

- ALL LEVELS ON DRAWINGS INDICATE TOP OF CONCRETE UNLESS INDICATED OTHERWISE.
- 2. DIMENSIONS OF BEAMS ARE INDICATED AS WIDTH x
- PROVIDE 50mm BLINDING UNDER ALL COLUMN AND CONCRETE WALL BASES.
- JOINTS INDICATED IN SURFACE BEDS, SLABS AND ARE ALSO TO BE CONSTRUCTED IN BRICK WALLS, SCREED
- 5. THE CONTRACTOR MUST ENSURE THAT ALL EMBEDDED ITEMS AND PENETRATIONS FOR SERVICES HAVE BEEN PROVIDED FOR AND POSITIONED ACCORDING TO THE LATEST DRAWINGS OF ALL DISCIPLINES BEFORE CASTING CONCRETE.
- 6. PROVISION OF PROPS UNDER SLABS AND BEAMS: THE CONTRACTOR MUST ENSURE THAT BEAMS AND SLABS HAVE SUFFICIENT STRENGTH AND/OR ARE ADEQUATELY PROPPED TO CARRY CONSTRUCTION LOADS FROM ABOVE. DISCUSS WITH ENGINEER.
- 7. FOUNDING CONDITIONS AND LEVELS TO BE APPROVED BE APPROVED BY ENGINEER.
- 8. CONTRACTOR TO CHECK ALL DIMENSIONS AND LEVELS ON SITE AND REPORT ANY DISCREPANCIES TO THE
- CEMENT SHALL NOT BE STORED FOR LONGER THAN 6
   WEEKS WITHOUT APPROVAL FROM THE ENGINEER.
   CEMENT WILL BE STORED UNDER COVER AND OFF THE GROUND.
- 10. ALL WATERPROOFING AND TANKING TO BE CARRIED OUT TO MANUFACTURER'S SPECIFICATIONS AND ARCHITECTS DETAILS.
- 11.BACKFILL AROUND COLUMNS AND WALLS TO COMMENCE EVENLY.

## SURFACE BED

- 1. SHOULD NO ALTERNATIVE CURING METHOD BE APPROVED BY THE ENGINEER IN WRITING:

   CONCRETE CAST UNDER ROOF COVER:

  SAW CUT FLOOR SLABS WITHIN 24 HOURS OF CASTING CURE BY WETTING SIX TIMES PER DAY FOR A MINIMUM OF 7 DAYS.
- CONCRETE CAST IN OPEN AIR: CONCRETE CAST IN OPEN AIR:
   CURE BY COVERING WITH PLASTIC SHEETING
   IMMEDIATELY AFTER STRIKING OFF
   SAW CUT FLOOR SLABS WITHIN 6 HOURS OF CASTING
   FOR POWER FLOATED SLABS, COVER SLAB WITH PLASTIC
   SHEETING IMMEDIATELY AFTER STRIKING OFF AND
   REPLACE PLASTIC SHEETING AFTER POWER FLOATING.
- UNLESS OTHERWISE SPECIFIED ALL FILL UNDER SURFACE BEDS SHALL BE AN APPROVED MATERIAL COMPACTED TO 955 MOD AASHTO.
- MINIMUM LAP OF MESH REINFORCEMENT IS 400mm UNLESS OTHERWISE NOTED.
- REFER TO ARCHITECT DETAILS FOR SURFACE FINISH
   AND COVERING.
- 5. PROVIDE A VERTICAL ISOLATION JOINT BETWEEN THE SURFACE BED AND ALL VERTICAL WALLS AND COLUMNS PROTRUDING THROUGH THE SURFACE BED.

- ALL CONCRETE WORK TO BE CARRIED OUT IN ACCORDANCE WITH SABS 1200 G (LATEST ADDITION).
- 2. MINIMUM CONCRETE CUBE STRENGTH AT 28 DAYS:

28 DAY STRENGTH (MPa)
15
25
30
25
AS FOR BASE SLAB

3. MINIMUM COVER TO REINFORCEMENT:

IIII ONOLINEITI		
ELEMENT	COVER (mm)	
FOUNDATIONS (WITH BLINDING)	50	
COLUMNS, BEAMS	40	
SLABS AND STAIRS	40	

- 4. ALL REINFORCEMENT IS TO BE APPROVED BY THE ENGINEER BEFORE CONCRETE IS CAST. INSPECTION TO BE UNDERTAKEN WHEN REBAR IS PROPERLY FIXED AND COVER BLOCKS HAVE BEEN POSITIONED AND THE CONTRACTOR QA DOCUMENTATION HAS BEEN SIGNED OFF BY THE CONTRACTOR.
- 5. NO KICKERS TO BE CAST FOR WALLS OR COLUMNS.
- THE LOCATION OF CONSTRUCTION JOINTS, SHUTTER AND PROP REMOVAL TIMES ARE TO BE AGREED WITH ENGINEER PRIOR TO CONSTRUCTION.
- 7. THE CONTRACTOR TO ENSURE THAT THE NECESSARY PROVISION IS MADE IN THE SUPPORTWORK FOR 3 SLABS TO SUPPORT THE WET WEIGHT OF ONE SLAB. e.g FOR THE CASTING OF LEVEL 5 SLAB 10% SUPPORT WORK MUST BE PROVIDED ON LEVEL 4, 70% ON LEVEL 3 AND 30% ON LEVEL 2.
- CONSTRUCTION JOINTS:
   NO HORIZONTAL JOINTS WILL BE ALLOWED IN BASES,
  BEAMS AND SLABS. NO VERTICAL JOINTS IN COLUMNS
  AND WALLS.
- 9 IF FOR ANY REASON A COLD JOINT SHOULD FORM IF FOR ANY REASON A COLD JOINT SHOULD FORM DURING CASTING, THE PLANE OF THE JOINT SHOULD BE AT 45 DEGREES TO THE SOFFIT OF THE MEMBER AND THE ENGINEER SHOULD BE NOTIFIED IMMEDIATELY.
- 11. ALL CONCRETE TO BE COMPACTED USING A MECHANICAL VIBRATOR OF A SUITABLE SIZE. DEEP MEMBERS TO BE VIBRATED IN 500mm LAYERS AND WHEN VIBRATING EACH LAYER, THE POKER SHOULD BE
- 12. ALL CONCRETE TO BE CONTINUOUSLY CURED USING AN APPROVED METHOD FOR A MINIMUM OF 7 DAYS.
- 13. SHOULD NO ALTERNATIVE CURING METHOD BE
- 13. SHOULD NO ALTERNATIVE CURING METHOD BE APPROVED BY THE ENGINEER IN WRITING:

   CONCRETE CAST UNDER ROOF COVER: SAW CUT FLOOR SLABS WITHIN 24 HOURS OF CASTING CURE BY WETTING SIX TIMES PER DAY FOR A MINIMUM OF 7 DAYS.

   CONCRETE CAST IN OPEN AIR: CURE BY COVERING WITH PLASTIC SHEETING IMMEDIATELY AFTER STRIKING OFF SAW CUT FLOOR SLABS WITHIN 6 HOURS OF CASTING FOR POWER FLOATED SLABS, COVER SLAB WITH PLASTIC SHEETING IMMEDIATELY AFTER STRIKING OFF AND REPLACE PLASTIC SHEETING IMMEDIATELY AFTER STRIKING OF FAND REPLACE PLASTIC SHEETING AFTER POWER FLOATING. COLUMNS TO BE WRAPPED IN PLASTIC.
- 13. CASTING OF CONCRETE IN EXCESS OF 3.5m IS NOT PERMITTED WITHOUT PRIOR APPROVAL FROM THE
- 14. WELDING OF REINFORCEMENT IS NOT ALLOWED UNLESS APPROVED BY ENGINEER IN WRITING.
- 15. SYMBOLS DENOTING LAYERS OF REINFORCEMENT IN SLABS AND BASES:

- 16. MIX DESIGNS TO BE SUBMITTED TO ENGINEER FOR
- 17. ALL CONTRACTORS QA DOCUMENTATION TO BE FORWARDED TO ENGINEER BEFORE COMMENCING WITH ANY STRUCTURAL WORK.
- 18. THE TOP OF ALL VERTICAL CONCRETE ELEMENTS THAT SUPPORT HORIZONTAL CONCRETE ELEMENTS TO BE WELL SCABBLED AND CLEANED PRIOR TO CASTING CONCRETE.
- 19. PULL OUT BAR REINFORCEMENT MAY NOT BE USED
- 20. ALL SLAB PANELS WITH UPSTAND BEAMS TO REMAIN . ALL SLAB PANELS WITH UPSTANDS HEAMS TO REMAIN PROPPED UNTIL THE UPSTANDS HAS BEEN CAST AND IS 14 DAYS OLD. THE TOP OF THE SLAB TO BE WELL SCABBLED AND CLEANED AND A WET TO DRY EPOXY TO BE PROVIDED TO THE ENGINEER'S APPROVAL.

- TIMBER ROOFS TO BE DESIGNED AND SIGNED OFF BY MANUFACTURER. MANUFACTURER'S SIGN OFF LETTER TO BE FORWARDED TO ENGINEER.
- TRUSSES TO BE FIXED WITH WITH A GALVANISED STEEL STRAP 30x1.6mm WITH A 90 DEGREE BEND EMBEDDED 400mm INTO CONCRETE AND 600mm INTO MASONRY.
- ALL EXTERNALLY EXPOSED PARTS OF TIMER TRUSSES TO BE PAINTED WITH 2 COATS OF CREOSOTE.
- WHERE TRUSSES PASS THROUGH WALLS 2 COATS OF CREOSOTE MUST BE APPLIED AND WRAPPED WITH A LAYER OF DPC TO ALLOW MOVEMENT.
- 5. TRUSSES TO BE SIGNED OF BEFORE ROOF COVERING

1. THE FOLLOWING BRICK AND MORTAR STRENGTHS SHALL APPLY: BRICKWORK

	BRICK STRENGTH	MORTAR CLASS (SABS 0164)
RETAINING WALLS & BWK BELOW GROUND LOADBEARING WALLS	14 MPa	CLASS I
PANEL WALLS IN RC	7 MPa	CLASS II

GALVANISED WALL TIES TO SANS 28 ARE TO BE PROVIDED AS FOLLOWS(NO SINGLE STRAND TYPE WALL TIES WILL BE PERMITTED):

WALL TYPE	NUMBER OF TIES
GROUTED CAVITY WALL	4 PER m2
CAVITY WALL	3 PER m2
WITHIN 230 mm EITHER SIDE OF VERTICAL CONTROL JOINT IN THE OUTER SKIN OF A CAVITY WALL	VERTICAL ROW OF TIES AT 250 mm CENTRES (EVERY THIRD COURSE)

GALVANISED BRICKFORCE IS TO BE PROVIDED AS FOLLOWS: ALL BRICKFORCE TO BE SABS APPROVED.

WALL TYPE	BRICKFORCE QUANTITY
BRICK FOUNDATION WALLS	EVERY COURSE
BRICK WALLS GENERALLY	EVERY FOURTH COURSE
BLOCKWORK WALLS (THROUGHOUT)	EVERY SECOND COURSE
WALLS WITH OPENINGS	FIRST FIVE COURSES ABOVE AND WHERE APPLICABLE BELOW OPENINGS, CONTINUING 600 mm PAST OPENINGS.
CONTROL JOINTS	CONTINUOUS THROUGH CONTROL JOINT

MINIMUM DIAMETER OF BRICKFORCE: 2.8mm YIELD STRENGTH: 485MPa LAP LENGTH: 400mm

- 4. BRICK PANEL WALLS TO BE ANCHORED TO RC COLUMNS WITH GALVANISED HOOP IRON ANCHORS (50 mm² CROSS SECTION), FIXED TWICE TO THE COLUMN EVERY 4TH COURSE AND BUILT 400 mm INTO BRICKWORK. PROVIDE 10 mm JOINTEX BETWEEN BRICKWORK AND COLUMN.
- 6. PROVIDE A SKIMMED MORTAR FINISH AND TWO LAYERS OF DPC AS A SLIP JOINT TO THE TOPS OF ALL LOADBEARING BRICK WALLS PRIOR TO CASTING OF SLAB.
- 7. WALLS BUILT ON SUSPENDED RC SLABS/BEAMS: ALL TEMPORARY PROPS TO HAVE . WALLS BUILT ON SUSPENDED RC SLABS/BEAMS: ALL TEMPORARY PROVIDE OPC BEEN REMOVED PRIOR TO COMMENCEMENT OF BRICK/WORK, PROVIDE OPC LAYER AS BOND BREAKER BETWEEN SLAB AND FIRST COURSE OF BRICK/WORK, PROVIDE GALVANISED BRICKFORCE TO THE BOTTOM THREE COURSES AND EVERY FOURTH COURSE THEREAFTER. PRE LOAD THE FLOOR SLAB WITH BRICKS PRIOR TO BUILDING THE WALL.
- TIMBER MEMBERS BUILT INTO BRICKWORK TO BE GIVEN TWO COATS OF DURAM 195 OR SIMILAR AND WRAPPED IN PLASTIC.
- REINFORCED MASONRY CONSTRUCTION: CAVITIES IN REINFORCED MASONRY WALLS TO BE GROUTED UP WITH 25 MPa/10mm CONCRETE IN MAXIMUM LIFTS OF 450 mm A5 BRICK LAYING PROCEEDS. CAVITIES TO BE CLEAR OF MORTAR DROPPINGS AND PROVIDED WITH WALL TIES IN ACCORDANCE WITH NOTE ABOVE (SEE "WALL TIES") MINIMUM GROUT COVER TO REINFORCEMENT = 20 mm.
- 10. ALL WINDOW AND DOOR OPENINGS IN MASONRY TO BE FITTED WITH CHICKEN

FOUNDATIONS
THE MINIMUM DEPTH OF FOUNDATION SHALL NOT BE LESS THAN 250mm DEEP BELOW UNFINISHED GROUND LEVEL. PROPRIETARY ANCHORS
ALL EXPANSION AND CHEMICAL TYPE ANCHORS FOR FIXING INTO CONCRETE AND

- READ THIS DRAWING IN CONJUNCTION WITH THE ARCHITECT'S DRAWINGS.
- WORKSHOP DRAWINGS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
- ALL STRUCTURAL STEELWORK SHALL BE IN ACCORDANCE WITH SABS 1200H AND SANS 2001 CS1 WHERE APPLICABLE.
- 4. HOT FORMED HOLLOW SECTIONS SHALL BE GRADE S355JR.
- 5. HOT ROLLED SECTIONS SHALL BE GRADE S355JR.
- ALL WELDS ARE TO BE DESIGNED TO GIVE FULL MEMBER
   OTHER OTHER OF THE PROPERTY OF THE P
- 7. ALL BOLTED CONNECTIONS ARE TO BE DESIGNED TO SABS
- 8. ALL BOLTS TO BE GRADE 8,8 U.N.O. BOLTS TO BE ELECTRO
- 9. ALL HOLDING DOWN BOLTS TO BE MINIMUM M16.
- COLD FORMED STEEL SECTIONS TO HAVE A MINIMUM YIELD STRENGTH OF 210 MPa.
- 11. PROVIDE 60MPa NON-SHRINK GROUT BELOW ALL BASE PLATES.
- 12. ALL FIXINGS TO ROOF STEELWORK TO BE APPROVED BY THE
- 13. ALL TRUSS MEMBERS TO BE WELDED ALL ROUND
- 14. CONNECTIONS TO PURLIN FOR MECHANICAL AND ELECTRICAL SUPPORTS WILL ONLY BE MADE BY BOLTING TO THE WEB OF THE
- 15. ALL MECHANICAL AND ELECTRICAL SUPPORTS ON TRUSSES TO BE AT NODE POINTS.
- 16. SURFACE PREPARATION OF STRUCTURAL STEELWORK (SANS
- WIRE BRUSH ALL NEW STEELWORK TO A MINIMUM ST 2.0 IN
- ACCORDANCE WITH SWEDISH SIS 055900 -1967.

  THE TREATMENT MUST REMOVE LOOSE MILL SCALE, RUST AND FOREIGN MATTER
- 17. CORROSION PROTECTION SPECIFICATION: ALL STEELWORK TO BE HOT DIPPED GALVANIZED TO SABS 763.
- DEGREASE WITH GALVANIZED IRON CLEANER AND 3M SCOTCH BRITE PADS AND RINSE WITH FRESH WATER PRIOR TO APPLICATION OF PRIMER COAT.

- PRIMER: STEELWORK TO BE PAINTED ONE COAT OF ZINC PHOSPHATE ALKYD PRIMER, (35 microns DTF)
   INTERMEDIATE COAT: STEELWORK TO BE PAINTED WITH ONE COAT OF UNIVERSAL UNIDERCOAT, (30 microns DTF)
   TOP COAT: STEELWORK TO BE PAINTED WITH TWO FINAL COATS ENAMEL (ALKALYD ENAMEL) (30 microns DTF EACH)

ALL PAINTWORK DAMAGED DURING ERECTION AND TRANSPORTATION TO BE TOUCHED UP TO ABOVE SPEC. FINAL COLOUR TO ARCHITECTURAL SPEC.

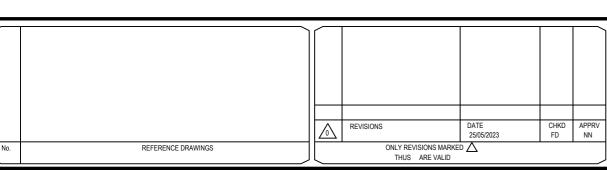
# **ISSUED FOR TENDER**

SCALE A0 / AS SHOWN

8/2/RNM/0444 A3001 SHEET 1 OF 1

DRAWING No. RCN-J320-03

 $\sqrt{0}$ 



M. NCUBE F. DUBE (Pr. TechEng) M. NCUBE CHECKED F. DUBE (Pr. TechEng)



RCN CONSULTANTS K3B SHEFFIELD MANOR SHEFFIELD BEACH KwaZulu Natal 4420 TEL: 031 465 0323 FAX: 086 226 3853



10 CONNOR STREET P.O. BOX 5 PORT SHEPSTONE

STAFF DEPOT ABLUTIONS PHASE 3

GENERAL NOTES

