

METHOD OF PROTECTING ADJACENT STRUCTURES DURING EXCAVATION

WHERE ADJACENT BUILDING IS LESS THAN 3 STOREYS HIGH OR WHERE ADJACENT FOUNDATION IS BELOW THE DEPTH OF THE PROPOSED FOUNDATION

- BEFORE THE LEVEL OF EXCAVATION REACHES THE BOTTOM OF THE ADJACENT FOUNDATION, PLACE THE STEEL PLATE AGAINST THE ADJACENT PROPERTY AND DRIVE THE UPRIGHT G.I. PIPES (WITH THE UPVC SLEEVES) INTO THE GROUND. DRIVE THE STEEL PLATES 400-500 mm INTO THE GROUND
- 1.) EXCAVATE ANOTHER 300mm DEEPER.
  - 2.) DRIVE THE STEEL PLATE ANOTHER 300mm DEEPER.
  - 3.) FOLLOW THIS PROCEDURE UNTIL THE REQUIRED DEPTH, AS SHOWN IN THE DIAGRAM, IS REACHED.
  - 4.) PROP THE G.I PIPES USING WALINGS AND RAKING SHORES AS SHOWN IN THE DIAGRAM.

- 6.) POUR THE FOUNDATION.
- 7.) AFTER 3 DAYS REMOVE THE UPRIGHT G.I. PIPES AND PLACE THE WALING AGAINST THE STEEL SHEET, USING RAKING SHORES AS BEFORE.
- 8.) GROUT THE SPACE INSIDE UPVC PIPES.
- 9.) WHILE BACKFILLING, REMOVE STEEL SHEETS AND RAKING SHORES.
- 10.) NOTE: STEEL PLATES MAY REQUIRE STIFFENING WITH WELDED ANGLES IN BOTH DIRECTIONS. EXCAVATION & SHORE PROTECTION MUST PROCEED IN PORTIONS, DECIDED BASED ON SITE CONDITIONS FOR MAXIMUM SAFETY & PROTECTION.

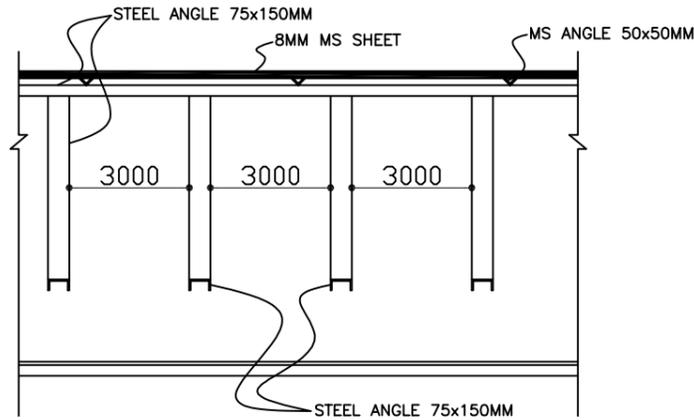
5.0 MISCELLANEOUS AND WATERPROOFING

- 5.1 THE CONTRACTOR IS REQUIRED TO SUBMIT COORDINATED M&E PENETRATION DRAWINGS FOR APPROVAL. TRIMMING BARS FOR BEAM AND SLAB OPENING SHALL BE PROVIDED ACCORDINGLY TO STANDARD DETAILS.
  - 5.2 NON-STRUCTURAL REINFORCED CONCRETE ELEMENTS ARE NOT COMPLETELY SHOWN IN THE STRUCTURAL DRAWINGS. PLEASE REFER TO ARCHITECTURAL DRAWINGS FOR THE LOCATION OF SUCH ELEMENTS.
  - 5.3 REFER TO ARCHITECTURAL DRAWINGS FOR RAIN WATER DOWNPIPE LOCATION.
  - 5.4 ALL GROUND SLAB, BEAM AND WALL IN CONTACT WITH SOIL AND/OR WATER SHALL BE APPLIED WITH SPECIFIED WATERPROOFING
- ALL CONSTRUCTION JOINTS IN THE SLAB AND WALL SHALL BE PROPOSED BY THE CONTRACTOR AND APPROVED BY EMPLOYER'S PERSONNEL. WATERPROOFING DETAILS SHALL BE APPROVED BY THE EMPLOYER'S PERSONNEL. APPROVED WATERPROOFING DETAILS SHALL BE PROVIDED AT ALL CONSTRUCTION JOINT. THE COST OF WATER-PROOFING CONSTRUCTION JOINT IS DEEMED TO BE INCLUDED IN THE TENDER PRICE.

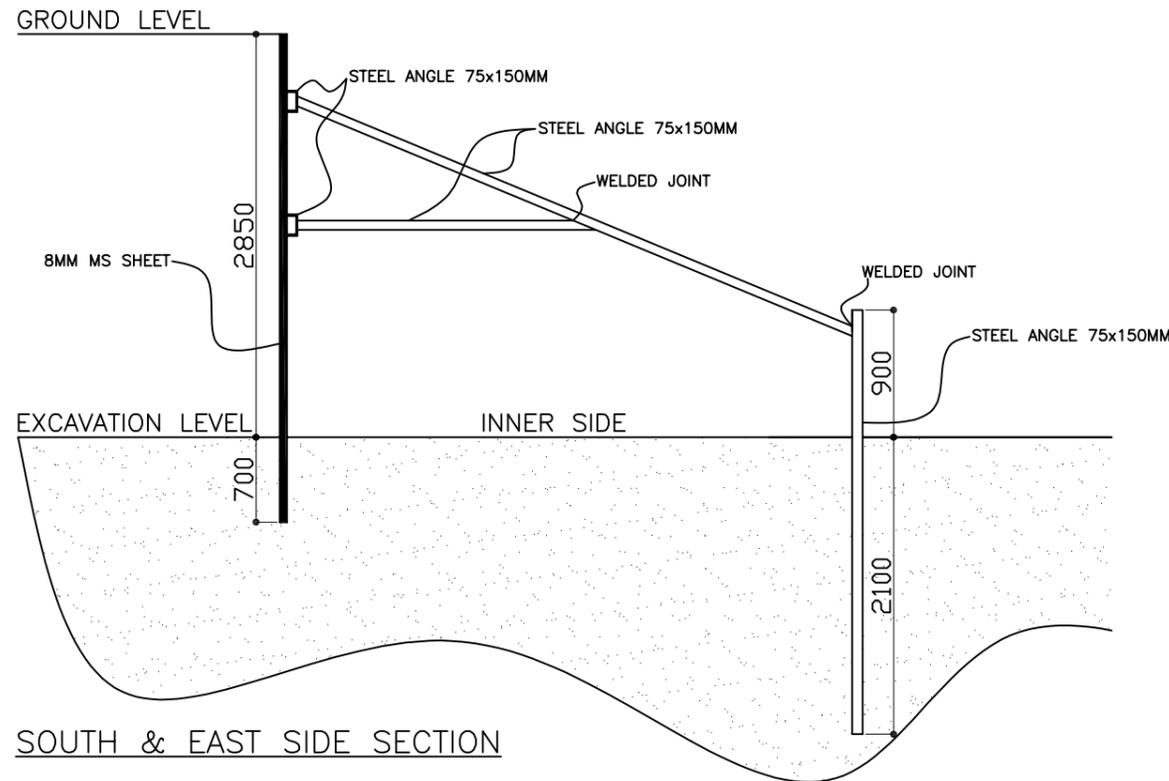
- 5.5 PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL SUBMIT THE FOLLOWING FOR THE APPROVAL BY THE EMPLOYER'S PERSONNEL:
  - a.) METHOD AND SEQUENCE OF CONSTRUCTION.
  - b.) DESIGN AND CALCULATION OF TEMPORARY SUPPORT TO EXCAVATION PREPARED AND ENDORSED BY A GEOTECHNICAL PROFESSIONAL ENGINEER.
  - c.) INSTRUMENTATION PROGRAMMED TO MONITOR SOIL MOVEMENT, WATER TABLE AND SETTLEMENT.
  - d.) EFFECTS OF GROUND WATER LEVEL DRAW-DOWN.
  - e.) PRECAUTIONARY MEASURES TO AVOID DAMAGE TO NEIGHBORING BUILDING STRUCTURES.
- 5.6 ROOF SHALL BE CAST TO FALL TOWARDS RAIN WATER DISCHARGE POINTS.
- 5.7 R.C. FLAT ROOF STRUCTURE AND TERRACE SLAB SHALL BE WATER TIGHT AND BE WATERPROOFED WITH THE APPROVED WATERPROOFING SYSTEM. ALL CONSTRUCTION JOINT IN THE ROOF AND TERRACE SLAB SHALL BE PROPOSED BY THE CONTRACTOR FOR THE APPROVAL BY THE EMPLOYER'S PERSONNEL. ALL CONSTRUCTION JOINTS SHALL BE PROVIDED WITH WATER STOP TO ENSURE WATER TIGHTNESS. 24 HOURS DURATION PONDING TESTS SHALL BE CARRIED OUT FOR THE ROOF/TERRACE STRUCTURE PRIOR TO APPLICATION OF WATERPROOFING MEMBRANE. ALL LEAKAGE AND SEEPAGE THROUGH THE ROOF/TERRACE STRUCTURE SHALL BE REPAIRED AT THE CONTRACTOR'S COST. PONDING TEST SHALL BE CARRIED OUT AGAIN AFTER THE REPAIR TO CHECK THE WATER TIGHTNESS.
- 5.8 INSTALLATION OF MECHANICAL AND ELECTRICAL EQUIPMENT ON ROOF SHALL NOT WEAKEN THE WATER TIGHTNESS OF THE ROOF STRUCTURE. USE OF EXPANSION BOLT ON THE ROOF SLAB IS NOT ACCEPTABLE.

6.0 TIMBER

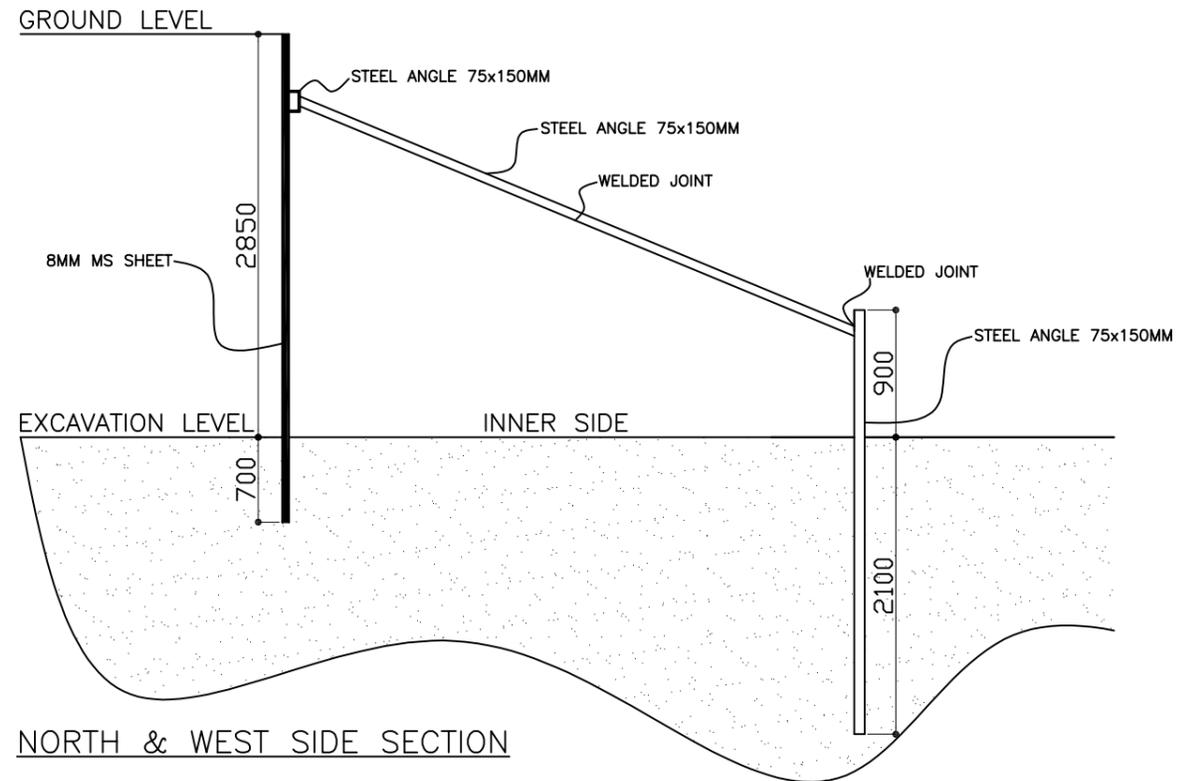
- 6.1 TIMBER SHOULD HAVE A STRENGTH GRADE OF F8 AS PER AS1720.1-1997. MINIMUM BENDING STRENGTH, BENDING PARALLEL TO GRAIN, SHALL BE 25 N/mm<sup>2</sup>. MINIMUM SHEAR STRENGTH, PARALLEL TO GRAIN, SHALL BE 2.5 N/mm<sup>2</sup>. MINIMUM MOISTURE CONTENT SHALL BE 12%.



PLAN



SOUTH & EAST SIDE SECTION



NORTH & WEST SIDE SECTION

Revision	Date	Drawn By	Checked By
-	-	-	-

Client :  
**MINISTRY OF ARTS, CULTURE & HERITAGE**

Project Title :  
**KALHUVAKARU MOSQUE RELOCATION**

Building Name :  
**KALHUVAKARU MOSQUE**

Drawing Title :  
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**1:50**

Discipline :  
**STRUCTURAL**

Stage :  
**SUBMISSION**

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Checked By :  
**SHAREEF**

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