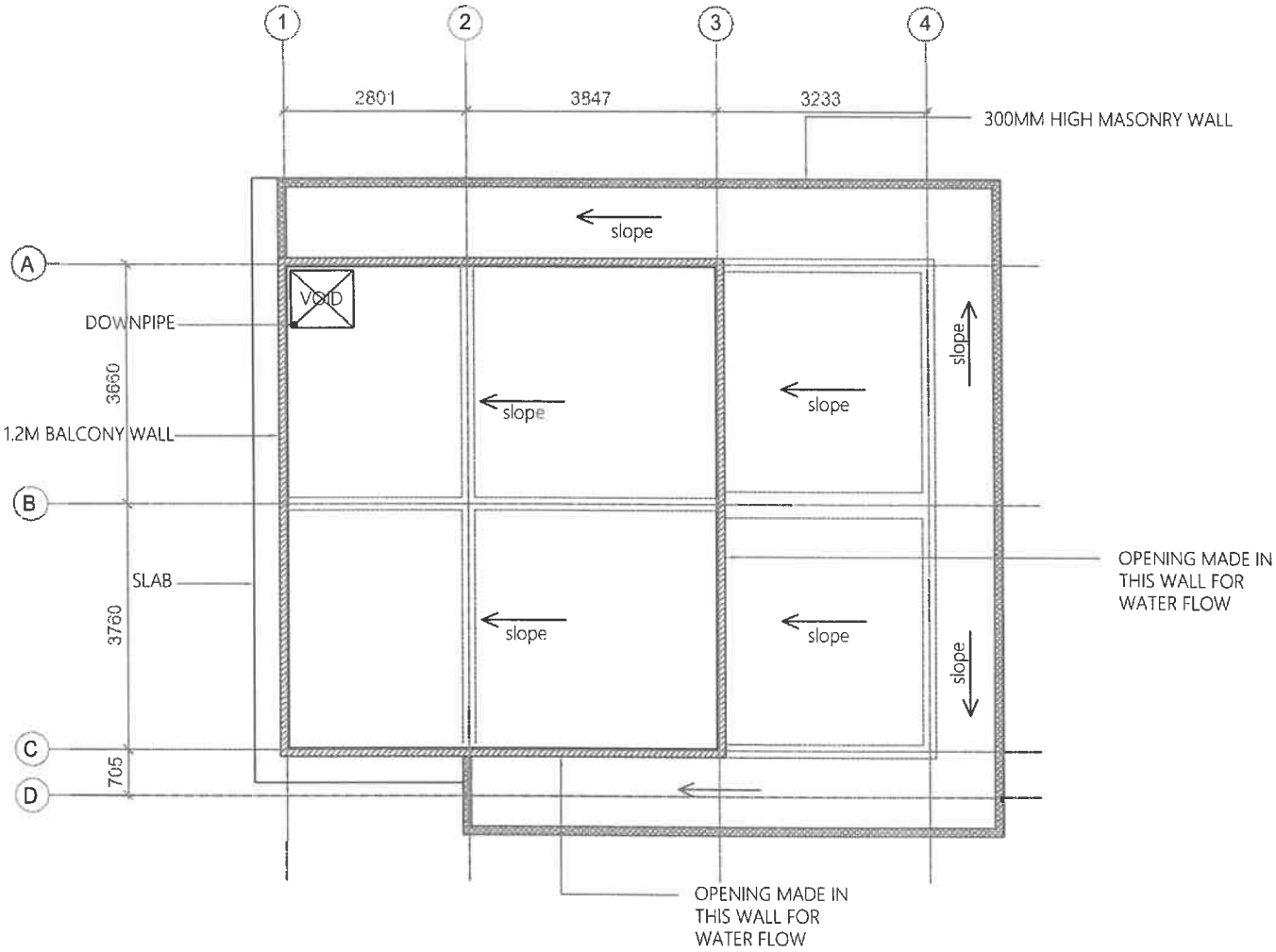
SCALE 1:100

PROJECT TITLE:
HARBOR SITE OFFICE

CLIENT:
KULHUDHUFFUSHI CITY COUNCIL

DATE:
JAN 2025

SHEET NO.:



ROOF SLAB PLAN

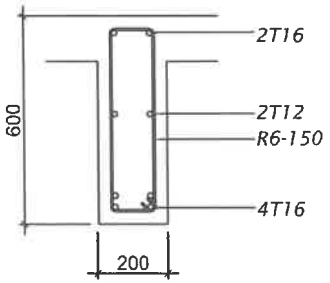
SCALE 1:100

PROJECT TITLE:
HARBOR SITE OFFICE

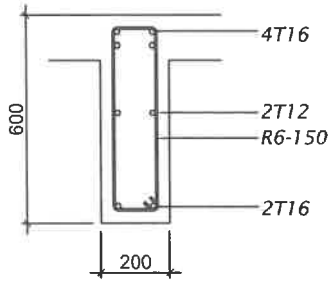
CLIENT:
KULHUDHUFFUSHI CITY COUNCIL

DATE:
JAN 2025

SHEET NO.:

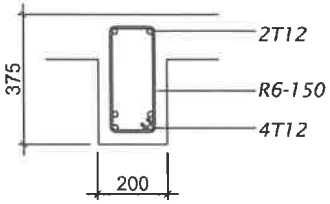


MIDSPAN

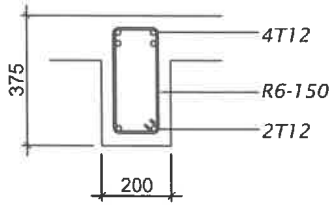


B1

SUPPORT

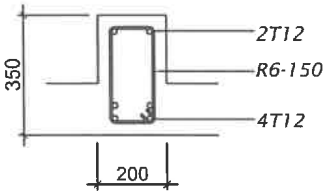


MIDSPAN

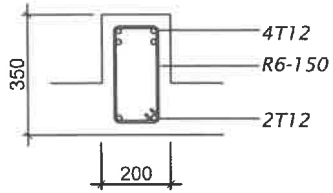


B2

SUPPORT

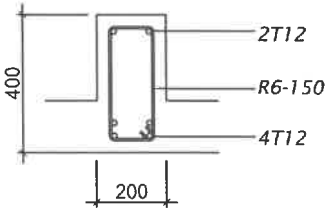


MIDSPAN

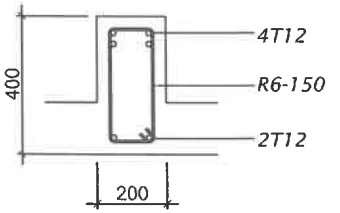


B3

SUPPORT

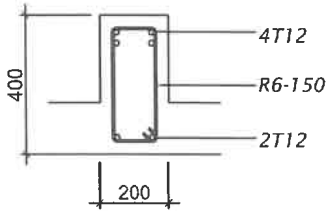


MIDSPAN

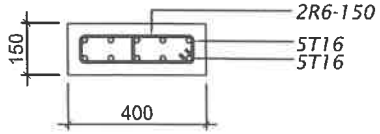


B4

SUPPORT



CB1



HB1

BEAM DETAILS

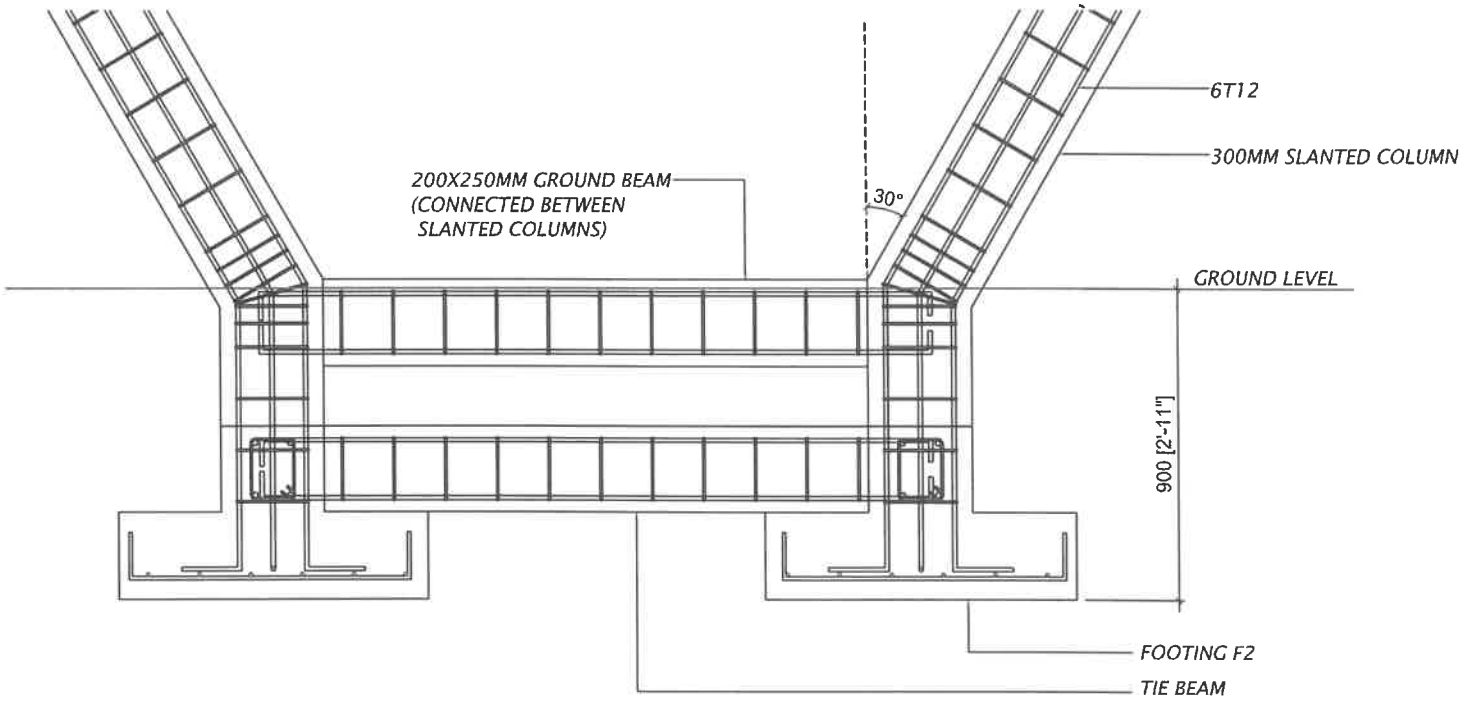
SCALE 1:20

PROJECT TITLE:
HARBOR SITE OFFICE

CLIENT:
KULHUDHUFFUSHI CITY COUNCIL

DATE:
JAN 2025

SHEET NO.:



SLANTED COLUMN DETAIL

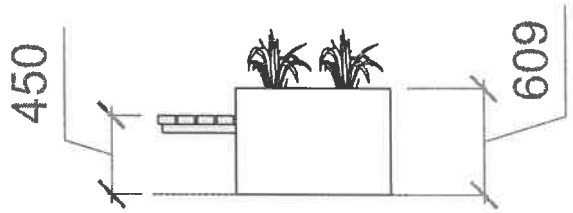
SCALE 1:20

PROJECT TITLE:
HARBOR SITE OFFICE

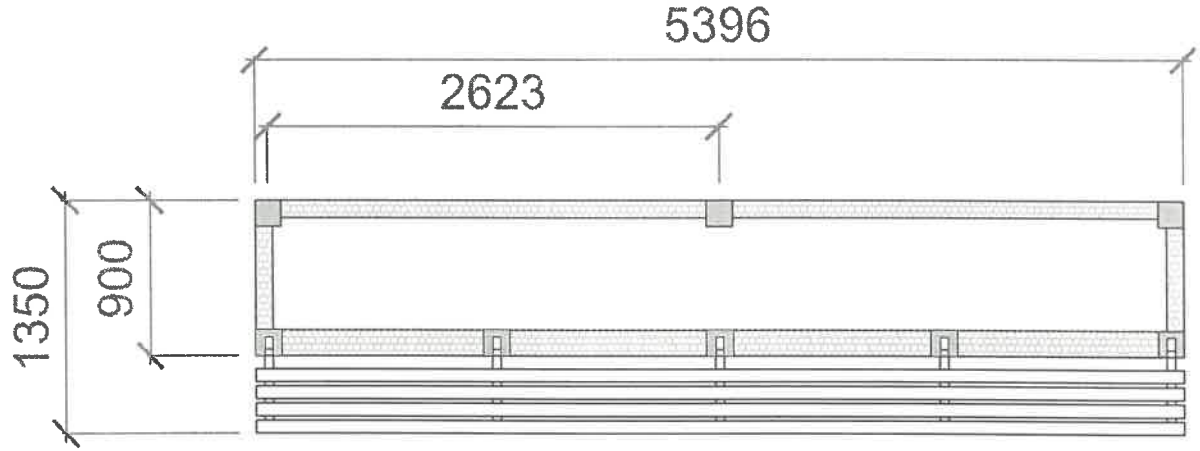
CLIENT:
KULHUDHUFFUSHI CITY COUNCIL

DATE:
JAN 2025

SHEET NO.:



SIDE VIEW



TOP VIEW

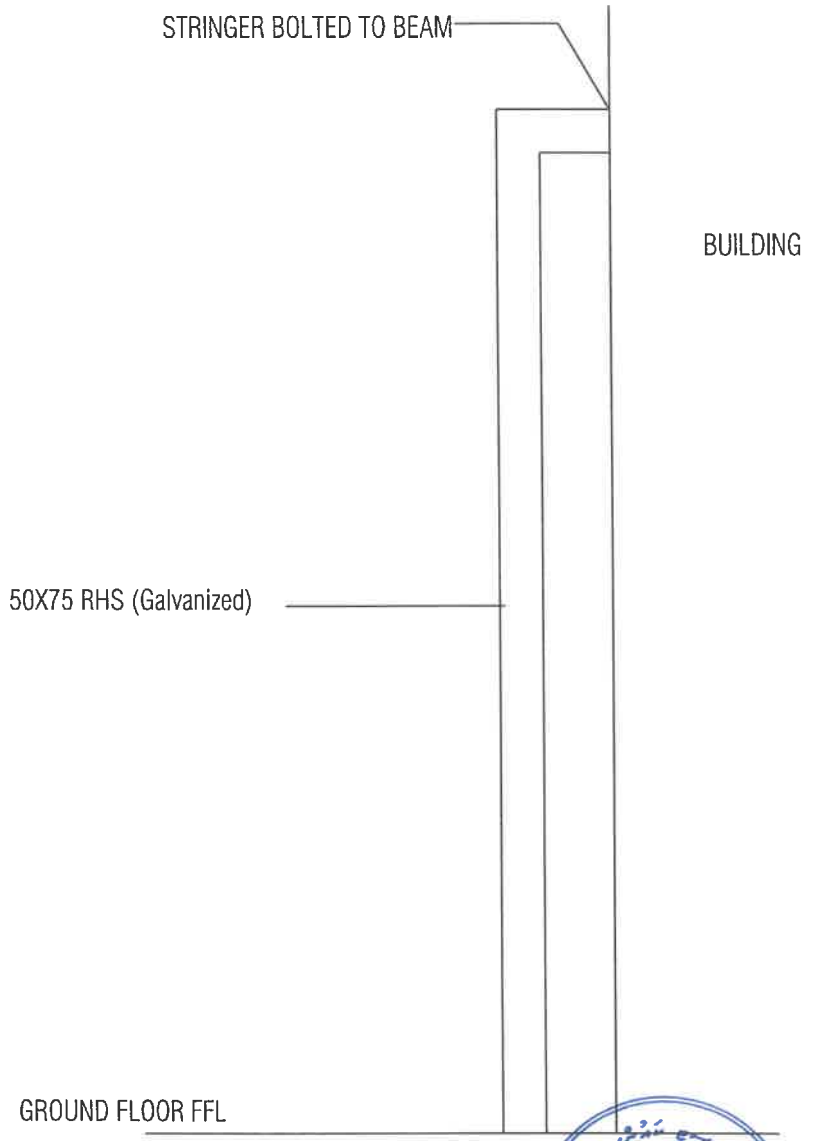
BENCH DETAIL

PROJECT TITLE:
HARBOR SITE OFFICE

CLIENT:
KULHUDHUFFUSHI CITY COUNCIL

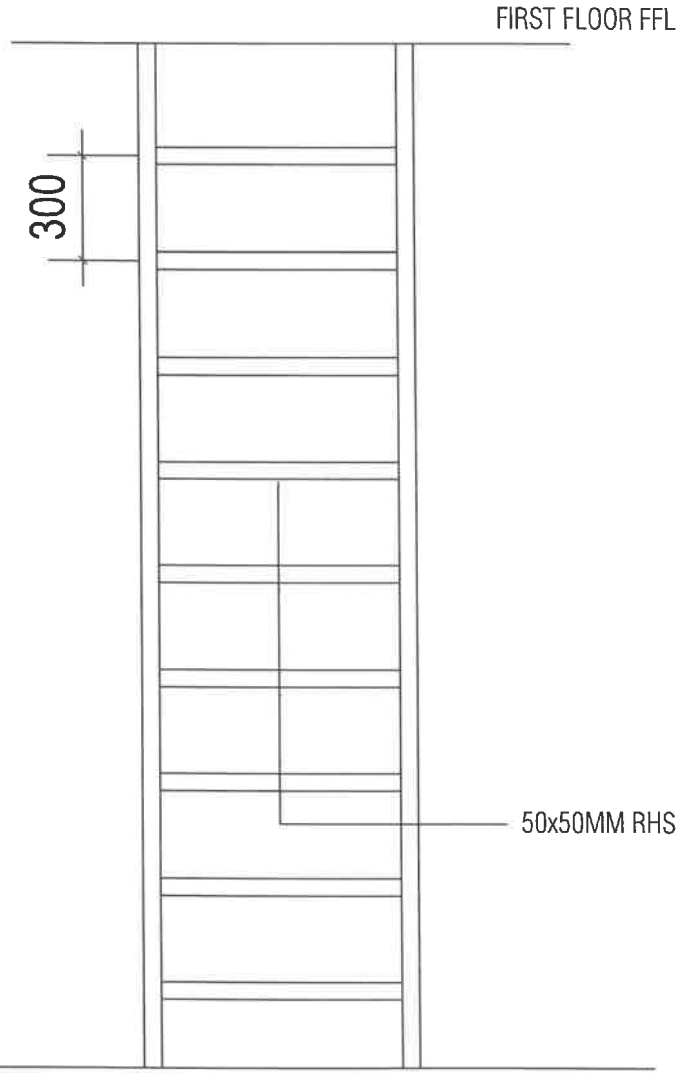
DATE:
JAN 2025

SHEET NO.:



LADDER DETAIL- SIDE VIEW

SCALE 1:30



LADDER DETAIL- FRONT VIEW

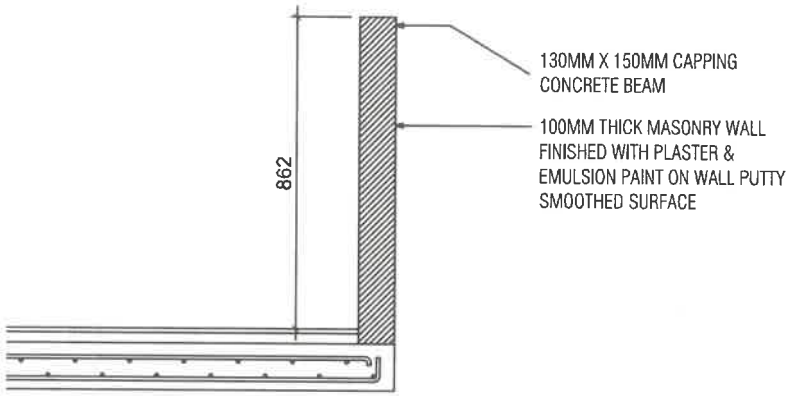
SCALE 1:30

PROJECT TITLE:
HARBOR SITE OFFICE

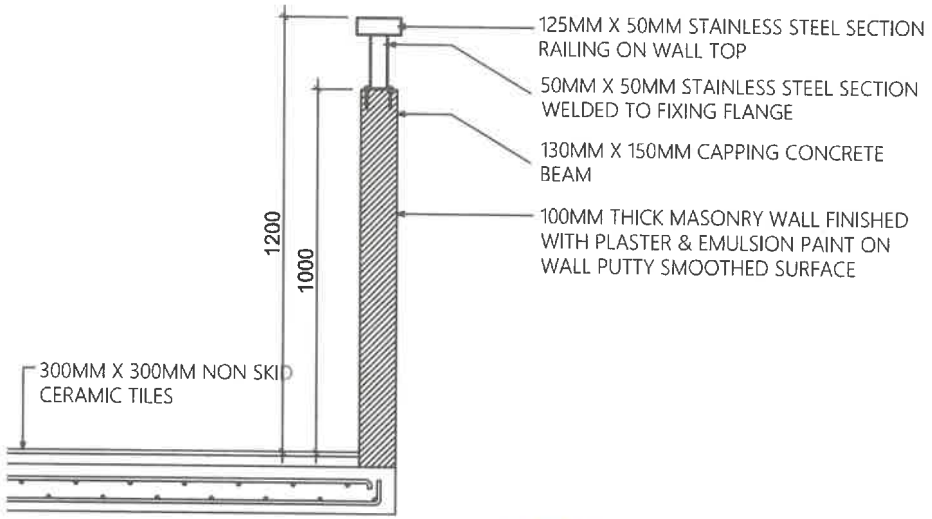
CLIENT:
KULHUDHUFFUSHI CITY COUNCIL

DATE:
JAN 2025

SHEET NO.:



PARAPET WALL DETAIL



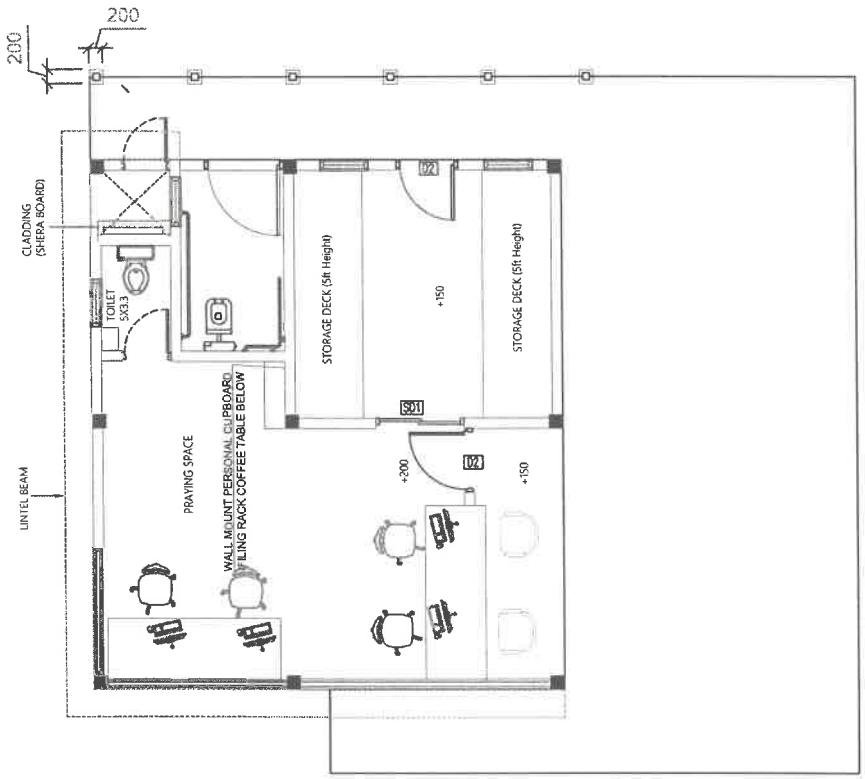
BALCONY RAILING DETAIL

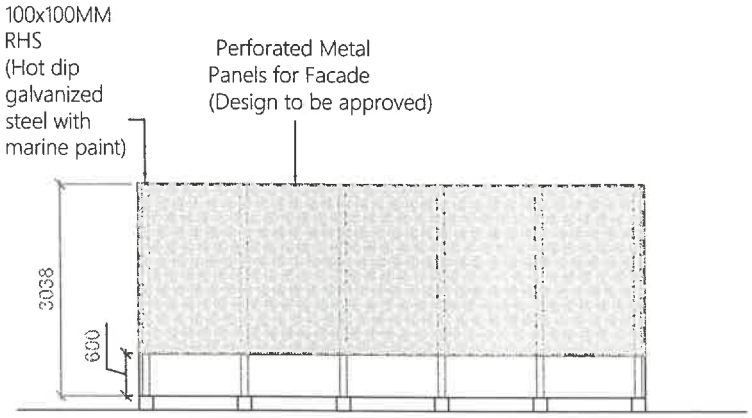
PROJECT TITLE:
HARBOR SITE OFFICE

CLIENT:
KULHUDHUFFUSHI CITY COUNCIL

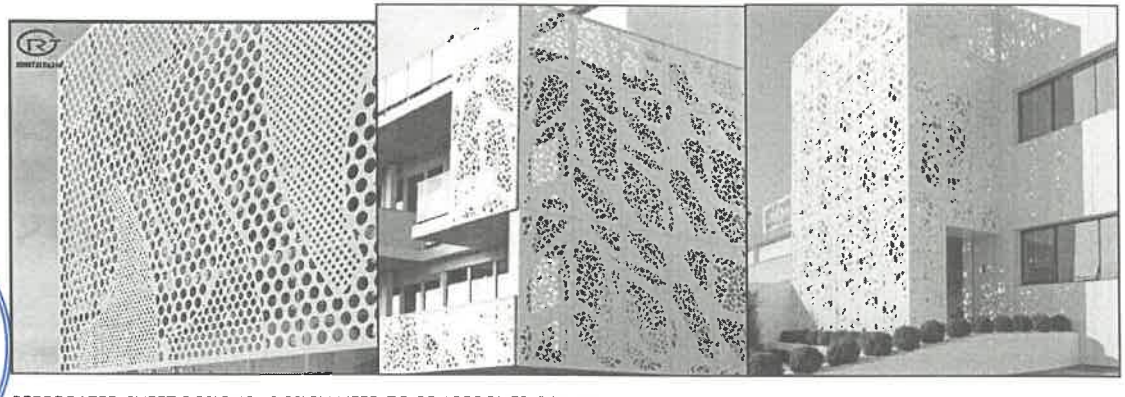
DATE:
JAN 2025

SHEET NO.:





TYPICAL INSTALLATION METHOD



PERFORATED SHEET DESIGNS (DESIGN NEED TO BE APPROVED BEFORE PURCHASE)

PROJECT TITLE:
HARBOR SITE OFFICE

CLIENT:
KULHUDHUFFUSHI CITY COUNCIL

DATE:
JAN 2025

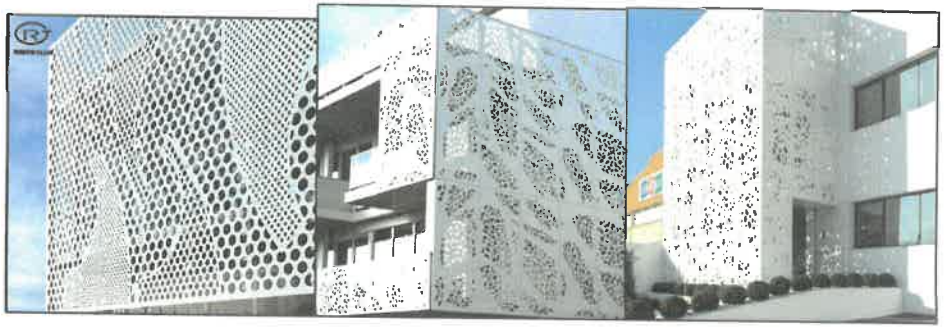
SHEET NO.:

		TRADITIONAL SMOOTH CEMENT FINISH	ROUGH RENDER PLASTER, MATT WHITE PAINT	CEMENT BOARD WITH WHITE PAINT	LAMINATED FLOORING BOARD RUSTIC OAK	SMOOTH RENDER, PLASTER WHITE PAINT	WHITE PAINT	PVC CEILING	SS POLISHED	300 X 600 MM HOMOGENOUS NON-SKID TILE	300 X 600 MM HOMOGENOUS SMOOTH TILE	DECORATIVE CLADDING	PERFORATED SHEETS
SHADED AREA	FLOOR									●			
	WALL		●									●	
	CEILING												
EXTERIOR	FLOOR												
	WALL		●									●	
	CEILING			●									
INTERIOR	FLOOR				●								
	WALL					●							
	CEILING						●						
TOILET	FLOOR									●			
	WALL										●		
	CEILING							●					
TERRACE	FLOOR									●			
	WALL		●										
	CEILING												
	RAILING								●				
FENCE	FENCE												●
	WALL		●										

NOTE:

1. CONTRACTOR SHALL FINALIZE THE DESIGN OF PERFORATED SHEET, CLADDING, TILES AND PAINT BEFORE PURCHASE.

Decorative cladding typical sample design(Contractor shall seek approval from council before purchase)



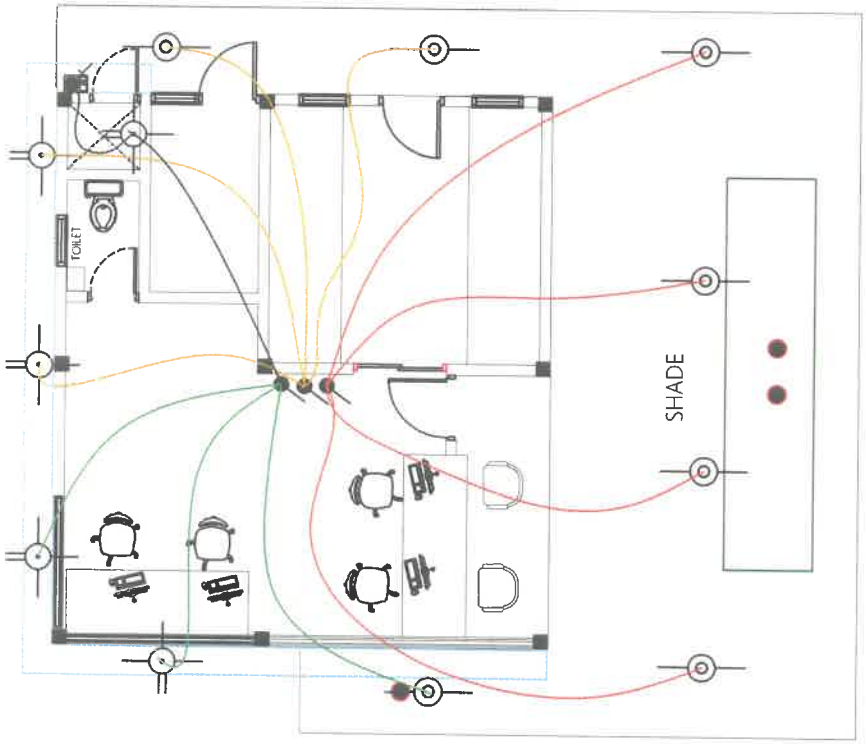
PERFORATED SHEET DESIGNS (DESIGN NEED TO BE APPROVED BEFORE PURCHASE)

PROJECT TITLE:
HARBOR SITE OFFICE

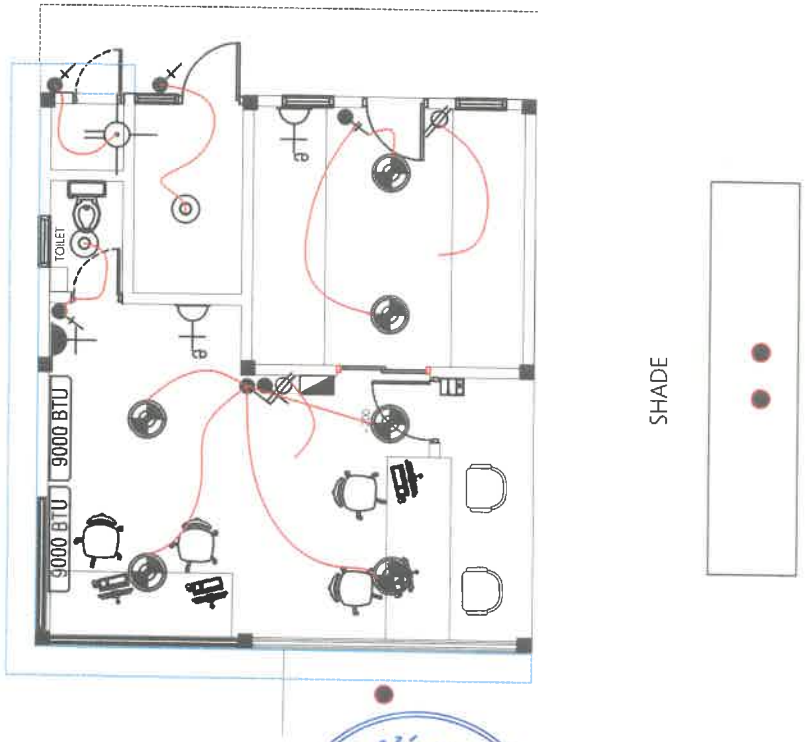
CLIENT:
KULHUDHUFFUSHI CITY COUNCIL

DATE:
JAN 2025

SHEET NO.:



OUTDOOR LIGHT PLAN
SCALE 1:100



INTERIOR LIGHT PLAN
SCALE 1:100

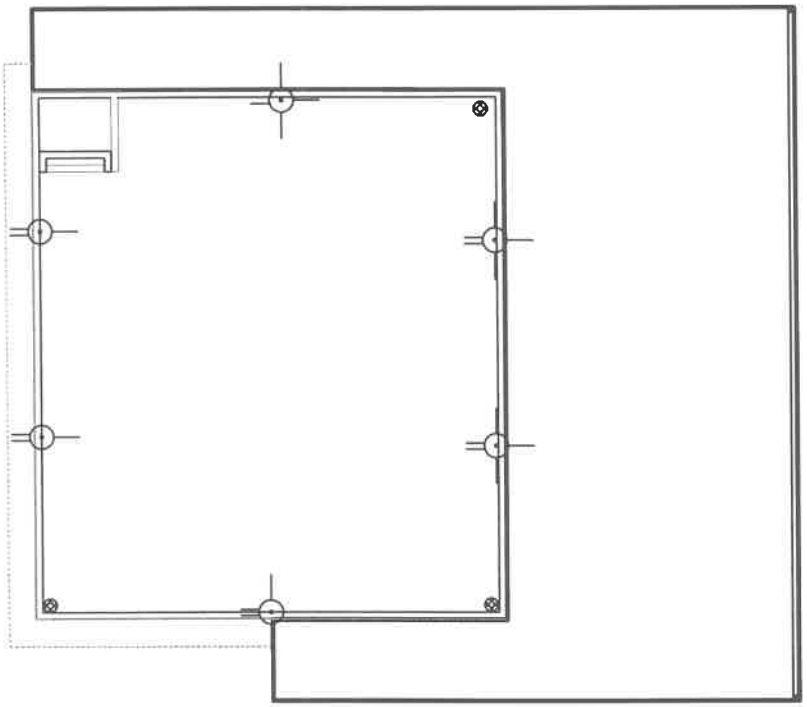
PROJECT TITLE:
HARBOR SITE OFFICE

CLIENT:
KULHUDHUFFUSHI CITY COUNCIL

DATE:
JAN 2025

SHEET NO.:

ELECTRICAL



TERRACE LIGHT PLAN
SCALE 1:100

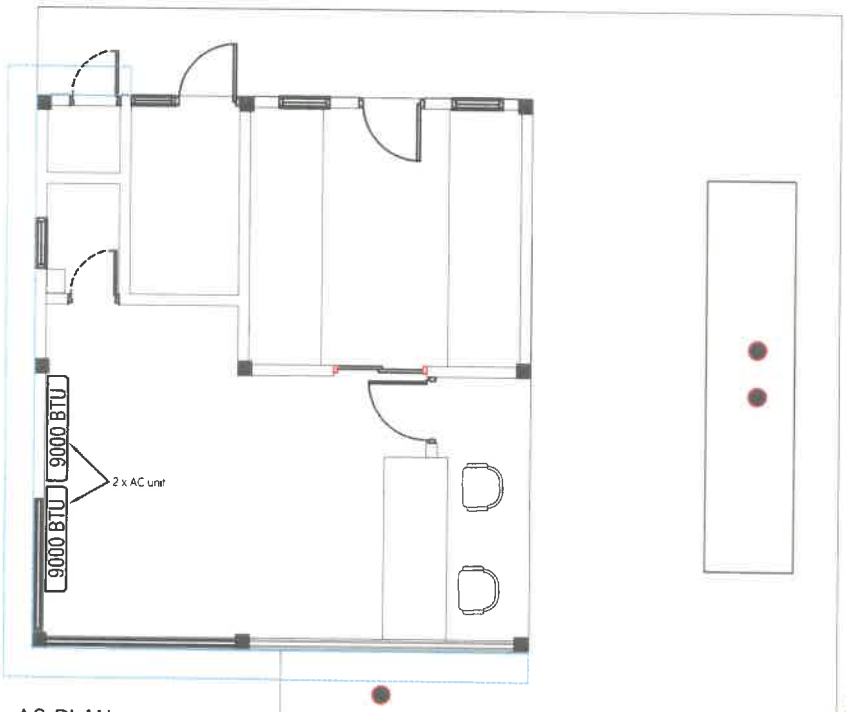
	DOOR ACCESS CONTROL WITH FINGER PRINT AND RFID
	DISTRIBUTION BOARD
	WEATHERPROOF CEILING MOUNT LIGHT
	WEATHERPROOF WALL MOUNT LIGHT
	EMERGENCY LIGHT, 2 HR NON-MAINTAINED
	1X13A SOCKET OUTLET (FOR EMERGENCY LIGHTS)
	1X15A SOCKET OUTLET (FOR AC)
	ONE WAY SWITCH (2 GANG)
	ONE WAY SWITCH (1 GANG)
	FAN / LIGHT DIMMER TWO WAY SWITCH
	ONE WAY SWITCH (4 GANG)
T	TELEPHONE OUTLET
N	NETWORK
	WALL MOUNT AC UNIT (9000 BTU)
	CEILING FAN
	DOOR ACCESS CONTROL WITH FINGER PRINT AND RFID
	DISTRIBUTION BOARD (THREE PHASE)

PROJECT TITLE:
HARBOR SITE OFFICE

CLIENT:
KULHUDHUFFUSHI CITY COUNCIL

DATE:
JAN 2025

SHEET NO.:



AC PLAN

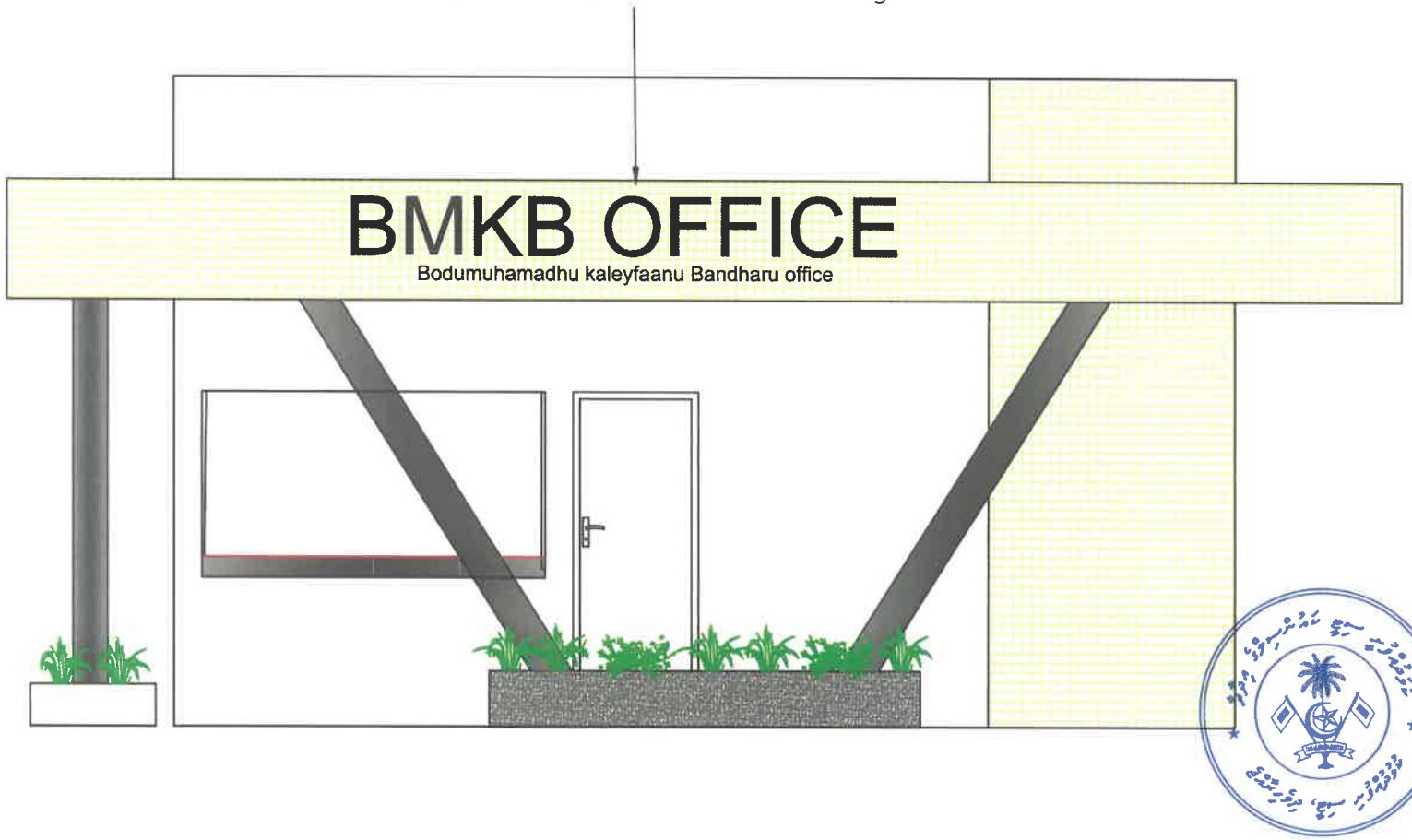
PROJECT TITLE:
HARBOR SITE OFFICE

CLIENT:
KULHUDHUFFUSHI CITY COUNCIL

DATE:
JAN 2025

SHEET NO.:

Name board
(Text, font and size to be finalized)
individual letters on to the front of a building



Note:
Lighting th signage : Incorporate an LED lighting system or an alternative method of illuminating the signage to be considered.
Material - (to be finalized)