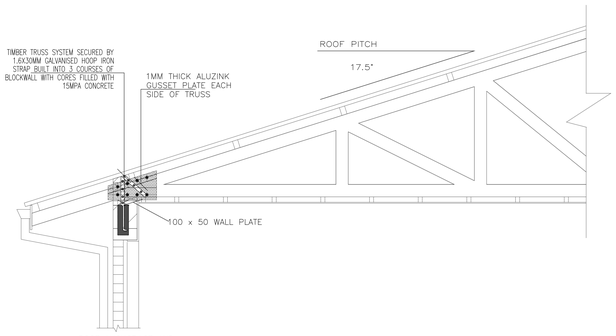
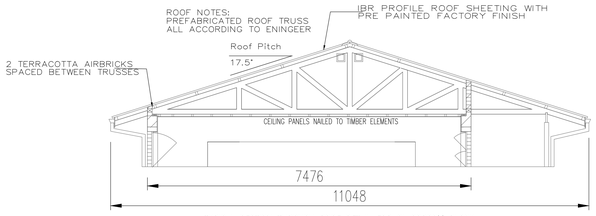
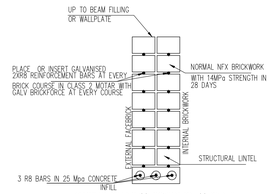


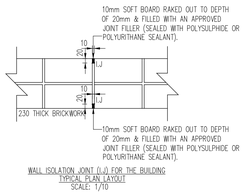
ROOF ANCHORAGE AND BRICKFORCE INFO
SCALE: 1/20



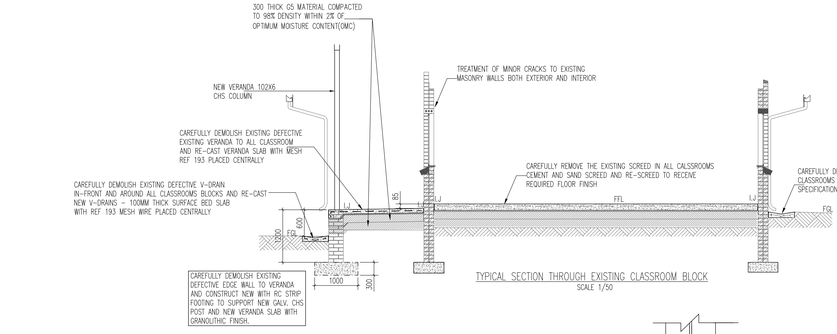
TYPICAL SECTION THROUGH ROOF DETAIL FOR CLASSROOM BLOCK
SCALE 1/50



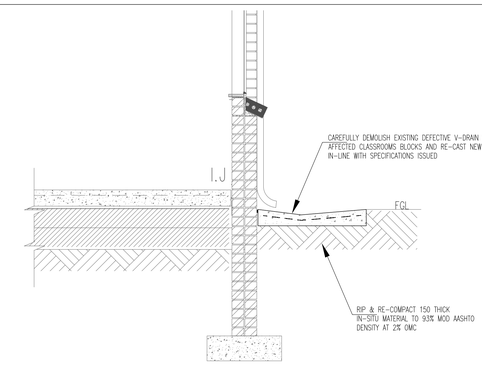
TYPICAL EAVES MASONRY BEAM DETAIL
SCALE 1:10



WALL ISOLATION JOINT (I.J) FOR THE BUILDING
TYPICAL PLAN LAYOUT
SCALE: 1/10



TYPICAL SECTION THROUGH EXISTING CLASSROOM BLOCK
SCALE 1/50



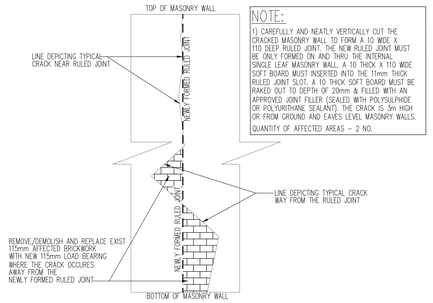
TYPICAL SECTION THROUGH EXISTING CLASSROOM BLOCK AND V-DRAIN CONNECTION
SCALE 1/20

GENERAL NOTES :

1. ALL WORK TO BE IN ACCORDANCE WITH THE RELEVANT DEPARTMENTAL SPECIFICATIONS?
2. WRITTEN DIMENSIONS TO PREVAIL WHERE DISCREPENCIES ARISE. ALL SUCH DISCREPENCIES SHALL BE REPORTED TO THE ENGINEER
3. NO CONCRETE SHALL BE PLACED PRIOR TO THE ENGINEER GIVING WRITTEN APPROVAL FOR SAME.
4. OPEN TRENCHES, ROAD FORMATION ETC. SHALL BE INSPECTED BY THE ENGINEER PRIOR TO FURTHER CONSTRUCTION.
5. ALL REINFORCED CONCRETE SHALL BE 30MPa/19mm.
6. SAW CUTTING WHERE APPLICABLE TO BE DONE BETWEEN 12 AND 24 HOURS AFTER CONCRETE PLACEMENT.
7. ALL CONTROL TESTING APPLICABLE TO EARTHWORKS AND CONCRETE CONSTRUCTION SHALL BE CARRIED OUT STRICTLY IN ACCORDANCE WITH THE RELEVANT DEPARTMENTAL SPECIFICATIONS.
8. MILD AND HIGH TENSILE REINFORCEMENT TO SABS 1435 WITH CHARACTERISTIC YIELD STRENGTHS OF 250MPa AND 450MPa RESPECTIVELY.
9. MESH REINFORCEMENT IN CONCRETE ROADWAY WHERE APPLICABLE SHALL BE PLACED 50mm FROM THE TOP SURFACE.
10. ROADWAY CONCRETE WHERE APPLICABLE SHALL BE POWER FLOATED, THEN UNIFORMLY BRUSHED. A TEST PANEL SHALL BE CONSTRUCTED FOR APPROVAL.
11. CONTRACTOR TO BE RESPONSIBLE FOR MAINTAINING CORRECT COVER & POSITION OF REINFORCING DURING POURING OF CONCRETE.
12. APPROVED CURING MEASURES TO BE MAINTAINED FOR MIN. 7 DAYS AFTER CONCRETE PLACEMENT.
13. COVER TO RC MEMBERS

	TOP	BOTTOM	SIDE
PAD & STRIP FOOTINGS	150	50	50
COLUMNS	40	40	40
SUSPENDED GROUND BEAMS	50	50	50
SUSPENDED BEAMS	30	30	30
GROUND SLABS	50	50	50
SUSPENDED SLABS	30	30	30
RC CORDWALLS	30	30	30
RC RETAINING WALLS	150	50	50

14. ALL EXTERIOR TIMBER MEMBERS WITH GROUND CONTACT ARE TO BE TREATED WITH WITH TWO COAT OF CREOSOTE.
15. ALL EXTERIOR TIMBER MEMBERS ABOVE GROUND ARE TO BE TREATED WITH A COPPER CHROME ARSENIC (CCA)
16. ALL EXTERIOR EXPOSED TIMBER MEMBERS ABOVE GROUND ARE TO BE TREATED WITH TWO COAT OF CREOSOTE.

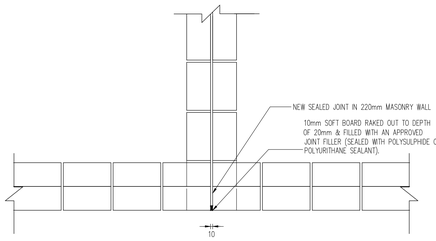


NOTE:

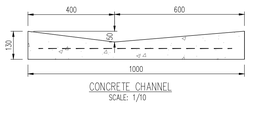
1) CAREFULLY AND NEATLY VERTICALLY CUT THE CRACKED MASONRY WALL TO FORM A 10 WIDE X 110 DEEP RULED JOINT. THE NEW RULED JOINT MUST BE ONLY FORMED ON AND THRU THE INTERNAL SINGLE LEAF MASONRY WALL. A 10 THICK X 110 WIDE SOFT BOARD MUST INSERTED INTO THE 11mm THICK RULED JOINT SLOT. A 10 THICK SOFT BOARD MUST BE RAKED OUT TO DEPTH OF 20mm & FILLED WITH AN APPROVED JOINT FILLER (SEALED WITH POLYSULPHIDE OR POLYURITHANE SEALANT). THE CRACK IS 3m HIGH OR FROM GROUND AND EAVES LEVEL MASONRY WALLS.

QUANTITY OF AFFECTED AREAS – 2 NO.

ELEVATION THRU RULED JOINT ON EXIST MASONRY CRACK
SCALE: 1/50



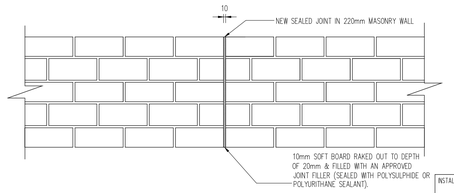
NEW 220mm MASONRY EXPANION JOINTS PLAN LAYOUT
SCALE: 1/10



CONCRETE CHANNEL
SCALE: 1/10

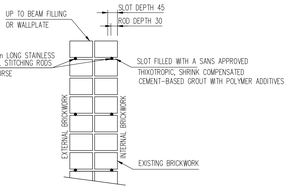
NOTE:

THE BRICKWORK/WALL JOINTS ARE TO BE CONSTRUCTED AT EVERY 14m LENGTH OF WALL PANEL OR INTERVALS

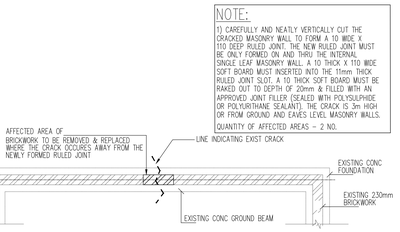


NEW 220 mm EXTERNAL MASONRY WALL ELEVATION
SCALE: 1/10

WALKWAY FLOOR SLAB
SCALE: 1/10



TYPICAL CROSS SECTION OF MASS MASONRY BEAM DETAIL
SCALE 1:10



TYPICAL RULED JOINT ON EXIST MASONRY CRACK PLAN LAYOUT
02 NO. OFF RULED JOINT REQUIRED
SCALE: 1/50

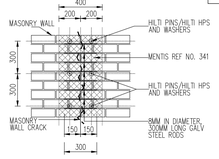
NOTE:

1) CAREFULLY AND NEATLY VERTICALLY CUT THE CRACKED MASONRY WALL TO FORM A 10 WIDE X 110 DEEP RULED JOINT. THE NEW RULED JOINT MUST BE ONLY FORMED ON AND THRU THE INTERNAL SINGLE LEAF MASONRY WALL. A 10 THICK X 110 WIDE SOFT BOARD MUST INSERTED INTO THE 11mm THICK RULED JOINT SLOT. A 10 THICK SOFT BOARD MUST BE RAKED OUT TO DEPTH OF 20mm & FILLED WITH AN APPROVED JOINT FILLER (SEALED WITH POLYSULPHIDE OR POLYURITHANE SEALANT). THE CRACK IS 3m HIGH OR FROM GROUND AND EAVES LEVEL MASONRY WALLS.

QUANTITY OF AFFECTED AREAS – 2 NO.

NOTE:

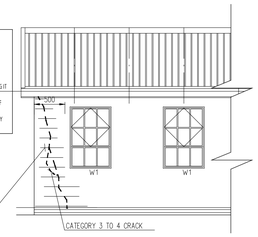
PLASTER TO BE REMOVED ON EITHER (IF NECESSARY)SIDE OF THE WALL FOR 400MM WIDE (200 FROM EACH SIDE OF THE CRACK), USE A SMALL ANGLE GRINDER TO CUT A SHARP EDGE WHERE THE EXISTING PLASTER BEGINS, RAKE A MASONRY JOINT FOR 20MM DEPTH, 300MM LONG AND THEREAFTER PLACE A 8MM IN DIAMETER, 300MM LONG GALVANIZED STEEL ROD AT EVERY COURSE FOR THE FULL LENGTH OF THE CRACK, FILL BACK A CLASS TWO MORTAR IN THE MASONRY JOINT, FIX A MENTIS REF NO. 341 TO ACT AS REINFORCEMENT FOR NEW PLASTER WITH HILTI PINS/HILTI HPS AND WASHERS AT EACH FIXING POSITION, NAILS AND WASHERS ARE TO BE FIXED 200MM HORIZONTALLY FROM EACH OTHER(C/C) AND 300MM VERTICALLY FROM EACH OTHER(C/C). RE-PLASTER AND REPAINT THE AFFECTED AREA. LINTELS: IN AREAS WHERE LINTELS ARE NOT INSTALLED, CAREFULLY REMOVE BRICKWORK, PLASTER AND PAINT AND INSTALL NEW LINTELS WITH 250MM OVERLAP ON EACH SIDE OF THE DOOR OPENING. THERE AFTER RE-LAY BRICKS WITH GALVANISED BRICK FORCE AT EVERY COURSE IN CLASS 2 MORTAR AND RE-PLASTER AND PAINT THE AFFECTED AREA OR ENTIRE WALL PANEL. THE HEIGHT OF MASONRY CRACK IS 3m.



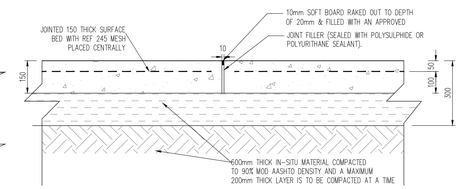
TYPICAL MASONRY CRACK REMEDIAL DETAIL-ELEVATION
SCALE: 1/20

INSTALLATION OF REINFORCING RODS

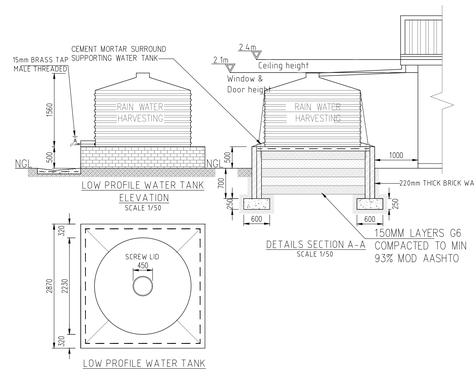
1. CHASE SLOTS AT 3EVERY THIRD COURSE AND AT EVERY COURSE ABOVE LINTEL LEVEL ALONG THE HEIGHT OF THE WALL THAT EXTENDS 500MM EACH SIDE OF THE CRACK.
2. CLEAR LOOSE DEBRITUS FROM SLOTS AND FLUSH THROUGHLY WITH WATER
3. PUMP BEAD OF THIXOTROPIC, SHRINK COMPENSATED GROUT TO REAR OF SLOT,FILLING IT EVENLY TO APPROXIMATELY TWO-THIRDS FULL.
4. PUSH HELICAL CRACK STITCHING TIE INTO GROUT TO APPROXIMATELY TWO-THIRDS OF SLOT DEPTH THEWEL DISPLACED GROUT TO FORM A ENCAPSULATE ROD.
5. MAKE GOOD WALL CHASE TO DISGUISE SLOT. REPAIR CRACKS BETWEEN THE HELICALLY REINFORCED MASONRY WITH APPROPRIATE AND DISCRETE FILLER.



TYPICAL MASONRY VERTICAL CRACK STITCHING REMEDIAL DETAIL – ELEVATION
SCALE 1/50



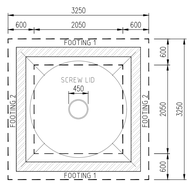
TYPICAL ISOLATION JOINT (I.J) FOR THE BUILDING AND UNDERLYING LAYERS.
SCALE: 1/10



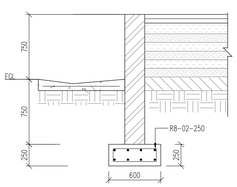
LOW PROFILE WATER TANK ELEVATION
SCALE 1/50

DETAILS SECTION A-A
SCALE 1/50

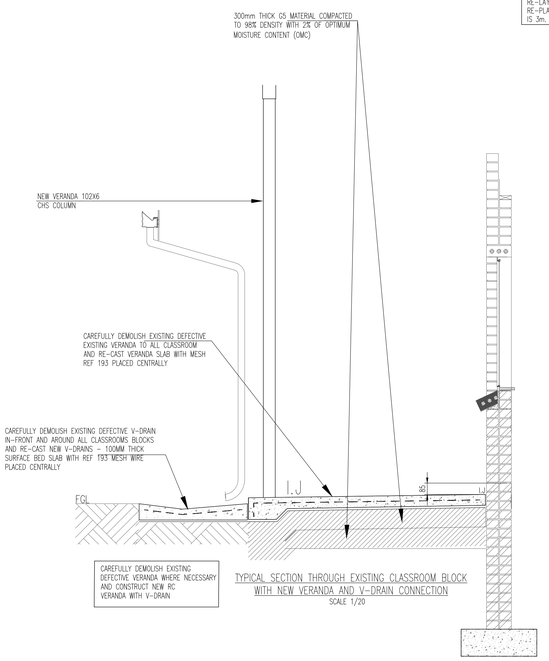
LOW PROFILE WATER TANK PLAN LAYOUT
SCALE 1/50



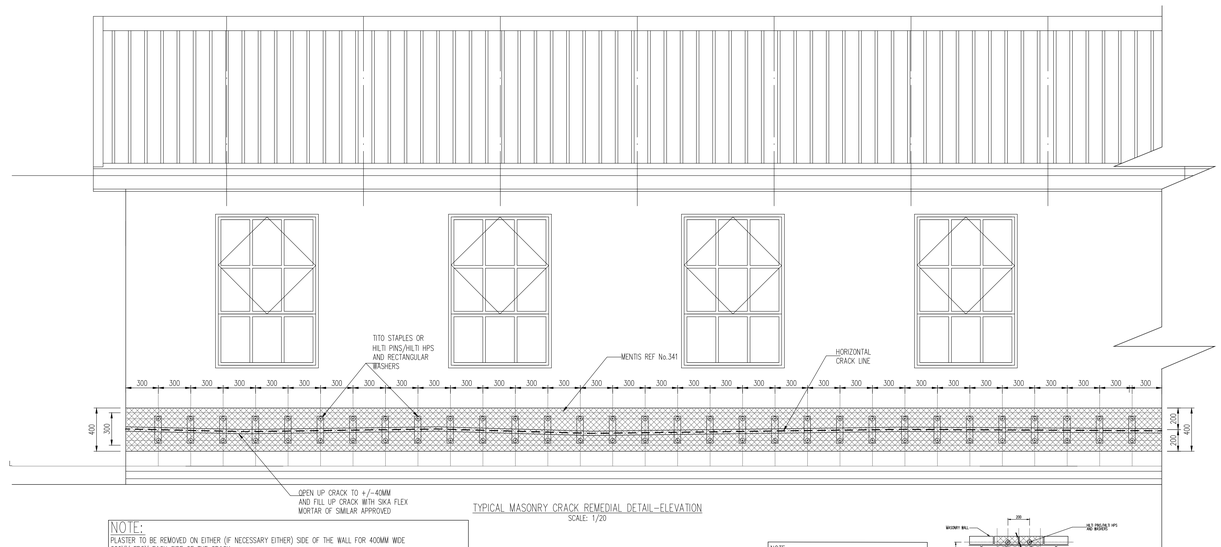
WATER TANK STRIP FOOTING PLAN LAYOUT
SCALE 1/50



TYPICAL EDGE STRIPFOOTING FOUNDATION FOR 220 THICK BRICKWORK
SCALE: 1/25



TYPICAL SECTION THROUGH EXISTING CLASSROOM BLOCK WITH NEW VERANDA AND V-DRAIN CONNECTION
SCALE 1/20



TYPICAL MASONRY CRACK REMEDIAL DETAIL-ELEVATION
SCALE: 1/20

NOTE:

PLASTER TO BE REMOVED ON EITHER (IF NECESSARY EITHER) SIDE OF THE WALL FOR 400MM WIDE 200MM FROM EACH SIDE OF THE CRACK.
USE A SMALL ANGLE GRINDER TO CUT A SHARP EDGE WHERE THE EXISTING PLASTER BEGINS
RAKE A MASONRY JOINT FOR 20MM DEPTH, 300MM LONG.
DRILL TOP AND BOTTOM OF CRACK AND CAREFULLY INSERT TITO STAPLES OR SIMILAR APPROVED, TAP THE TITO STAPLES TO HOLD PROPERLY IN THE DRILLED HOLES.
FILL BACK A CLASS TWO MORTAR OR SIKA FLEX MORTAR IN THE CRACK JOINT, FIX A MENTIS REF No. 341 TO ACT AS A REINFORCEMENT FOR NEW PLASTER WITH HILTI PINS OR TOTO STAPLES AND WASHERS AT EACH FIXING POSITION.
RE-PLASTER AND APPLY PAINT TO THE AFFECTED AREAS

NOTE:

THE MENTIS REF NO. 341 TO ACT AS REINFORCEMENT FOR NEW PLASTER WITH HILTI PINS/HILTI HPS AND WASHERS AT EACH FIXING POSITION, NAILS AND WASHERS ARE TO BE FIXED 200MM HORIZONTALLY FROM EACH OTHER(C/C) AND 300MM VERTICALLY FROM EACH OTHER(C/C). RE-PLASTER AND REPAINT THE AFFECTED AREA.

TYPICAL MASONRY PLASTER REINSTATEMENT DETAIL
SCALE 1:20

TANK STAND STRIP FOOTING BENDING SCHEDULE INFO BASED ON 1No. BASE

UNIT		DIA	BAR MK.	No.OF BARS		LENGTH IN mm.	TOTAL LENGTH IN METERS					
MK.	NO.			UNIT	TOTAL		S/C	A	B	C	D	E/R
FOOTING 1	2	Y12	01	8	16	3400	35	3200				
		R8	02	13	26	1700	60	200	550			
FOOTING 2	2	Y12	01	8	16	3400	35	1690				
		R8	02	13	26	1700	60	200	550			

FOR IPAC STAGE 3 ONLY

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Department: Education
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4302

Project Description :
UKHAHLAMBA HIG SCHOOL

Contract No. RFP 139/2019
Drawing Title :REFURBISHMENT AND REPAIRS RELATED DETAILS FOR CIVIL & STR. WORKS

Drawn	Checked
DA	LD
Designed	Approved
KK	NC
Scale/s	Date
AS SHOWN	AUGUST. 2022
Drawing No.	Revision
DBSA/UKHS-RRW-01	0