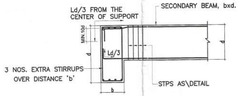
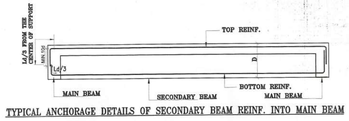


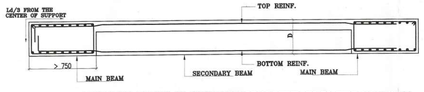
TYP. LONG STEEL DETAILING AT CHANGE IN BEAM SIZES



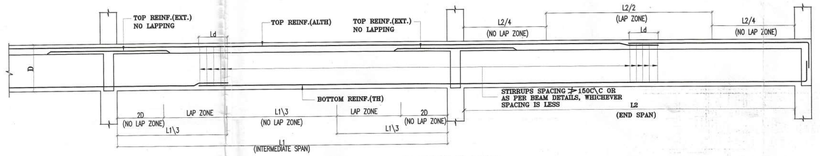
TYPICAL DETAILING OF SECONDARY AND PRIMARY BEAM INTERSECTION



TYPICAL ANCHORAGE DETAILS OF SECONDARY BEAM REINF. INTO MAIN BEAM



TYPICAL ANCHORAGE DETAILS OF SECONDARY BEAM REINF. IN TO WIDE MAIN BEAM



TYPICAL REINFORCEMENT SPLICING DETAILS IN BEAMS
(MAX. 50 % REINF. MAY BE SPLICED AT ANY SECTION)

ABBREVIATIONS

NOTATIONS	STANDS FOR
ABT.	ABOUT
ALT.	ALTERNATELY
ALTH.	ALTHOUGH
ARCH.	ARCHITECTURAL
@	AT THE RATE OF
B.	BEAM
BLDG.	BUILDING
BT.	BENT
BW.	BOTHWAYS
C/C	CENTRE TO CENTRE
℄	CENTRE LINE
CONC.	CONCRETE
COL.	COLUMN
CONST.	CONSTRUCTION
CONTD.	CONTINUED
D.	DEPTH
DET.	DETAIL
DIA/Ø/ϕ	DIAMETER
DPC.	DAMP PROOF COURSE
DRG.	DRAWING
EF.	EACH FACE/EARTH FACE
EL.	ELEVATION LEVEL/EARTH LEVEL/EFFECTIVE LENGTH
FDN.	FOUNDATION
FFL.	FINISHED FLOOR LEVEL
F.	FOOTING
GA.	GENERAL ARRANGEMENT
GL.	GROUND LEVEL/GRADED LEVEL
INV.	INVERTED
L.	LINTEL
LEV.	LEVEL
MIN.	MINIMUM
LL.	LIVE LOAD
MAX.	MAXIMUM
MKD.	MARKED
NO.	NUMBER/NUMBERS
NTS.	NOT TO SCALE
P.	PILE
PCC	PLAIN CEMENT CONCRETE
PED.	PEDESTAL
PC.	PILE CAP
PLA.	PLACING
RCC.	REINFORCED CEMENT CONCRETE
REINF.	REINFORCEMENT
S.	SLAB
SEC.	SECTION
SPEC.	SPECIFICATION
ST.	STRAIGHT
STAGG.	STAGGERED
STPS.	STIRRUP/STIRRUPS
STRL.	STRUCTURAL
SYM.	SYMMETRY/SYMMETRICAL
T.	TOP
TABS.	TOP & BOTTOM
TH.	THROUGH
THK.	THICK
TOC.	TOP OF CONCRETE
TYP.	TYPICAL
UOS.	UNLESS OTHERWISE SPECIFIED
V.	VENTILATOR
W.	WINDOW

NOTATIONS

- * 150THICK — INDICATES THE THICKNESS OF SOLID SLAB,WALL IN MM.
- * A — INDICATES THAT A SECTION HAS BEEN DRAWN ALONG THE HORIZONTAL LINE LOOKING TOWARDS THE ARROW HEAD.
- * — INDICATES AN OPENING IN THE STRUCTURAL ELEMENT
- * SEC. — LOAD BEARING BRICK WORK
- * A — REFER DETAIL AT 'A'
- * S2 — SLAB IDENTIFICATION NUMBER
- * 8 T @ 150 — CENTRE TO CENTRE DISTANCE OF TWO BARS/STIRRUPS (2 LEGGED); AT THE RATE OF; FOR REINFORCEMENT (R/F.); DIA OF BAR
- * 2 - 16T — FOR REINFORCEMENT (R/F.); DIA OF BAR; NO. OF BARS
- * 2L-2 LEGGED STIRRUPS
- * 4L-4 LEGGED STIRRUPS
- * 6L-6 LEGGED STIRRUPS
- * C 101 — INDICATES COLUMN TYPE 101
- * PLAN — IN PLAN AT A PARTICULAR LEVEL REPRESENTS THE TERMINATION OF VERTICAL R.C.C. MEMBER BELOW THAT LEVEL (SLAB; VERTICAL R.C.C. MEMBER TERMINATING)
- * PLAN — IN PLAN AT A PARTICULAR LEVEL REPRESENTS THE STARTING OF VERTICAL R.C.C. MEMBER (VERTICAL R.C.C. MEMBER STARTING; SLAB)
- * PLAN — IN PLAN REPRESENTS A VERTICAL R.C.C MEMBER PASSING THRU AT THAT LVL (VERTICAL R.C.C. MEMBER PASSING THRU; SLAB)

GENERAL

1. PLEASE DO NOT SCALE. WORK TO DIMENSIONS ONLY.
2. ALL DIMENSION ARE IN MM
3. ALL LEVELS ARE IN METERS U.O.S.
4. ALL STRUCTURAL DRAWINGS ARE TO BE FOLLOWED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS. ANY DISCREPANCY SHALL BE GOT CLARIFIED BEFORE EXECUTION.

EARTHWORK AND FOUNDATION

1. LOOSE POCKETS IN FOUNDATIONS SHALL BE REMOVED AND FILLED UP WITH P.C.C. MIX 1:6:12
2. MUD MAT SHALL BE LAID SOON AFTER EXCAVATION TO THE REQUIRED LEVEL. EXCAVATION PIT SHALL BE DEWATERED BEFORE LAYING MUD MAT.
3. ALL WORK BELOW GROUND LEVEL SHALL BE EXECUTED IN DRY CONDITION.
4. BACK FILLING SHALL BE DONE IN LAYERS NOT EXCEEDING 200 MM THICKNESS. EACH LAYER SHALL BE COMPACTED TO THE OPTIMUM DENSITY.
5. EARTH BACK FILL BEHIND RET. WALL SHALL BE DONE ONLY AFTER CASTING AND CURING OF ROOF SLAB.
6. ALL EXCAVATION SHALL BE DONE IN SLOPE AS/ SOIL CONDITIONS WITH ADEQUATE MEASURES TO PREVENT COLLAPSE UNDER ALL CIRCUMSTANCES.
7. ADDITIONAL SAFETY MEASURES TO PROTECT ADJACENT PROPERTY DURING AND AFTER EXCAVATION WILL BE TAKEN AS/ SITE REQUIREMENT WHEREVER NECESSARY.

REINFORCED CONCRETE AND AAC/BRICK WORK

1. ALL RCC SHALL BE OF CONTROLLED GRADE M25 OR HIGHER GRADE OF CONCRETE (70% OF COLUMN GRADE)IN ACCORDANCE WITH IS:456 U.O.S. REGULAR TESTING OF RCC AS STIPULATED IN I.S. CODE OR AS DIRECTED BY THE ENGINEER-IN-CHARGE WILL BE ENSURED. UTMOST CARE WILL BE TAKEN TO ENSURE THAT ACTUAL RCC WORK AT SITE CONFORMS TO THE CONTROLLED GRADE RCC.
   - FOR TALL BUILDINGS OF H_B 50M. MINIMUM GRADE OF RCC. WILL BE M30.
2. LOCATION AND DETAIL OF CONSTRUCTION JOINTS IN CONCRETE STRUCTURES WHERE EVER NOT SPECIFIED SHALL BE GOT APPROVED BY THE ENGINEER-IN-CHARGE.
3. RESPECTIVE FIXTURES AND POCKETS SHALL BE PLACED IN POSITION BEFORE CONCRETING.
4. HIGHYIELD STRENGTH DEFORMED BARS CONFORMING TO IS:1136 OR IS:1786 SHALL BE USED FOR MAIN REINF. THESE ARE INDICATED BY –T
5. LAP LENGTH FOR ALL BARS SHALL BE AS/TABLE ①
6. ALL BARS SHALL BE SHEARED. FLAME CUTTING WILL NOT BE PERMITTED. THE BARS SHALL BE BENT COLD.
7. IF LENGTH OF BARS SHOWN IN THE DRAWING EXCEEDS THE MAX. AVAILABLE BAR LENGTH, SPLICED BARS MAY BE SUBSTITUTED. SPLICE LOCATION SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER IN CHARGE. LAPS SHALL BE STAGGERED IN SUCH A WAY THAT NOT MORE THAN 50%OF BARS ARE LAPPED AT ONE PARTICULAR SECTION.
8. CLEAR COVERS TO ANY REINF SHALL BE AS FOLLOWS U.O.S.

RAFT (TOP) ISOLATED FDN AND GRADE SLAB	50mm.
RAFT (BOTTOM AND SIDES)	75mm.
RETAINING WALL (OUTSIDE)	30mm.
RETAINING WALL (INSIDE)	25mm.
COLUMNS	40mm.
SHEAR WALLS	30mm.
BEAM CONTINUOUS	40mm.
BEAM SIMPLY SUPPORTED	50mm.
SLAB CONTINUOUS	25mm.
SLAB SIMPLY SUPPORTED	35mm.
WATER TANKS INNER SIDE	30mm.
WATER TANKS OUTER SIDE	40mm.

9. MAXIMUM LENGTH OF R.WALL/SLAB TO BE CASTED IN A SINGLE POUR IS 20M.
10. VERTICAL SHRINKAGE GAP OF 100 mm. SHALL BE LEFT IN RETAINING WALL AFTER EVERY 20M. TO BE CASTED 5 DAYS AFTER CASTING OF RETAINING WALL WITH RCC AS PER WALL MIX - AND NON SHRINK COMPOUND.
11. ALL BRICK WORK SHALL BE CLASS I BRICK LAID IN CEMENT MORTAR 1:6 (1 CEMENT : 6 COARSE SAND)FOR 230MM. WALL THICKNESS U.O.S.
12. ALL 100mm. THICK WALLS SHALL BE LAID IN CEMENT MORTAR 1:4 (1 CEMENT:4 COARSE SAND). 2 NOS BT BARS SHALL BE PROVIDED AT 400c/c.
13. TIE BARS IN SLABS SHALL BE 8 T @ 300C/C U.O.S.
14. NO ELECTRICAL P.V.C. PIPE OR DISTRIBUTION BOX SHALL BE LOCATED IN THE BEAM.
15. SUITABLE SLEEVES WITH EXTRA REINF. AS PER INSTRUCTION BY ENGINEER-IN-CHARGE SHALL BE LEFT IN BEAM FOR SANITARY PIPES AS REQD. PUNCTURING OF BEAMS AT LATER STAGE SHALL NOT BE ALLOWED.
16. IF EXCESSIVE CONDUITS OCCUR AT ANY LOCATION IN THE STRUCTURE, THE SAME SHALL BE COMMUNICATED TO THE STRUCTURAL ENGINEER AND REMEDIAL MEASURES AS SUGGESTED WILL BE INCORPORATED BEFORE EXECUTION.
17. MINIMUM CRUSHING STRENGTH OF AAC BLOCK SHALL BE 30-40 Kg/cm^2
18. SLAB TOP BARS SHOWN LIKE THUS . (——)
19. SLAB BOTTOM BARS SHOWN LIKE THUS . (– – – –)
20. IN BEAMS WHERE THERE ARE MORE THAN ONE LAYER OF REINF. A SPACER BAR SHALL BE PROVIDED BETWEEN TWO LAYERS AT SPACING 1500C/C THE DIA OF SUCH BARS SHALL BE EQUAL TO 25mm OR THE MAX. SIZE OF BAR IN THE LAYERS.WHICHEVER IS MORE.
21. OPEN END OF STIRRUPS SHALL BE ON OPPOSITE FACES FOR ALTERNATE STIRRUPS.

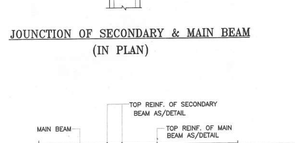


ALL STIRRUPS SHALL HAVE 135* HOOKS

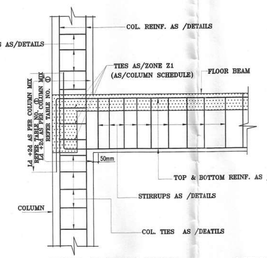
22. LOCATION OF CONSTRUCTION JOINTS SHALL GENERALLY BE AT 1/4 TO 1/3 OF SPAN, TO BE GOT APPROVED FROM CONSULTANTS BEFORE EXECUTION.
23. FOR LAPPING OF BARS WITH DIFFERENT DIAS, THE LAP LENGTH SHALL BE CONSIDERED AS PER DIA OF LESSER DIA.
24. CEMENT USED FOR RCC WORKS SHALL BE OPC CEMENT (GRADE 43) CONFORMING TO IS : 8112. MAXIMUM % OF FLY ASH FOR DESIGN MIX SHALL BE 25% OF CEMENTATIOUS MATERIAL
25. SPACER BARS IN RAFT WHEREVER REQUIRED SHALL BE PROVIDED @ 1000 C/C SPACER BARS/CHAIRS DIA SHALL BE EQUAL TO DIA OF LONGITUDINAL BAR TO SUPPORT.
26. COUPLER WILL BE PROVIDED FOR ALL REINF. 16ø AND ABOVE.
27. EARTH FILLING UNDER GRADE SLAB SHOULD HAVE COMPACTION UPTO 95% OF PROCTOR DENSITY.
28. PROVIDE L/250 CAMBER FOR EVERY BEAM GREATER THAN 10MTR SPAN.

STRUCTURAL STEEL

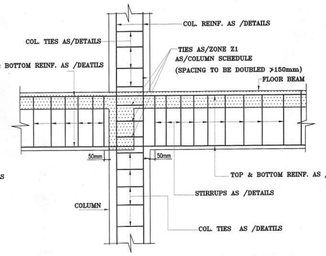
1. ALL STRUCTURAL STEEL SECTION WILL BE AS PER IS :226, IS:961,IS:2062 AND IS:8500 AS APPLICABLE
2. ALL WELDING ELECTRODES SHALL CONFORM TO IS:814 OR IS:1395
3. ALL DRAWING MUST BE VERIFIED BY PERFORMING FULL SCALE LAY OUT AT THE SITE BEFORE FABRICATION.ANY DISCREPANCY MUST BE BROUGHT TO THE NOTICE OF THE CONSULTANTS, AND APPROPRIATE CLARIFICATION BE OBTAINED.
4. ALL WELDS ARE 6MM CONTINOUS FILLET WELDS UNLESS SPECIFIED OTHERWISE.
5. CONTRACTOR MUST PREPARE FABRICATION DRAWINGS AS PER SITE DIMENSIONS AND GET THEM APPROVED BY THE CONSULTANTS BEFORE STARTING FABRICATION.
6. SPECIALISED JOBS LIKE SPECIAL BOLTING AND FIXING SHALL BE GOT DONE BY AUTHORISED WORKMEN OF THE SPECIFIED VENDOR FOR SUCH JOBS.



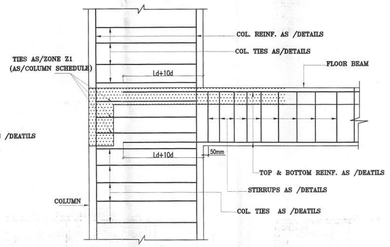
JOUNCTION OF SECONDARY & MAIN BEAM
(IN PLAN)



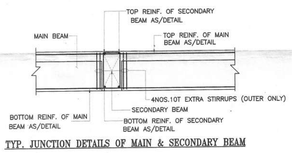
TYP. DETAILS OF A BEAM-COLUMN JUNCTION AT EXTERIOR COLUMN (BEAMS ON 1/2/3 SIDES)



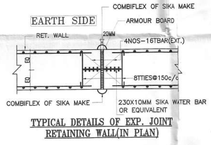
TYP. DETAILS OF A BEAM-COLUMN JUNCTION AT INTERIOR COLUMN (BEAM ON ALL FOUR SIDES)



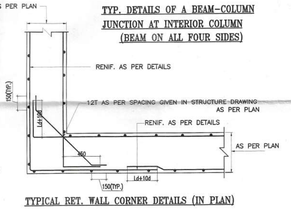
TYP. DETAILS OF A BEAM-COLUMN JUNCTION AT WIDE COLUMN (EXTERIOR)



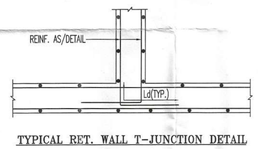
TYP. JUNCTION DETAILS OF MAIN & SECONDARY BEAM



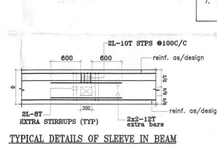
TYPICAL DETAILS OF EXP. JOINT RETAINING WALL(IN PLAN)



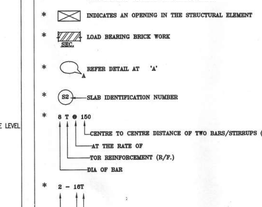
TYPICAL RET. WALL CORNER DETAILS (IN PLAN)



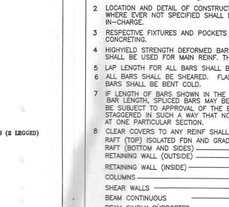
TYPICAL RET. WALL T-JUNCTION DETAIL
(IN PLAN)



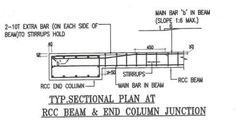
TYPICAL DETAILS OF SLEEVE IN BEAM



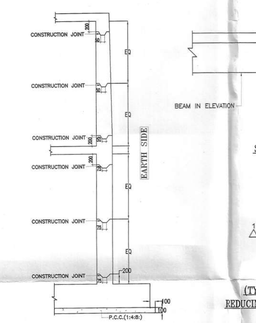
REINFORCEMENT DETAILS AT COL.& BEAM JUNCTION (IN PLAN)



TYPICAL CROSS SECTION OF LINTEL



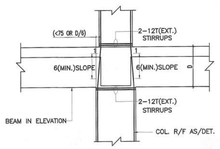
TYP.SECTIONAL PLAN AT RCC BEAM & END COLUMN JUNCTION



TYPICAL LOCATION OF CONSTRUCTION JOINT IN RETAINING WALL



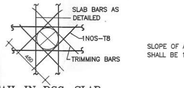
SECTION 1-1

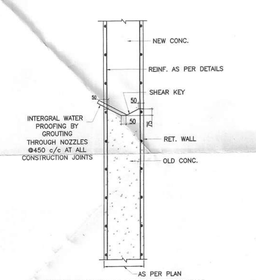


SECTION 2-2



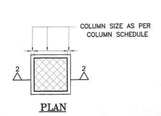
TYPICAL CUTOUT DETAIL IN RCC. SLAB



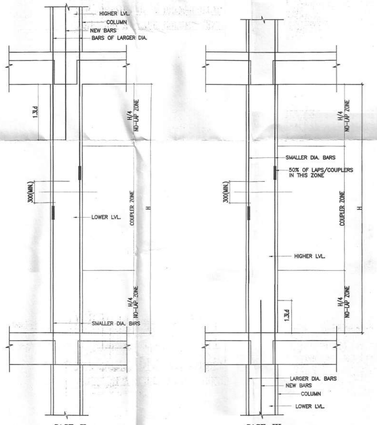


TYPICAL DEATILS OF CONSTRUCTION JOINT IN RET. WALL (IN PLAN)

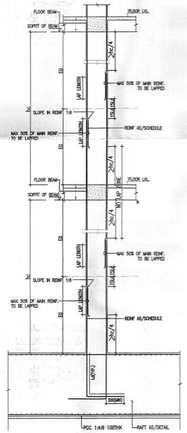
(TYP. DETAILS OF COLUMN REDUCING SIZE FROM THREE SIDES)



(TYP. DETAILS OF COLUMN REDUCING SIZE FROM FOUR SIDES)

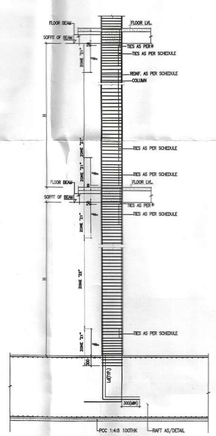


(TYP. SECTION SHOWING CHANGE IN COLUMN REINF. AT ANY LEVEL)



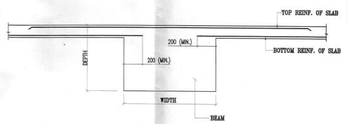
TYPICAL COLUMN LAPPING DETAIL

COLUMN VERTICAL BARS TO BE LAPPED ALTERNATIVELY IN ONE POSITION WITH STAGGERING NOT MORE THAN 50DIAS TO BE LAPPED AT ONE SECTION (FOR REINF. 16mm DIA AND BELOW)

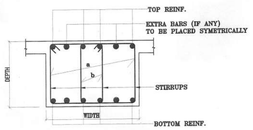


TYPICAL COLUMN TIES DETAIL

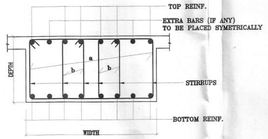
1. — OR LARGER DIMENSION OF COLUMN SIDE OR 450mm,WHICHEVER IS MORE.
2. SPACING OF TIES IN LAPPING LENGTH WILL NOT BE GREATER THAN 150mm.
3. PROVIDE HALF SPACIAL CONFINING REINFORCEMENT REQUIRED IN ZONE (PER SHAR OF ALL FOUR SIDES OF COLUMN)
4. PROVIDE SPACIAL CONFINING REINFORCEMENT REQUIRED IN ZONE (PER ALL OTHER COLUMNS)
5. THE SHEAR WALL SHALL HAVE FULL HEIGHT ZONE A FOR THE GROUND TO 1st FLOOR.
6. NO LAPS SHALL BE PROVIDED IN THE SHEAR WALL FROM GROUND FLOOR TO 1st FLOOR.



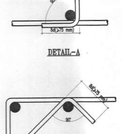
ANCHOR DETAIL OF SLAB BOTTOM REINF. IN BEAM

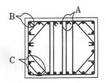


TYPICAL SECTION OF 4-LEGGED (STIRRUPS)

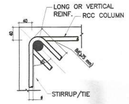


TYPICAL SECTION OF 6-LEGGED (STIRRUPS)





TYPICAL DETAIL OF SINGLE TIE IN COLUMN.



TYP DETAILS OF HOOKS

L A P L E N G T H(FOR Fe-550) (D= DIA OF BAR)				
	40D	43D	51D	53.5D
DIA	M-40 & ABOVE	M-35	M-30	M-25
32T	1280	1376	1632	1712
28T	1120	1204	1428	1498
25T	1000	1075	1275	1337.5
20T	800	860	1020	1070
16T	640	688	816	856
12T	480	516	612	642
10T	400	430	510	535

NOTES:
1- FOR GENERAL NOTES REFER DWG NO.93/S/100
2- ALL DIMENSIONS ARE IN mm.
3- CON. MIX -M25.
4- GRADE OF REINF. - Fe 550D
5- THIS DWG. SHALL BE READ WITH ALL RELEVANT ARCH. DRAWING.

PROJECT:
REVISED BUILDING PLAN OF COMMERCIAL COLONY MEASURING 10.4375 ACRES (LICENSE NO. 86 OF 2013 DATED 10.07.2013) IN SECTION-68, GURUGRAM MANESAR URBAN COMPLEX BEING DEVELOPED BY ADVANCE INDIA PROJECTS LIMITED.

OWNER SIGN

STRUCTURAL CONSULTANTS
CIVTECH CONSULTANTS PVT LTD
A-46 , SECTOR-4 , NOIDA-201301
PH. NO. 0120-2144084, E-mail :- Projects@civtech.in

ARCHITECT SIGN — Architect to take responsibility for Architectural change of the project.

DRAWING TITLE: STANDARD NOTES

DATE:- 22-04-2024	SCALE:- N.T.S
DRAWN BY:- RAKESH	APPRO. BY:-
DESIGNED BY:- AMIR	CHECKED. BY:- AMIR
DRG. NO :- 924/S/100	SHEET NO:- 1/1
ISSUED FOR :- SUBMISSION	REV NO:-

Advance India Projects Limited — Authorised Signatory

Naresh Kumar Garg B.E. (CIVIL) M.E. (Structure) Emp. ID TPR-797A-2024

Er. PARESH JAUHRI (M.Tech. Structures - IIT Delhi) Proof Consultant (TPR-576A) Department of Town & Country Planning, Haryana

Naresh Kumar B.E. (CIVIL) M.E. Emp. ID TPR-798A-2024

Ar. Shashank Dixit B. Arch, MCA