HOMES FOR NGARANNAM, ARMOUROURED VEHICLE SHADE MAFA LGA, BORNO.

ISSUED FOR CONSTRUCTION
Figured dimension must be taken in preference dimensions.
Contractor, sub-contractors and suppliers must verify all dimensions on site before commencing any work or making any shop drawings.
All timber to be pressure treated with anti-fungal and anti-infestion on approved treatment.

NOTE

All internal doors to have 25mm undercut to avoid internal pressure build up.

Issued For Review

HOMES FOR NGARRANAM, MAF A LGA, BORNO.

ARMOURED POLICE VEHICLE SHADE
LOCATION ON MASTERPLAN

Scale: 1:50
Date: DECEMBER, 2021
Drawg No: AK25-04-204
Figured dimension must be taken in preference dimensions.
Contractors, sub-contractors and suppliers must verify all dimensions on site before commencing any work or making any shop drawings.
All timber to be pressure treated with anti fungal and anti infestation treatment.
All internal Doors to have 25mm undercut to avoid internal pressure build up.

NOTE

HOMES FOR NGARANANAM,
MAFA LGA, BORNO.

ARMoured POLICE VEHICLE SHADE,
ROOF PLAN

Scale: 1:50
Date: DECEMBER, 2021
Drawn No.
AK33-04-207
NOTE
Figured dimension must be taken in preference dimensions.
Contractor, sub-contractors and suppliers must verify all dimensions on site before commencing any work or making any shop drawings.
All timber to be pressure-treated with anti- fungal and anti-insecticidal treatment.

NOTE
All Internal Doors to have 25mm undercut to avoid internal pressure build up.

100MM ROUND GALVANIZED STEEL PIPES

FOUNDATION FOOTING

SECTION A-A
1 : 50

50 X 50 X 2.5MM (3.68KG/M) SHS
SQUARE METAL TRUSSES

50MM X 50MM X 4MM (3.77KG/M) EA
ANGLE IRON

150MM CONCRETE SLAB

BLOCK WALL

FOUNDATION FOOTING

SECTION B-B
1 : 50

ARMOURING POLICE VEHICLE SHADE
SECTION A-A
SECTION B-B

HOMES FOR NGARANNAM,
MAFA LGA, BORNO.

ISSUED FOR REVIEW

Scale: 1 : 50
Date: DECEMBER, 2021
Draw. No. AK25-04-206
Figured dimension must be taken in preference dimensions.

Contractors, sub-contractors and suppliers must verify all dimensions on site before commencing any work or making any shop drawing.

All timber to be pressure treated with anti fungal and anti infestation on approved treatment.

NOTE

All Internal Doors to have 25mm undercut to avoid internal pressure build up.

HOMES FOR NGARRANNAM,
MAFA LGA, BORNO.

ISSUED FOR REVIEW

ARMOURED POLICE VEHICLE SHADE
FRONT AND REAR ELEVATIONS

Scale: 1:50
Date: DECEMBER, 2021
Drawg. No. A435-04-209
**NOTE**

Figured dimension must be taken in preference dimensions.

Contractors, sub-contractors and suppliers must verify all dimensions on site before commencing any work or making any shop drawings.

All timber to be pressure treated with anti fungal and anti infestation on approved treatment.

All internal Doors to have 25mm undercut to avoid internal pressure build up.

**HOMES FOR NGARANNAM, MAPA LGA, BORNO.**

ISSUED FOR REVIEW

ARMOURED POLICE VEHICLE SHADE
LEFT ELEVATION & RIGHT ELEVATION

Scale: 1 : 50

Date: DECEMBER, 2021

Drwg. No. A435-04-210
GENERAL NOTES.

1. Issued for Tender

HOMES FOR NGARRAMAH, MAFA LGA, BORNO.

REINFORCED CONCRETE

1. DESIGN IS TO BS 8110

2. CONCRETE GRADES ARE TO BE AS FOLLOWS WITH FIGURES IN BRACKET DENOTING MAXIMUM SIZE OF AGGREGATES:

- FOUNDATION: 30 (25)
- COLUMNS: 30 (20)
- BEAMS & SLABS: 30 (20)

3. UNLESS OTHERWISE INDICATED, REINFORCEMENT SHALL BE HIGH YIELD STEEL (TYPE 2), DENOTED BY "Y", HAVING CHARACTERISTIC STRONGEY NOT LESS THAN 410N/MM².

4. COVER TO REINFORCEMENT SHALL BE THE FOUNDATION:

   - BOTTOM: 50MM
   - SIDES: 75MM

   COLUMNS:
   - 25MM

   BEAMS:
   - 25MM

   SLABS:
   - 20MM

5. DRAWINGS MUST BE READ IN CONJUNCTION WITH THE RELEVANT ARCHITECTURAL DRAWINGS AND IN CASE OF ANY DISCREPANCY REFER TO THE DESIGN ENGINEER FOR CLARIFICATION.

6. DIMENSIONS ARE IN MILLIMETRE (MM) AND MUST NOT BE SCALLED AT ANY TIME.

7. FOUNDATION WAS DESIGNED FOR AN ASSUMED ALLOWABLE SOIL BEARING PRESSURE OF 150KN/M².

8. THIS DESIGN ENGINEER WILL NOT TAKE RESPONSIBILITY FOR ANY JOB NOT SUPERVISED BY HIM.

BLOCKWORK

1. HOLLOW BLOCKWALLS BELOW GROUND SLAB LEVEL ARE TO BE FILLED WITH MASS CONCRETE. BACK FILLING IS TO BE CARRIED OUT SIMULTANEOUSLY ON BOTH SIDES.

2. WALL THICKNESS OF THE BLOCKS SHOULD NOT BE MORE THAN 200MM.

3. THE MAXIMUM CRUSHING STRENGTH OF THE HOLLOW BLOCK IS TO BE 20N/MM² OF GROSS AREA OF BLOCK AT 28DAYS.

4. BLOCKWORK TIES BETWEEN BLOCKWORK WALL AND COLUMNS/TIRES ARE TO BE PROVIDED AT EVERY COURSE. TIES TO BE 6MM BAR STRAPS 700MM LONG INTO THE BLOCKWORK.

5. MAXIMUM POUR HEIGHT FOR ALL FILLED BLOCK BLOCKWORK TO BE 2 COURSES AT A TIME.

6. ALL SERVICE PIPES ONLY BE PUT INSIDE BLOCKWALL AFTER THE TOP BLOCKWORK HAS BEEN COMPLETED. PUTTING SERVICE PIPES INSIDE TOP BEARING BLOCKWORK CORROSION MUST BE AVOIDED.
GENERAL NOTES.

1. DESIGN IS TO BS 8110
2. CONCRETE GRADES ARE TO BE AS FOLLOWING WITH FIGURES IN BRACKET DENOTING MAXIMUM SIZE OF AGGREGATE:
   - FOUNDATION: 30(25)
   - COLUMNS: 30(20)
   - BEAMS: 30(20)
   - SLABS: 30(20)
3. UNLESS OTHERWISE INDICATED, REINFORCEMENT SHALL BE HIGH YIELD STEEL (TYPE 2), DENOTED BY ‘Y’, HAVING CHARACTERISTIC STRONGTH NOT LESS THAN 410N/MM²
4. COVER TO REINFORCEMENT SHALL BE THE FOLLOWING:
   - FOUNDATION: 50MM (BOTTOM) 75MM (SIDES)
   - COLUMNS: 25MM
   - BEAMS: 25MM
   - SLABS: 20MM
5. DRAWINGS MUST BE READ IN CONJUCTION WITH THE RELEVANT ARCHITECTURAL DRAWINGS AND IN CASE OF ANY DISCREPANCY REFER TO THE DESIGN ENGINEER FOR CLARIFICATION.
6. DIMENSIONS ARE IN MILLIMETRE (MM) AND MUST NOT BE SCALED AT ANY TIME.
7. FOUNDATION WAS DESIGNED FOR AN ASSUMED ALLOWABLE SOIL BEARING PRESSURE OF 150KN/M²
8. THIS DESIGN ENGINEER WILL NOT TAKE RESPONSIBILITY FOR ANY JOB NOT SUPERVISED BY HIM.

HOMES FOR NGARANNAM,
MAFA LGA, BORNO.
GENERAL NOTES.

1. DESIGN IS TO BS 8110
2. CONCRETE GRADES ARE TO BE AS FOLLOWING WITH FIGURES IN BRACKET DENOTING MAXIMUM SIZE OF AGGREGATE:
   - FOUNDATION: 30(25)
   - COLUMNS: 30(20)
   - BEAMS & SLABS: 30(20)
3. UNLESS OTHERWISE INDICATED, REINFORCEMENT SHALL BE HIGH YIELD STEEL (TYPE 1), DESIGNATED BY "Y", HAVING A CHARACTERISTIC STRAIGHT NOT LESS THAN 410N/MM².
4. COVER TO REINFORCEMENT SHALL BE THE FOLLOWING:
   - FOUNDATION: 50MM (BOTTOM) 75MM (SIDES)
   - COLUMNS: 25MM
   - BEAMS: 25MM
   - SLABS: 20MM
5. DRAWINGS MUST BE READ IN CONJUNCTION WITH THE RELEVANT ARCHITECTURAL DRAWINGS AND IN CASE OF ANY DISCREPANCY REFER TO THE DESIGN ENGINEER FOR CLARIFICATION.
6. DIMENSIONS ARE IN MILLIMETRE (MM) AND MUST NOT BE SCALABLE AT ANY TIME.
7. FOUNDATION WAS DESIGNED FOR AN ASSUMED ALLOWABLE SOIL BEARING PRESSURE OF 150KN/M².
8. THIS DESIGN ENGINEER WILL NOT TAKE RESPONSIBILITY FOR ANY JOB NOT SUPERVISED BY HIM.

BLOCKWORK
1. HOLLOW BLOCK WALLS BELOW GROUND SLAB LEVEL ARE TO BE FILLED WITH MASS CONCRETE. BACK FILLING IS TO BE CARRIED OUT SIMULTANEOUSLY ON BOTH SIDES.
2. THE WALL THICKNESS OF THE BLOCKS SHOULD NOT BE MORE THAN 250MM.
3. THE MAXIMUM CRUSHING STRENGTH OF THE HOLLOW BLOCK IS TO BE 20N/MM² OF GROSS AREA OF BLOCK AT 28 DAYS.
4. BLOCKWORK TIES BETWEEN BLOCKWORK WALL AND COLONNAD|ENT ANCHORS ARE TO BE PROVIDED AT EVERY COURSE. TIES TO BE 6MM BAR STAPED 700MM LONG INTO THE BLOCK.
5. MAXIMUM POUR HEIGHT FOR ALL FILLED BLOCK BLOCKWORK TO BE 2 COURSES AT A TIME.
6. ALL SERVICE PIPES SHALL ONLY BE PUT INSIDE BLOCKWORK AFTER DUE CONSULTATION WITH STRUCTURAL ENGINEERS. PUTTING SERVICE PIPES INSIDE NON-LOAD BEARING BLOCKWORK CORNERS MUST BE AVOIDED.

100mm x 6mm x 14.1kg/m CHS round metal section

GROUND LEVEL

50mm Blinding Concrete

FOOTING DETAILS

SECTION A-A
GENERAL NOTES.

1. DESIGN IS TO BS 8110
2. CONCRETE GRADES ARE TO BE AS FOLLOWING:
   - FOUNDATION: C30/37 (300mm dia. - 25mm max. aggregate)
   - COLUMNS: C30/37 (200mm dia. - 20mm max. aggregate)
   - BEAMS & SLABS: C30/37 (200mm dia. - 20mm max. aggregate)
3. UNLESS OTHERWISE INDICATED, REINFORCEMENT SHALL BE HIGH YIELD STEEL (TY), DESIGNATED BY "Y", HAVING A CHARACTERISTIC STRAIN NOT LESS THAN 0.005.
4. COVER TO REINFORCEMENT SHALL BE THE FOLLOWING:
   - FOUNDATION: 50MM (BOTTOM) 75MM (SIDES)
   - BEAMS & SLABS: 25MM
5. DRAWINGS MUST BE READ IN CONJUNCTION WITH THE RELEVANT ARCHITECTURAL DRAWINGS AND IN CASE OF ANY DISCREPANCY REFER TO THE DESIGN ENGINEER FOR CLARIFICATION.
6. ALL DIMENSIONS ARE IN MILLIMETRES (MM) AND MUST NOT BE SCALED AT ANY TIME.

BLOCKWORK

1. HOLLOW BLOCKWALLS BELOW GROUND SLAB LEVELS ARE TO BE FILLED WITH MASS CONCRETE. BACKFILLING IS TO BE CARRIED OUT SIMULTANEOUSLY ON BOTH SIDES.
2. THE WALL THICKNESS OF THE BLOCKS SHOULD NOT BE MORE THAN 25MM.
3. THE MAXIMUM CRUSHING STRENGTH OF THE HOLLOW BLOCK IS TO BE 20N/MM² OF GROSS AREA OF BLOCK AT 28 DAYS.
4. BLOCKWORK TIES BETWEEN BLOCKWORK WALL AND COLONNETTES ARE TO BE PROVIDED AT EVERY COURSE. TIES TO BE 6MM BAR STRAPS 700MM LONG INTO THE BLOCKWORK.
5. MAXIMUM POUR HEIGHT FOR ALL FILLED BLOCK BLOCKWORK TO BE 2 COURSES AT A TIME.

6. ALL SERVICE PIPES SHALL NOT BE PUT INSIDE BLOCKWORK AFTER BUILDING BEGINS. INSIDE BLOCKWORK. CONSIDER USING LARGE BORE PIPES TO INSIDE BLOCKWORK. SHOULD NOT BE INSIDE BLOCKWORK. INSIDE BLOCKWORK. CONSIDER USING LARGE BORE PIPES TO INSIDE BLOCKWORK.
REINFORCED CONCRETE
1. DESIGN IS TO BS 8110
2. CONCRETE GRADES ARE TO BE AS
   FOLLOWING WITH FIGURES IN BRACKET DENOTING MAXIMUM SIZE
   AGGREGATE
   - FOUNDATION:   30(25)
   - COLUMNS:     30(20)
   - BEAMS & SLABS      30(20)
3. UNLESS OTHERWISE INDICATED, REINFORCEMENT SHALL BE HIGH YIELD
   STEEL TYPE 2, DESIGNATED BY "Y" (Yielding Characteristic Not Less
   Than 410N/MM²)
4. COVER TO REINFORCEMENT SHALL BE AS
   FOUNDATION:   75MM (BOTH SIDES)
   - COLUMNS:    25MM
   - BEAMS:      25MM
   - SLABS:      20MM
5. DRAWINGS MUST BE READ IN CONJUNCTION WITH THE RELEVANT
   ARCHITECTURAL DRAWINGS AND IN CASE OF ANY DISCREPANCY REFER TO
   THE DESIGN ENGINEER FOR CLARIFICATION.
6. DIMENSIONS ARE IN MILLIMETRE(MM) AND MUST NOT BE SCALED AT
   ANY TIME.
7. FOUNDATION WAS DESIGNED FOR AN ASSUMED ALLOWABLE SOIL
   BEARING PRESSURE OF 150KN/M²
8. THIS DESIGN ENGINEER WILL NOT TAKE RESPONSIBILITY FOR ANY JOB
   NOT SUPERVISED BY HIM.

BLOCKWORK
1. HOLLOW BLOCKWALLS BELOW GROUND SLAB LEVELS ARE TO BE FILLED
   WITH MASS CONCRETE. BACK FILLING IS TO BE CARRIED OUT SIMULTANEOUSLY ON
   BOTH SIDES.
2. THE WALL THICKNESS OF THE BLOCK SHOULD NOT BE MORE THAN 250MM.
3. THE MAXIMUM CRUSHING STRENGTH OF THE HOLLOW BLOCK IS TO BE 20N/MM²
   OF GROSS AREA OF BLOCK AT 28 DAYS.
4. BLOCKWORK TIES BETWEEN BLOCKWORK WALL AND COLUMNS/TIES ARE TO
   BE PROVIDED AT EVERY COURSE. TIES TO BE 6MM BAR STRAPS 700MM LONG INTO
   THE BLOCKWORK.
5. MAXIMUM POUR HEIGHT FOR ALL FILLED BLOCKWORK TO BE 2 COURSES AT A
   TIME.
6. ALL SERVICE PIPES SHALL ONLY BE PUT INSIDE BLOCKWORK AFTER CON
   CONSULTATION WITH STRUCTURAL ENGINEERS. PUTTING SERVICE PIPES INSIDE
   LOAD BEARING BLOCKWORK CORNERS MUST BE AVOIDED.

BORNO.