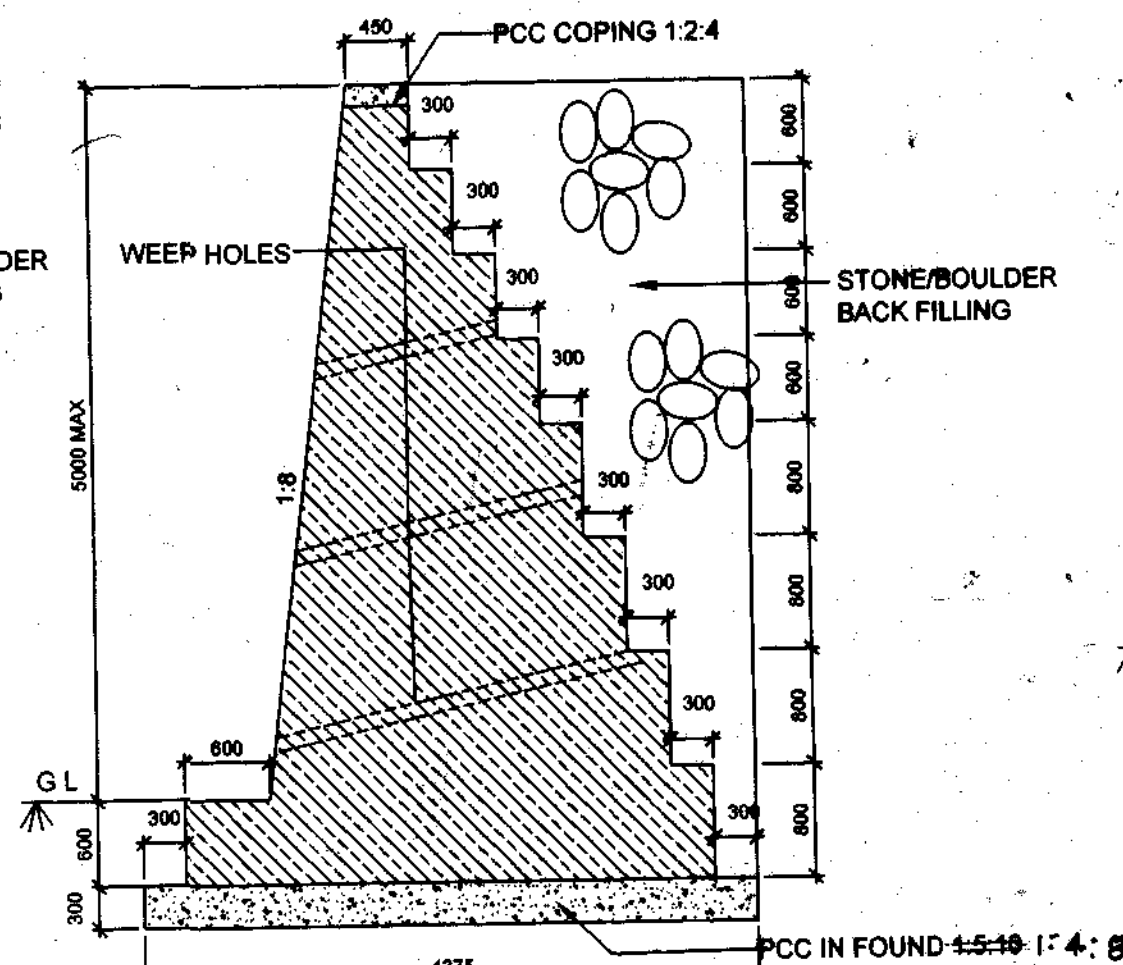
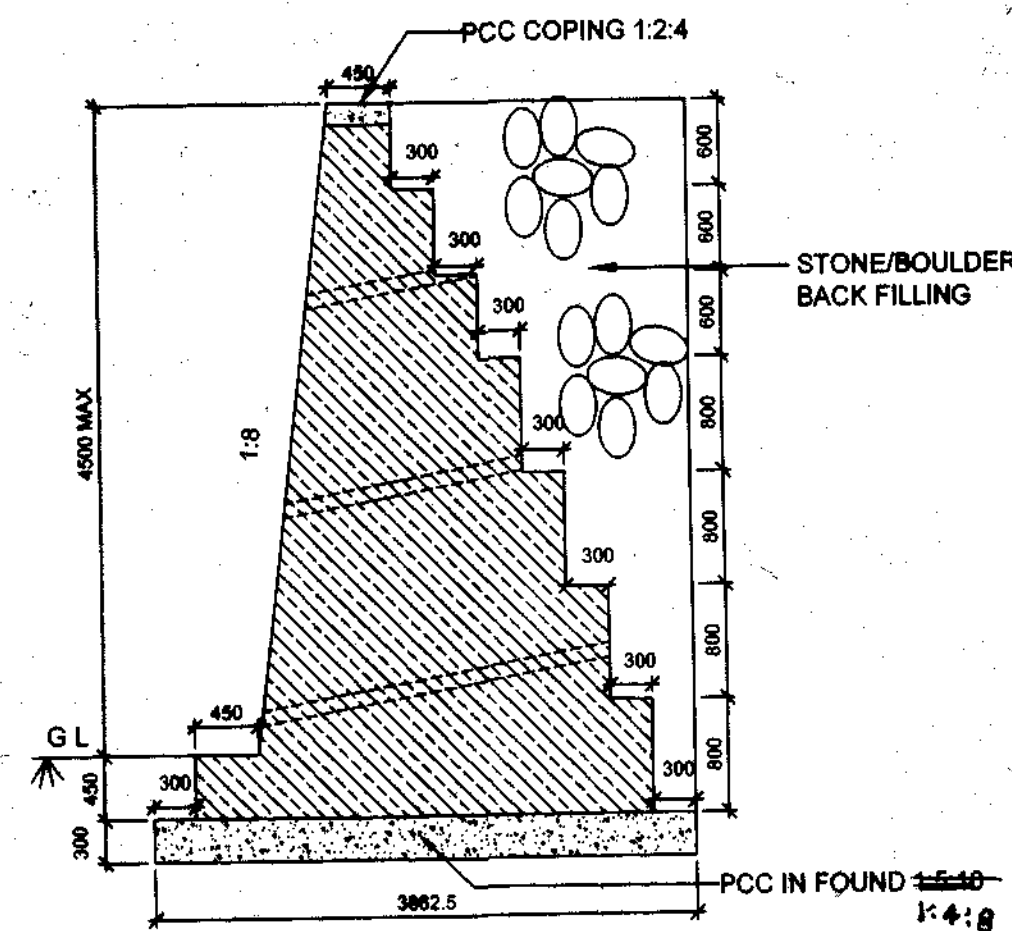


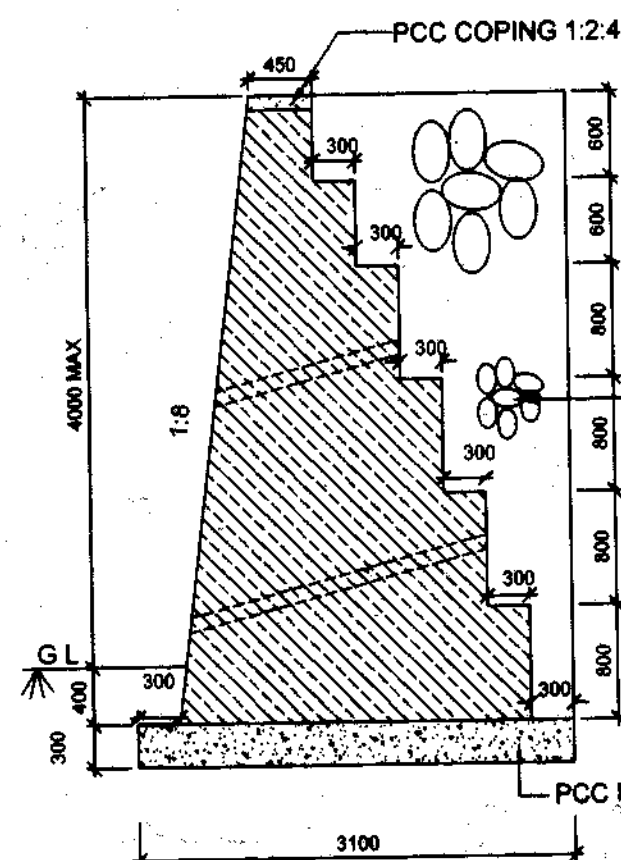
HEIGHT 5 M TO 5.6 M MAX  
MAX BASE PRESSURE 11 TON /SQM



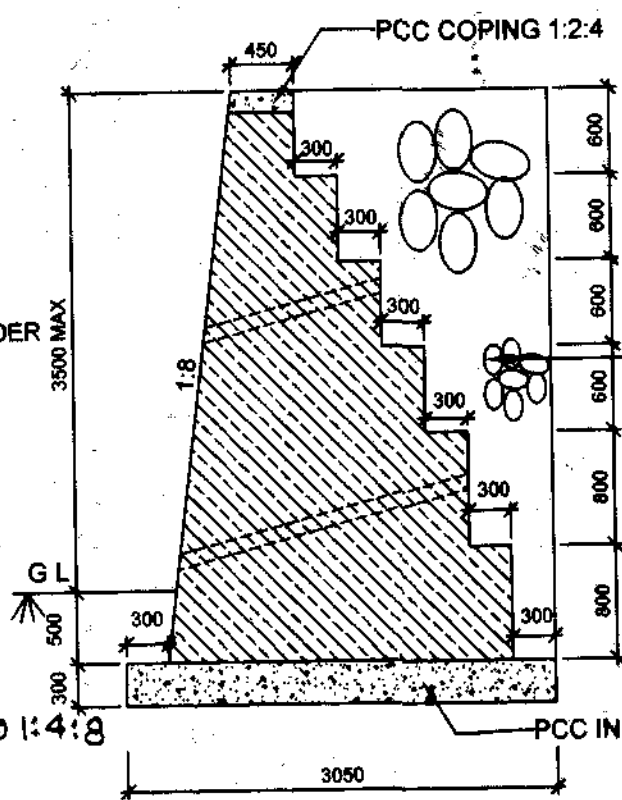
HEIGHT 4.5 M TO 5 M MAX  
MAX BASE PRESSURE 9 TON /SQM



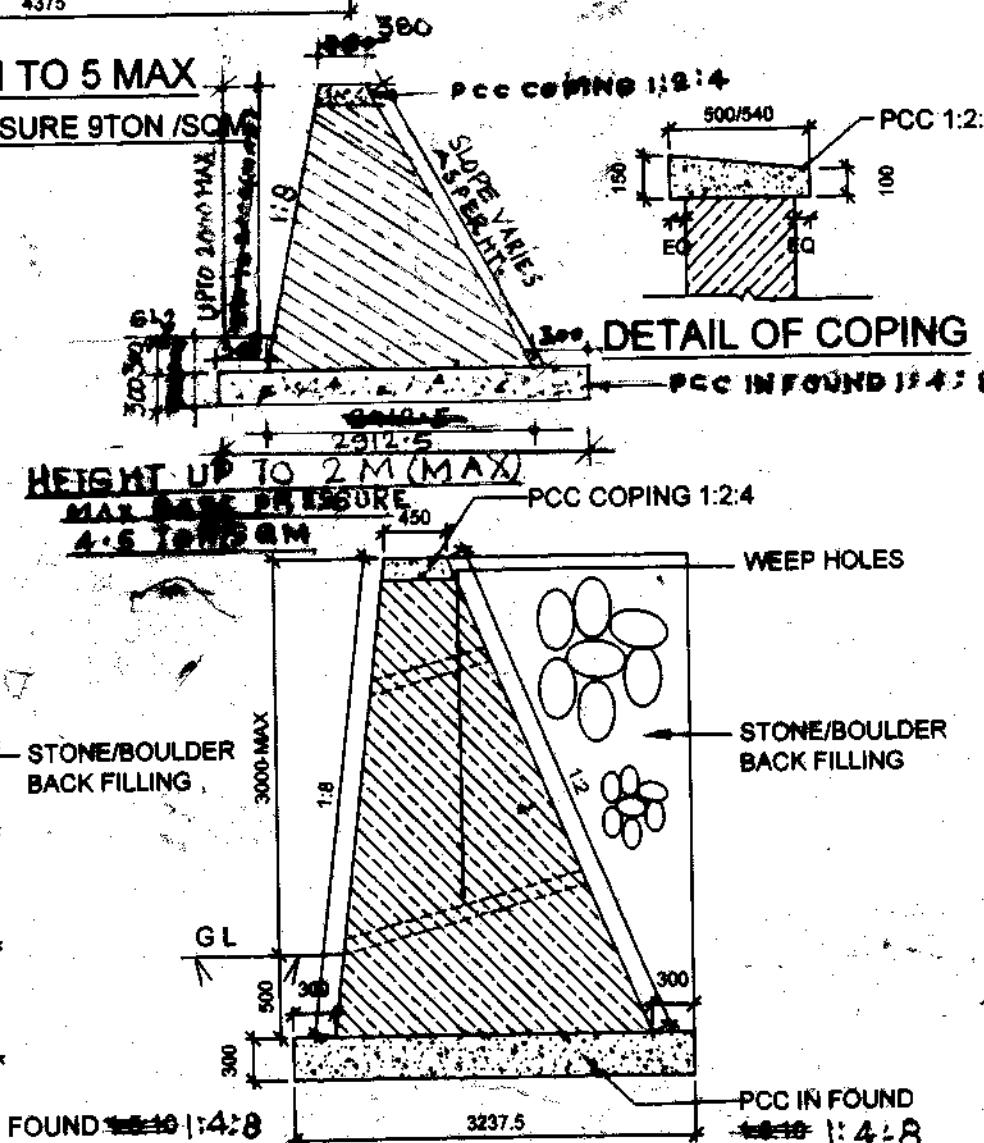
HEIGHT 4 M TO 4.5 M MAX  
MAX BASE PRESSURE 8.5 TON /SQM



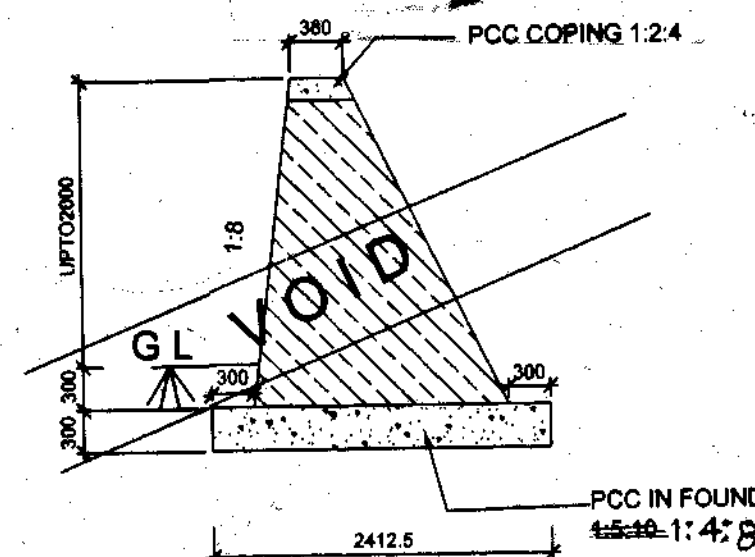
HEIGHT 3.5 M TO 4 M MAX  
MAX BASE PRESSURE 10 TON /SQM



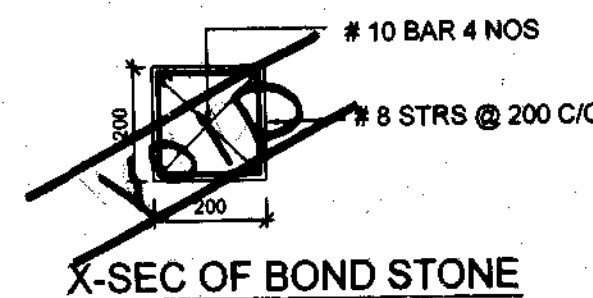
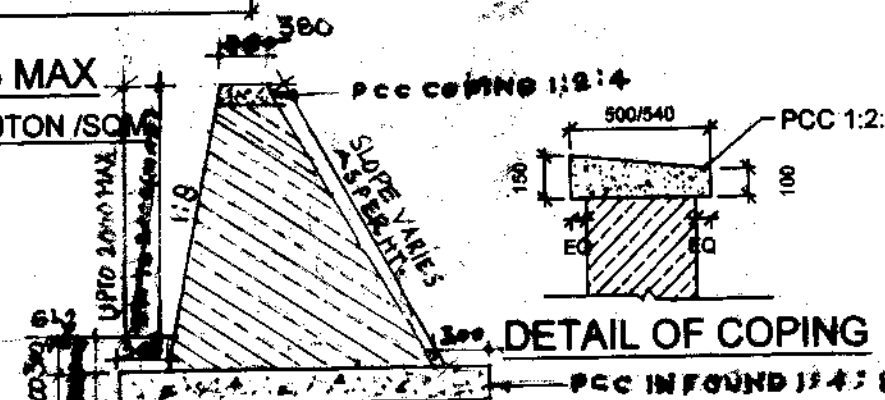
HEIGHT 3 M TO 3.5 M MAX  
MAX BASE PRESSURE 8.5 TON /SQM



HEIGHT 2 M TO 3 M MAX  
MAX BASE PRESSURE 6.5 TON /SQM



HEIGHT UP TO 2 M MAX  
MAX BASE PRESSURE 4.5 TON /SQM



## NOTES :

- CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
- FIGURED DIMENSIONS SHALL BE FOLLOWED.
- ALL DIMENSIONS ARE GIVEN IN MILLIMETERS UNLESS OTHERWISE SHOWN.
- ALL RETAINING WALLS SHALL BE BUILT IN CM 1:6 IN COURSED STONE MASONRY.
- MAX BASE PRESSURE SHOWN FOR EACH SECTION SHOULD NOT BE MORE THAN ALLOWABLE BEARING CAPACITY OF THE SOIL.
- RETAINING WALL SECTIONS HAVE NOT BEEN DESIGNED FOR ANY POSITIVE SURCHARGE.
- ANGLE OF FRICTIONAL RESISTANCE  $\phi$  OF THE BACK FILL MATERIAL SHALL NOT BE LESS THAN  $30^\circ$ .
- STAGGERED WEEP HOLES SHALL BE PROVIDED AT A SPACING OF 500 MM HORIZONTALLY AND 1500 MM IN VERTICAL PLAN AT A SLOPE OF 1:80 WEEP HOLES SHALL BE OF SIZE 80MM X 80MM.
- GRADED GRAVEL FILTER OF SIZE 300X300X300 MM SHALL BE CREATED AROUND THE WEEP HOLE SECTION UNDER THE BACK FILL. (OF SIZE 450X230X230)
- PRECAST PCC BOND STONES 2 NOS PER SQUARE METRE OF FACE AREA SHALL BE PROVIDED AS PER THE SECTION SHOWN & SHALL BE STAGGERED.
- STONE HAVING DIMENSIONS LESS THAN 150 MM NOT BE USED.
- EXECUTIVE TO ENSURE THAT NO PART OF RETAINING WALL RESTS ON LOOSE/FILLED UP EARTH.
- BULK DENSITY OF THE BACK FILL SOIL HAS BEEN ASSUMED AS 1800 KG/MT3
- AN EXPANSION JOINT 25 MM WIDE SHALL BE PROVIDED AT A DISTANCE NOT MORE THAN FIFTEEN METRES.
- FOR RETAINING WALLS UP TO 3000 HIGH DETAILS OF RETAINING AS PER DRG NO. CE/SD/787/02 SHIT NO 1/1.
- FOR ALL RCC WORK M-25 GRADE DESIGN MIX CONC AS PER IS -456 OF 2000 SHALL BE USED.

11	17-07-25	RETAINING WALL HT. UP TO 2000 MAX CORRECTED	XXX SD
10	05-14	NOTE NO 15 DELETED	XXX SD
9	17-7-13	DETAIL HEIGHT UP TO 4 M (MAX) ADDED AND PCC IN FOUND AMENDED AS 1:4:8	XXX SD
8	26-03-2002	X-SEC OF BOND STONE VOIDED & IN NOTE NO. 10 PCC BONDSTONE IS USED IN PLACE OF RCC BONDSTONE.	XXX SD
7	19-07-03	A NOTE NO 16 ADDED	XXX SD
6	18-1-2002	IN DETAIL OF COPING DIMENSION 540 ADDED	XXX SD
5	13-07-95	A NOTE NO 15 ADDED	XXX SD
4	13-07-95	RETAINING WALL HEIGHT UP TO 3M MAX DELETED	XXX SD
3	13-07-95	STONE/BOULDER BACK FILLING SHOWN IN CROSS SECTION OF RETAINING WALL	XXX SD
2	13-07-95	WIDTH OF FOUNDATION CORRECTED TO 3237.5 INSTEAD OF 2637.5 FOR RETAINING WALL HT 2M TO 3M MAX	XXX SD
1	15-06-92	DRG REVISED UP TO DATE	XXX SD

SN.	DATE	DESCRIPTION	INITIAL
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## TYPICAL DETAILS OF RETAINING WALL STONE CONSTRUCTION

## CROSS SECTIONS & DETAILS

DATE	03-04-92	SH NO.	1/1
DRN	NAAG	CHIEF ENGINEER	
D. BY	JAINESH	UDHAMPUR ZONE	
DFO NO.	BOOK NO-8	DRG NO: CE/TD/1058/92	
SCALE	1:50		

CERTIFIED TRUE COPY  
TRACED ON 18 DEC 2009

AAD (ARCH)

XXX SD

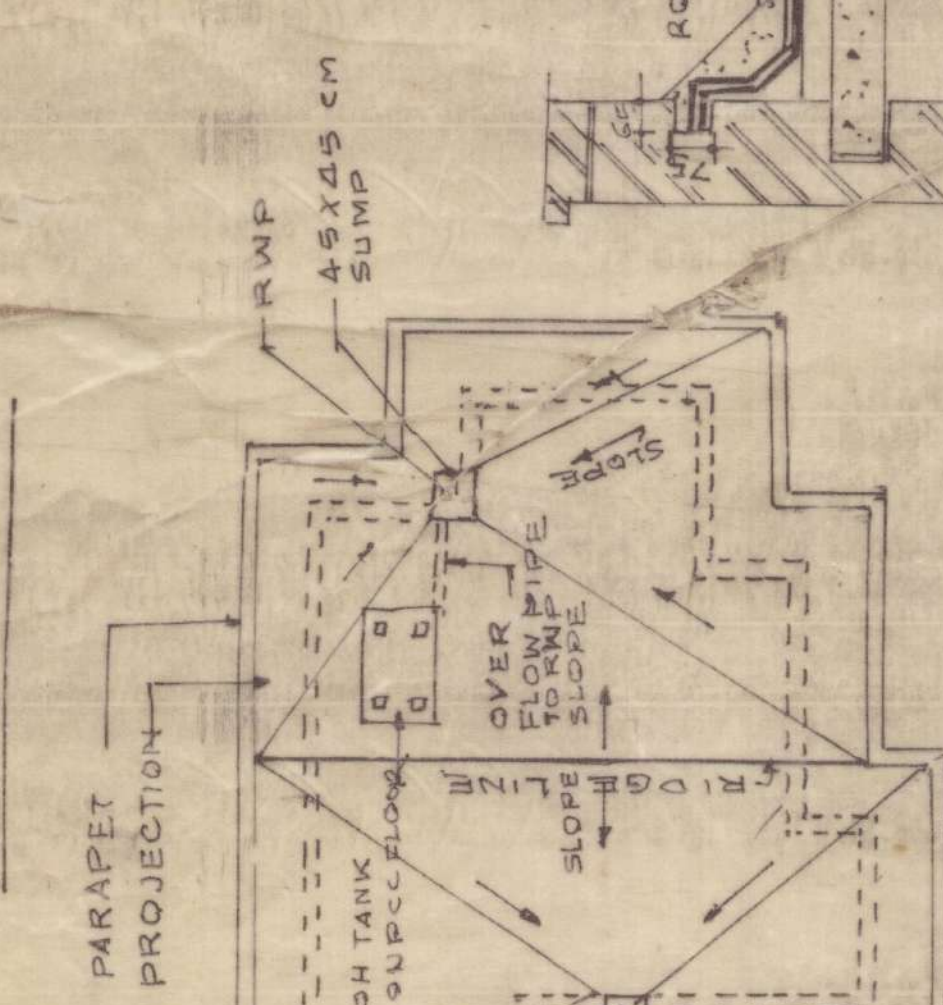
AE  
SO-III (DESIGN)

XXX SD

SO-II (DESIGN)  
FOR CHIEF ENGINEER



PLUMBING & SANITARY



TYPICAL ROOF/TERRACE PARAPET WALL

TYPICAL DETAIL OF WATER PROOFING TREATMENT IN CASE OF ROOF ABUTTING THE PARAPET WALL

ROOF SLAB

ROOF FLOOR FINISH

ROOF DRAIN

ROOF DRAIN GULLY

ROOF DRAIN PIPING

ROOF DRAIN DOWN PIPE

ROOF DRAIN OUTLET

ROOF DRAIN COVER

ROOF DRAIN FLANGE

ROOF DRAIN GASKET

ROOF DRAIN NUT/BOLT

ROOF DRAIN WASHER

ROOF DRAIN BRACKET

ROOF DRAIN HANGER

ROOF DRAIN SUPPORT

ROOF DRAIN ANCHOR

ROOF DRAIN BUSH

ROOF DRAIN SLEEVE

ROOF DRAIN JOINT

ROOF DRAIN SEALANT

ROOF DRAIN FLASHING

ROOF DRAIN TRIM

ROOF DRAIN CAP

ROOF DRAIN PLATE

ROOF DRAIN BASE

ROOF DRAIN LEG

ROOF DRAIN RING

ROOF DRAIN COLLAR

ROOF DRAIN WELDER

ROOF DRAIN CUTTER

ROOF DRAIN DRILL BIT

ROOF DRAIN SCREWDRIVER

ROOF DRAIN WRENCH

ROOF DRAIN Pliers

ROOF DRAIN Saw

ROOF DRAIN Hammer

ROOF DRAIN Mallet

ROOF DRAIN Level

ROOF DRAIN Square

ROOF DRAIN Compass

ROOF DRAIN Protractor

ROOF DRAIN Spirit Level

ROOF DRAIN Bubble Level

ROOF DRAIN Laser Level

ROOF DRAIN Auto Level

ROOF DRAIN Tripod

ROOF DRAIN Mounting Plate

ROOF DRAIN Mounting Bracket

ROOF DRAIN Mounting Bolt

ROOF DRAIN Mounting Nut

ROOF DRAIN Mounting Washer

ROOF DRAIN Mounting Gasket

ROOF DRAIN Mounting Sealant

ROOF DRAIN Mounting Flashing

ROOF DRAIN Mounting Trim

ROOF DRAIN Mounting Cap

ROOF DRAIN Mounting Plate

ROOF DRAIN Mounting Base

ROOF DRAIN Mounting Leg

ROOF DRAIN Mounting Ring

ROOF DRAIN Mounting Collar

ROOF DRAIN Mounting Welder

ROOF DRAIN Mounting Cutter

ROOF DRAIN Mounting Drill Bit

ROOF DRAIN Mounting Screwdriver

ROOF DRAIN Mounting Wrench

ROOF DRAIN Mounting Pliers

ROOF DRAIN Mounting Saw

ROOF DRAIN Mounting Hammer

ROOF DRAIN Mounting Mallet

ROOF DRAIN Mounting Level

ROOF DRAIN Mounting Square

ROOF DRAIN Mounting Compass

ROOF DRAIN Mounting Protractor

ROOF DRAIN Mounting Spirit Level

ROOF DRAIN Mounting Bubble Level

ROOF DRAIN Mounting Laser Level

ROOF DRAIN Mounting Auto Level

ROOF DRAIN Mounting Tripod

ROOF DRAIN Mounting Mounting Plate

ROOF DRAIN Mounting Mounting Bracket

ROOF DRAIN Mounting Mounting Bolt

ROOF DRAIN Mounting Mounting Nut

ROOF DRAIN Mounting Mounting Washer

ROOF DRAIN Mounting Mounting Gasket

ROOF DRAIN Mounting Mounting Sealant

ROOF DRAIN Mounting Mounting Flashing

ROOF DRAIN Mounting Mounting Trim

ROOF DRAIN Mounting Mounting Cap

ROOF DRAIN Mounting Mounting Plate

ROOF DRAIN Mounting Mounting Base

ROOF DRAIN Mounting Mounting Leg

ROOF DRAIN Mounting Mounting Ring

ROOF DRAIN Mounting Mounting Collar

ROOF DRAIN Mounting Mounting Welder

ROOF DRAIN Mounting Mounting Cutter

ROOF DRAIN Mounting Mounting Drill Bit

ROOF DRAIN Mounting Mounting Screwdriver

ROOF DRAIN Mounting Mounting Wrench

ROOF DRAIN Mounting Mounting Pliers

ROOF DRAIN Mounting Mounting Saw

ROOF DRAIN Mounting Mounting Hammer

ROOF DRAIN Mounting Mounting Mallet

ROOF DRAIN Mounting Mounting Level

ROOF DRAIN Mounting Mounting Square

ROOF DRAIN Mounting Mounting Compass

ROOF DRAIN Mounting Mounting Protractor

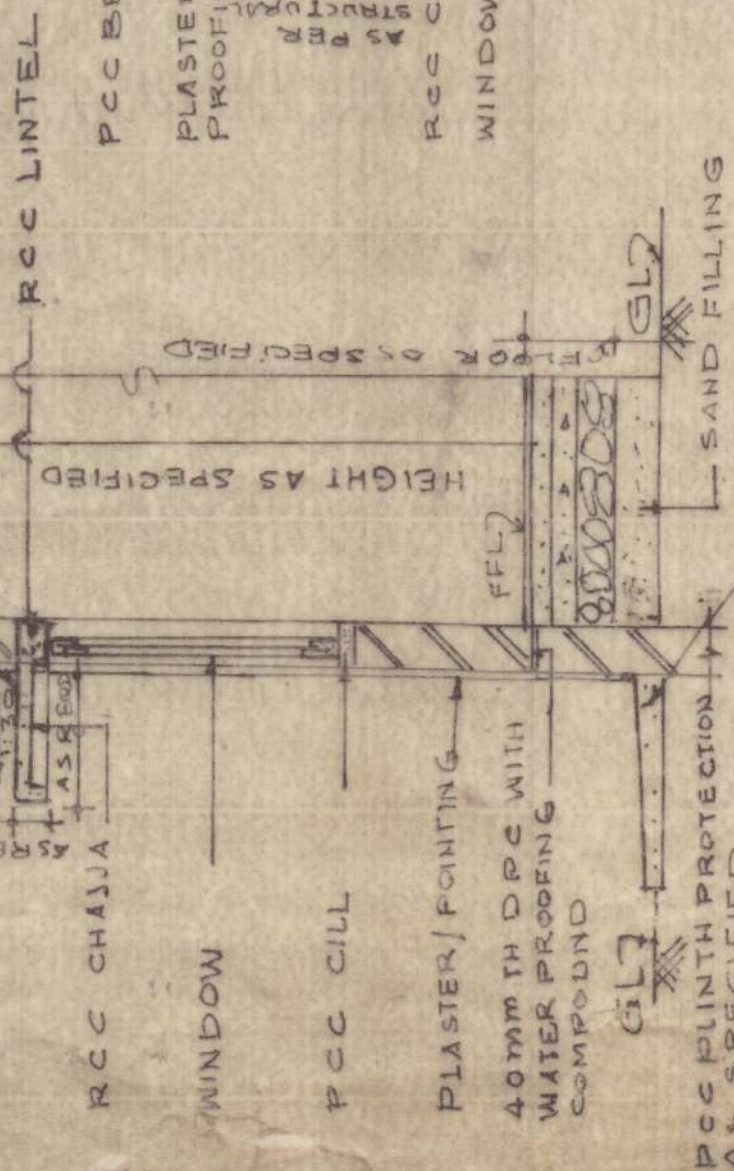
ROOF DRAIN Mounting Mounting Spirit Level

ROOF DRAIN Mounting Mounting Bubble Level

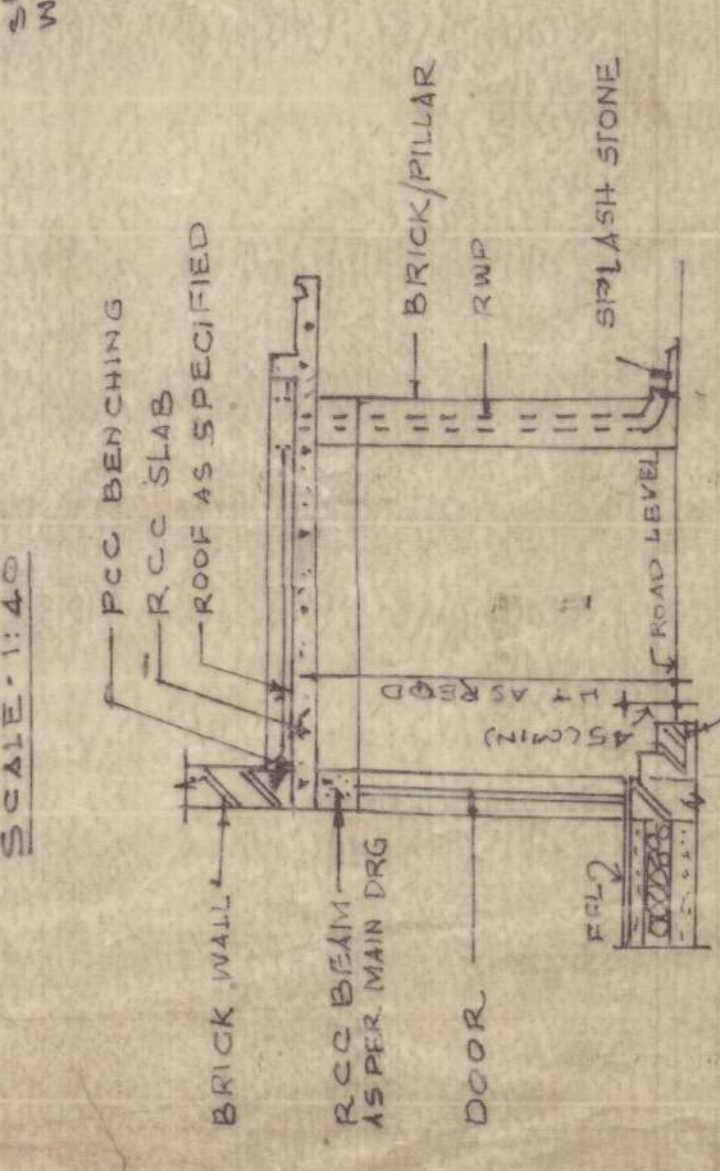
ROOF DRAIN Mounting Mounting Laser Level

ROOF DRAIN Mounting Mounting Auto Level

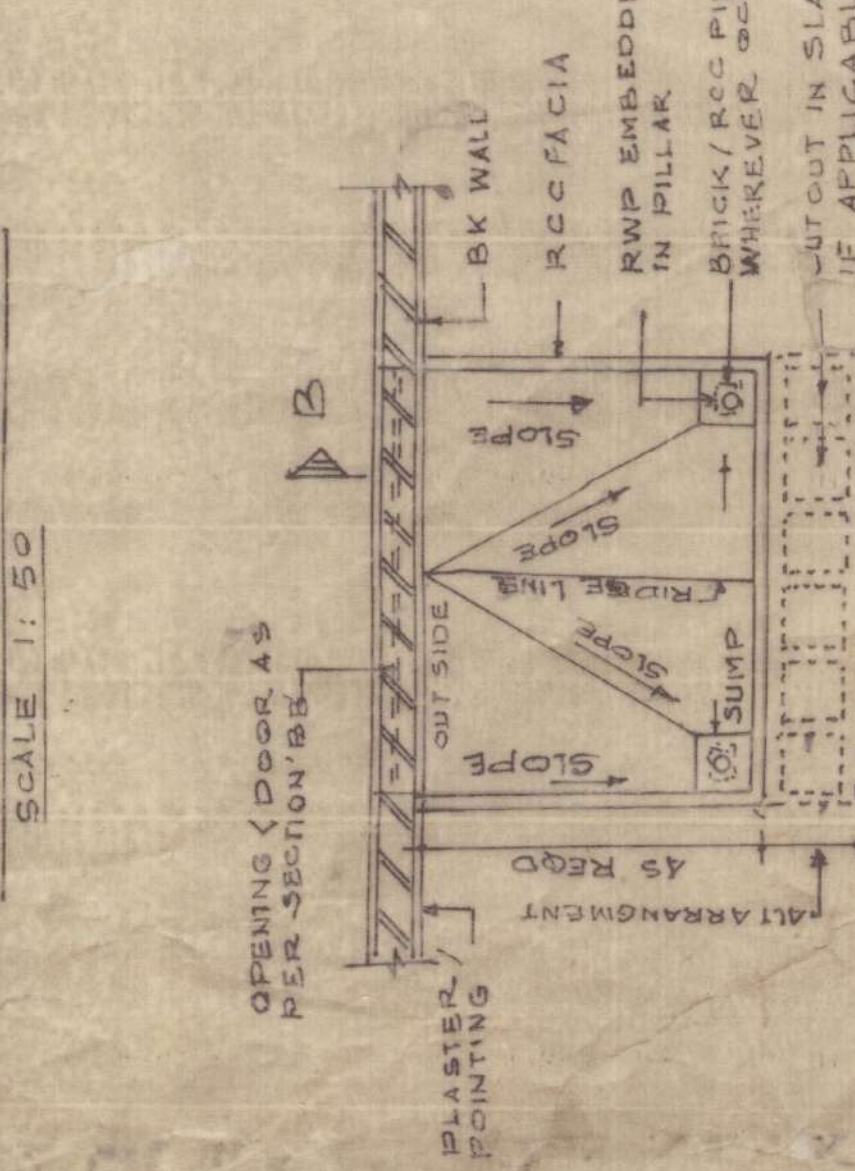
ROOF DRAIN Mounting Mounting Tripod



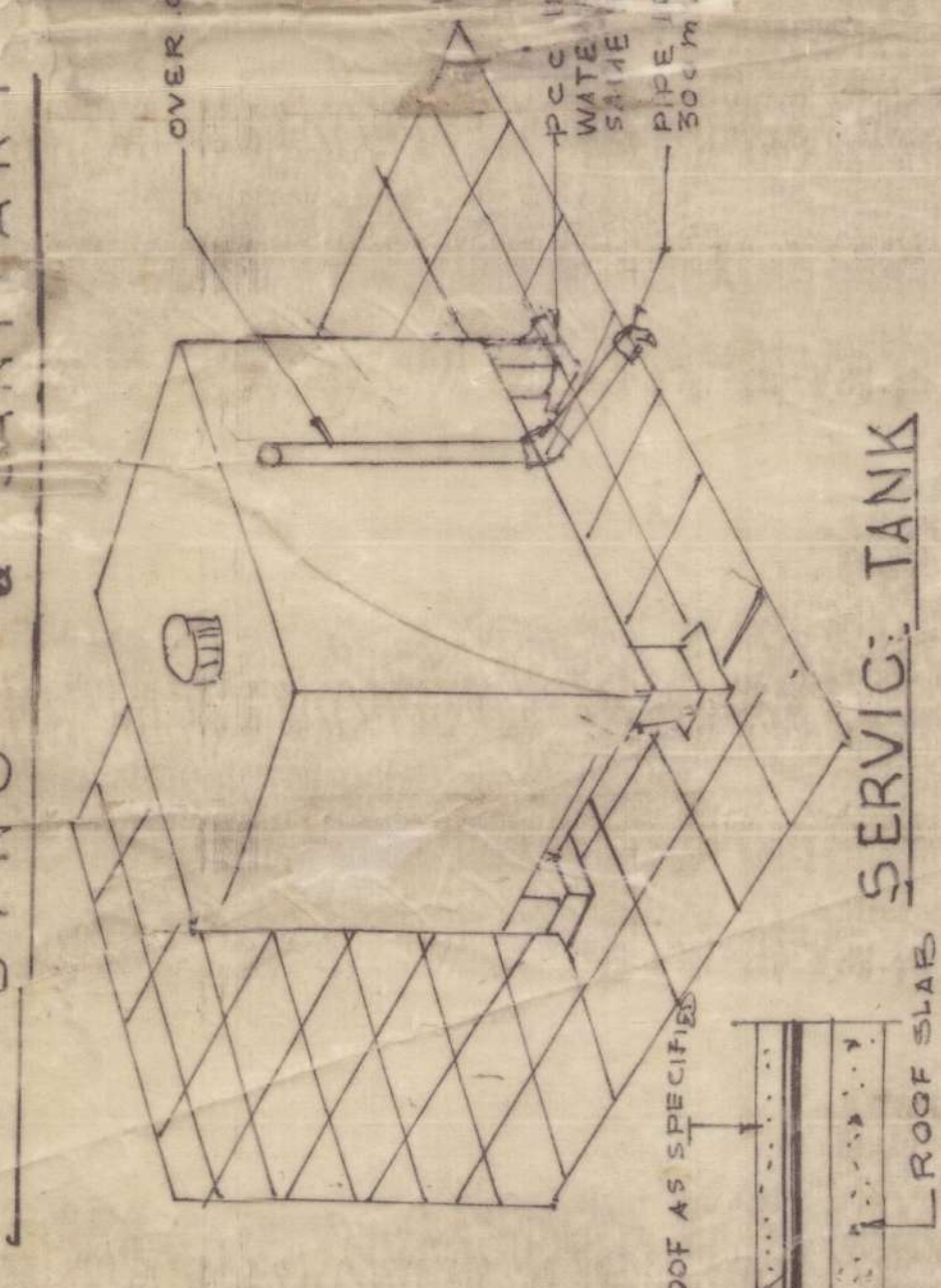
EXTERNAL WALL



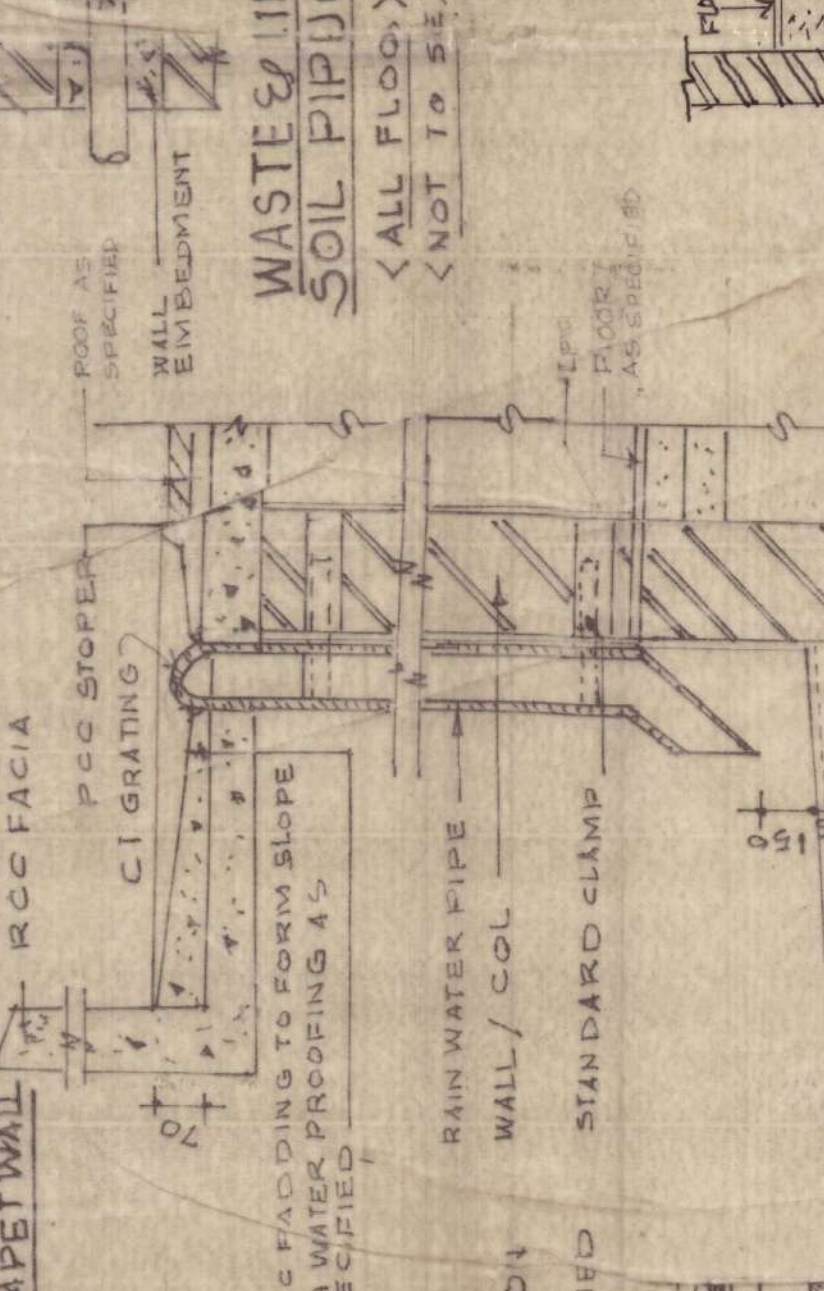
CROSS SECTION 'B-B'



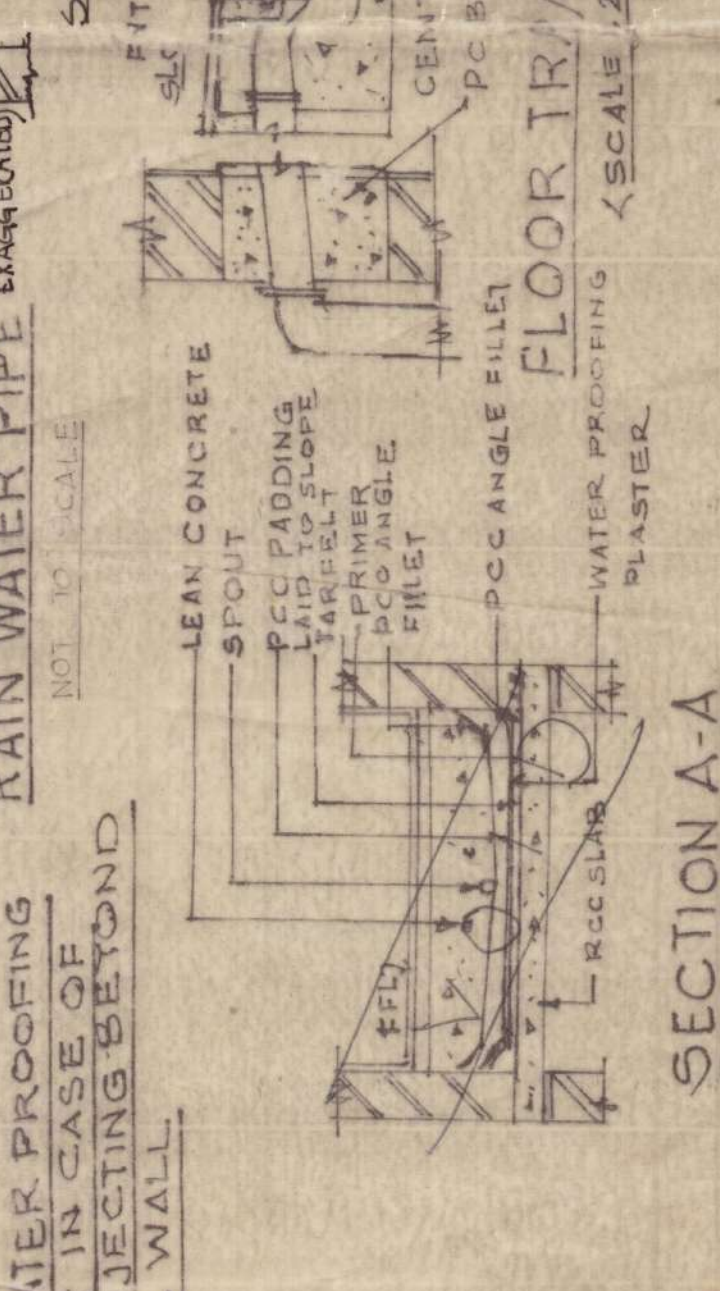
PLAN  
TYPICAL PORCH ROOF  
SCALE 1"=50'



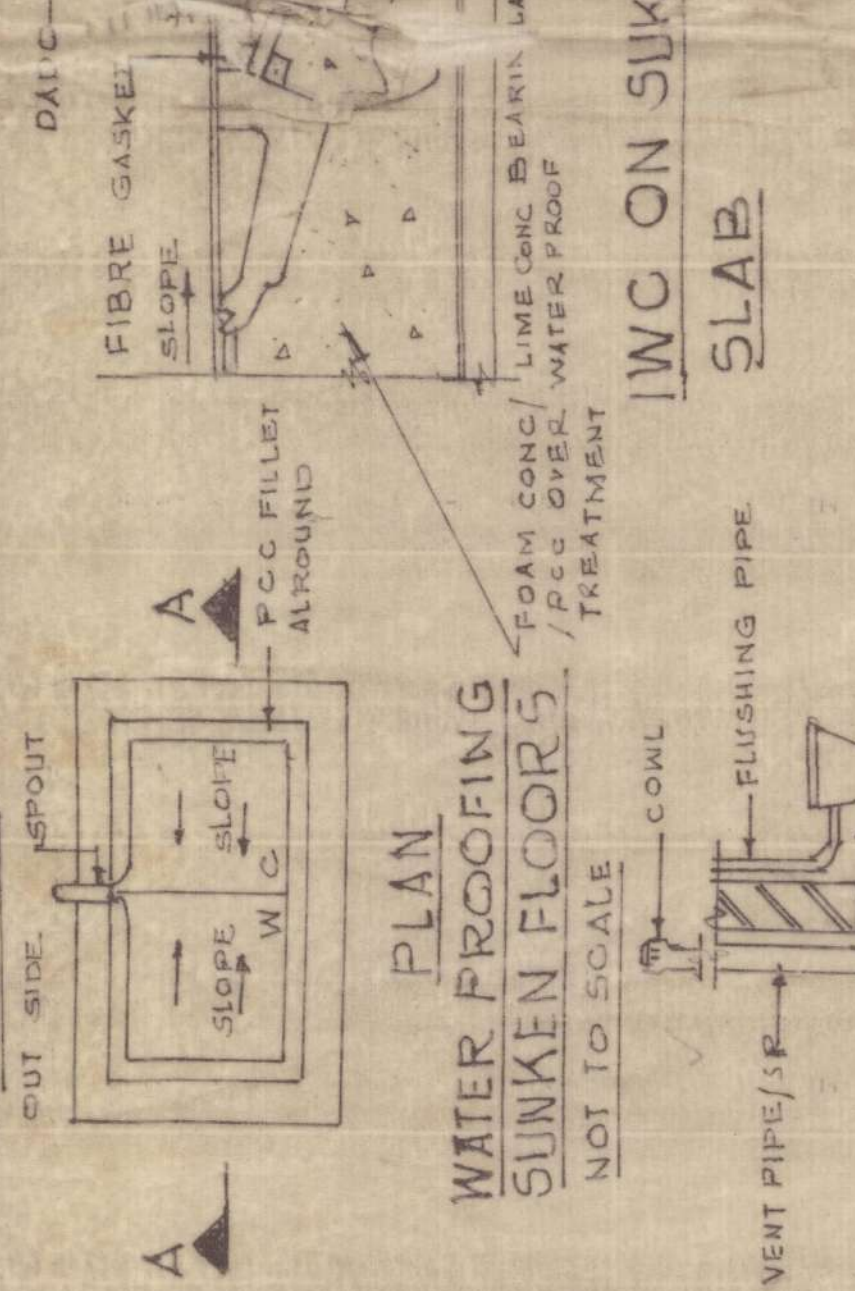
ING  
PUTTING THE



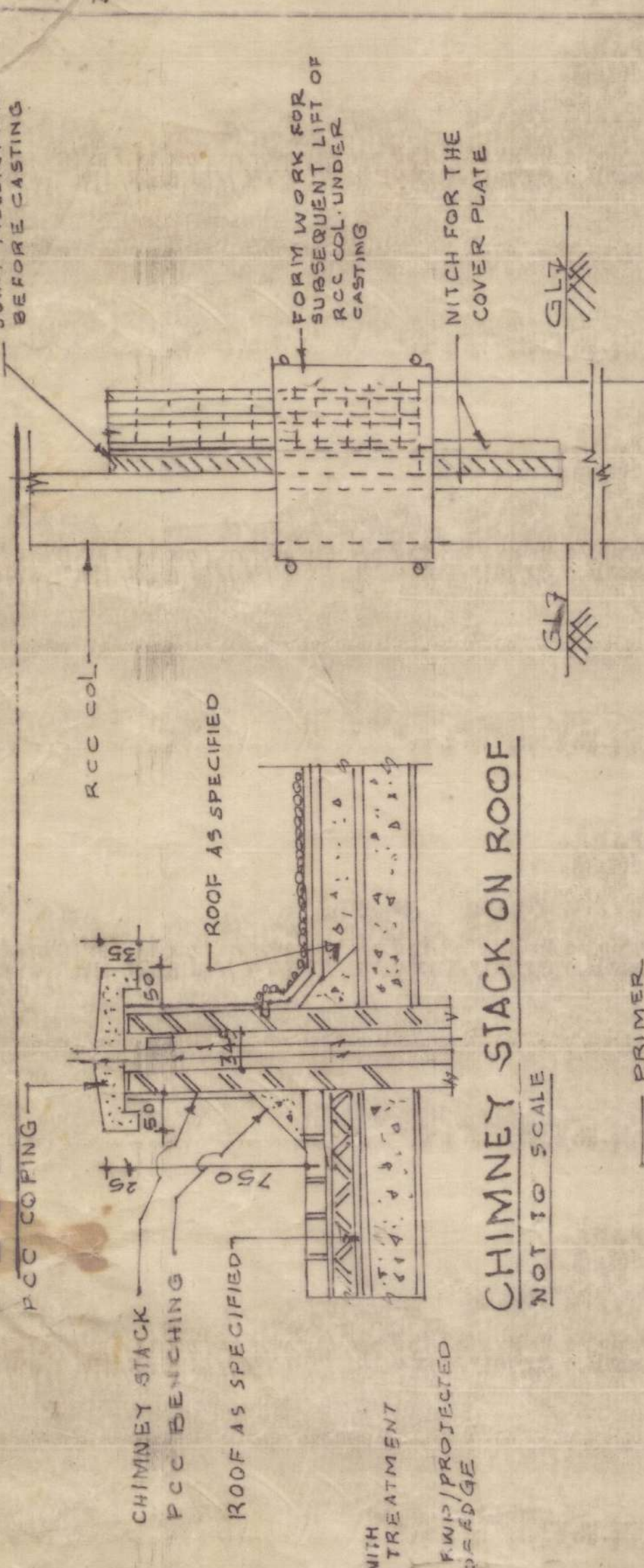
5711



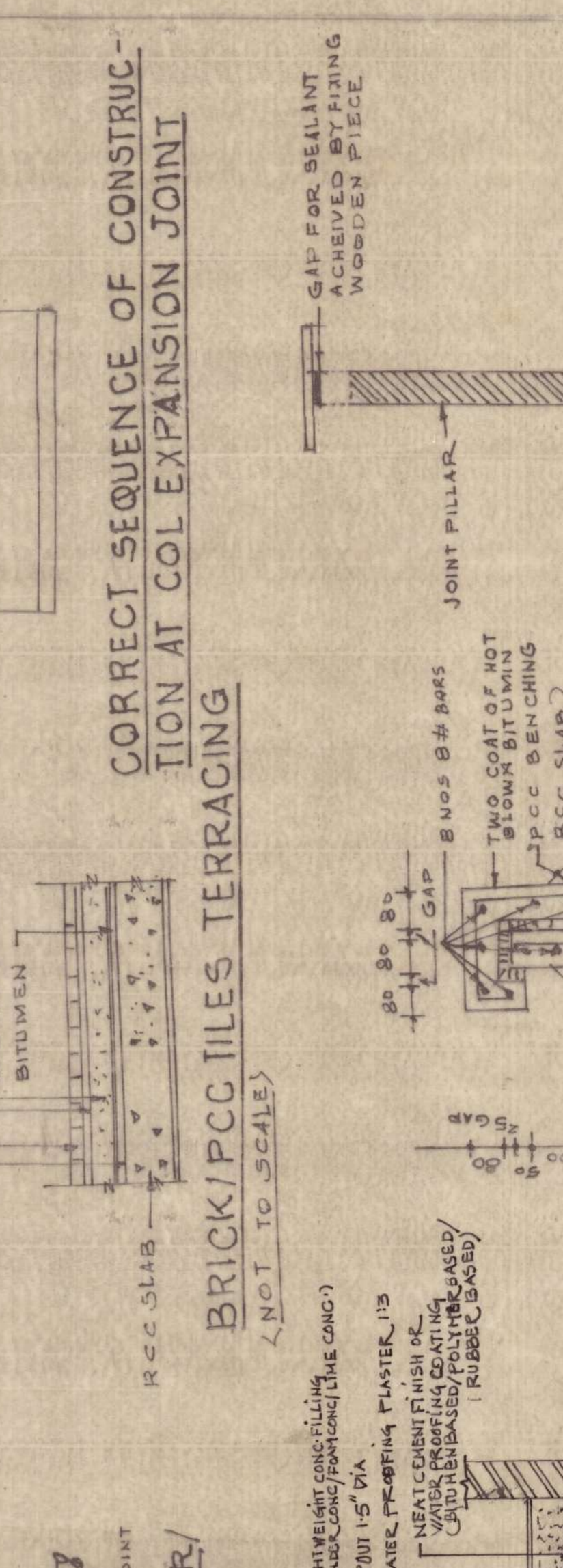
WATER PROOFING TREATMENT



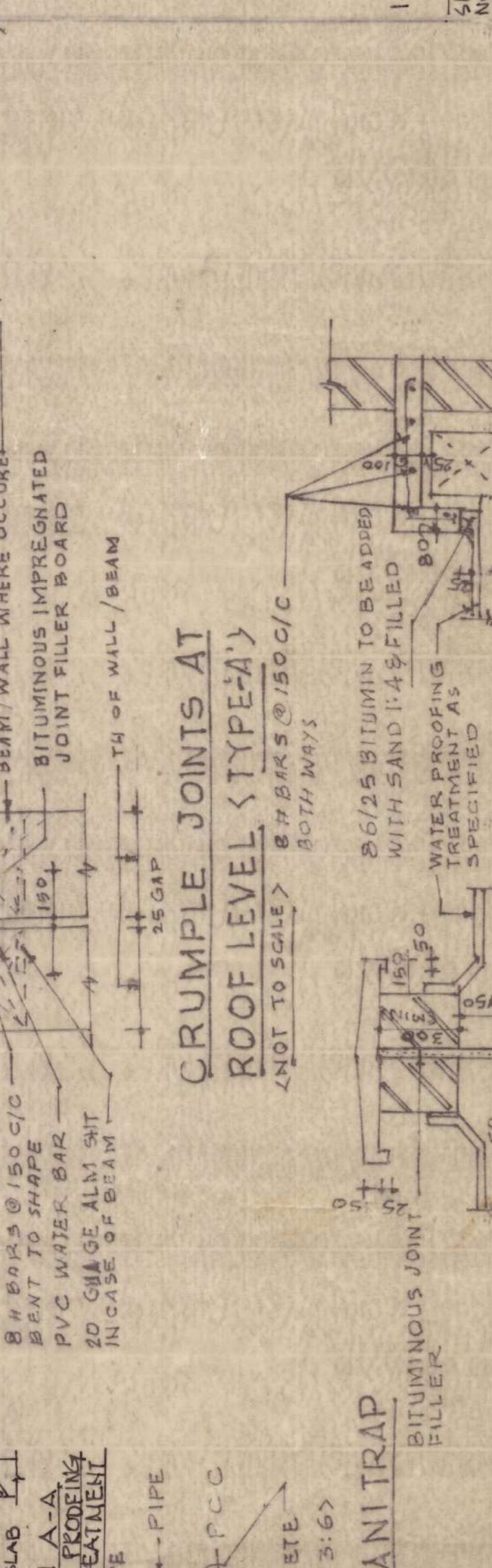
Technical drawing of a cross-section of a wall and floor assembly. The wall is on the left, and the floor is on the right. The floor assembly consists of a concrete slab (labeled 'FCL7') supported by a steel beam (labeled 'EWC'). The wall is labeled 'EWC (INTERMEDIATE FLOOR)'. Dimensions are indicated: '1P5' for the wall thickness and '1P6' for the floor thickness.



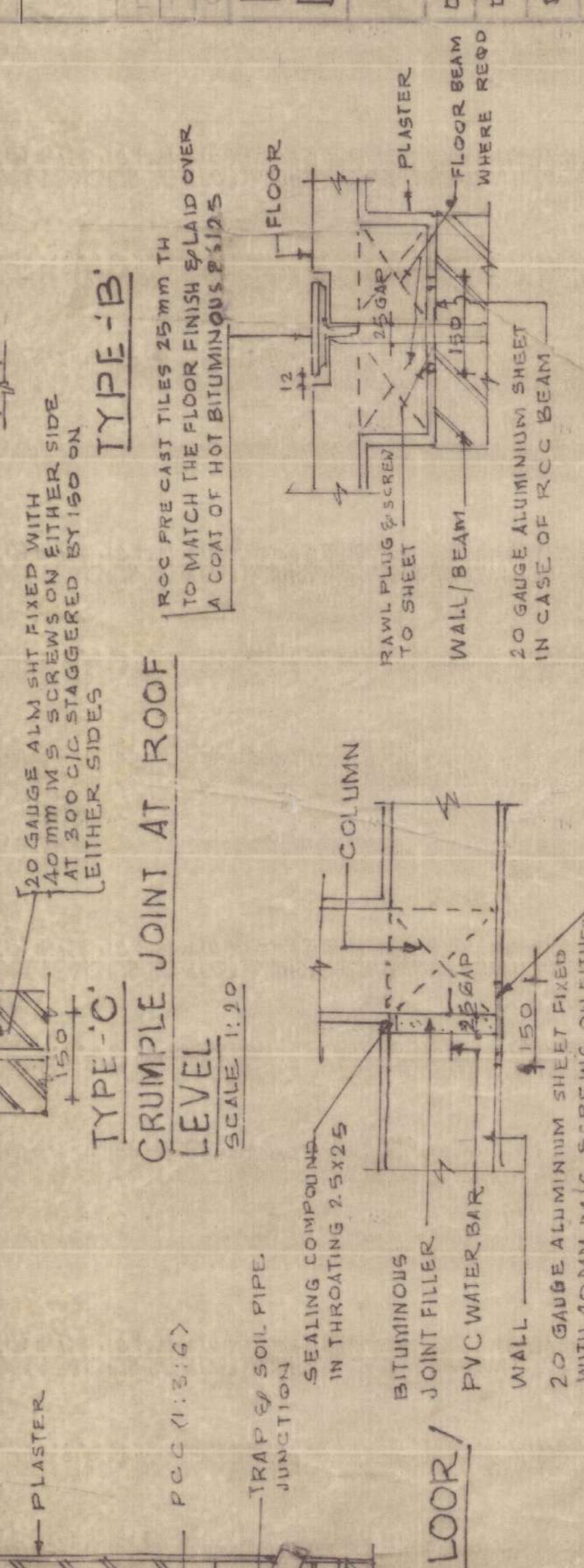
— BRICK/REC TILES  
— BEDDING MORTAR  
— PCC/LIME CONC  
LAD TO SLOPE



Architectural drawing of a building section. A vertical dimension line on the left indicates a height of 300 units. The drawing shows structural elements like walls and a roofline.




RCC SLAB



CRUMPLE JOINT BETWEEN  
WALL / COL.

- 1- CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
- 2- ALL DIMENSIONS ARE GIVEN IN MILLIMETRE UNLESS OTHERWISE SPECIFIED.
- 3- FIGURED DIMENSIONS SHALL BE FOLLOWED.

29-09-21	SECTION A-A WATER PROOFING TREATMENT MADE VOID AND NEW SECTION OF SAME ADDED	INITIAL	
DATE	DESCRIPTION	REVISION	

CERTIFIED TRUE COPY  
RE-TRACED IN CE UDHAMPUR  
ZONE

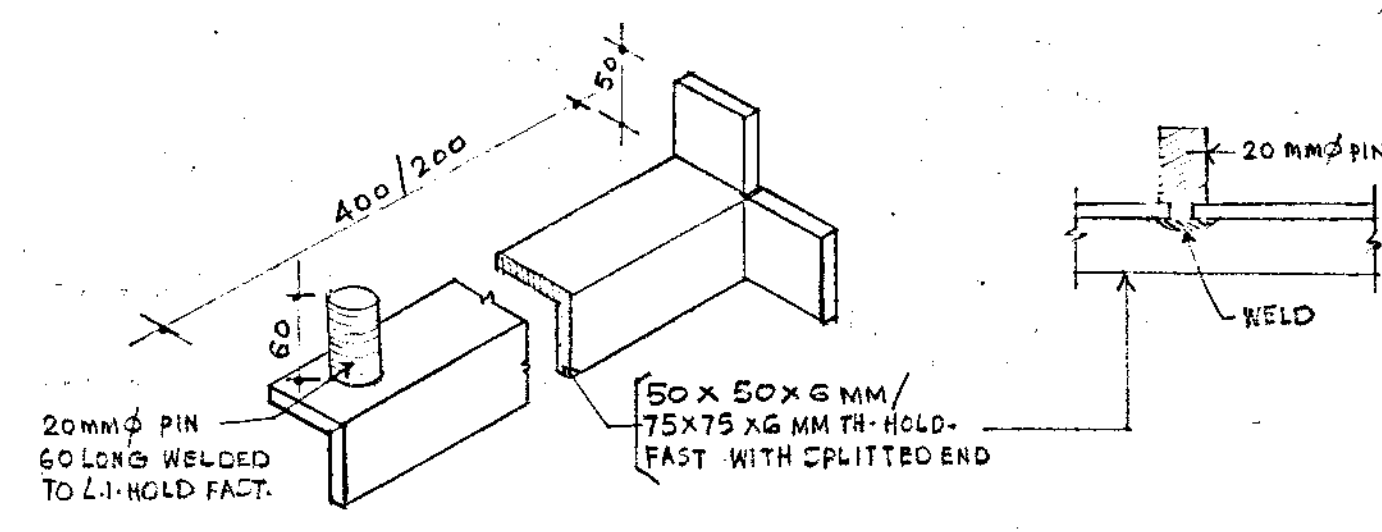
LEAKAGE, SEEPAGE &  
DAMPNESS PREVENTION & CURE

TYPICAL DETAILS

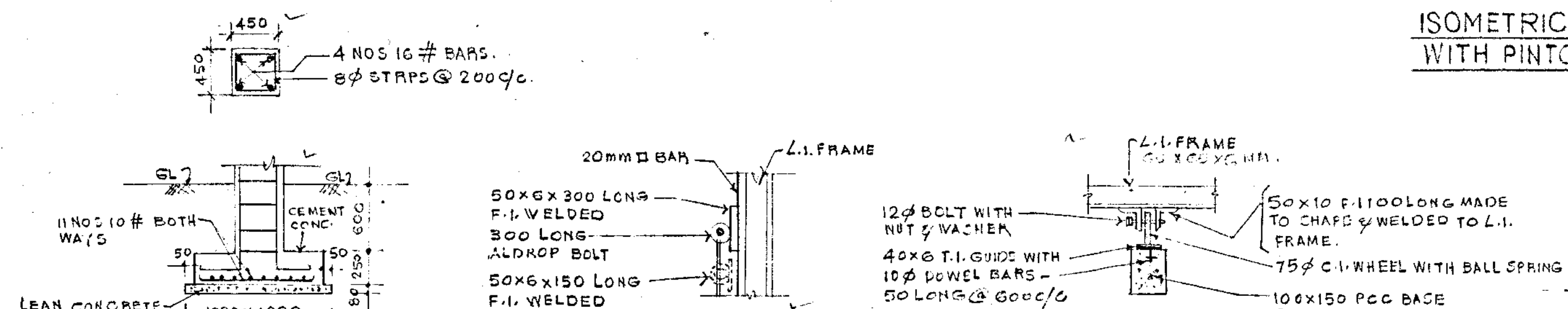
DATE	28-9-95	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>CHIEF ENGINEER</b>  <b>UDHAMPUR ZONE</b> </div>	1/1	SHEET NO
BORN	P. KUMAR			
DES				
ACKD				DRG NO: CE TD/123/95

sig. sd x x x  
sig. sd x x x  
S. E. E.  
S. I. D. E.  
FOR CHIEF ENGINEER  
S. O. M. D. E. S. I. G. N.





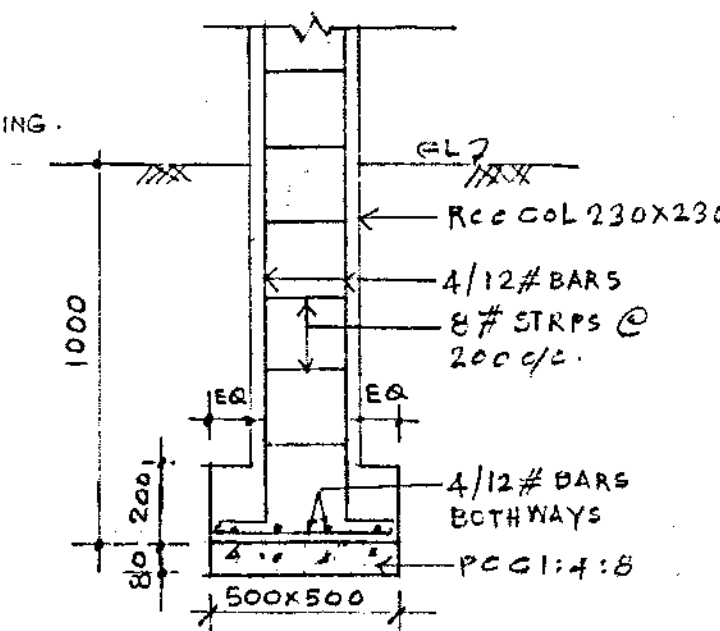
ISOMETRIC VIEW OF F.I.HOLDFAST  
WITH PINTOL HINGE



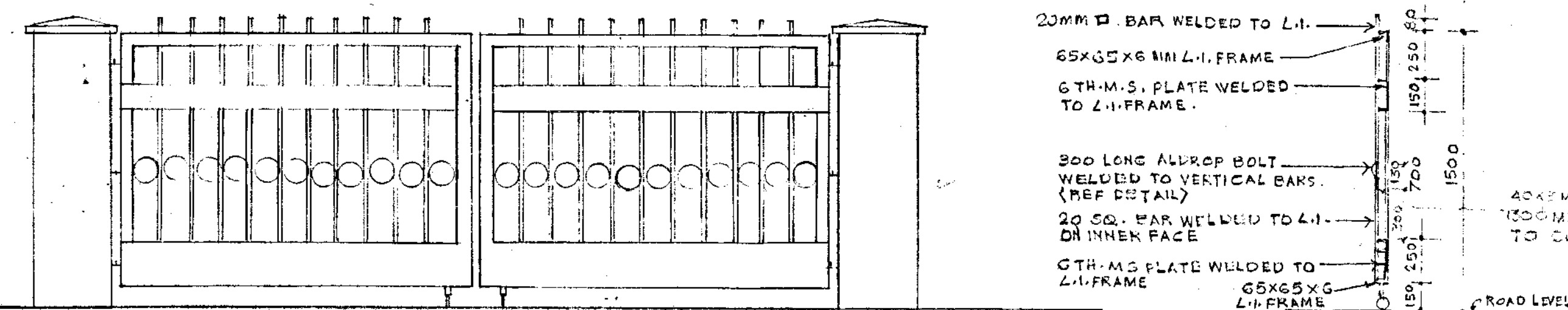
FOUNDATION DETAIL OF RCC COLS  
OF SIZE 230x300 & 450x450

FIXING DETAIL OF  
ALDROP BOLT

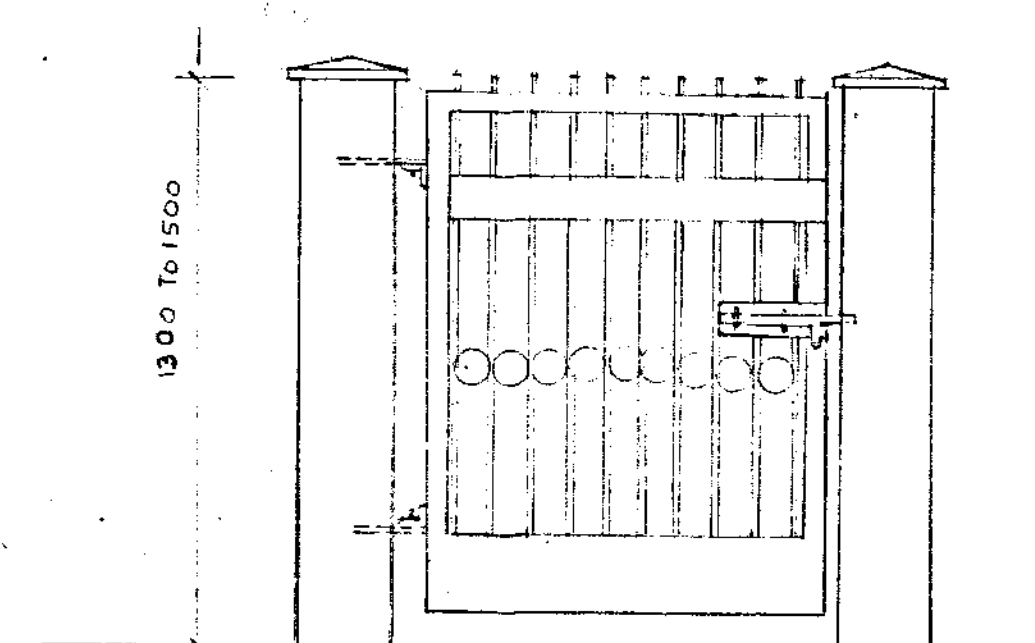
### FIXING DETAIL OF C.I. WHEEL/TRACK



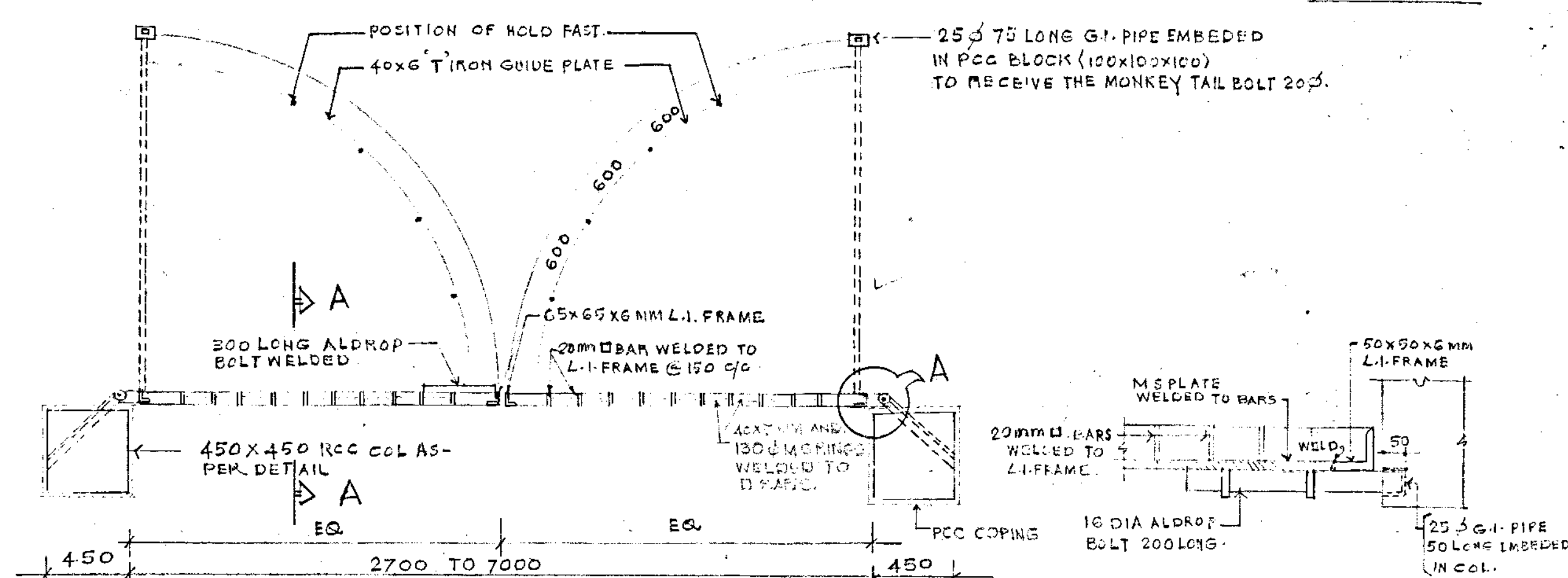
SECTION OF RCC COL 230x230



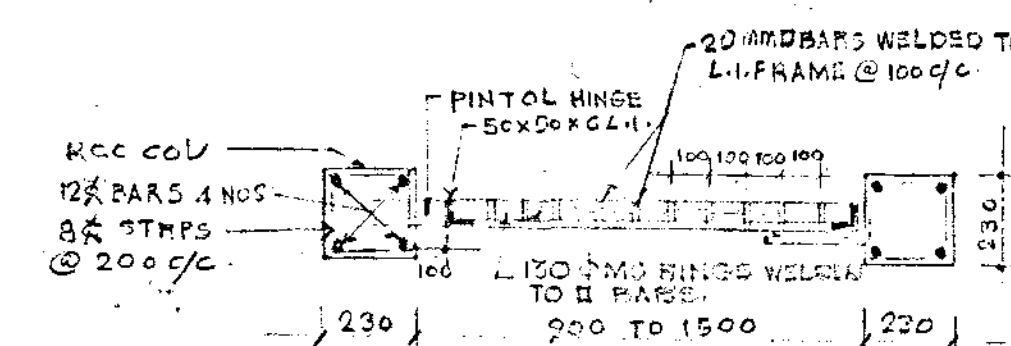
— SECTION AT A-A —  
SCALE: 1:25



ELEVATION





DETAIL OF ALDROP BOLT  
FOR WICKET GATE.

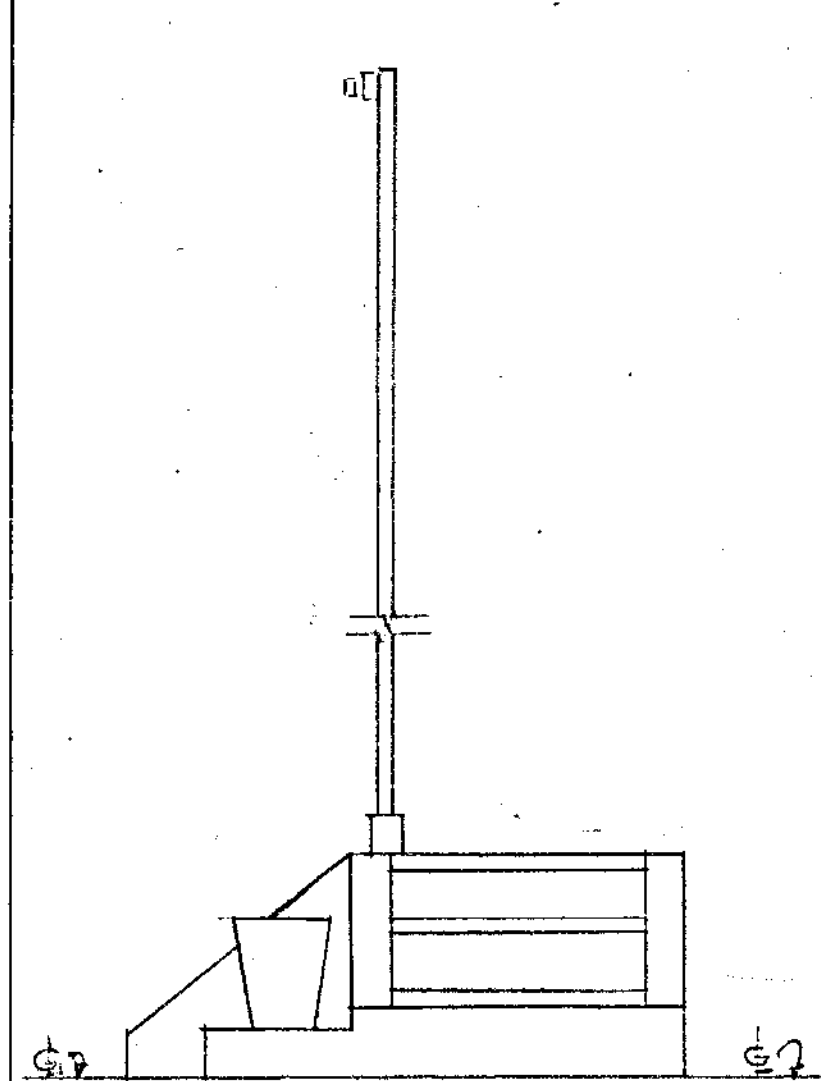


PLAN OF WICKET GATE  
SCALE: 1:20

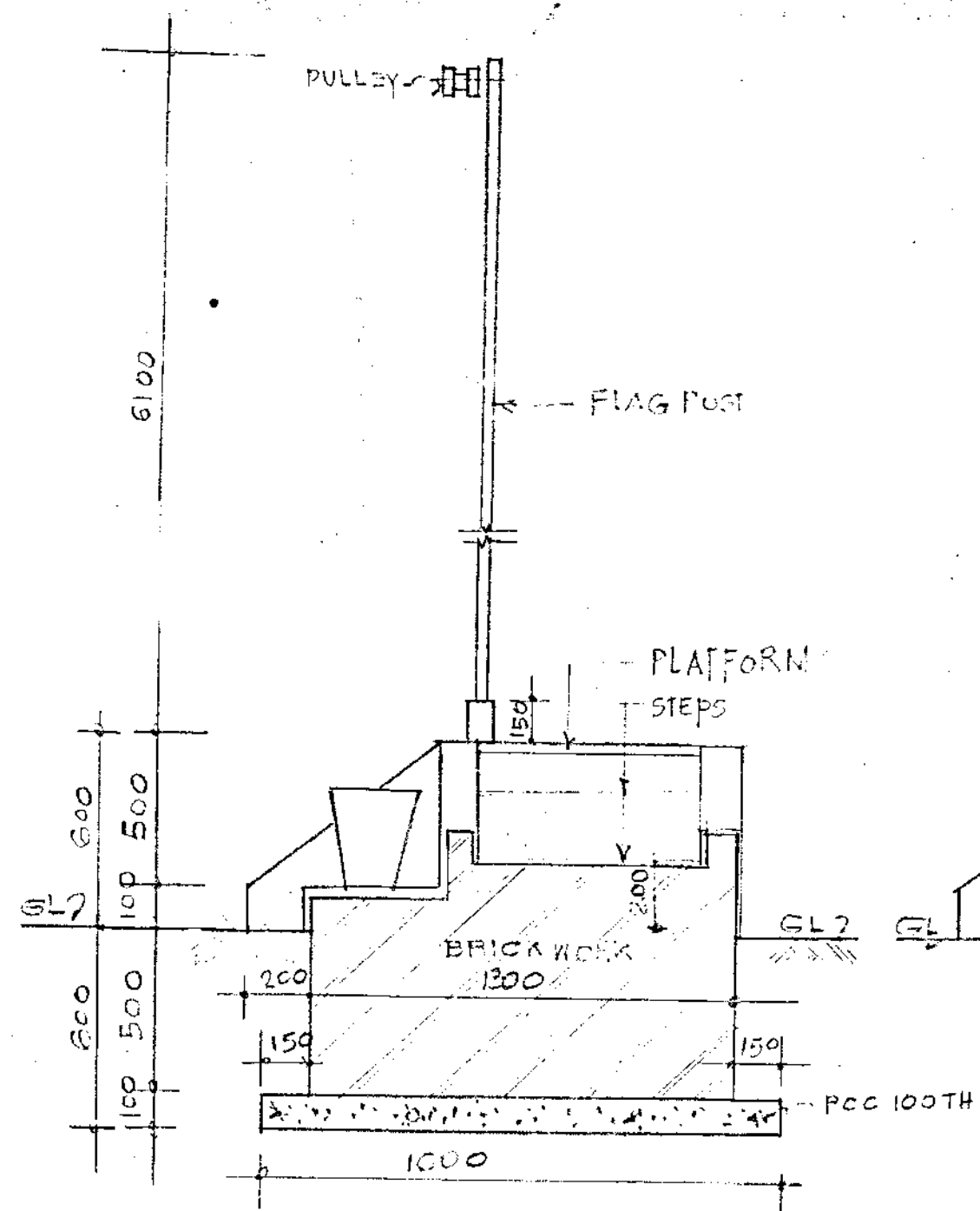
NOTES:-

1. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF WORK.
2. ALL DIMENSIONS ARE GIVEN IN MM ONLY.
3. FIGURED DIMENSIONS SHALL BE FOLLOWED.
4. THE FDN HAS BEEN DESIGNED FOR SAFE BEARING CAPACITY OF 10 T/M<sup>2</sup>.
5. FOR ALL RCC/STRUCTURAL DETAILS REF. DRG NO. CE/TD-801/92 SHT NO. 1/3 TO 3/3.
6. IF THE WICKET GATE IS TO BE CONSTRUCTED ALONG WITH MAIN GATE ONE COLUMN SHOULD BE AVOIDED.
7. THIS DRG IS BASED ON DRG NO. CE/TD-1119/95 SHT NO. 1/1 DATED 25.7.95.
8. ALL STEEL SURFACE OF STEEL GATE SHALL BE GIVEN TWO COATS OF SYNTHETIC ENAMEL PAINT OVER A COAT OF AND RCC FILLERS SHALL BE GIVEN 3 COATS OF WHITE WASH.
9. FOR ALL RCC WORK M-25 GRADE DESIGN MIX CONCRETE AS PER IS: 456-2000 SHALL BE USED.
10. ALL STEEL USED SHALL BE HYSD 415 CONFORMING TO IS: 1786.
11. FOR ALL OTHER RCC NOTES REFER DRG. NO. CE/TD-1192/2002 SHT NO. 1/2 TO 12/10.

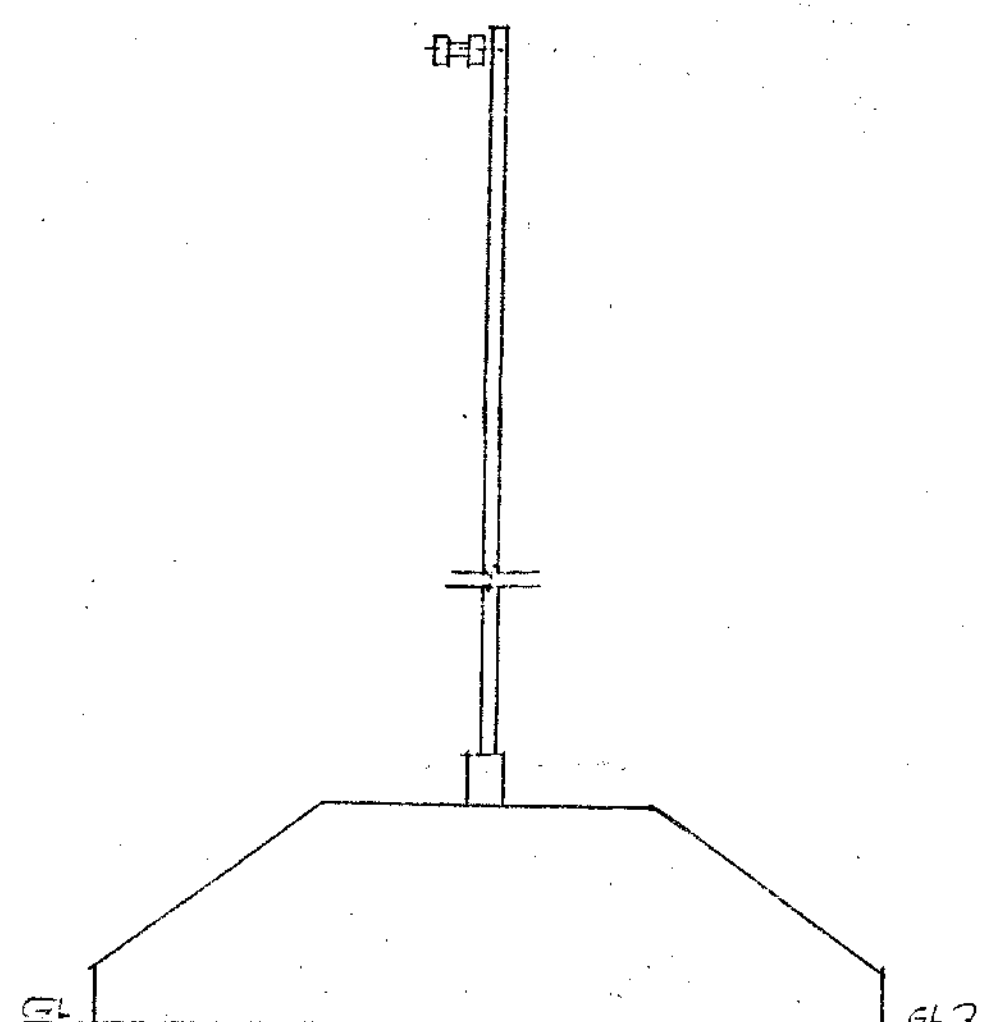
1.	27-6-03	IN NOTE NO 5 DELETED AND NOTE NO 9, 10 AND 11 ADDED		<i>JS</i>
S.NO	DATE	DESCRIPTION		INITIAL
R E V I S I O N				
STEEL GATE (2700-7000) &/ WICKET GATE (900-1500)				
PLAN, ELEVATION, SECTION & DETAILS				
DATE	14-3-97	CHIEF ENGINEER UDHAMPUR ZONE		Sht No 1/1
DRN	V. GEORGE			
TCO	-			
CKD	-			
SCALE	AS SHOWN	DRG No. CE/TD-1135/97		
 Dy. ARCHITECT		 SENIOR ARCHITECT FOR CHECKING		



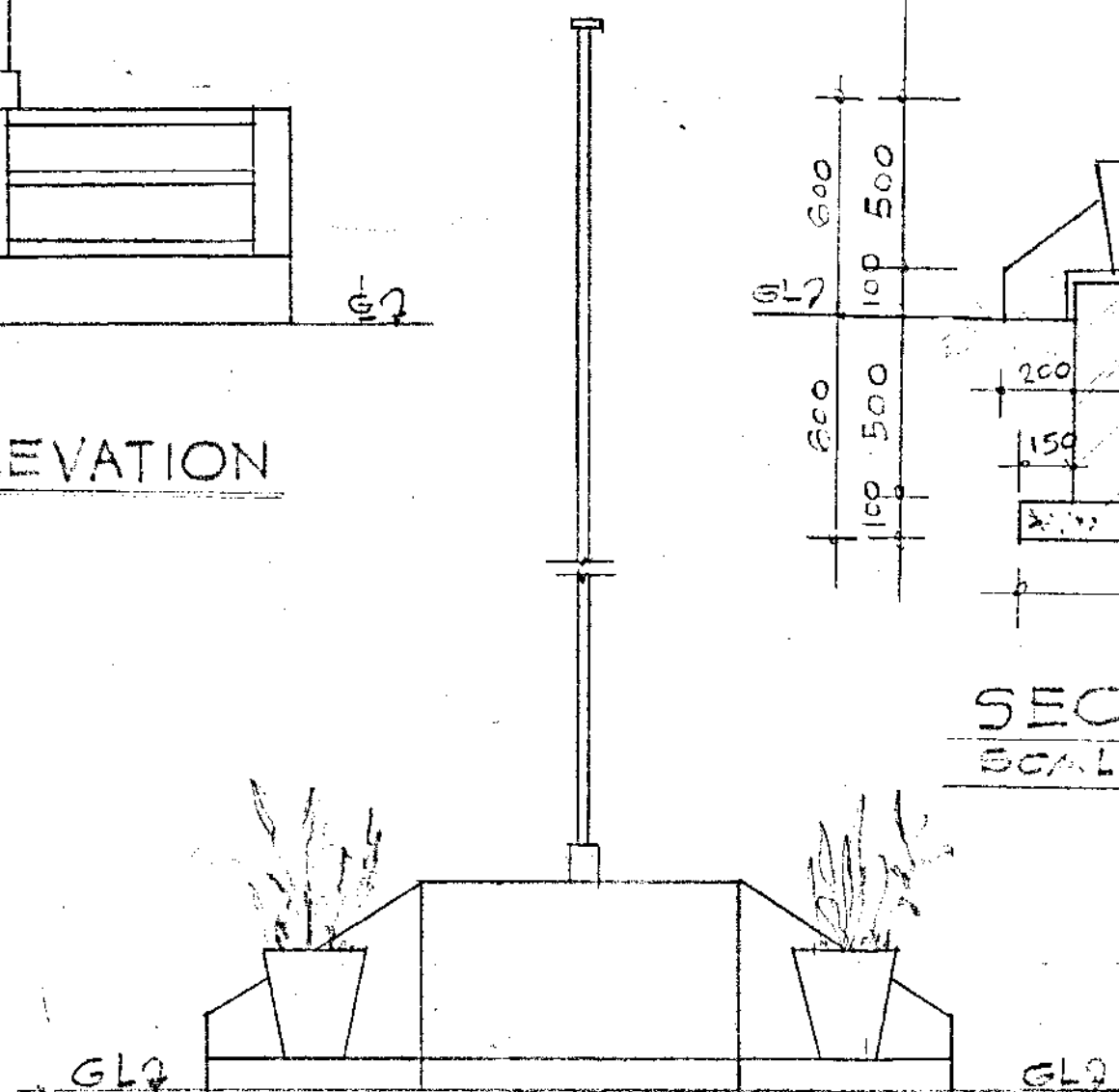
SIDE ELEVATION



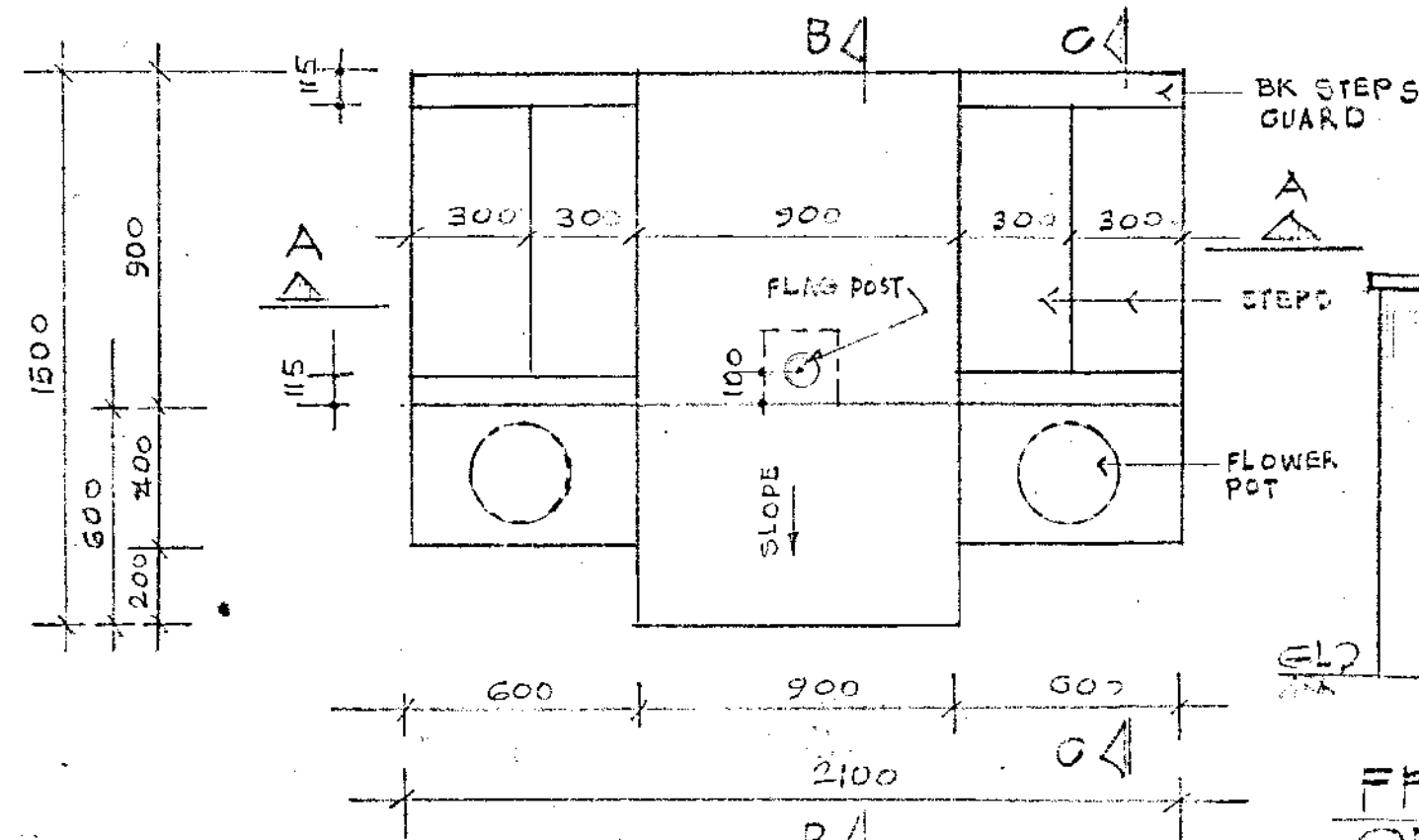
SECTION ON C.C.  
SCALE: 1:20



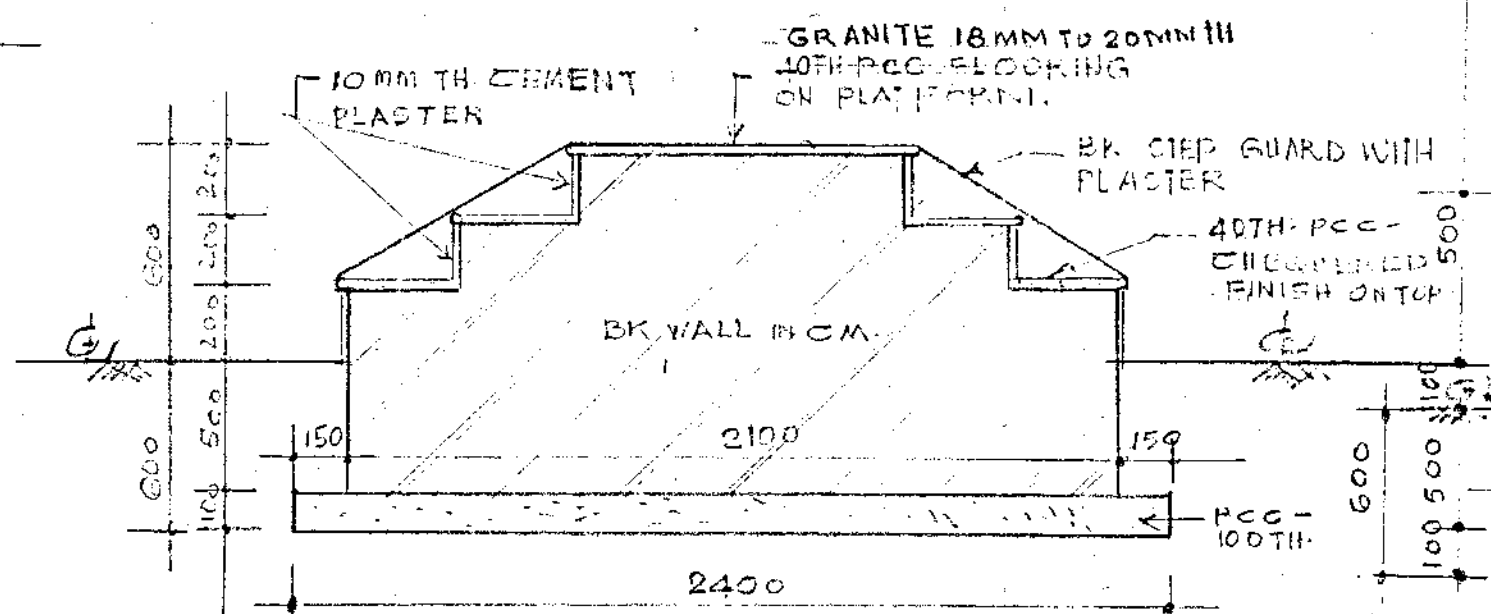
REAR ELEVATION



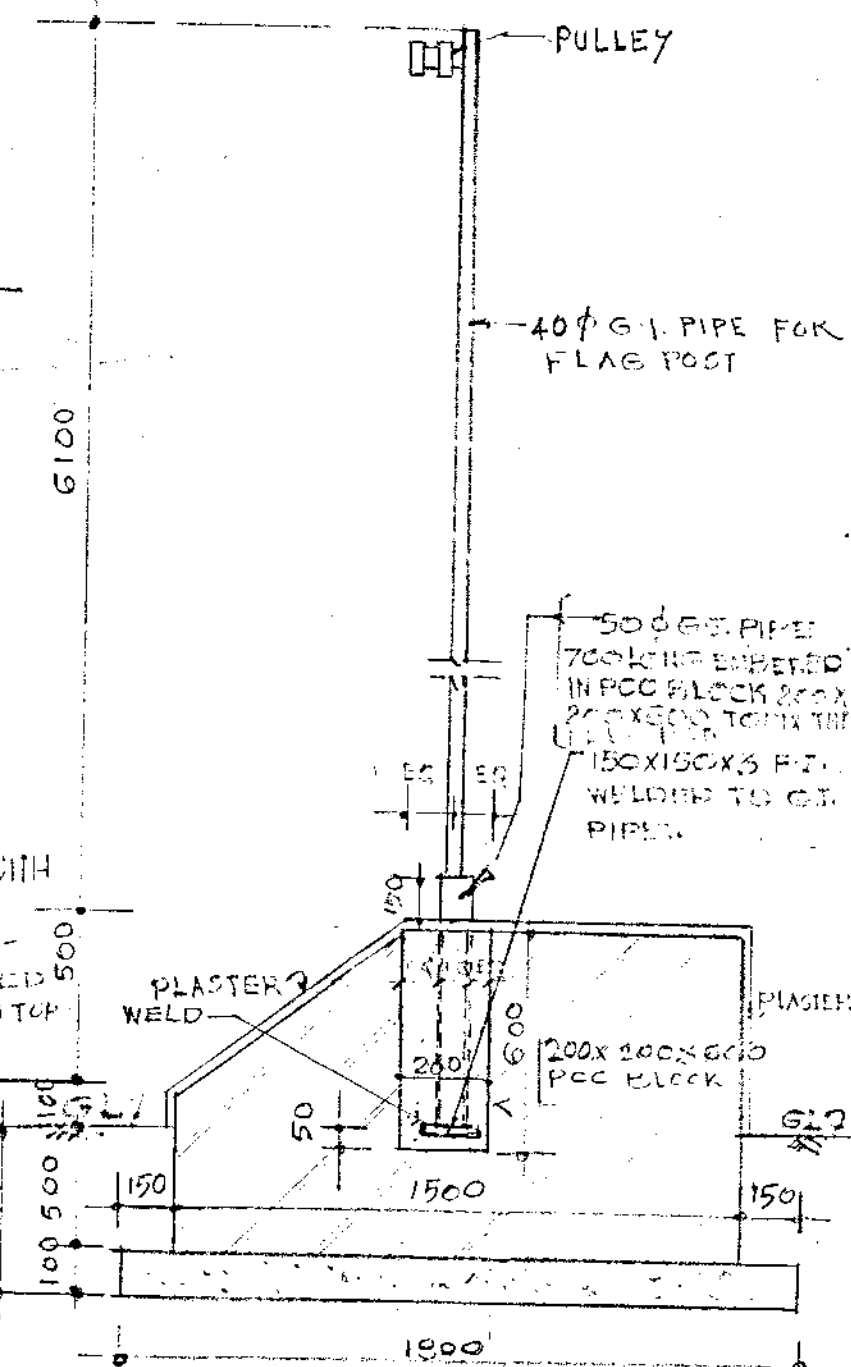
FRONT ELEVATION



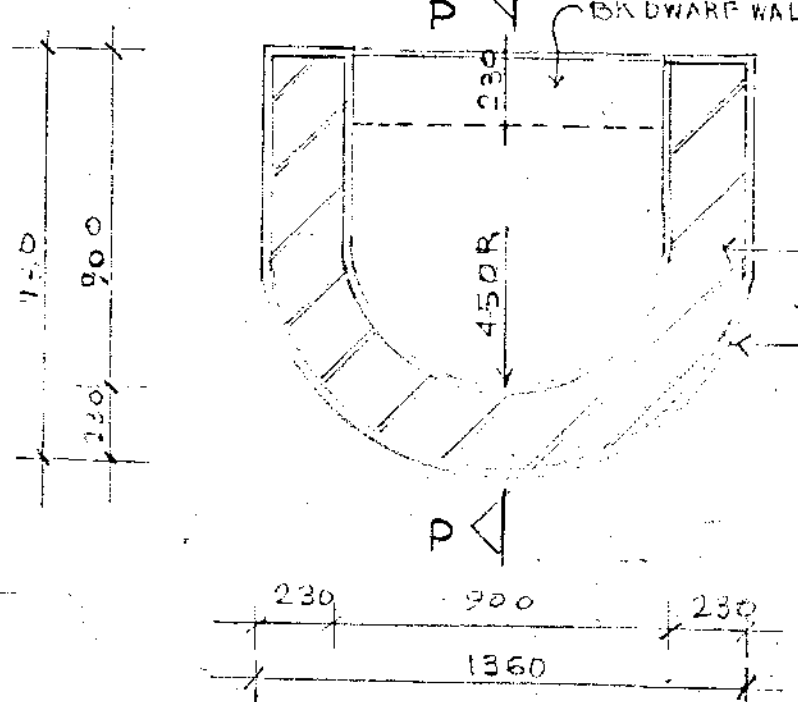
PLAN OF FLAG STAFF WITH BASE  
SCALE: 1:20



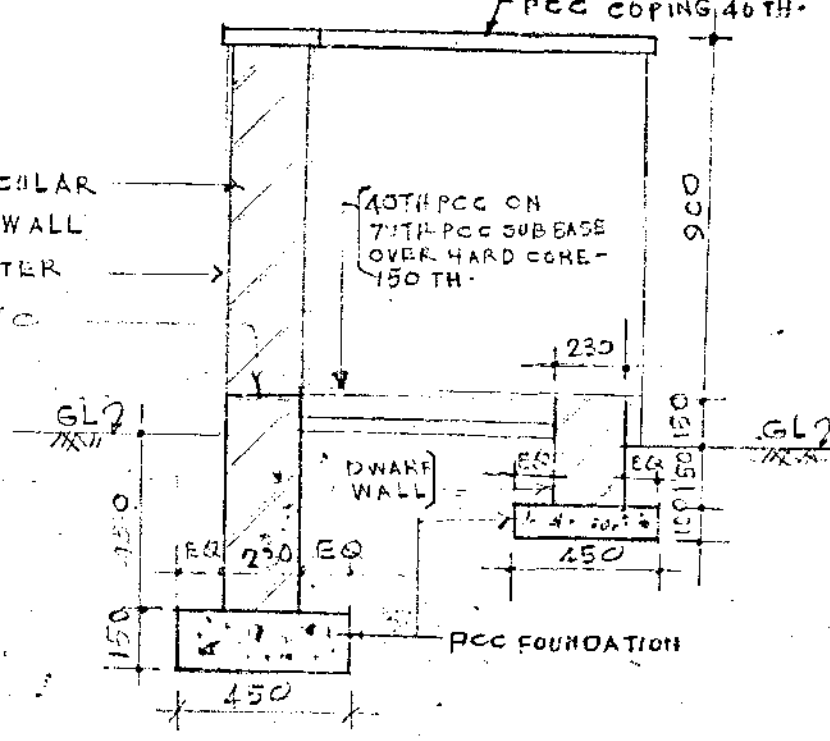
SECTION AT A-A  
SCALE: 1:20



SECTION AT B-B  
SCALE: 1:20



PLAN OF ALARM POST  
SCALE: 1:20

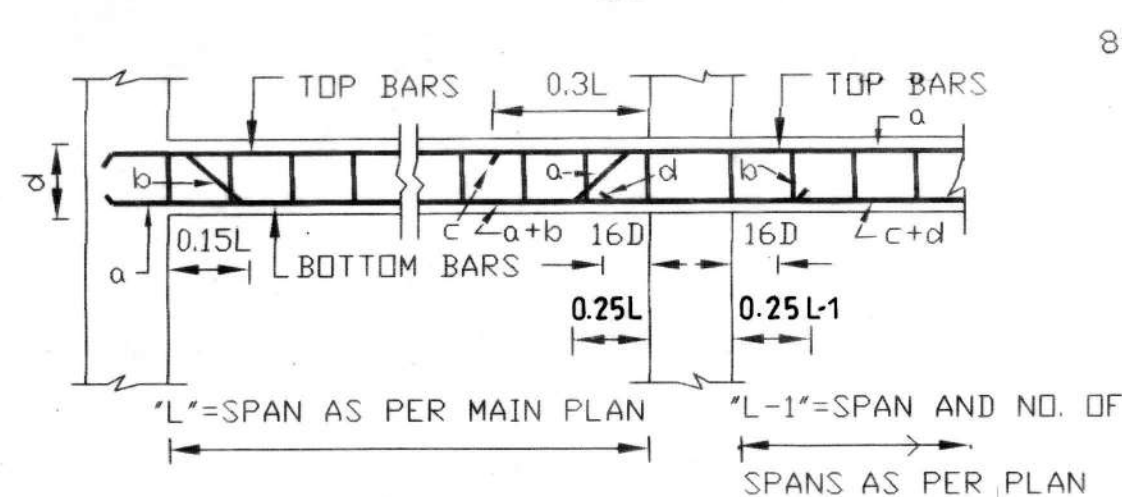


SECTION AT P-P

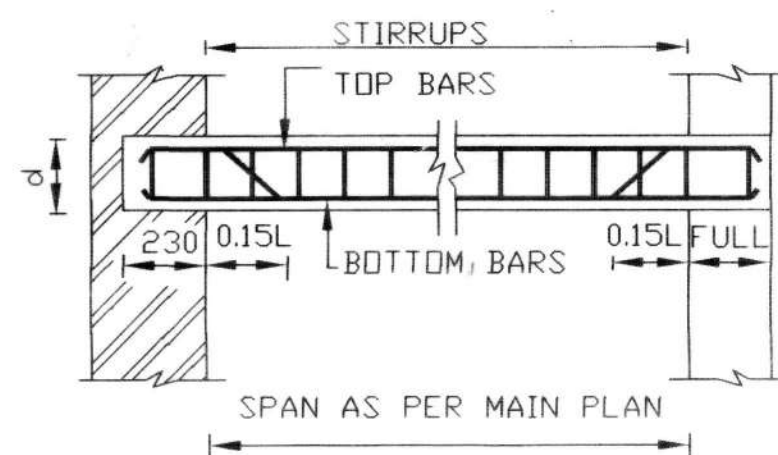
- NOTES
1. CONTRACTOR TO CHECK & VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
  2. FIGURED DIMENSIONS SHALL BE FOLLOWED.
  3. ALL DIMENSIONS ARE GIVEN IN MILLI-METERS.
  4. THIS DRG IS BASED ON DRG NO CE/UD-764/86 SHT NO. 1/1 DATED 6-9-86.
  5. PULLEY SHALL BE PAINTED WITH 2 COATS OF SYNTHETIC ENAMEL PAINT WHITE OVER ONE COAT OF PRIMER.

DT	23.04.15	DRG CORRECTED UP TO DATE	
SLH	DATE	DESCRIPTION	INITIAL
REVISION			
TYPICAL DETAILS OF FLAG STAFF WITH BASE AND ALARM POST			
PLAN, ELEVATIONS & SECTIONS			
DATE	14-3-97	CHIEF ENGINEER	SHT NO.
DRN	MRS. ANTHA	UDHAMPUR ZONE	1/1
TCD			
CRD			
SCALE	AS SHOWN	DRG NO CE/UD-1442/97	
BY ARCHITECT		SENIOR ARCHITECT FOR CHIEF ENGINEER	

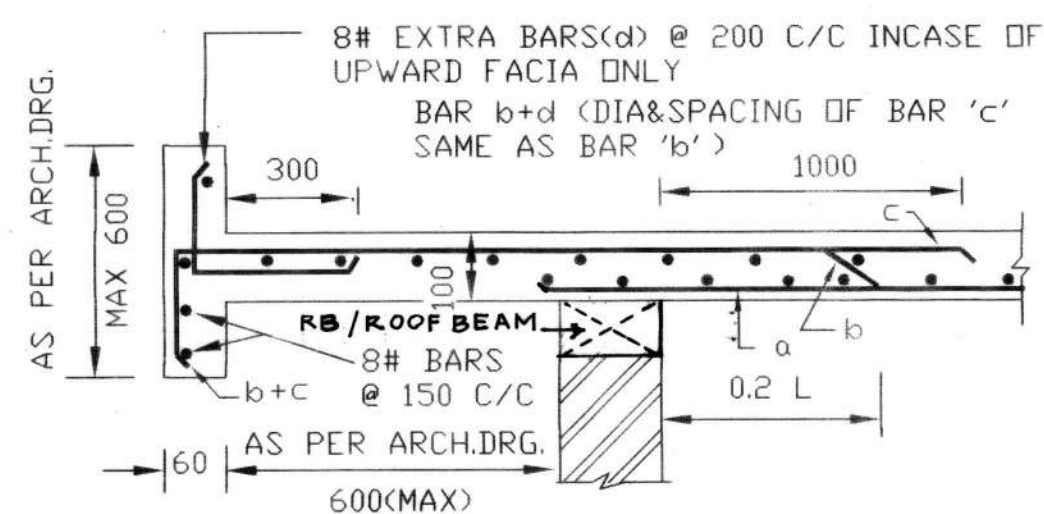




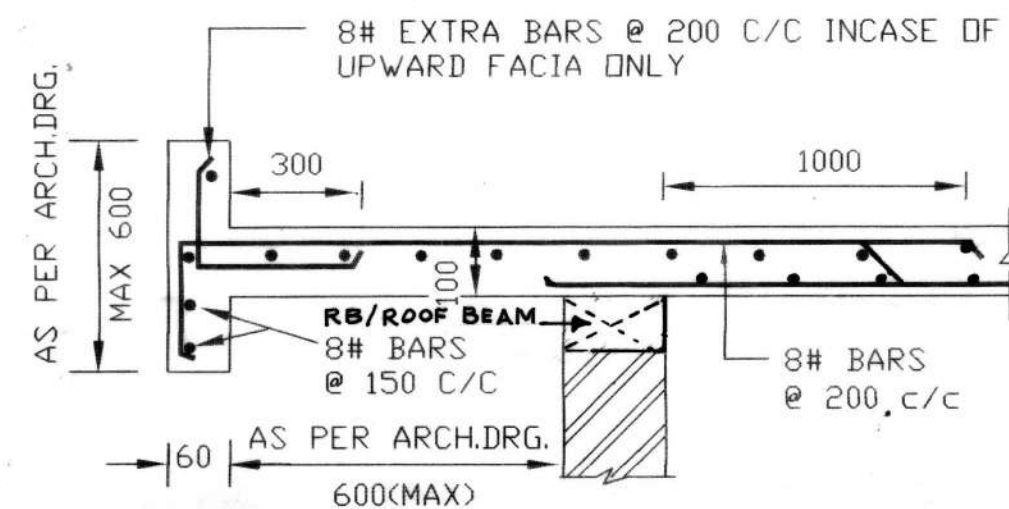
**LONG SEC. OF CONTINUOUS  
BRESSUMMER (BR)/LINTEL (LT)**



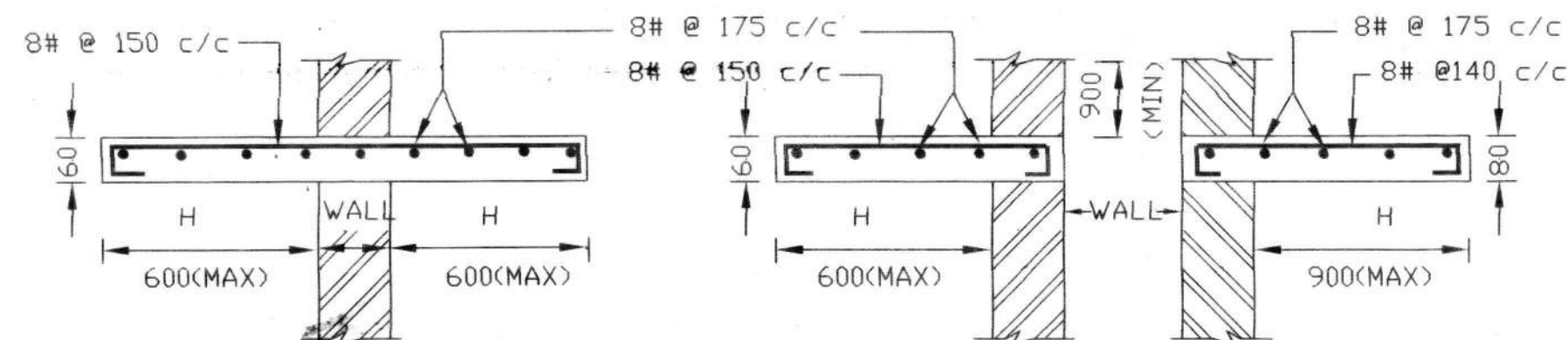
**LONG SEC. OF SIMPLY SUPPORTED  
BRESSUMMER (BR)/LINTEL (LT)**



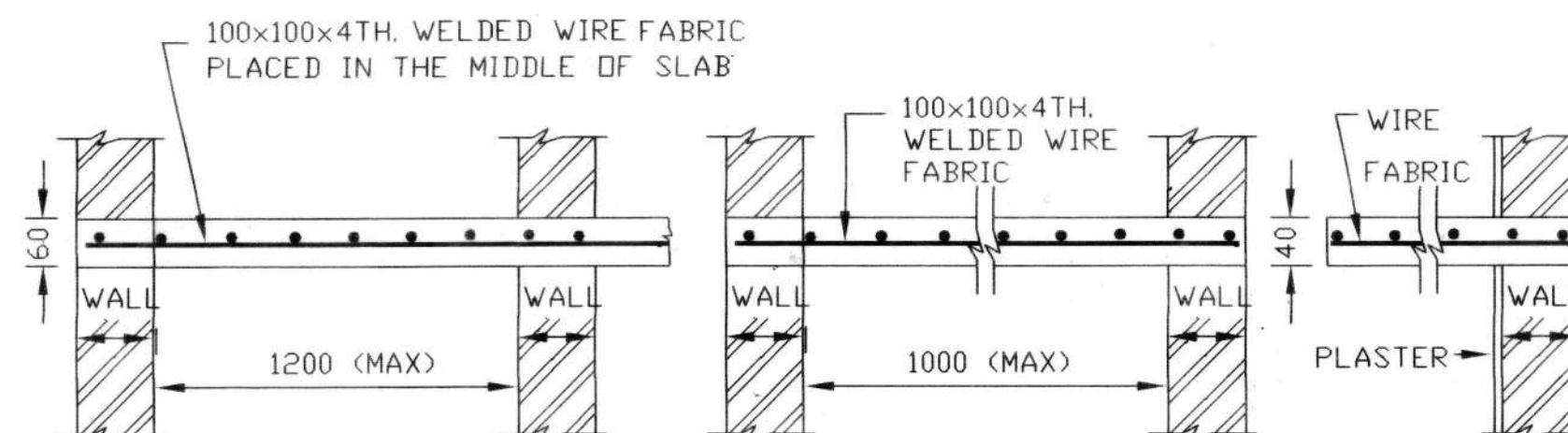
**ROOF PROJECTION ON SUPPORTING EDGES OF ONE/TWO WAY SLAB**



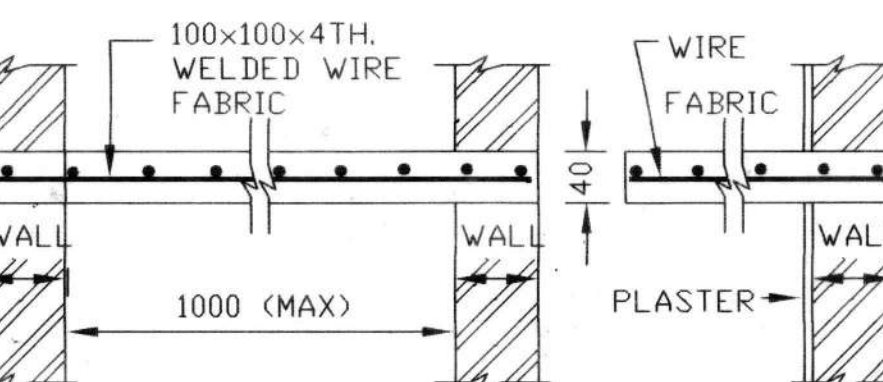
**ROOF PROJECTION ON NON SUPPORTING EDGES OF ONE WAY SLAB**



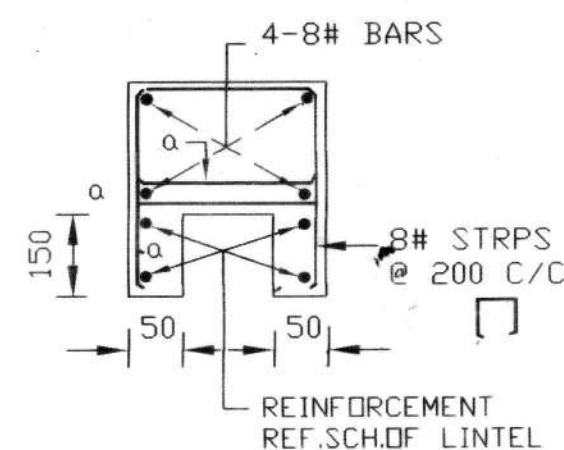
**RCC SHELF BOTH SIDE**



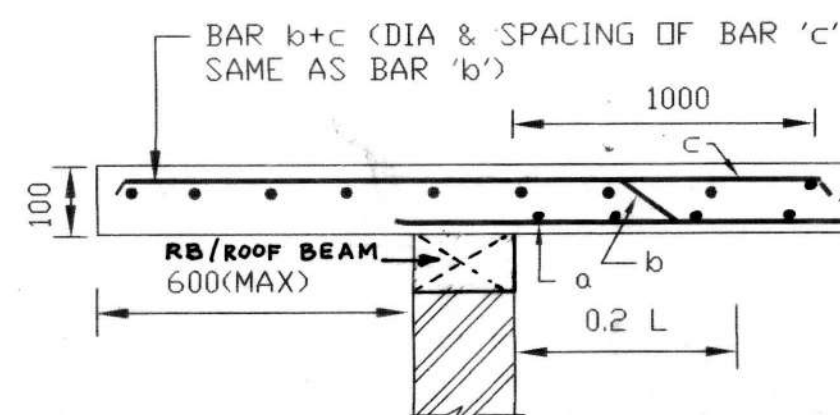
**RCC SHELF CONTINUOUS**



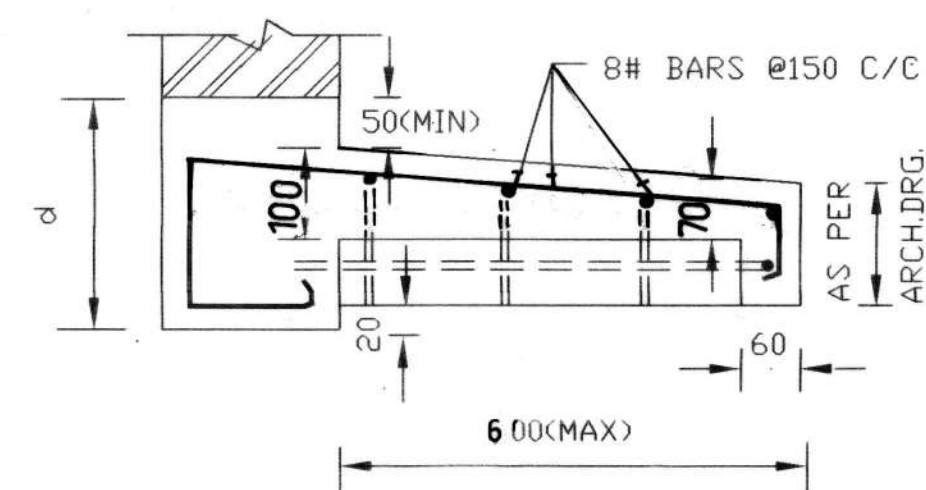
**RCC SHELF WITH SIDE SUPPORTS**



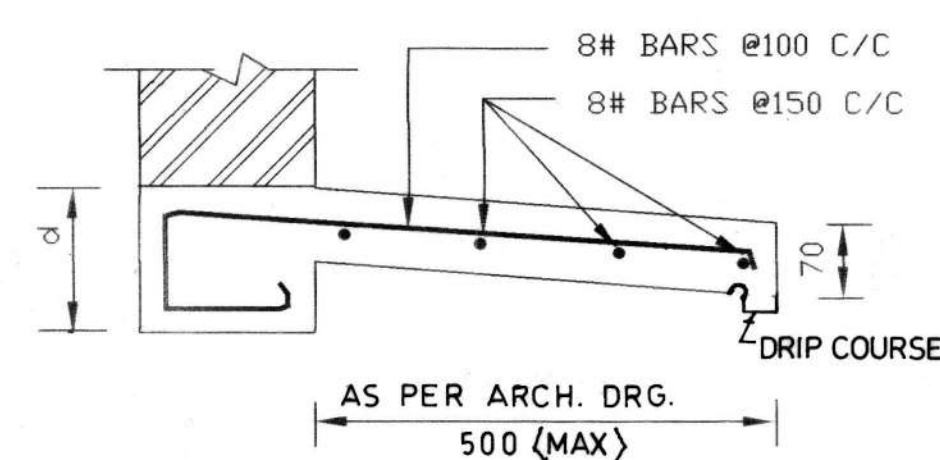
**DETAIL OF PELMET BOX**



**ROOF PROJECTION WITHOUT FACIA**



**DETAIL OF CHAJJA**



**DETAIL OF CHAJJA IN SLOPE**

## NOTES

1. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
2. ALL DIMENSIONS ARE GIVEN IN MILLI-METRES UNLESS OTHERWISE SHOWN.
3. FIGURED DIMENSIONS SHALL BE FOLLOWED.
4. REINFORCEMENT IN TOP SLAB OF THE BUILT IN ALMIRAH SHALL BE SAME AS THAT IN CONTINUOUS RCC SHELF.
5. WIDTH OF GAP SHALL BE 25mm UPTO 3.0 M HEIGHT OF BLDG. EVERY ADDITIONAL 3.0 M HEIGHT OR PART THEREOF, INCREASE THE GAP BY 7.5mm FOR SEISMIC CO-EFFICIENT LESS THAN 0.08 AND 10mm FOR SEISMIC COEFFICIENT GREATER THAN 0.08.
6. LENGTH OF SLOTTED HOLES FOR FIXING ALUMINIUM SHEET TO COVER CRUMPLE SHALL BE SAME AS THAT OF GAP OF CRUMPLE JOINT (MATCHING WITH ADJOINING WALLS)
7. TWO COATS OF HOT BROWN BITUMEN 85/25 @ 1.70 KG PER SQM SHALL BE APPLIED ON ALL EXPOSED FACES OF CRUMPLE JOINT AS SHOWN IN DETAILS AFTER THROUGH CLEANING OF CONCRETE SURFACE.
8. THE DETAIL GIVEN IN THIS DRG SHALL EQUALLY APPLICABLE FOR STONE MASONRY WALLS.
9. THIS DRG. SUPERCEDES DRG. NO. CE/TD-1109/95 SHT. NO. 1/1

1	3-7-2010	IN NOTES THE NOTE NO. 6 CORRECTED	18
SL.NO.	DATE	DESCRIPTION	INT.

## REVISIONS

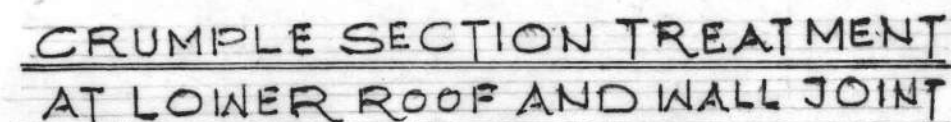
## TYPICAL RCC DETAILS OF LINTELS, CHAJJAS, SHELVES AND CRUMPLE SECTIONS ETC

DATE	31-12-2002	CHIEF ENGINEER UDHAMPUR ZONE	SHT. 1/3
DRN	SM S.S.SINGH & C.K.PREMI		
DES			
DF.NO.			
SCALE		DRG.NO.CE/TD/1191 /2002	

Wankar  
LT COL  
SO-11 (DESIGN)

LT COL  
SO-1 (DESIGN)  
for CHIEF ENGINEER





1.	FOR ALL NOTES REFER DRG. NO. CE/TD-1192/2002 SHT. NO. 1/12 TO 12/12
----	--

2.	06.2.2015	(a) NEW SECTION - 'CRUMPLE SECTION TREATMENT AT LOWER ROOF AND WALL JOINT' ADDED.	J
		(b) REMARKS 'WALLS WHERE EXIST' ADDED IN SECTION OF 'CRUMPLE JOINT AT ROOF LEVEL'.	
1	3-7-2010	INDRG CRUMPLE JOINT AT ROOF LEVEL & CRUMPLE JOINT BETWEEN WALL/CLS CORRECTED.	fz
SL.NO.	DATE	DESCRIPTION	INT.

### TYPICAL RCC DETAILS OF LINTELS, CHAJJAS, SHELVES AND CRUMPLE SECTIONS ETC

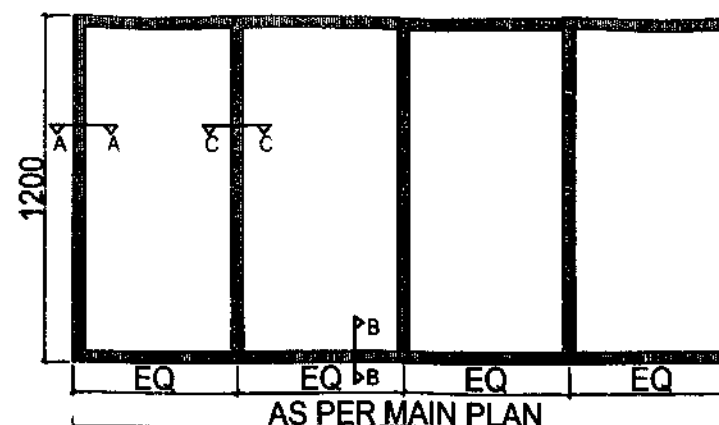
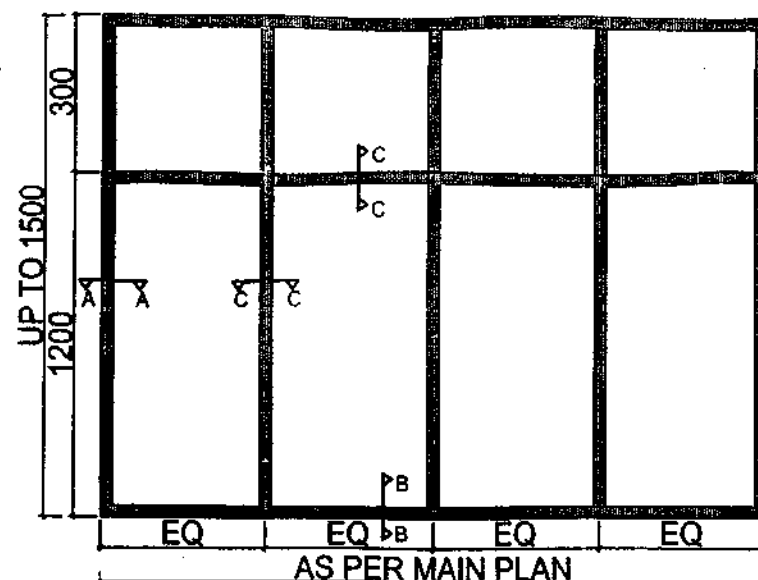
DATE	31-12-2002	CHIEF ENGINEER UDHAMPUR ZONE	SHT. 2 / 3
DRN	SM S.S.SINGH & C.K.PREMI		
DES			
DF.NO.			
SCALE		DRG.NO.CE/TD/1191 /2002	

Winkler  
LT COL  
SO-11 (DESIGN)

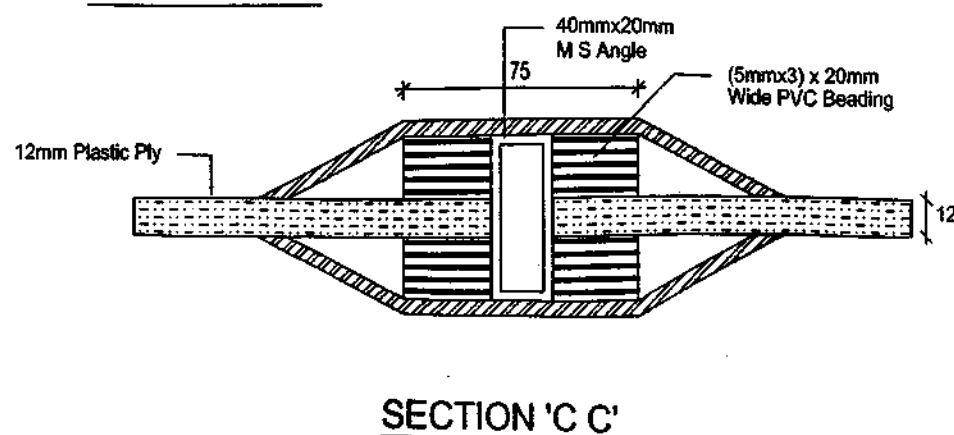
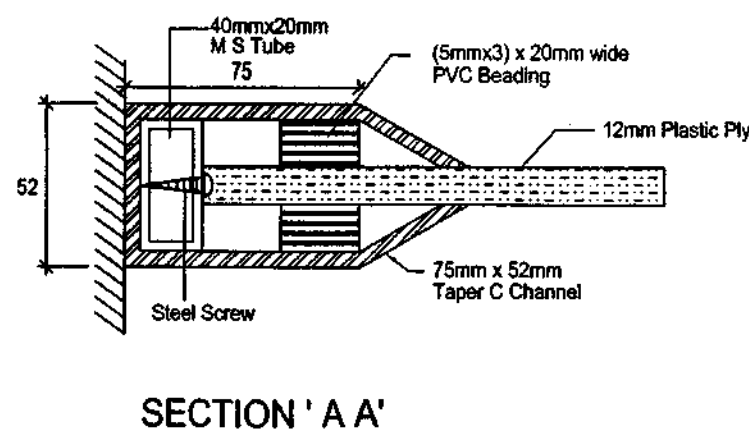
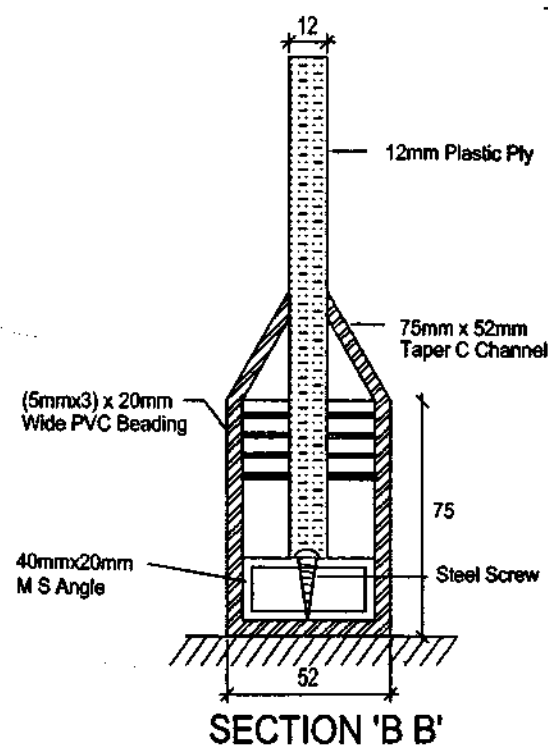
LT COL  
- SO-1 (DESIGN)  
for CHIEF ENGINEER







TYPICAL ELEVATION OF PVC PARTITION

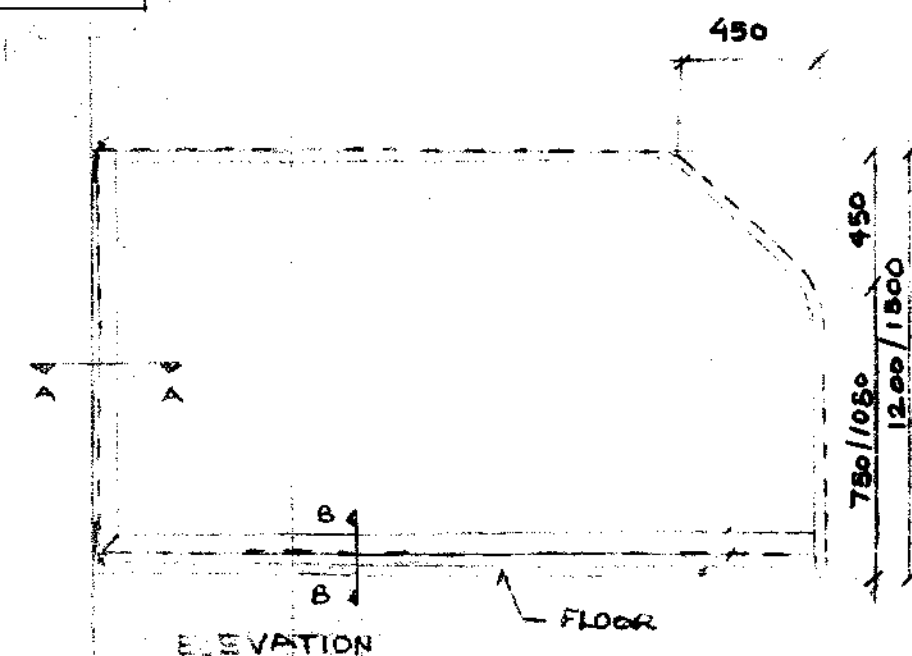


SPECIFICATION :-

PROVIDING AND FIXING OF 52 mm TH. PVC PARTITION CONSISTING OF 12 mm PLASTIC PLY PANEL REINFORCED WITH FRAME WORK MADE FROM 40 mm X 20 mm M.S. TUBES IN BETWEEN TWO M.S. TUBES 5 mm THICK PLAIN / PRINTED / PRELAM HEAT MOULDED \* RAJASHRI \* P V C 'C' CHANNEL OF SIZE 75X50 mm WITH FEATHERED EDGES SHALL BE FIXED ON THE FLOOR, WALL AND CEILING. PLASTIC PLY PANEL SHALL BE INSERTED IN THE P V C 'C' CHANNEL. THE FIRST AND LAST M.S. ANGLE SHOULD BE ERECTED SUCH THAT IT IS INSIDE A P V C 'C' CHANNEL IN BETWEEN ADJOINING PLASTIC PLY PANEL 5 mm THICK X 75 mm WIDTH PLAIN / PRINTED / PRELAM P V C SHEET FEATHERED AT EDGES SHALL BE STUCK ON FRONT & BACK FACE USING SOLVENT CEMENT. IF THE HEIGHT OF PARTITION EXCEEDS 8 FEET; THEN 40mm X 20 mm M.S. TUBE IS WELDED HORIZONTALLY AT THE JOINT OF PANELS IN BETWEEN TWO VERTICAL ANGLES ETC. COMPLETE AS PER DIRECTION OF ENGINEER-IN-CHARGE, MANUFACTURERS SPECIFICATION & DRAWING.

NOTES:-

- CONTRACTOR TO CHECK ALL DIMENSION BEFORE EXECUTION OF THE WORK.
- ALL DIMENSIONS ARE IN MM.
- FIGURED DIMENSIONS SHALL BE FOLLOWED
- PVC SHEET TO BE SEALED WITH SOLVENT CEMENT. (PVC PIPE JOINT ADESHIVE).
- PVC FRAME SHALL BE FIXED WITH PARTITION USING 100 mm LONG M.S. SCREWS THROUGH THE FRAME FOR USING PVC FASTENERS.
- ALL THE DETAILS OF PVC PARTITIONS SHOWN IN THE DRG ARE AS PER THE INFORMATION GIVEN BY RAJASHRI PLASTIWOOD, INDORE (MP).
- COLOUR OF THE PVC SHEET, PVC PLASTIC PLY PANEL TO BE FINALISED BY ENGR-IN-CHARGE.
- ALL THE TAPER 'C' CHANNEL & TAPER STRIPS 5 mm PVC SHEET BE USED.
- SH- DENOTE SIDE HUNG.

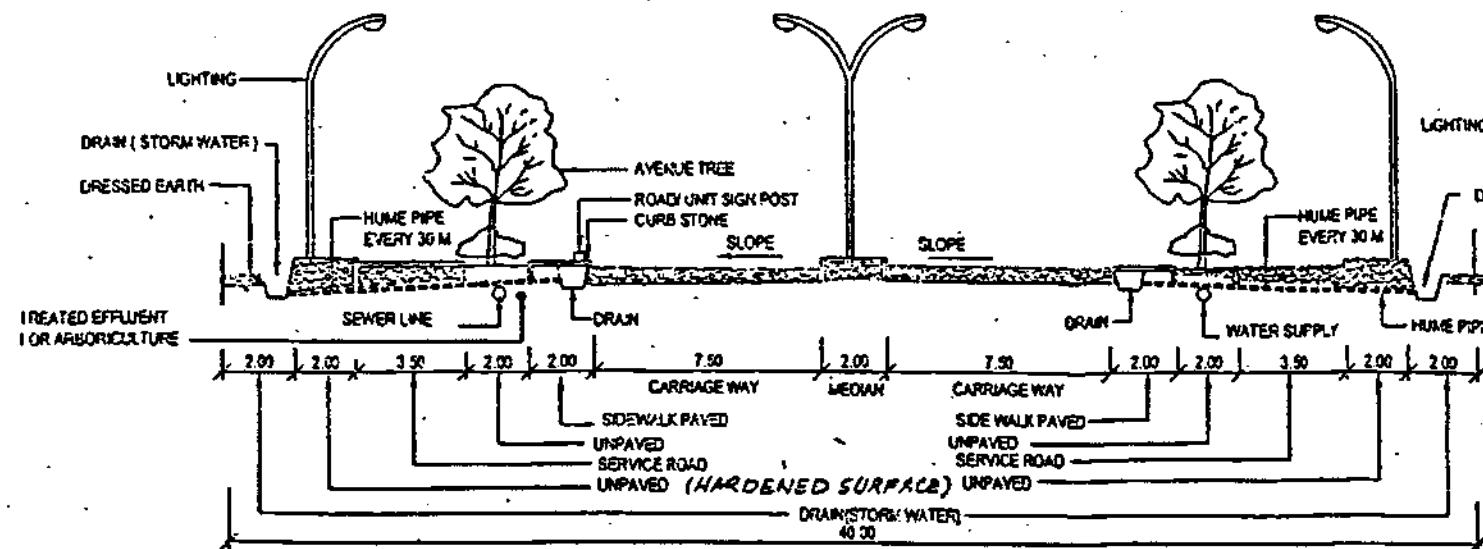


01	18.12.12	ELEVATION OF SOLID PVC PARTITION SUBK ADDED	2
SN	DATE	DESCRIPTION	INITIAL
REVISION			
PVC PARTITION			
SOLID PVC PARTITION			
PLAN ELEVATION SECTION & DETAILS			
DATE	30 JUN 2009	CHIEF ENGINEER	SHT NO
DRN	D V REDDY	UDHAMPUR ZONE	1/2
TCD	---	UDHAMPUR	
CKD	---		
SCALE	AS SHOWN	DRG NO - CEUZ / TD / 1300 / 09	

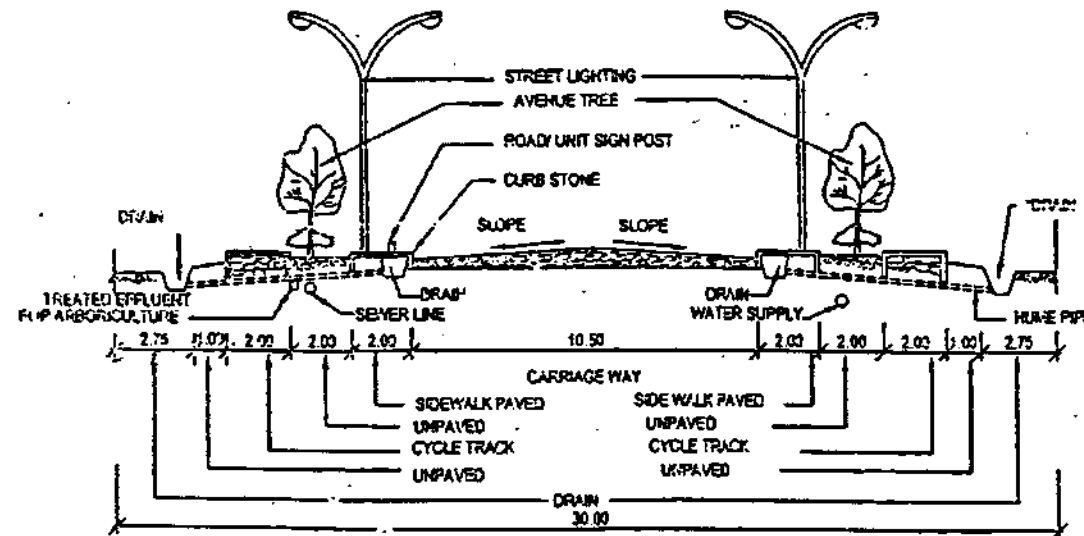
AAD (ARCH)

LT COL  
SENIOR ARCHITECT  
FOR CHIEF ENGINEER

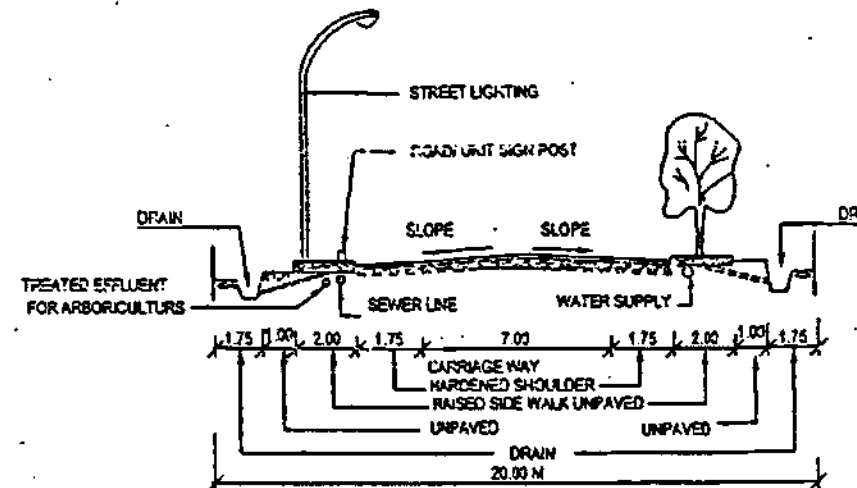




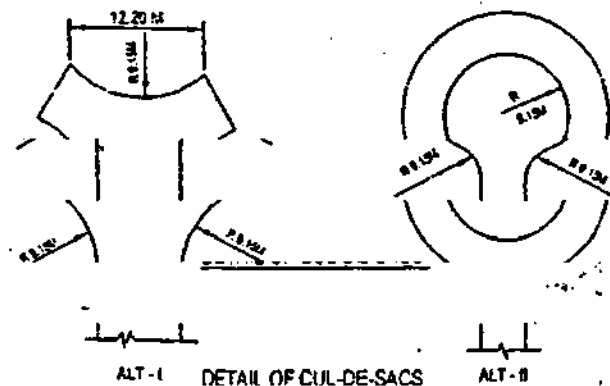
40 M RIGHT OF WAY RD - 1



30 M RIGHT OF WAY RD - 2

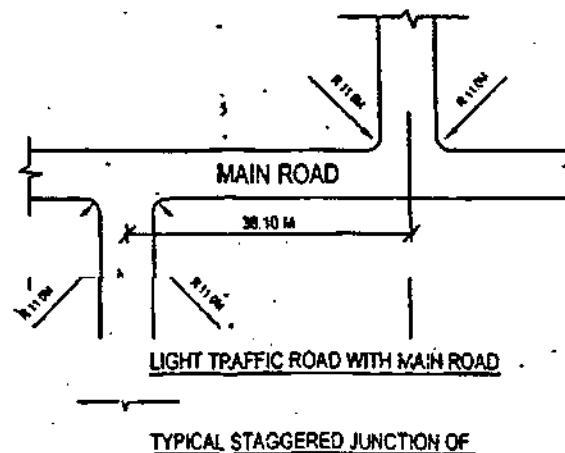


20 M RIGHT OF WAY RD - 3

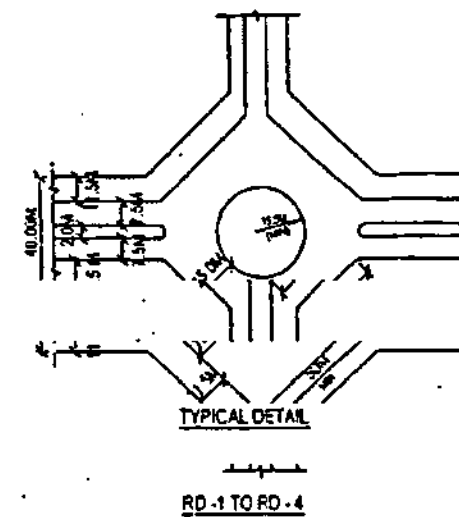


ALT - I DETAIL OF CUL-DE-SACS

ALT - II



TYPICAL STAGGERED JUNCTION OF



TYPICAL DETAIL RD-1 TO RD-4

## NOTES

- ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN.
- FIGURED DIMENSIONS SHALL BE FOLLOWED.
- THE WIDTH & DEPTH OF STORM WATER DRAIN SHOWN ON THE DRG IS INDICATIVE ONLY. THE EXACT SIZE SHALL BE DECIDED BY ENGINEER IN CHARGE AS PER SURFACE DRAINAGE SCHEME.
- POSITION OF TREES IS INDICATIVE. THE ACTUAL TYPE, NAME AND SPACING OF TREES TO BE AS PER ARBORICULTURE SCHEME.
- THE LOCATION OF THE STREET LIGHT POLES SHOULD BE KEPT AS MARKED VERTICALLY CROSS SECTION OF ROAD.
- THE SPACING OF THE POLES ARE TO BE DECIDED TO ACHIEVE UNIFORM ILLUMINATION AND AS PER LATEST TECH INSTRUCTIONS.
- THE MINIMUM HEIGHT OF THE CONDUCTORS SHOULD CONFORM TO THE STANDARDS LAID UNDER.
- AT CROSS-JUNCTION, TEE JUNCTIONS, ROUND ABOUT ETC THE POLES / STREET LIGHT SHOULD BE LOCATED TO ACHIEVE THE UNIFORM ILLUMINATION AROUND AND THEIR LOCATION SHOULD MINIMIZE THE TRAFFIC HAZARDS.
- CUL-DE-SACS LENGTH SHALL NOT BE MORE THAN 120M AS A RULE.
- SMALL BUSHES TO BE PLANTED BETWEEN AVENUE TREES.
- DESIGN THICKNESS OF GRANULAR MATERIAL BE ARRIVED AS PER IRC AND SOL PARAMETERS.
- MIN 40 MM THICK BITUMINOUS LAYER SHOULD BE LAID WITH MECHANICAL PAVEMENT OVER WBM.
- FOR RESURFACING MAINTENANCE MIN 30 MM TH BITUMINOUS LAYER SHOULD BE LAID WITH MECHANICAL PAVEMENT.
- BALANCE GRANULAR THICKNESS BE PROVIDED AS GSB AND WBM SUB BASE BASE COURSE.
- THIS DRG SUPERCEDES DRG NO. 125/00/PT-2/2011/R DATED 11.11.11.
- IRC GUIDELINES SHALL BE FOLLOWED.

## GENERAL GUIDE LINES

- RD-4 SHALL BE ADOPTED AS ARTERIAL FOR ALL ROADS TAKING OFF FROM NATIONAL STATE HIGHWAYS IN THE MILITARY STATIONS WHERE DIV HQ OR ABOVE IS LOCATED.
- RD-2 SHALL BE ADOPTED FOR SUB ARTERIAL ROADS WHERE BDE HQ IS LOCATED.
- GEOMETRIC SHAPE & SPECIFICATION OF ELECTRIC POLE ALONG WITH LUMINARY AS PER REQUIREMENT BE PROVIDED.
- WHERE EVER ARRANGEMENT FOR USE OF TREATED EFFLUENT IS MADE ITS LINE SHALL BE PROVIDED AS INDICATED ON ROAD CROSS SECTION.
- RD-3 SHALL BE USED AS APPROACH TO UNITS AND MARRIED ZONES FROM THE DIAMETRIC APPROACHES.
- RD-4 SHALL BE USED AS APPROACHES WITHIN 1-2 KM UNITS & INDIAN APPROACHES TO THE MARRIED ACCOMMODATION.
- THE FOLLOWING GRADIENTS ARE RECOMMENDED IN THE PLAINS AND UNDOULATING CONTOUR.

DESCRIPTIONS	FLAT GRADIENTS	LIMITED GRADIENTS	SHORT STRETCHES NOT EXCEEDING 100M
(A) FLAT OR ROLLING TOPOGRAPHY	1 IN 20	1 IN 20	1 IN 15
(B) HILLY OR MOUNTAINOUS TOPOGRAPHY	1 IN 20	1 IN 15	1 IN 12

- IT IS IMPORTANT TO AVOID STEEP GRADIENTS AT APPROACHES TO ROAD JUNCTION, ROUND ABOUTS, BRIDGES, ACUTE BENDS & WHERE THE MOVEMENT OF TRAFFIC IS RESTRICTED.
- WHEN RD-2 IS USED AS ARTERIAL ROAD IN A BDE AND LESSER SIZE STATION A CENTRAL VERGE OF 2M SHALL BE PROVIDED WITH LOW LEVEL LANDSCAPING. THE VERGE WILL BE OBTAINED BY DELETING UNPAVED PORTION PROVIDED IN CROSS SECTION.
- HEIGHT OF CURB STONE SHALL BE AS PER SITE CONDITIONS.

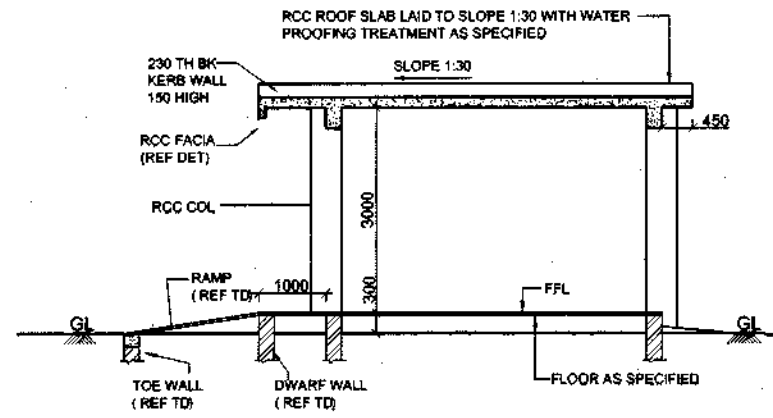
SNO	DATE	DESCRIPTION	INITIAL
REVISION			
DATE OF ARCHITECTURE			
E-IN-C'S BRANCH			
INTEGRATED HQ OF MOD (ARMY)			
CROSS SECTION FOR PAPER			
DRN	BREKSH RAMAR		1/1
DATE	08-SEP-2011	STANDARD ROAD	SHEET No
SCALE	1:100		
LAYOUT: MOD (ARMY) 11/11/11			



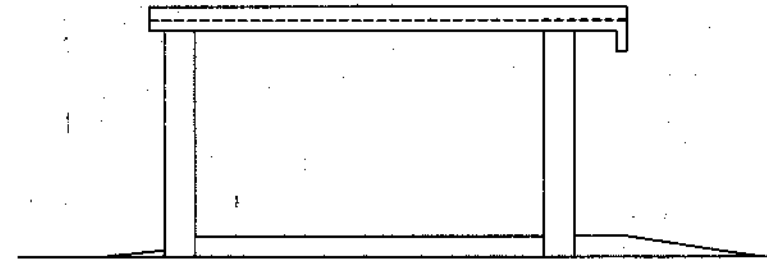
# 1. ADDITIONAL PRODUCT

SCHEDULE OF FINISHES		SH. NO.
DATE 01.12.2024	CHIEF ENGINEER	1
OFFR. MK ANANDU SINGH	UDHAMPUR ZONE	1
TOD		
CID		
SCALE	DRG NO.-CE/25-TO-44/75/F.202-4	
TECH OFFR.	DR. (P.O.) FOR CHIEF ENGINEER	

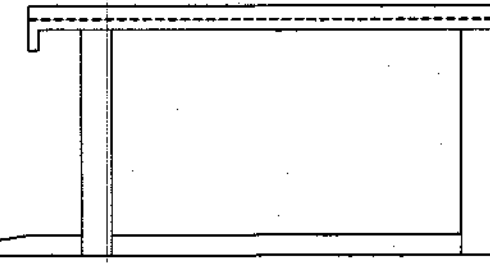




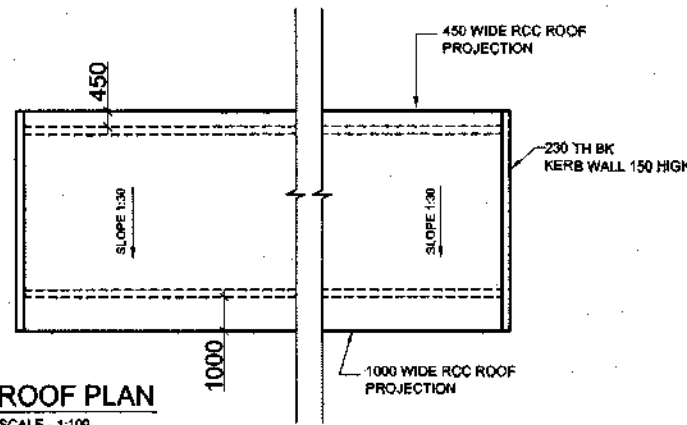
SECTION AT A-A'  
SCALE - 1:50



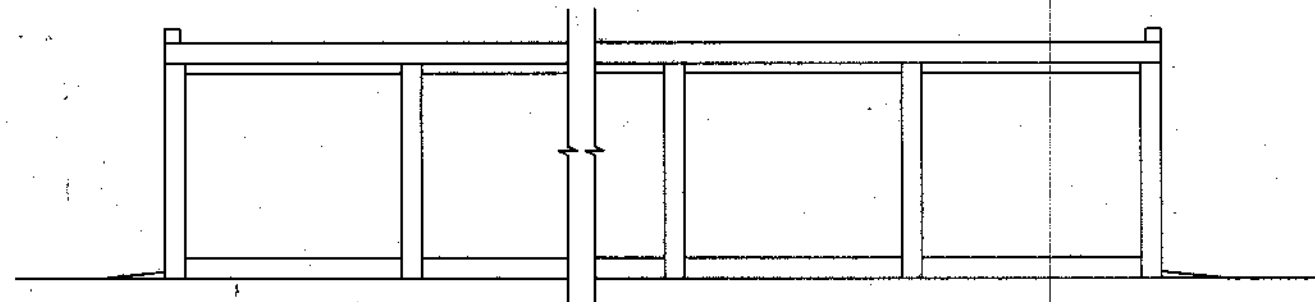
LEFT SIDE ELEVATION  
SCALE - 1:50



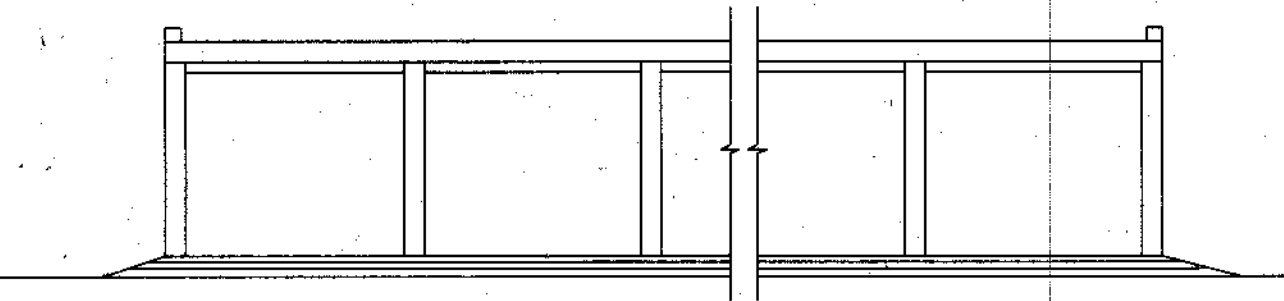
RIGHT SIDE ELEVATION  
SCALE - 1:50



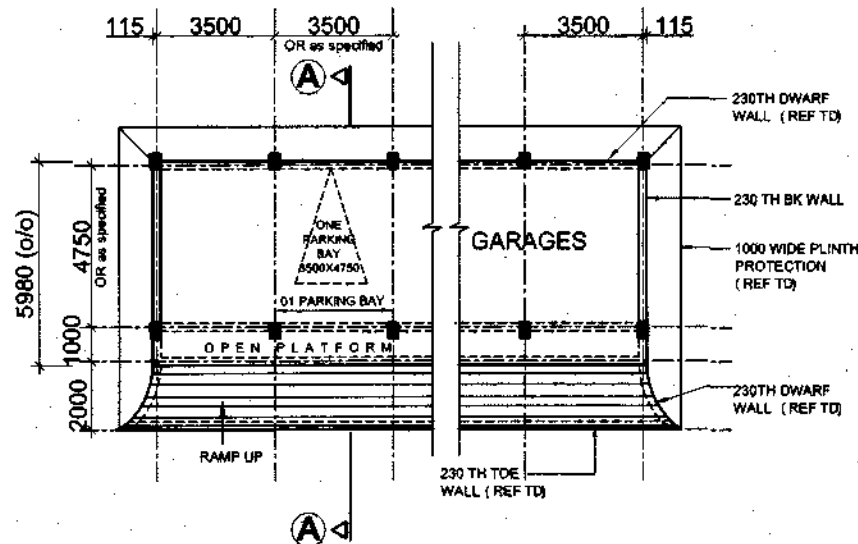
ROOF PLAN  
SCALE - 1:100



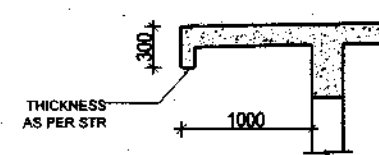
REAR ELEVATION  
SCALE - 1:50



FRONT ELEVATION  
SCALE - 1:50



PLAN  
SCALE - 1:100

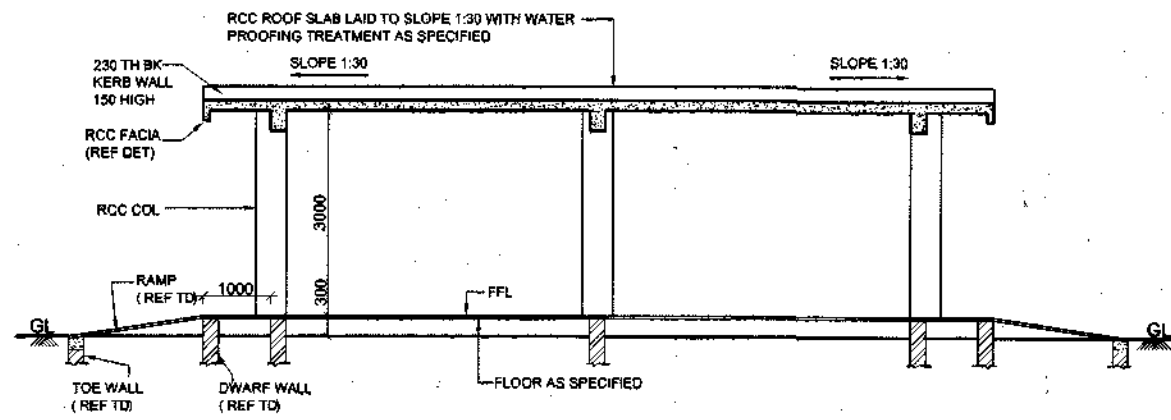


DETAIL OF RCC FACIA  
SCALE - 1:25

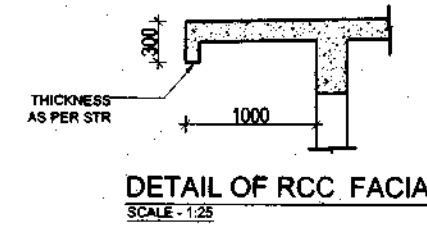
TYPICAL DETAILS FOR CAR GARAGES (SINGLE ROW)

SL NO	DATE	DESCRIPTION	INITIAL
REVISIONS			
TYPICAL DETAILS FOR CAR GARAGES (SINGLE ROW)			
PLAN, ROOF PLAN, ELEVATIONS, SECTION & DETAILS			
DATE	01.02.2024	CHIEF ENGINEER	SHT NO
DRN	SUBHRAJ	UDHAMPUR ZONE	1
TCD			2
CKD			
SCALE	AS SHOWN (A-2)	DRG NO- CEUZ / STD - 447 / 2024	
TECH OFFR		DY ARCH	DIR (ARCH) FOR CHIEF ENGINEER

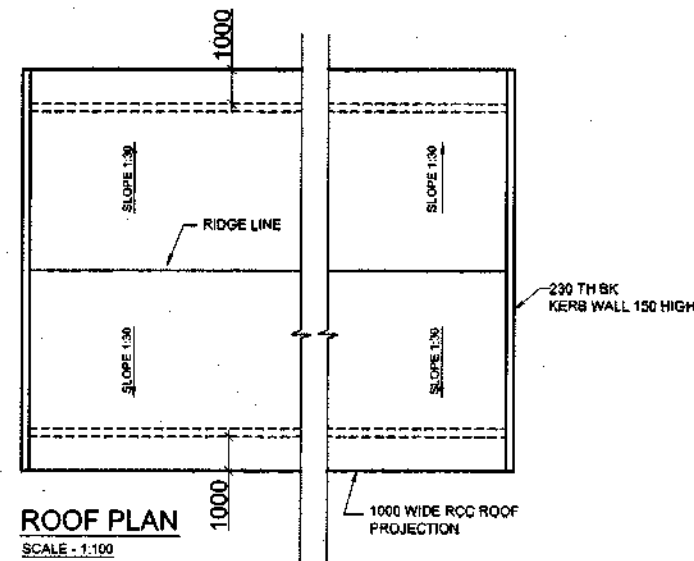




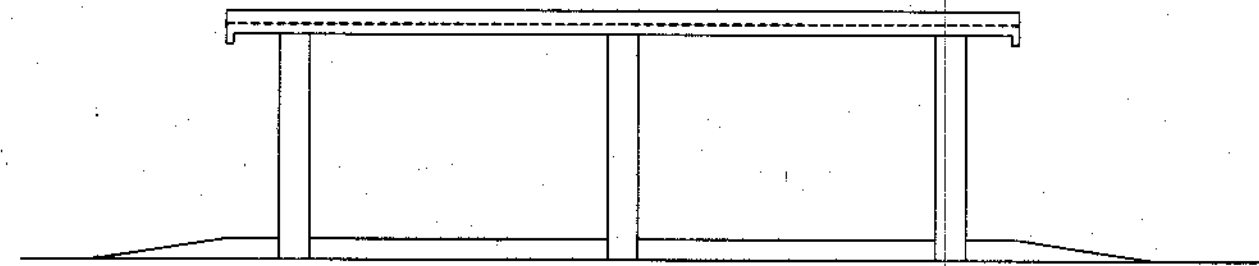
SECTION AT A-A  
SCALE - 1:50



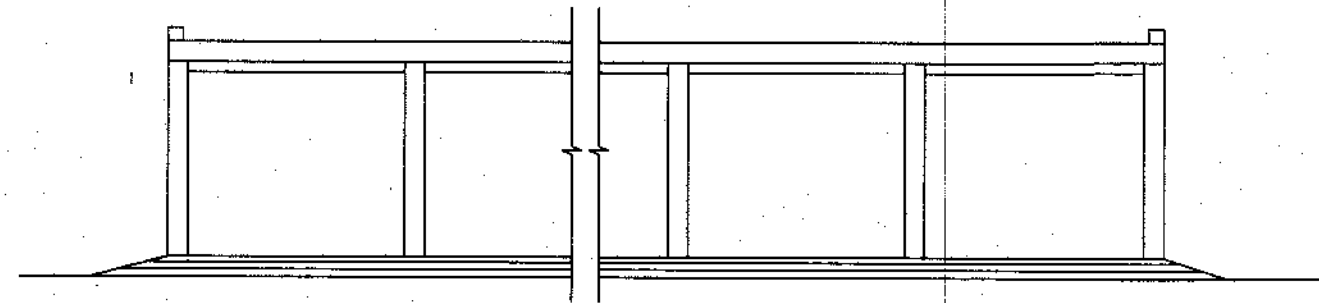
DETAIL OF RCC FACIA  
SCALE - 1:25



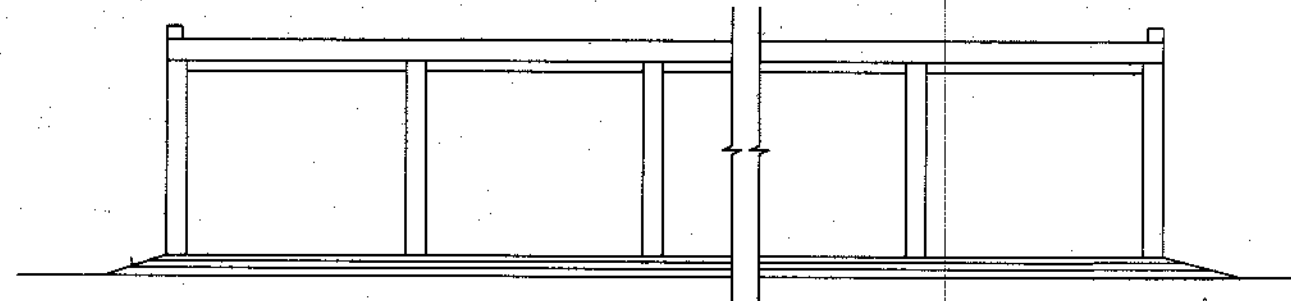
ROOF PLAN  
SCALE - 1:100



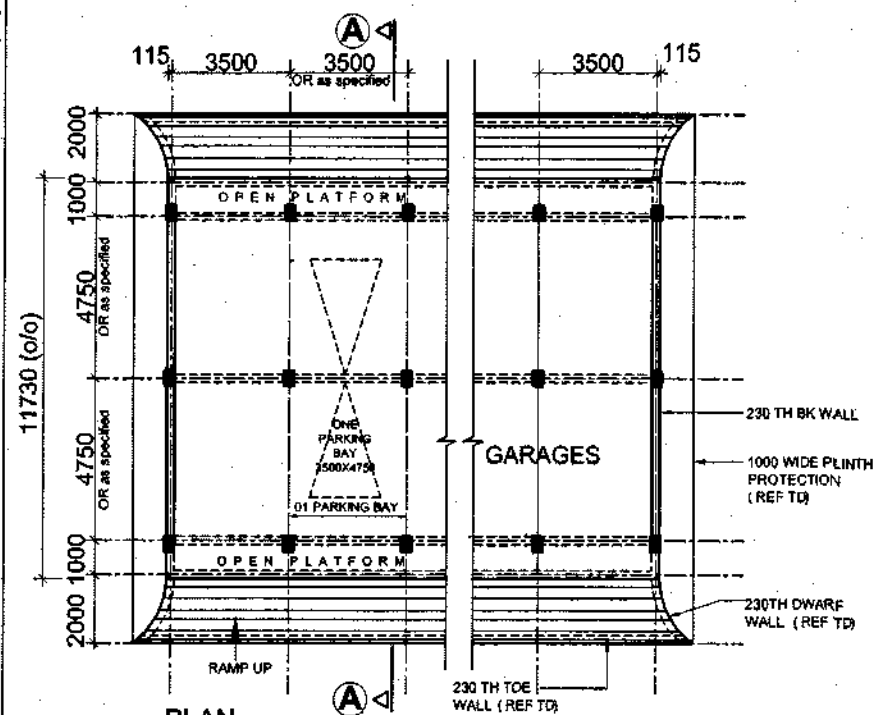
LEFT & RIGHT SIDE ELEVATION  
SCALE - 1:50



REAR ELEVATION  
SCALE - 1:50



FRONT ELEVATION  
SCALE - 1:50



PLAN  
SCALE - 1:100

TYPICAL DETAILS FOR CAR GARAGES (DOUBLE ROW)

SL NO	DATE	DESCRIPTION	INITIAL
REVISIONS			
TYPICAL DETAILS FOR CAR GARAGES (DOUBLE ROW)			
PLAN, ROOF PLAN, ELEVATIONS, SECTION & DETAILS			
DATE	01.02.2024	CHIEF ENGINEER	SHT NO
DRN	SUB NIRAJ	UDHAMPUR ZONE	2
TCD			2
CKD			
SCALE	AS SHOWN (A-2)	DRG NO- CEUZ / STD - 447 / 2024	
TECH OFFR		DY ARCH	DR (ARCH) FOR CHIEF ENGINEER



## NOTES

1. CONTRACTOR AND EXECUTIVES TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK. ANY DISCREPANCY WILL BE GOT CLARIFIED BY THIS OFFICE BEFORE EXECUTION.
2. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
3. FIGURED DIMENSIONS SHALL BE FOLLOWED.
4. THE MIX (GRADE) OF CONCRETE FOR ALL RCC WORK SHALL BE M-25 (DESIGN MIX) AS PER IS-456:2000. UNLESS OTHERWISE STATED.
5. ALL REINFORCEMENT IN RCC WORK SHALL BE HIGH STRENGTH STEEL BARS OF FE 500 D GRADE PRODUCED BY TMT PROCESS CONFORMING TO REQUIREMENTS OF IS 1786 - 2008. MINIMUM ELONGATION OF BARS SHALL BE 18%.
6. THE FOUNDATION IS DESIGNED FOR SAFE BEARING CAPACITY 10 T/M<sup>2</sup>. IN CASE OF VARIATION, THE MATTER SHALL BE REFERRED TO THIS OFFICE FOR REDESIGN. THE FOUNDATION SHALL NOT REST ON TREACHEROUS, ORGANIC OR FILLED UP SOIL.
7. THE MIN DEPTH OF FOUNDATION IF NOT SHOWN IN SCHEDULE EXCLUDING LEAN CONC SHALL BE 1.5 M FROM LOWEST ORIGINAL NATURAL GROUND LEVEL. WHILE DESIGNING THE FOUNDATION, IT HAS BEEN PRESUMED THAT THE VARIOUS POCKETS OF THE SITE SHALL BE BROUGHT TO ONE LEVEL BY CUTTING ONLY SO THAT AT NO POINT THE FOUNDATION LEVEL IS LESS THAN 1.5 M DEEP FROM NATURAL GROUND LEVEL.
8. DIMENSIONS OF FOOTING INDICATED IN FOUNDATION PLAN ARE EXCLUSIVE OF OFFSET OF LEAN CONC.
9. ALL RCC MEMBERS HAVE BEEN DESIGNED FOR FOLLOWING PARAMETERS AS PER IS : 456-2000 & IS : 1893-2016, IS 13920-2016.  
A) EXPOSURE CONDITION FROM DURABILITY CRITERIA - MODERATE  
B) FIRE RATING - 2.0 HOURS  
C) NOMINAL COVER TO REINFORCEMENT  
I) BEAMS - 30 MM  
II) COLUMNS - 40 MM  
III) SLABS - 30 MM  
IV) FOOTINGS - 50 MM  
D) SEISMIC ZONE - ZONE IV AS PER IS : 1893-2016 AMENDED TILL DATE ANY CHANGE IN ABOVE PARAMETERS SHALL BE REFERRED TO THIS OFFICE FOR DESIGN CHECK BEFORE EXECUTION, IMPORTANCE FACTOR OF 1.0 HAS BEEN CONSIDERED.
10. ALL OPENINGS SHALL BE PROVIDED WITH LINTEL AS PER TD UNLESS BEAMS ARE SPECIFICALLY INDICATED AT THE LOCATION IN THIS SERIES OF DRGS.
11. ALL WALLS ARE NON LOAD BEARING BRICK WALLS AND THESE SHALL BE CONSTRUCTED ONLY AFTER RCC FRAME STRUCTURE IS COMPLETED. THE ORDER OF CONSTRUCTIONS OF BRICK PANEL WALLS SHALL BE FROM TOP STOREY TO GROUND FLOOR. ALL BRICK WALLS WILL BE TIED TO RCC COLUMNS AS PER PROVISION OF NOTE NO 10.2 OF TD NO CEUZ/TD-1252/2007 SHEET NO 7/11.
12. BRICKS SHALL HAVE MINIMUM CRUSHING STRENGTH OF 75 KG / SQ CM AND THESE WILL MEET ALL OTHER REQUIREMENTS GIVEN IN BIS CODES. ALL BRICK WORK IN ONE BRICK THICK WALLS WILL BE LAID IN CEMENT SAND MORTAR 1:6.
13. THE STRUCTURAL DRAWINGS ARE BASED ON STRUCTURAL DESIGN CALCULATIONS CONTAINED IN DESIGN FOLDER OF THE PROJECT. THE PROVISION OF RELEVANT IS CODES HAVE BEEN CONSIDERED IN DESIGN OF THE STRUCTURE.
14. THE DESIGN / SPECIFICATIONS INCLUDED IN THESE DRAWING ARE IN ACCORDANCE WITH THE CURRENT GOVT. POLICY, IS SPECIFICATIONS, E-IN-C'S BRANCH TECHNICAL INSTRUCTIONS, SOUND ENGINEERING PRACTICE AND EARTHQUAKE RESISTANT DESIGN FOR ZONE IV.
15. WHEREVER THERE IS A DIFFERENCE IN SPACING OF COLUMN TIES AS SHOWN IN THIS DRAWING AND THAT SHOWN IN TD, THE LESSER SPACING SHALL BE ADOPTED.
16. IN THE SLABS THE DISTRIBUTION REINFORCEMENT OF 8 # @ 200 C/C SHALL BE PROVIDED IN THE CRANKED UP PORTION OF MAIN REINFORCEMENT, WHEREVER NOT INDICATED.
17. a. HALF BRICK WALLS WILL REST ON PB ONLY. THESE WALLS WILL BE BUILT IN CM 1 : 4 AND REINFORCED AS PER PROVISION OF NOTE 10.3 OF TD NO CEUZ/ TD- 1252/ 2007 SHEET NO 7/11. LINTEL BAND WILL BE PROVIDED ON HALF BRICK WALLS AS PER DETAILS GIVEN IN COMMON TYPICAL DRAWING.  
b. IN CASE HALF BRICK WALL OF HEIGHT MAX UPTO 2.40M SHOWN RESTING ON SLAB UPTO 3.50M CLEAR SPAN, ADDITIONAL REINFORCEMENT IN SLAB SHOULD BE PROVIDED AS SHOWN IN THE DRGS OF MISC DETAILS. HALF BRICK WALL MORE THAN 3.50M SPAN SHALL NOT BE RESTING ON SLAB. AND BEAM WILL BE PROVIDED EVEN IF NOT SHOWN IN DRG.  
c. IN HALF BRICK PARTITION WALLS 2-8 # BAR SHALL BE PROVIDED AT EVERY FOURTH COURSE IN BRICK WORK.

Contd .....

## NOTES

18. OVER THE SUPPORT PORTION OF BEAMS AND THOSE OF THE SLABS, WHEREVER TWO DIFFERENT QUANTITIES OF TOP REINFORCEMENT IS PROVIDED ON EITHER SIDE IN THE SCHEDULE, LARGER OF TWO QUANTITIES WILL BE PROVIDED.
19. TOP OF PLINTH BEAM SHALL BE KEPT AT 50 MM BELOW FFL OF GF. IN CASE OF LOCATIONS HAVING DIFFERENT FFL ON TWO SIDES OF PB, TOP OF PB SHALL BE KEPT AT 40MM BELOW HIGHER FFL.
20. TORSION REINFORCEMENT SHALL BE PROVIDED IN SLABS WHICH ARE CAST MONOLITHICALLY WITH BEAMS.
21. HEIGHT OF SOFFIT OF LINTEL BEAMS (LB'S) SHALL BE AS INDICATED IN ARCH DRGS. IN CASE HEIGHT OF SOFFIT OF LB'S IS NOT INDICATED IN ARCH DRGS, THE SAME SHALL BE TAKEN AS 2100 FROM FINISHED LEVEL OF RESPECTIVE FLOOR.
22. BARS OF BEAM TERMINATING AT ANY SUPPORT IN A SPAN SHALL BE TAKEN INTO THE ADJOINING SPAN OF THAT SUPPORT FOR A DISTANCE EQUAL TO L<sub>d</sub> OR L/3 (WHERE 'L' IS THE ADJOINING SPAN) WHICHEVER IS MORE.
23. WIDTH OF CRUMPLE JOINT WHEREVER INDICATED SHALL BE TAKEN AS 40 MM. SUITABLE DETAILS FOR CRUMPLE JOINT AS PER LOCATION SHALL BE ADOPTED AS PER IS : 3414 TO OBTAIN EFFECTIVE SEAL AGAINST PENETRATION OF WATER.
24. THE SLOPE FOR THE ROOF SHALL BE MAINTAINED IN RCC SLABS SO THAT THE THICKNESS OF ROOF TREATMENT REMAINS CONSTANT AT ALL THE POINTS.
25. IN CASE OF VARIATIONS IN THE DETAILS GIVEN IN ARCH & STRUCTURAL DRGS, THE DETAILS GIVEN IN STRUCTURAL DRGS SHALL SUPERSEDE.
26. ENGINEER IN CHARGE TO ENSURE THAT SPACING FOR REINFORCEMENT IS AS PER CL 26.3 OF IS - 456 : 2000 (AS AMENDED). WHEREVER THE REINFORCEMENT IN BEAMS IS TO BE PROVIDED IN TWO LAYERS, SPACER BAR OF DIA 25# @ 800mm C/C SHALL BE PROVIDED BETWEEN TWO LAYERS.
27. AT SOME LOCATIONS SOFFIT OF THE RB/FB HAS BEEN PROVIDED AT THE TOP OF WINDOW / DOOR OPENINGS. AT SUCH LOCATIONS SLOPE OF THE ROOF SLAB SHALL BE SUITABLY MODIFIED TO ACCOMMODATE THE BEAM DEPTH.
28. LOCATION AND CAPACITY OF WATER TANK ON ROOF SLAB SHALL BE TAKEN AS PER THIS STRUCTURAL DRG. IRRESPECTIVE OF WHAT IS MENTIONED IN THE ARCH DRG.
29. SLOPE OF VERANDAH ROOF SHALL BE MAINTAINED IN PCC PADDING.
30. IF THERE IS ANY VARIATION BETWEEN GRID DIMENSION GIVEN IN STRUCTURAL DRAWING AND ARCHITECTURAL DRAWING, THE MATTER SHALL BE REFERRED TO DESIGN SECTION OF THIS HQ.
31. GARRISON ENGINEER SHALL THOROUGHLY STUDY THE VARIOUS PROVISIONS GIVEN IN THE TDs REFERED IN MAIN STRUCTURAL DRGS AND ENSURE THAT THESE ARE CATERED IN THE WORK DURING EXECUTION.
32. WHEREVER 8mm ROUND BARS ARE SPECIFIED IN TENDER AND DRAWINGS IT SHALL BE REPLACED WITH TOR STEEL 8mm.
33. GE WILL PERSONALLY ENSURE THAT SEISMIC PROVISIONS FOR BRICK MASONRY AND R.C.C. STRUCTURAL WORK ARE PROVIDED.
34. DETAILS GIVEN IN THIS DRG SHALL SUPERCEDE THE DETAILS GIVEN IN TDs.
35. THE GROUND UNDER THE FOUNDATION SHALL BE FULLY COMPACTED.
36. ALL FOOTINGS SHALL BE CENTRALLY PLACED WITH RESPECT TO THE COLUMN UNLESS NOTIFIED OTHERWISE.
37. R.C.C. SLAB THICKNESS IS INCLUDED IN DEPTH OF R.C.C. BEAM.
38. ALL R.C.C. BEAMS, LINTEL BEAMS OR SLABS WITH ONE OR MORE INTERMEDIATE SUPPORTS SHALL BE TREATED AS CONTINUOUS.
39. LEAN CONCRETE MIX SHALL BE AS PER CONTRACT SPECIFICATIONS.
40. CHAIRS SHOULD BE PLACED AT A MAX SPACING OF 1M AND AT CLOSER SPACING NECESSARY TO KEEP TOP REINFORCEMENT IN CORRECT POSITION.
41. COVER BLOCK SHOULD BE OF M25 DESIGN MIX CONCRETE.
42. ALL SLOPING BEAMS AND SLABS WILL BE PROVIDED WITH ADDITIONAL REINFORCEMENT AT THEIR RIDGE AS INDICATED IN COMMON TYPICAL DETAILS DRG AND TD NO CEUZ/TD-1252/2007 SHT NO 9 / 11.
43. 230 THICK BRICKWALL ON FIRST AND SUBSEQUENT FLOOR SLABS SHALL NOT REST DIRECTLY ON SLAB. IF IT IS SHOWN ANYWHERE IN DRGS, MATTER SHALL BE REPORTED TO THIS HQ.
44. WHEREVER OVERALL DEPTH OF BEAM IS 750 OR MORE, SIDE FACE REINFORCEMENT OF 2 NOS #12 (ONE BAR ON EACH FACE) SHALL BE PROVIDED IF NOT SHOWN IN THE SCHEDULE.
45. ALL COLUMNS AT THE CRUMPLE SECTION WILL BE TREATED AS PER DETAILS GIVEN ON THIS DRG. ALL OTHER LOCATIONS OF THE CRUMPLE / EXPANSION JOINTS (i.e. ROOF TOP, SOFFITS OF BEAMS AND SLABS, FLOORS) WILL BE TREATED AS PER DETAILS GIVEN IN TD NO CE/TD-1191/2002.
46. FOR PREVENTION OF LEAKAGE AND SEEPAGE, MEASURES INDICATED IN TD NO. 1123/96 SHEET NO. 1/1 WILL BE ADOPTED.

## TYPICAL DETAILS DRAWINGS

1. CEUZ/TD - 1123 /1995	1/1	LEAKAGE, SEEPAGE AND DAMPNES PREVENTION AND CURE
2. CEUZ/TD - 1187/2002	1/1	DETAILS OF INTERNAL PLASTER GROOVES AND EXTERNAL PLASTER DETAILS AT JUNCTION OF WALL/BEAM/COLUMN
3. CEUZ/TD - 1191/2002	1/3 TO 3/3	TYPICAL RCC DETAILS OF LINTEL, CHAJJAS, SHELVES AND CRUMPLE SECTIONS ETC.
4. CEUZ/TD - 1250/2007	1/1	TYPICAL FOUNDATION AND BEAM / COLUMN JUNCTION DETAILS.
5. CEUZ/TD - 1251/2007	1/1	TYPICAL RCC DETAILS.
6. CEUZ/TD - 1252/2007	1/11 TO 11/11	GENERAL NOTES FOR RCC WORKS.
7. CEUZ/TD - 1584/2021	1/5 TO 5/5	TYPICAL DETAILS OF SEISMIC PROVISIONS.

SL. NO.	DATE	DESCRIPTION	INITIAL
REVISION			
TYPICAL DETAILS FOR CAR GARAGES			
NOTES			
DATE	01.02.2024	SHEET NO.	
DRN	DRN A. DAVAR	1	
DRN	DRN A. K. PANDY	5	
DRG	DRG NO. CEUZ/STD-447/ST1/2024		
SCALE	1/10		
TECH OFFR		DR (DESIGN) FOR CHIEF ENGINEER	



SCHEDULE OF RCC COLUMNS

SL NO.	COL NO.	SIZE	REINFORCEMENT			SECTION	SHAPE OF TIES	REMARKS
			LONGITUDINAL	TIES				
				CONCRETE REINFORCING (C/C)	NON CONCRETE REINFORCING (C/C)			
1.	C1	400 X 400	8 NOS - 16 #	10 # @ 70 C/C	8 # @ 150 C/C			

SCHEDULE OF RCC ROOF SLABS

SL NO.	SLAB MARK	THICKNESS 'T'	TYPE OF SLAB	REINFORCEMENT				DEPTH BARS	REMARKS
				SHORT SPAN MAIN BARS		LONG SPAN MAIN BARS			
				AT BOTTOM	EXTRA BARS AT TOP OVER SUPPORTS	AT BOTTOM	EXTRA BARS AT TOP OVER SUPPORTS		
1.	RS1	140	TWO WAY	8 # @ 130 C/C	8 # @ 260 C/C	8 # @ 130 C/C	8 # @ 260 C/C	8 # @ 250 C/C	1. SHORT SPAN REINFORCEMENT WILL BE PLACED BELOW THE BARS PLACED IN LONGER SPAN.

SCHEDULE OF ISOLATED FOOTINGS

COL NO.	COL MARK	SIZE OF FOOTING		THICKNESS			OVER ALL DEPTH (D) OF FOUNDATION BELOW SL.	REINFORCEMENT IN FOUNDATION				REMARKS
		LENGTH (L)	BREADTH (B)	d1	d2	d3		PARALLEL TO LENGTH		PARALLEL TO BREADTH		
								BOTTOM	TOP	BOTTOM	TOP	
F1		1800	1800	250	400	250	1500	12 # @ 150 C/C		12 # @ 150 C/C		PEDISTAL AS PER DETAIL IN TYPICAL SECTION

SCHEDULE OF RCC BEAMS :-

SL NO.	BEAM MARK	WIDTH OF BEAM	DEPTH OF BEAM	MAIN LONGITUDINAL REINFORCEMENT IN BEAMS		EXTRA BARS		SHEAR STIRRUPS IN BEAMS, TWO LEGS (d)	FROM FACE OF SUPPORT AND JUNCTION OF BEAMS TO DISTANCE 'X'	IN REMAINING PORTION OF THE BEAM	DISTANCE 'X'	FACE BARS	REMARKS
				MAIN LONGITUDINAL BARS THROUGHOUT									
				AT TOP	AT BOTTOM	AT TOP OVER SUPPORTS	AT BOTTOM IN MID SPAN						
1.	PB1	250	500	4 - 12 #	4 - 12 #	-	-	8# - 2L @ 70 C/C	8 # - 2L @ 100 C/C				1. EXTRA BARS AT TOP PROVIDED FOR A SPAN WILL BE EXTENDED TO ADJOINING SPAN FOR 1/3 LENGTH OF ADJOINING SPAN OR DISTANCE L/3 WHICHEVER IS HIGHER
2.	PB2	250	500	3 - 12 #	3 - 12 #	2 - 12 #	-	8# - 2L @ 70 C/C	8 # - 2L @ 100 C/C				

PLINTH BEAM (PB)

1.	PB1	250	500	4 - 12 #	4 - 12 #	-	-	8# - 2L @ 70 C/C	8 # - 2L @ 100 C/C				
2.	PB2	250	500	3 - 12 #	3 - 12 #	2 - 12 #	-	8# - 2L @ 70 C/C	8 # - 2L @ 100 C/C				

ROOF BEAM (RB)

1.	RB1	250	400	3 - 12 #	3 - 12 #	2 - 12 #	-	8# - 2L @ 70 C/C	8 # - 2L @ 100 C/C				
2.	RB2	250	400	3 - 16 #	3 - 12 #	2 - 12 #	-	8# - 2L @ 70 C/C	8 # - 2L @ 100 C/C				

DETAIL OF RAMP WITH PLATFORM AND OUTER PB

FOUNDATION PLAN SHOWING FOOTINGS, COL AND PLINTH BEAM

RCC ROOF PLAN SHOWING ROOF BEAM AND ROOF SLAB

NOTES

1. CONTRACTOR AND EXECUTIVES TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK. ANY DISCREPANCY WILL BE GOT CLARIFIED BY THIS OFFICE BEFORE EXECUTION.

2. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.

3. FIGURED DIMENSIONS SHALL BE FOLLOWED.

4. FOR ALL OTHER NOTES AND REF TO DRAWINGS FOR TD'S, REF DRG NO. CEUZW08T- SHEET NO. \_\_\_\_\_

REVISION

SL NO.	DATE	DESCRIPTION	INITIAL
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TYPICAL DETAILS FOR CAR GARAGES (SINGLE ROW)

FOUNDATION PLAN, RCC ROOF PLAN, SCHEDULE OF RCC COLUMNS, BEAMS AND ROOF SLABS

DATE: 01.02.2024

DRN: SUB A SHAMBER

DRB: SHALAK PANDAY

DRD: NTR

SCALE: NTR

CHIEF ENGINEER

UDHAMPUR ZONE

DRG.NO.CEUZ/STD-447/ST/2024


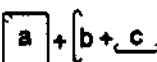
TECH OFFR

DIR (DESIGN) FOR CHIEF ENGINEER

SHEET NO.

2/5



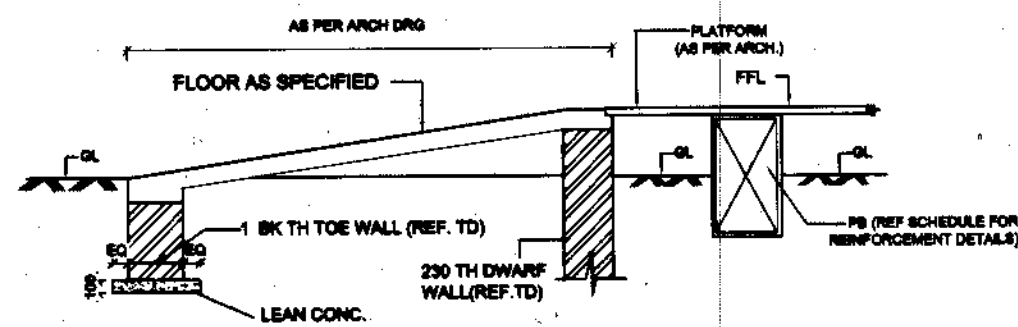
SCHEDULE OF RCC COLUMNS								
SL NO.	COL NO.	SIZE	REINFORCEMENT			SECTION	SHAPE OF TIES	REMARKS
			LONGITUDINAL	TIES				
				COMPRESSION REGION (CR)	NON COMPRESSION REGION (NCR)			
				TRANSVERSE / SPECIAL REINFORCEMENT (TIES AND LIGS) FOR FULL DEPTH OF BEAMS, 400 DEPTH IN FOUNDATIONS AND PER LENGTH 1/2 ON EITHER SIDE OF THE INTERSECTING BEAMS AS PER PB NO.6 AND 10 ON CE / TO NO. 10M / 2001 SNT. NO. 66.	TRANSVERSE REINFORCEMENT IN BALANCE USABLE PORTION			
1.	C1	400 X 400	8 NOS - 16 #	10 # @ 70 C/C	8 # @ 150 C/C			

SCHEDULE OF RCC ROOF SLABS									
SL NO	SLAB MARK	THICKNESS 'T'	TYPE OF SLAB	REINFORCEMENT				DISTR. BARS	REMARKS
				SHORT SPAN MAIN BARS		LONG SPAN MAIN BARS			
				AT BOTTOM	EXTRA BARS AT TOP OVER SUPPORTS	AT BOTTOM	EXTRA BARS AT TOP OVER SUPPORTS		
ROOF SLABS (RS)									
1.	RS1	140	TWO WAY	8 # @ 130 C/C	8 # @ 260 C/C	8 # @ 130 C/C	8 # @ 260 C/C	8 # @ 250 C/C	1. SHORT SPAN REINFORCEMENT WILL BE PLACED BELOW THE BARS PLACED IN LONGER SPAN.

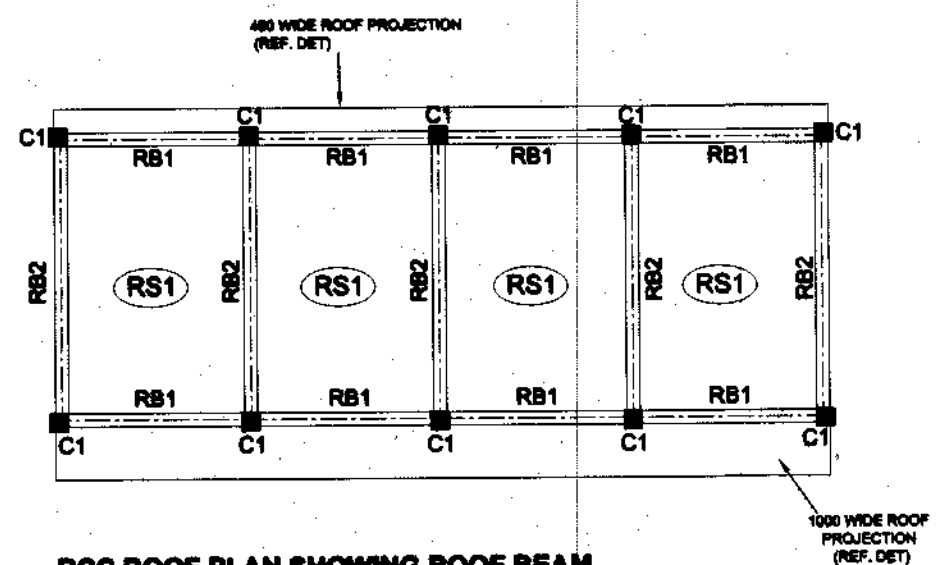
SCHEDULE OF ISOLATED FOOTINGS														
AS PER FOUNDATION PLAN	COL. MARK	COL. FOOTING MARK	SIZE OF COL.	SIZE OF FOOTING		THICKNESS			OVER ALL DEPTH (D) OF FOUNDATION BELOW GL	REINFORCEMENT IN FOUNDATION				REMARKS
				LENGTH (L)	BREADTH (B)	d1	d2	d3		PARALLEL TO LENGTH		PARALLEL TO BREADTH		
										BOTTOM	TOP	BOTTOM	TOP	
AS PER SCHEDULE		F1		1800	1800	250	400	250	1500	12 # @ 150 C/C	.	12 # @ 150 C/C	.	PIEDestal AS PER DETAILS IN TYPICAL SECTION

SCHEDULE OF RCC BEAMS :-												
SL NO	BEAM MARK	WIDTH OF BEAM	DEPTH OF BEAM	MAIN LONGITUDINAL REINFORCEMENT IN BEAMS				SHEAR STIRRUPS IN BEAMS, TWO LEGGED (2L)		DISTANCE 'X'	FACE BARS	REMARKS
				MAIN LONGITUDINAL BARS THROUGHOUT		EXTRA BARS		FROM FACE OF SUPPORT AND JUNCTION OF BEAMS TO DISTANCE 'X'	IN REMAINING PORTION OF THE BEAM			
				AT TOP	AT BOTTOM	AT TOP OVER SUPPORTS	AT BOTTOM IN MID SPAN					
PLINTH BEAM (PB)												
1.	PB1	250	500	4 - 12 #	4 - 12 #	-	-	8# - 2L @ 70 C/C	8 # - 2L @ 100 C/C			1. EXTRA BARS AT TOP PROVIDED FOR A SPAN WILL BE EXTENDED TO ADJOINING SPAN FOR 1/3 LENGTH OF ADJOINING SPAN OR DISTANCE 1d' WHICHEVER IS HIGHER
2.	PB2	250	500	3 - 12 #	3 - 12 #	2 - 12 #	-	8# - 2L @ 70 C/C	8 # - 2L @ 100 C/C			
ROOF BEAM (RB)												
1.	RB1	250	400	3 - 12 #	3 - 12 #	2 - 12 #	-	8# - 2L @ 70 C/C	8 # - 2L @ 100 C/C			
2.	RB2	250	400	3 - 16 #	3 - 12 #	2 - 12 #	-	8 # - 2L @ 70 C/C	8 # - 2L @ 100 C/C			

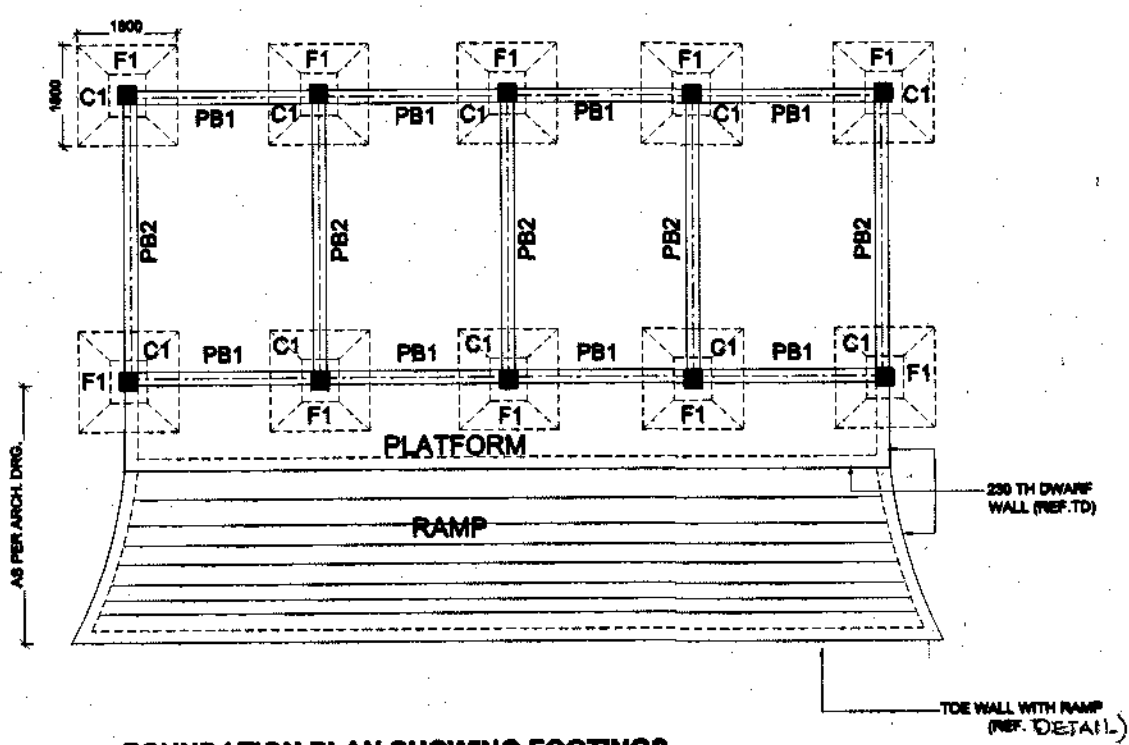
- NOTES**
- CONTRACTOR AND EXECUTIVES TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK. ANY DISCREPANCY WILL BE NOT CLARIFIED BY THIS OFFICE BEFORE EXECUTION.
  - ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.
  - FIGURED DIMENSIONS SHALL BE FOLLOWED.
  - FOR ALL OTHER NOTES AND REF TO DRAWINGS FOR TD & REF DRG NO. CRUZH08T- SHEET NO. \_\_\_\_\_



**DETAIL OF RAMP WITH PLATFORM AND OUTER PB**




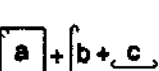
**RCC ROOF PLAN SHOWING ROOF BEAM AND ROOF SLAB**



**FOUNDATION PLAN SHOWING FOOTINGS, COL AND PLINTH BEAM**

SL NO.	DATE	DESCRIPTION	INITIAL
REVISION			
TYPICAL DETAILS FOR CAR GARAGES (SINGLE ROW)			
FOUNDATION PLAN, RCC ROOF PLAN, SCHEDULE OF RCC COLUMNS, BEAMS AND ROOF SLABS			
DATE: 01.02.2024	CHIEF ENGINEER UDHAMPUR ZONE		SHEET NO. 3/5
DRN: SLD A SHYAM			
DES: SLD A SHYAM			
CDS:			
SCALE: NTS	DRG. NO. CE07/STD-447/ST/2024		
TECH OFFR		DIR (DESIGN) FOR CHIEF ENGINEER	

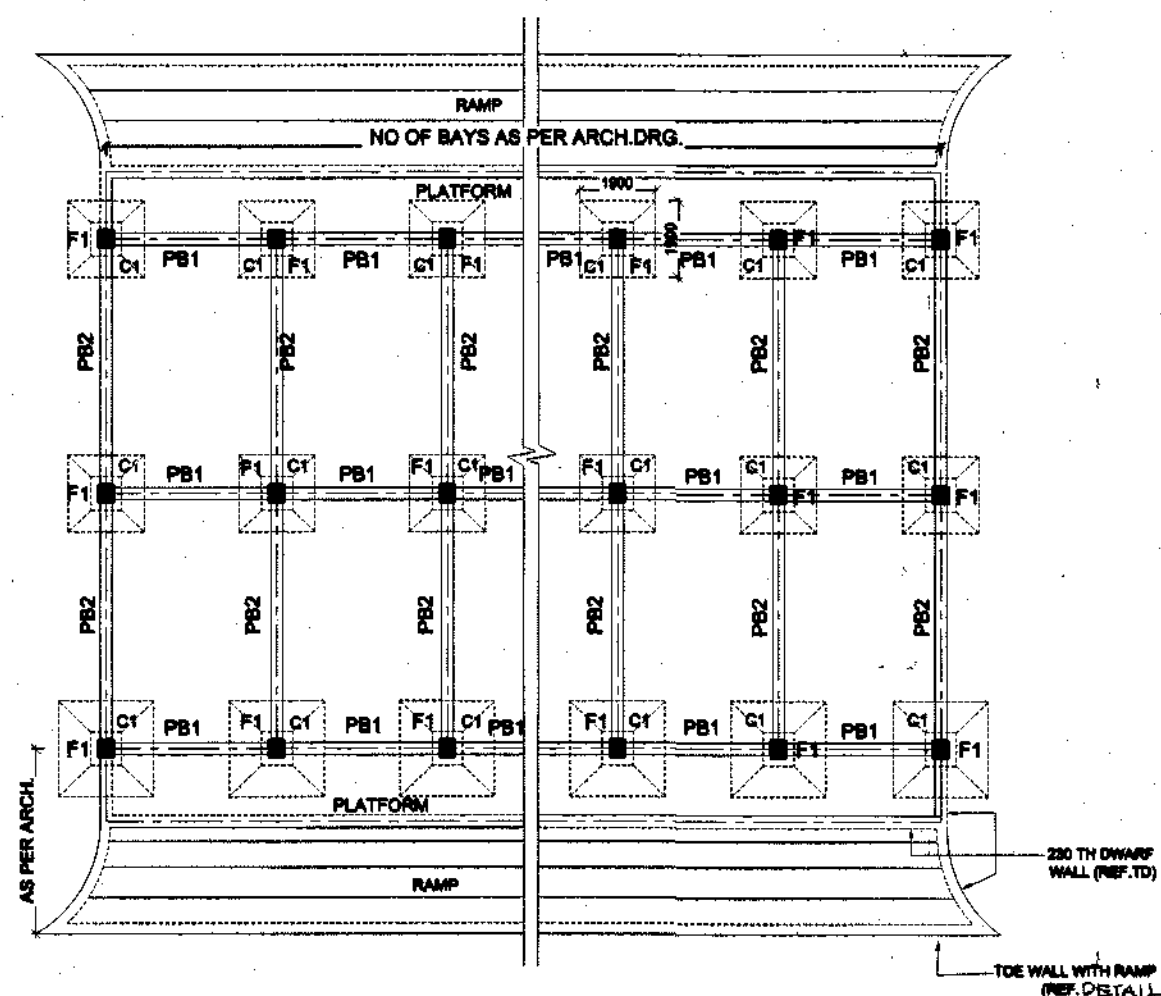


SCHEDULE OF RCC COLUMNS								
SL. NO.	COL. NO.	SIZE	REINFORCEMENT			SECTION	SHAPE OF TIES	REMARKS
			LONGITUDINAL	TIES				
				COMPRESS REGION (CR)	NON COMPRESS REGION (NCR)			
				TRANSVERSE / SPECIAL REINFORCEMENT (TIES AND LIGGS) FOR FULL DEPTH OF BEAMS, 400 DEPTH IN FOUNDATIONS AND FOR LENGTH 1/4 OF BOTH ENDS OF THE INTERSECTING BEAMS AS PER IS 456 AND IS 9000 / TO MS, 1984 / 2001 SFT. NO. 85.	TRANSVERSE REINFORCEMENT IN BALANCE BRIDGE PORTION			
1.	C1	400 X 400	8 NOS - 16 #	10 # @ 70 C/C	8 # @ 150 C/C			

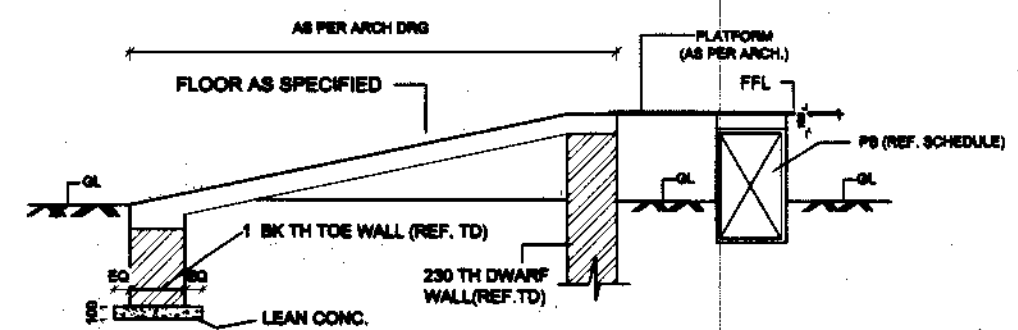
SCHEDULE OF ISOLATED FOOTINGS												
COL. MARK SIZE OF FOOTING AS PER SCHEDULE	COL. FOOTING MARK	SIZE OF FOOTING		THICKNESS			OVER ALL DEPTH (D) OF FOUNDATION BELOW GL	REINFORCEMENT IN FOUNDATION				REMARKS
		LENGTH (L)	BREADTH (B)	d1	d2	d3		PARALLEL TO LENGTH		PARALLEL TO BREADTH		
								BOTTOM	TOP	BOTTOM	TOP	
AS PER FOUNDATION PLAN AS PER SCHEDULE	F1	1800	1800	250	400	250	1500	12 # @150 C/C	.	12 # @150 C/C	.	PIEDestal AS PER DETAILS IN TYPICAL SECTION

SCHEDULE OF RCC ROOF SLABS									
SL NO	SLAB MARK	THICKNESS 'T'	TYPE OF SLAB	REINFORCEMENT				DISTR. BARS	REMARKS
				SHORT SPAN MAIN BARS		LONG SPAN MAIN BARS			
				AT BOTTOM	EXTRA BARS AT TOP OVER SUPPORTS	AT BOTTOM	EXTRA BARS AT TOP OVER SUPPORTS		
ROOF SLABS (RS)									
1.	RS1	140	TWO WAY	8 # @ 130 C/C	8 # @ 260 C/C	8 # @ 130 C/C	8 # @ 260 C/C	8 # @ 250 C/C	1. SHORT SPAN REINFORCEMENT WILL BE PLACED BELOW THE BARS PLACED IN LONGER SPAN.

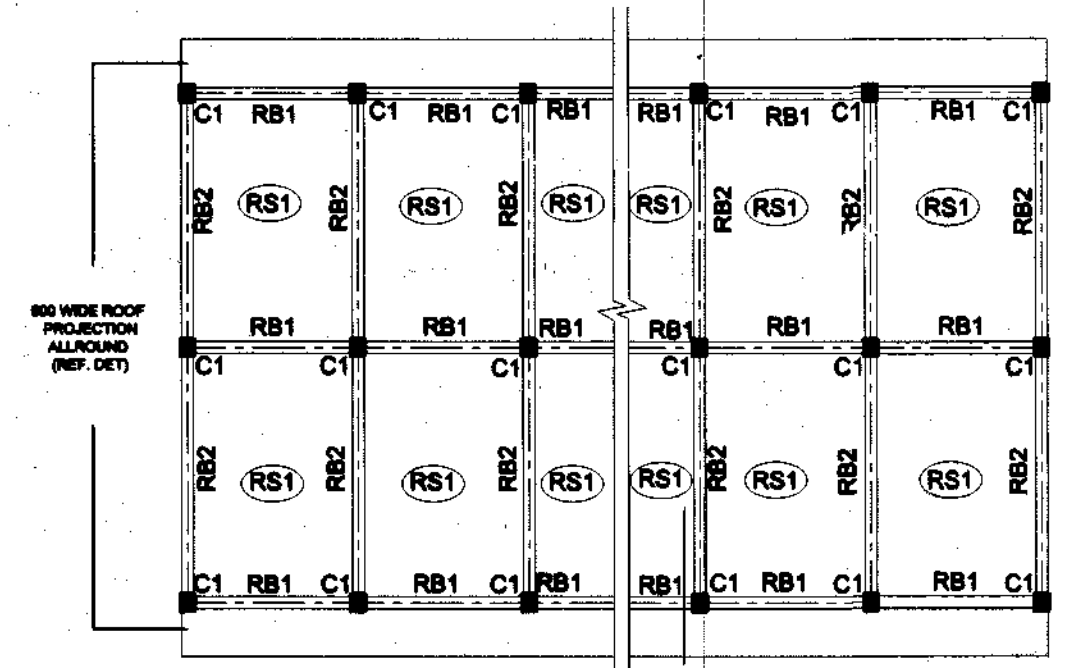
SCHEDULE OF RCC BEAMS :-												
SL NO	BEAM MARK	WIDTH OF BEAM	DEPTH OF BEAM	MAIN LONGITUDINAL REINFORCEMENT IN BEAMS				SHEAR STIRRUPS IN BEAMS, TWO LEGGED (S)		DISTANCE 'X'	FACE BARS	REMARKS
				MAIN LONGITUDINAL BARS THROUGHOUT		EXTRA BARS		FROM FACE OF SUPPORT AND JUNCTION OF BEAMS TO DISTANCE 'X'	IN REMAINING PORTION OF THE BEAM			
				AT TOP	AT BOTTOM	AT TOP OVER SUPPORTS	AT BOTTOM IN MID SPAN					
PLINTH BEAM (PB)												
1.	PB1	250	500	4 - 12 #	4 - 12 #	-	-	8# - 2L @ 70 C/C	8 # - 2L @ 100 C/C			1. EXTRA BARS AT TOP PROVIDED FOR A SPAN WILL BE EXTENDED TO ADJOINING SPAN FOR 1/3 LENGTH OF ADJOINING SPAN OR DISTANCE 'L' WHICHEVER IS HIGHER
2.	PB2	250	500	3 - 12 #	3 - 12 #	2 - 12 #	-	8# - 2L @ 70 C/C	8 # - 2L @ 100 C/C			
ROOF BEAM (RB)												
1.	RB1	250	400	3 - 12 #	3 - 12 #	2 - 12 #	-	8# - 2L @ 70 C/C	8 # - 2L @ 100 C/C			
2.	RB2	250	400	3 - 16 #	3 - 12 #	2 - 12 #	-	8 # - 2L @ 70 C/C	8 # - 2L @ 100 C/C			



FOUNDATION PLAN SHOWING COLUMNS, FOOTINGS AND PLINTH BEAM



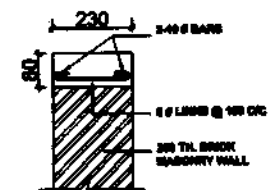
DETAIL OF RAMP WITH PLATFORM AND OUTER PB



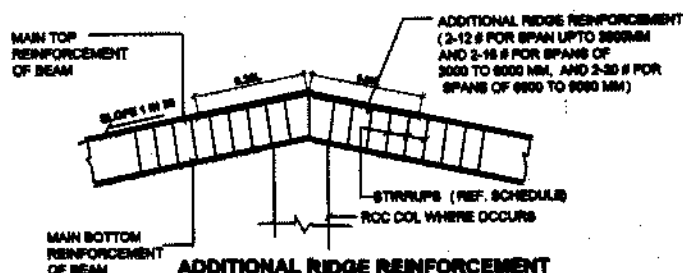
ROOF PLAN SHOWING COLUMN, ROOF BEAMS AND ROOF SLABS

SL. NO.	DATE	DESCRIPTION	INITIAL
REVISION			
TYPICAL DETAILS FOR CAR GARAGES (DOUBLE ROW)			
FOUNDATION PLAN AND ROOF PLAN, SCHEDULE OF FOOTINGS, COLUMNS, PLINTH BEAMS, ROOF BEAMS, ROOF SLABS & OTHER DETAILS			
DATE	C1.02.2024	DRG. NO. CE/2/STD-447/ST/2024	SHEET NO. 4/5
BY	SH. A. K. RAO	CHIEF ENGINEER	UDHAMPUR ZONE
CHKD			
SCALE	1/10		
TECH OFFR		DIR (DESIGN) FOR CHIEF ENGINEER	

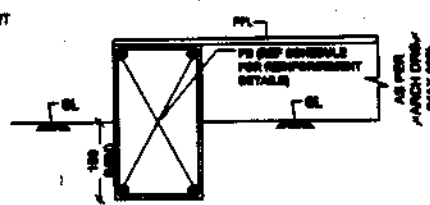




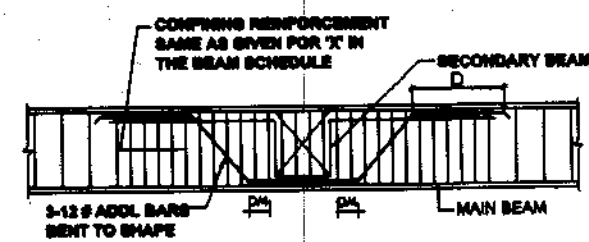
**DETAIL OF LINTEL BAND  
FOR 230 THICK BRICK  
MASONRY WALLS.**



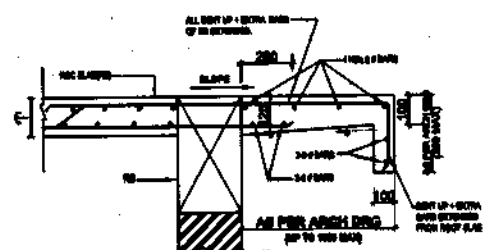
**ADDITIONAL RIDGE REINFORCEMENT  
IN SLOPING RCC BEAMS**  
(THIS SECTION WILL BE FOLLOWED WHERE DETAILS  
ARE NOT GIVEN SPECIFICALLY)



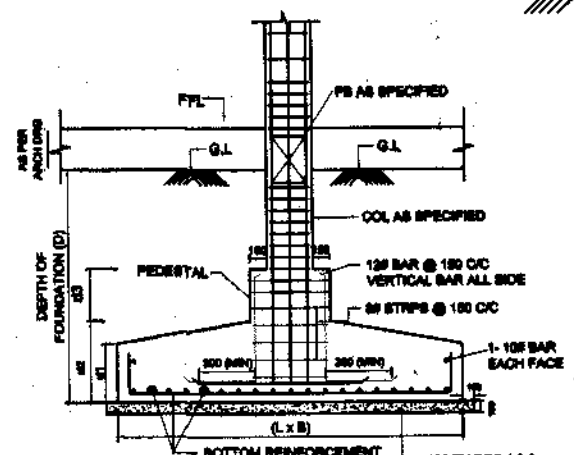
**TYPICAL X-SEC. OF PLINTH BEAM (PB)**  
PLINTH HT 300



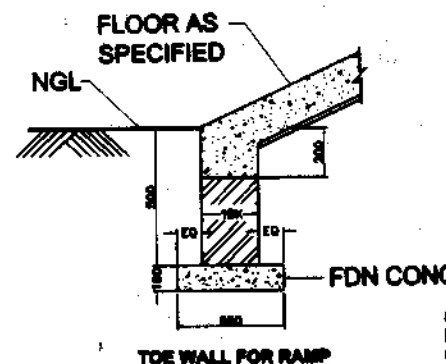
**REINFORCEMENT DETAILING  
AT INTERSECTING BEAMS**



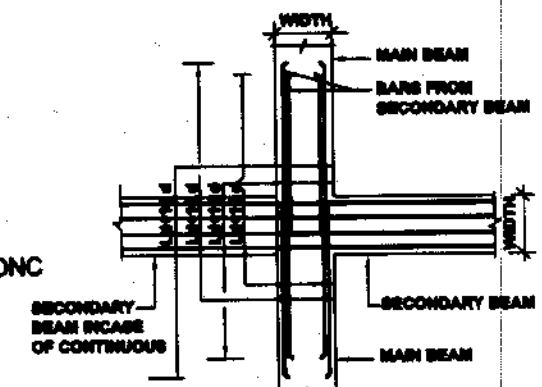
**DETAIL OF ROOF PROJECTION  
WITH DOWNWARD FACIA**



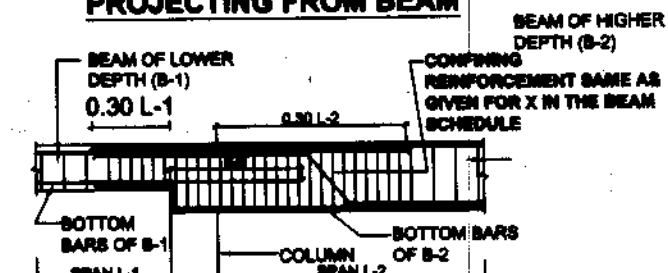
**TYPICAL SECTION OF ISOLATED FOOTING**  
(WITHOUT FOUNDATION BEAM)



**TOE WALL FOR RAMP**

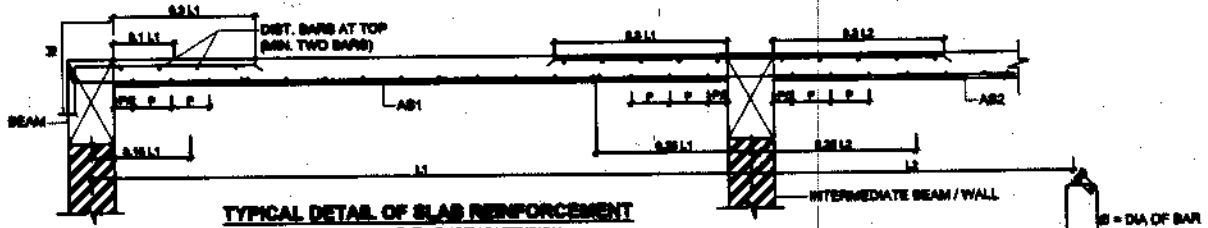


**TYP. DETAIL PLAN OF BEAM  
PROJECTING FROM BEAM**



**REINFORCEMENT DETAILING AT  
JUNCTION OF BEAMS OF  
DIFFERENT DEPTHS**

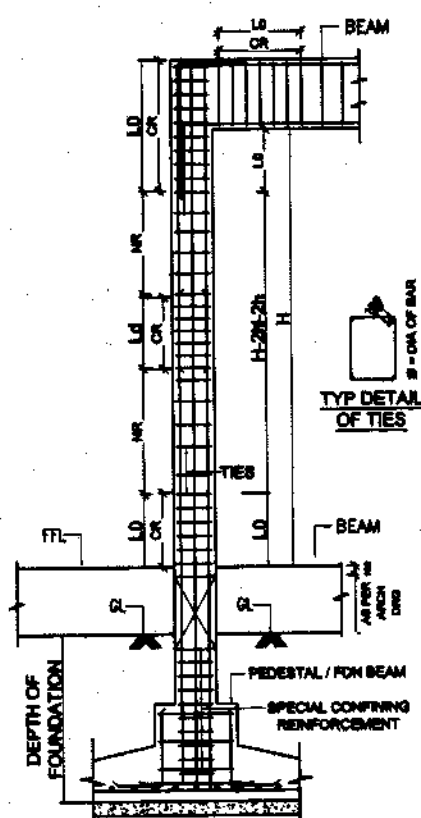
NOTE :- MAIN TOP AND BOTTOM BARS OF BEAMS WILL BE TAKEN THROUGH THE JUNCTION TO ADJOINING BEAM IF DIA INDICATED IN THE SCHEDULE FOR THESE BARS IS SAME. HOWEVER IF DIA OF THE BARS IN TWO BEAMS IS DIFFERENT, THEN DETAILING ARRANGEMENT INDICATED ABOVE WILL BE FOLLOWED.



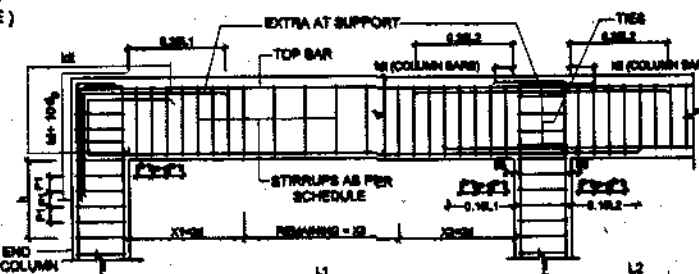
**TYPICAL DETAIL OF SLAB REINFORCEMENT**  
L = DEVELOPMENT LENGTH IN TENSION



**TYPICAL DETAIL FOR  
LAP SPICE IN BEAM AND COL.**



**TIE SPACING DETAIL**  
(CONFINEMENT REINFT REF SCHEDULE)



**TYPICAL DETAIL OF BEAM COLUMN AT END JUNCTION**  
L = DEVELOPMENT LENGTH IN TENSION

SL NO	DATE	DESCRIPTION	INITIAL
REVISION			

**TYPICAL DETAILS FOR CAR GARAGES**

**COMMON STRUCTURAL TYPICAL DETAILS**

DATE	01.02.2004	SHEET NO.	5/5
DRN	DR A SHARMA	<b>CHIEF ENGINEER UDHAMPUR ZONE</b>	
CRD	DR A SHARMA		
SCALE	NTS	DRG.NO.CBLZ/STD-447/ST/2024	

TECH OFFR  
DIR (DESIGN)  
FOR CHIEF ENGINEER



# LEGEND— INTERNAL ELECTRIFICATION

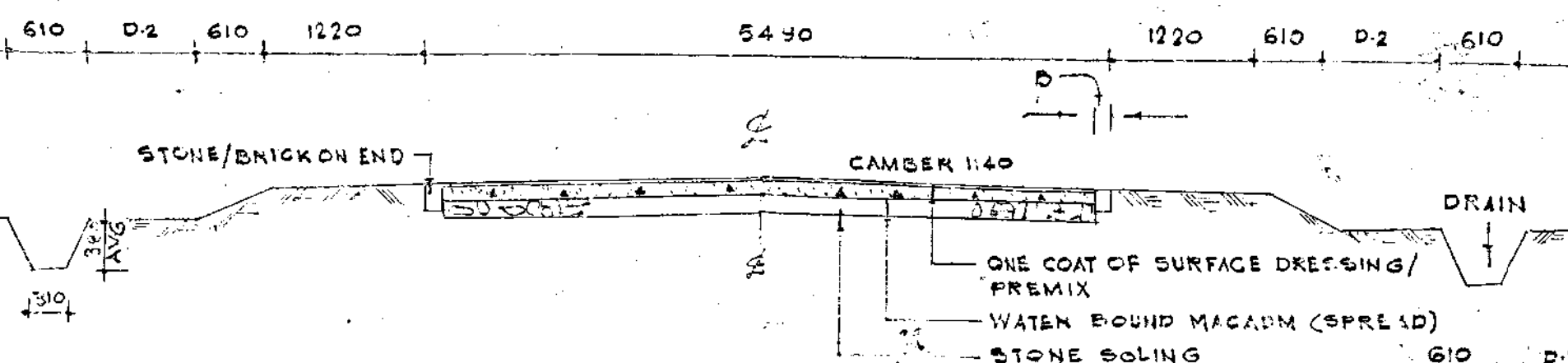
# ARCHITECT SECTION

SNO	DESCRIPTIONS	LEGEND	SNO	DESCRIPTIONS	LEGEND	SNO	DESCRIPTIONS	LEGEND	LEGEND FOR WATER SUPPLY		
1.	CEILING FAN POINT WITH FAN 1200 MM SWEEP (48)		25.	SWITCH SOCKET OUTLET 3 PIN 5 AMP					SL. NO.	DESCRIPTION	SYMBOL
2.	CEILING FAN POINT WITH FAN 1400 MM SWEEP (56)		26.	SWITCH SOCKET OUTLET 3 PIN 15 AMP					1.	2.	3.
3.	BRACKET /CABIN FAN		27.	SWITCH DP 15 AMP 250 VOLTS FOR GEYSER					1	MAIN SUPPLY	—S—S—
4.	EXHAUST FAN		28.	ELECTRIC BELL / BUZZER					2	PIPE TO O/H TANK FRESH WATER PIPE	—
5.	FAN REGULATOR WITH A SWITCH S.P ONE WAY		29.	MAIN SWITCH IC SPN 250 VOLTS (LIGHTING)					3	PIPE FROM O/H TANK TO WC'S & WHB	----
6.	PENDANT POINT		30.	MAIN SWITCH IC SPN 250 VOLTS POWER					4.	O/H TANK	
7.	FLUORESCENT MIRROR LIGHT		31.	MAIN SWITCH IC TPN 600 VOLTS					5.	TAP	—+—
8.	BATH ROOM LIGHT FITTING		32.	DB IC SPN 250 VOLTS (LIGHTING)					6	SOWER ROSE	—+—
9.	FLUORESCENT TUBE LIGHT FITTING 1x40 WATT		33.	DB IC SPN 250 VOLTS (POWER)					7.	STOP COCK	
10.	FLUORESCENT TUBE LIGHT FITTING 2x40 WATT		34.	DB IC TPN 500 VOLTS					<b>NOTES</b> 1. THE POSITION OF ELECTRIC ATTACHMENTS IS TENTATIVE AND CAN BE CHANGED BY ENGR IN CHARGE TO SUIT THE SITE CONDITION. 2. SEPARATE CIRCUITS SHALL BE PROVIDED FOR POWER AND LIGHT POINTS. 3. ALL CEILING FAN POINTS SHALL BE EARTHED AND EARTH WIRE SHALL BE CONNECTED TO THE MAIN EARTH. 4. ALL SWITCHES & SOCKETS OF PLANO TYPE & FAN REGULATORS SHALL BE FIXED INSIDE THE CI OR MALLEABLE IRON BOXES FIXED FLUSH WITH SURFACE OF WALL. 5. HEIGHT OF VENT PIPES SHALL BE 150MM MORE THAN HEIGHT OF SERVICE TANK FIXED WITH ELBOW AT TOP PROVIDED WITH MOSQUITO NET.		
11.	SINGLE WALL BRACKET LIGHT		35.	EARTH							
12.	CEILING LIGHT FITTING SQUARE OR CIRCULAR HANDI TYPE		36.	GEYSER POSITION							
13.	GLASS GLOBE WITH GALLERY ON BATTEN HOLDER		37.	TELEPHONE POINT							
14.	BULK HEAD LIGHT FITTING		38.	FAN HOOK WITH POINT WIRING							
15.	BULK HEAD LIGHT FITTING FLAME PROOF		39.	FAN HOOK WITHOUT POINT WIRING					2. 25-06-03 REVISED UP TO JUNE 03 1. 21-5-94 NOTES SER NO. 1155 ADDD REVISION		
16.	SINGLE BRACKET CANDLE LIGHT		40.	BATH ROOM SPOT LIGHT FITTING					<b>LEGEND</b> INTERNAL WATER SUPPLY & INTERNAL ELECTRIFICATION		
17.	PENDANT CANDLE LIGHT FITTING (CHANDELIER)		41.	HIGH WAY LIGHTS					DATE	12-5-90	SHT. NO.
18.	BATTEN LAMP HOLDER		42.	FLOOD LIGHTS					DRN.	SUBASH.	4/1
19.	SWITCH 5 AMP SINGLE POLE TWO WAY		43.	MERCURY / SODIUM VAPOUR LIGHTS					TCD	VIJAY	
20.	SWITCH 5 AMP SINGLE POLE ONE WAY		44.	MCCB / MCB'S WITH SHEET METAL ENCLOSURE					CKD	MEER	
21.	SWITCH 5 AMP SINGLE POLE ONE WAY FRAME PROOF		45.	DB'S SHEET METAL ENCLOSURE WITH MCB'S SP.					SCAU	N A	DRG. NO. CE/TD-1025/90
22.	SWITCH PUSH BUTTON TYPE FOR BELL / BUZZER SINGLE POLE ONE WAY		46.	DB'S SHEET METAL ENCLOSURE WITH MCB'S TP.					Meelachary ASSISTANT ARCHITECT		
23.	SWITCH 5 AMP SINGLE POLE ONE WAY WATER TIGHT								SENIOR ARCHITECT FOR C		
24.	DOUBLE BRACKET CANDLE LIGHT								TD-1025-1/1		



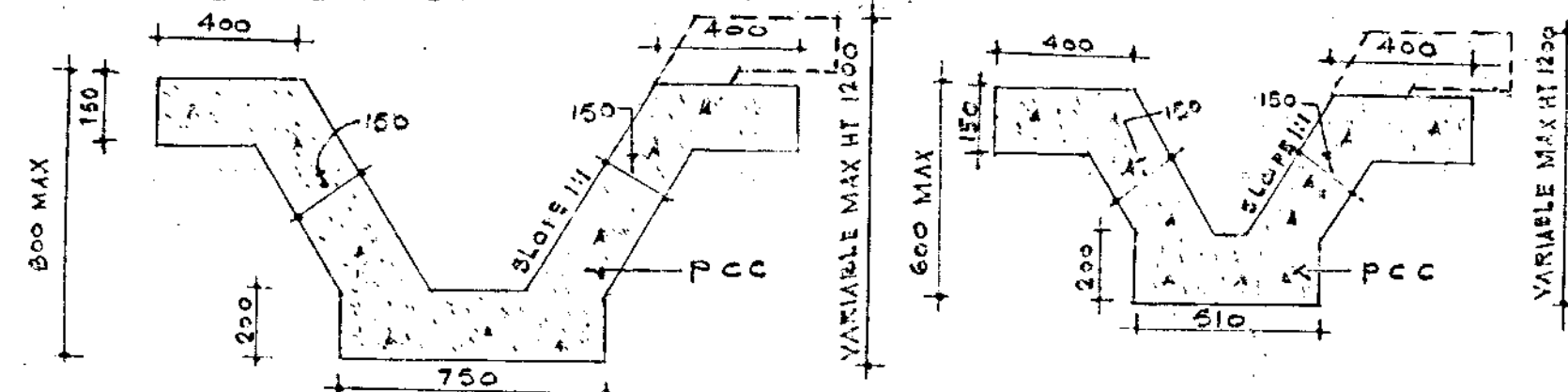
# NOTES

1. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF WORK.
2. FIGURED DIMENSIONS SHALL BE FOLLOWED.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.
4. AGGREGATE TO BE PROVIDED SHALL HAVE GRADATION AS PER IS 383. THIS SHALL BE CONFIRMED TO THE CONTRACTING OFFICE BEFORE EXECUTION.
5. THE STONE TO BE USED SHALL HAVE:
  - i) IMPACT VALUE NOT GREATER THAN 20%
  - ii) CRUSHING VALUE NOT GREATER 15%
6. THE ENGINEER IN CHARGE MAY VARY D-1 & D-2 TO SUIT SUBJECT TO THE CONDITION THAT D-1 WILL NOT EXCEED D-2 WILL NOT BE LESS THAN 30 MM. 300 MM.
7. THE FINISHED LEVEL OF THE ROAD SHALL BE 30 CM ABOVE THE AVERAGE GROUND LEVEL.



TYPICAL CROSS SECTION OF 5490 WIDE MAIN ROAD IN CUTTING

SCALE 1:50

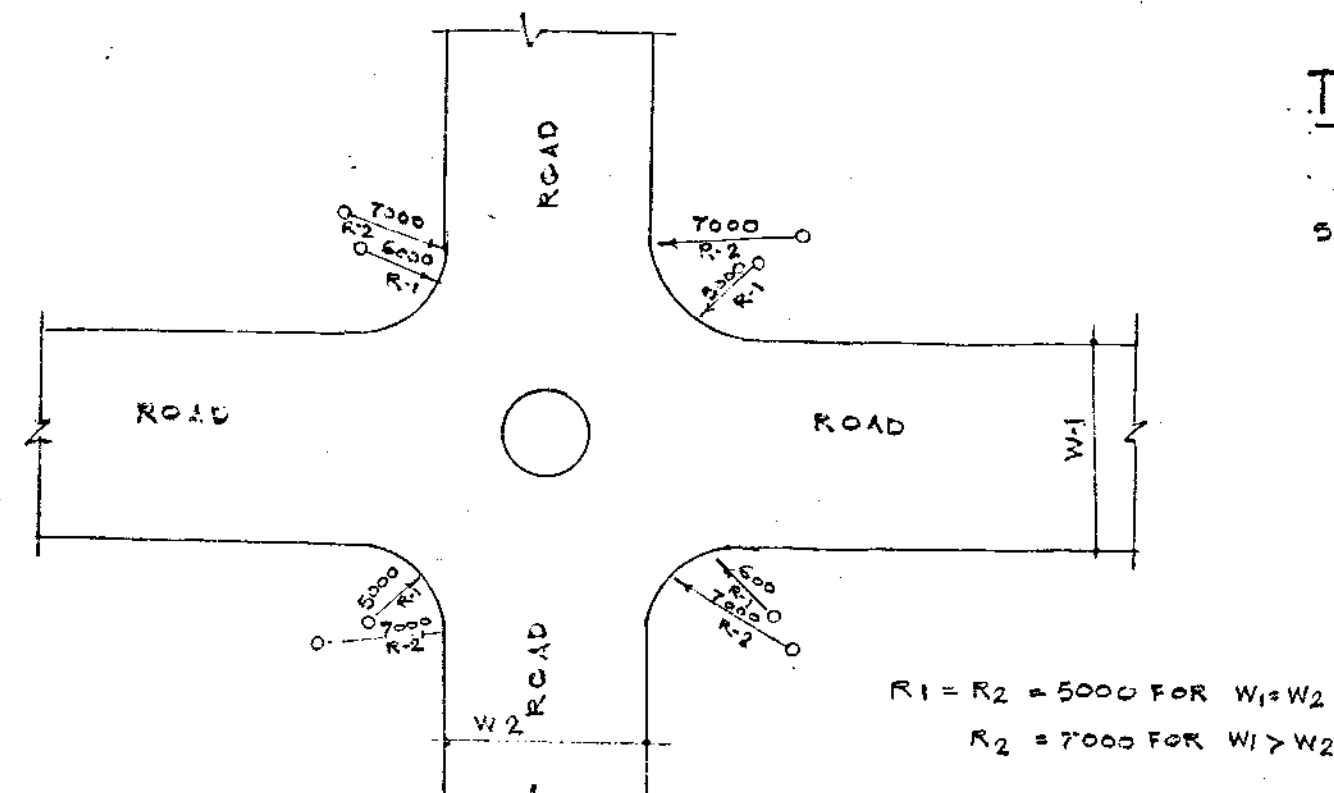


X-SEC OF DRAIN (TYPE-B)

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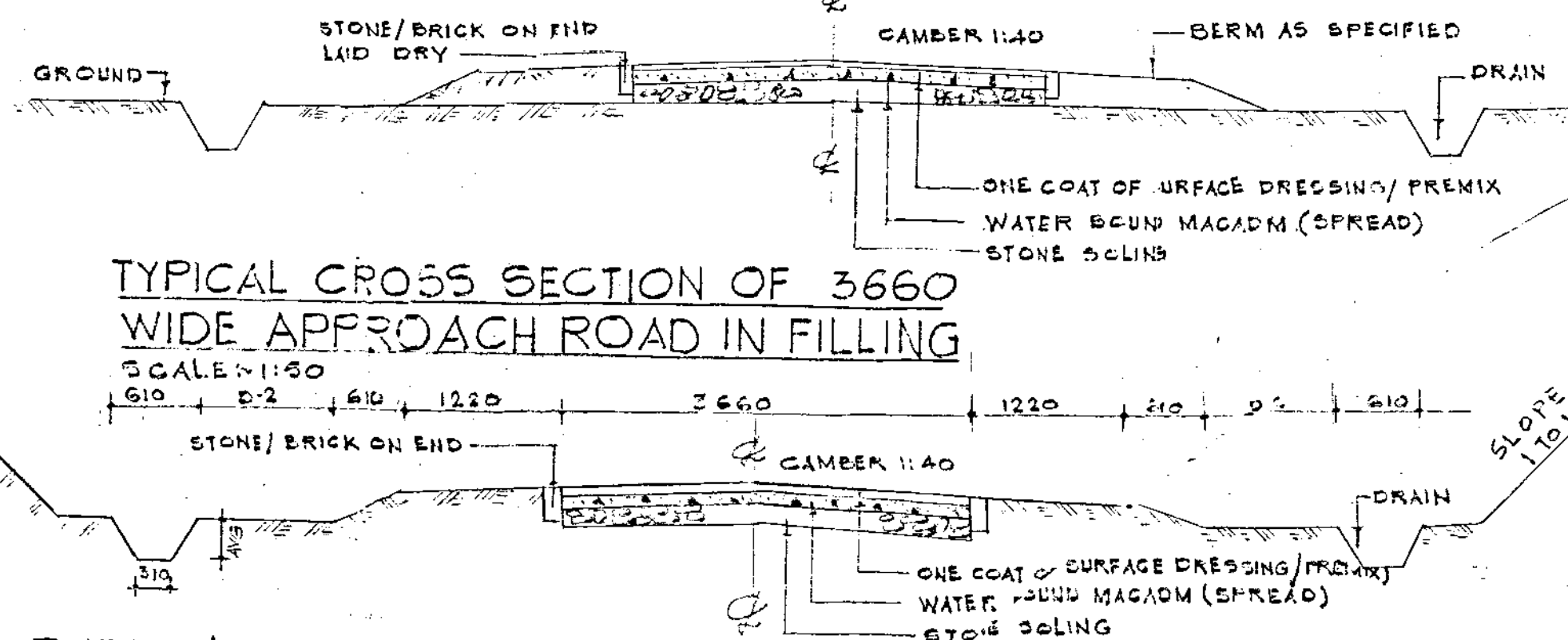
X-SEC OF DRAIN (TYPE-A)

SCALE 1:20



DETAIL OF ROAD CROSSING 90°

SCALE 1:20

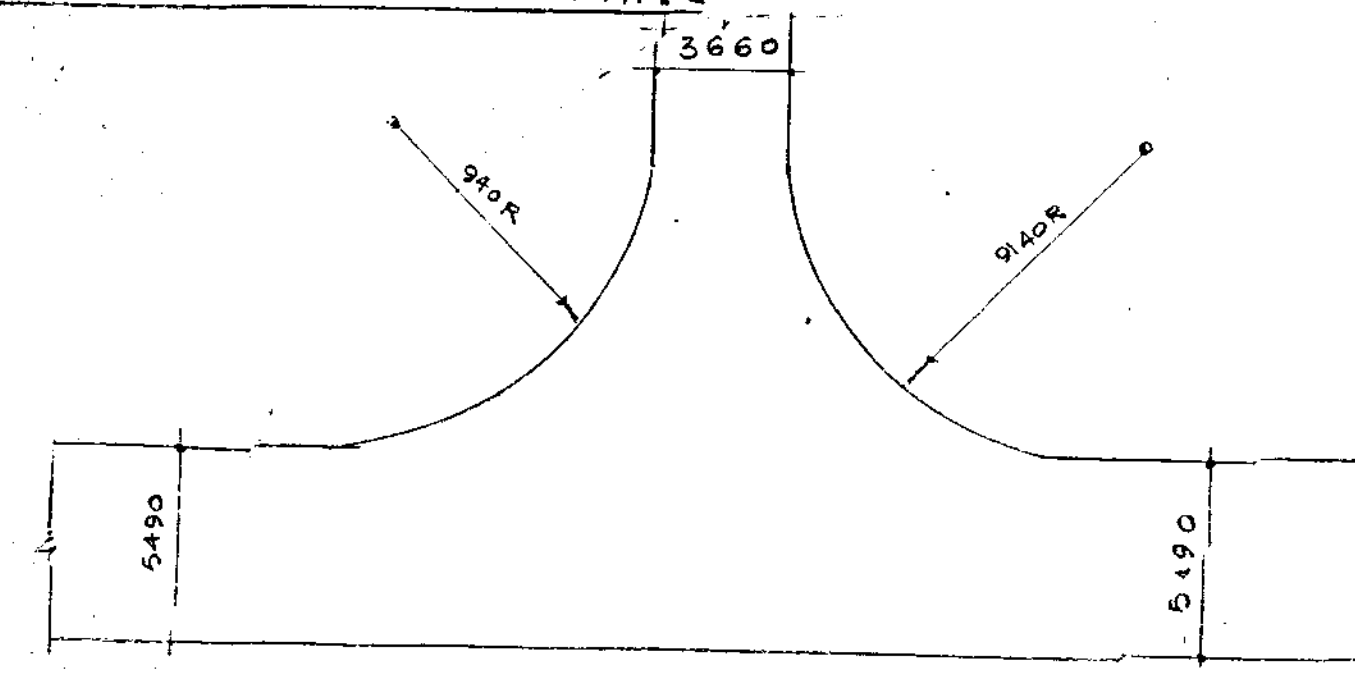


TYPICAL CROSS SECTION OF 3660 WIDE APPROACH ROAD IN FILLING

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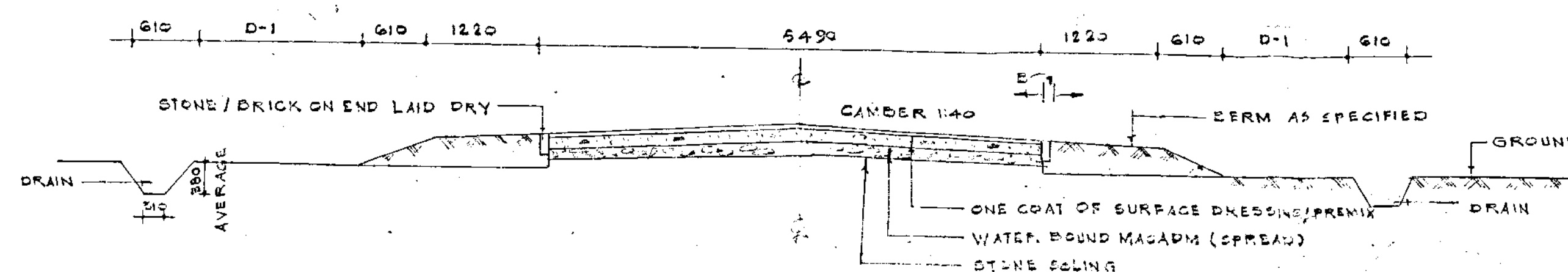
TYPICAL CROSS SECTION OF 3660 WIDE APPROACH ROAD IN CUTTING

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DETAIL OF 'T' JUNCTION

SCALE 1:20



TYPICAL CROSS SECTION OF 5490 WIDE MAIN ROAD IN FILLING

SCALE 1:50

1/26-5-95 NOTE - G-1 FOR 30 MM MINDED TO 300 MM

CA. DATE DESCRIPTIONS INITIAL

REVISIONS

TYPICAL DETAILS OF ROAD AND PCC DRAIN TYPE A & B

DATE 28-3-92 CHIEF ENGINEER SHT NO

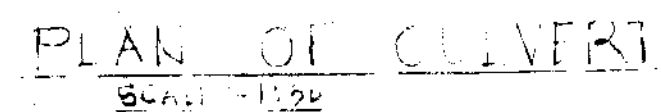
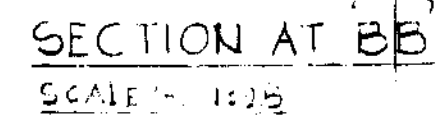
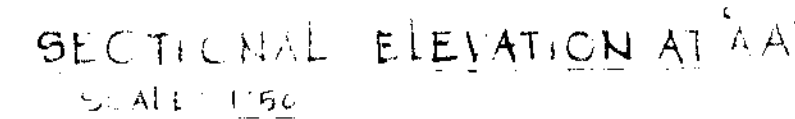
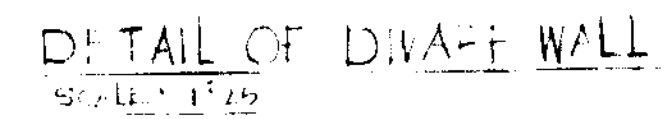
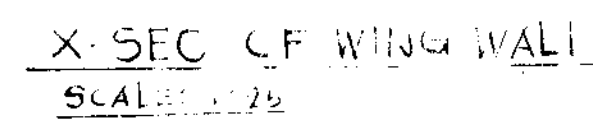
DRN RAM SARAN UDHAMPUR ZONE 1/1

CD (C) REF DRG CE/10-1055/92

SCALE AS SHOWN

SOIL (PLG) BY ARCHITECT SO-III (DESIGN) OF CHIEF ENGINEER





- NOTES
1. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS BEFORE EXECUTION OF THE WORK.
  2. FIGURED DIMENSIONS SHALL BE FOLLOWED.
  3. ALL DIMENSIONS GIVEN IN THIS DRG. ARE IN CENTI METERS UNLESS OTHERWISE SHOWN.
  4. THE EXECUTIVE AUTHORITY SHALL CHECK THIS DRG. BEFORE TAKING EXECUTION IN HAND.
  5. QUALITY CONCRETE TO BE USED TO GIVE ULTIMATE COMPRESSIVE STRENGTH OF 4000 LBS/IN<sup>2</sup> AT 28 DAYS.
  6. THIS DRG. IS BASED ON DRG NO. CIV/70-30/2251/1/1.
  7. ALL STEEL USED SHALL BE HYSD Fe. 415 CONFORMING TO IS 1786.
  8. ALL 6 CM TO 15 CM ARE KNOWN MIX CONCRETE AS PER 145 OF 1945. SHALL BE USED.

IN NOTE 1. 7 X 1.4 ADDED.		IN NOTE 2. 6' 1" ADDED IN SEC. 81	
1. 13052823	60.3 3/4 2 ADDED.		
SUNC. DATE	DESCRIPTION		
REVISIONS			
RCC CULVERT 60/90 CM SPAN			
< BRICK MASONRY >			
PLAN SECTION AND DETAILS			
DATE	27.12.92	CHEF ENGINEER	SHT NO.
DESIGN	1/1	UDHAMPUR ZONE	1/1
SCALE	AS SHOWN	DRG NO. CE/TP-III/95	

EE.  
SO-1 (DESIGN)  
R. C. ENGINEER