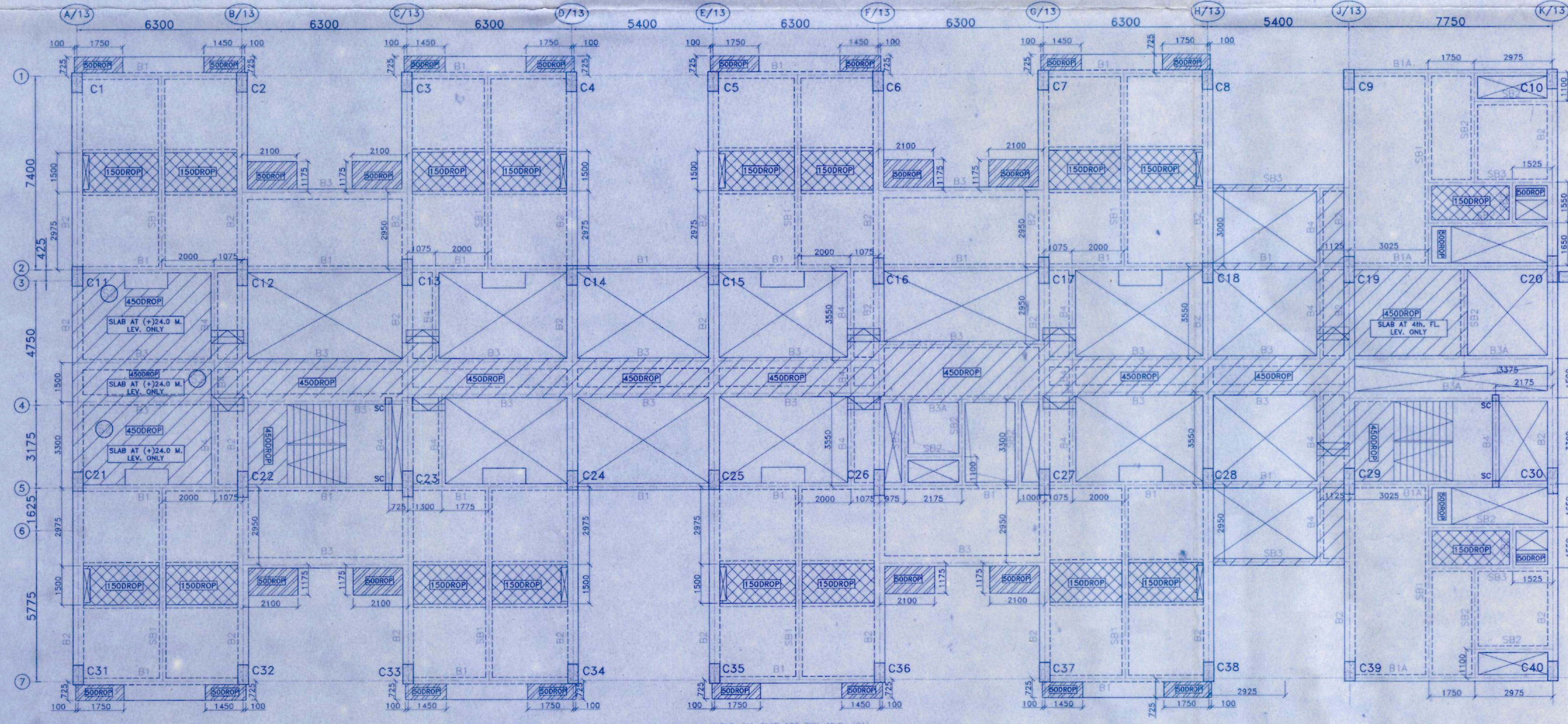


G.A. AT 3rd. FLOOR LEV.(G+13TH. STORIED RESIDENTIAL BUILDING)

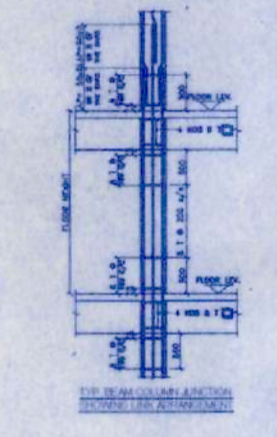


G.A. AT TYP. FLOOR LEV.(G+13TH. STORIED RESIDENTIAL BUILDING)

COL. MKD.	SIZE	Fdn.TO 3rd. FLOOR	3rd.FL. TO 5th. FL.	5th.FL. TO 7th. FL.	7th.FL. TO 9th. FL.	9th.FL. TO ROOF
C12, C13, C16, C17, C18, C20, C22, C23, C26, C27, C29, C30	400 X 1000	20-32T	12-32T+8-20T	8-32T+12-20T	8-25T+12-20T	20-20T
C1, C10, C31, C40	400 X 750	18-20T	12-20T+6-16T	8-20T+10-16T	18-16T	18-16T
C2, C3, C4, C5, C6, C7, C8, C9, C11, C21, C32, C33, C34, C35, C36, C37, C38, C39	400 X 750	12-25T+6-20T	8-25T+10-20T	18-20T	12-20T+6-16T	8-20T+10-16T
C14, C15, C18, C24, C25, C28	400 X 750	12-32T+6-25T	8-32T+10-25T	18-25T	12-25T+6-16T	8-25T+10-16T
C41, C44	400 X 400	12-20T	COLUMN ENDS AT 3RD FLOOR LEV.			
C42, C43	L' 250 X 500	8-25T+4-20T	COLUMN ENDS AT 3RD FLOOR LEV.			

BEAM MKD	SIZE (IN mm)	AT SUPPORT		AT SPAN		STIRRUPS	
		TOP	BOT	TOP	BOT	SUPPORT	SPAN
B1	250x600	4-25 T	2-25 T	2-25 T	2-25T+2-20T	2L-8T@125c/c	2L-8T@200c/c
B1A	250x600	3-20T+3-25T	3-20 T	3-20 T	6-20 T	2L-10T@150c/c	2L-10T@200c/c
B2	400x400	8-20 T	4-20 T	4-20 T	6-20 T	4L-8T@125c/c	4L-8T@200c/c
B3	400x400	4-20 T	4-20 T	4-20 T	4-20 T	4L-8T@150c/c	4L-8T@200c/c
B3A	400x400	2-25T+2-20T	4-20 T	2-25 T	4-20T+4-16T	4L-8T@150c/c	4L-8T@200c/c
B4	250x400	3-16 T	2-16 T	2-16 T	2-16 T	2L-8T@150c/c	2L-8T@200c/c
SB1	250x600	3-20 T	3-20 T	3-20 T	6-20 T	2L-8T@200c/c	2L-8T@200c/c
SB2	250x400	2-16 T	2-16 T	3-16 T	3-16 T	2L-8T@200c/c	2L-8T@200c/c
SB3	250x400	2-16 T	2-16 T	2-16 T	4-16 T	2L-8T@200c/c	2L-8T@200c/c

SLAB MKD.	SLAB THK	SHORTER SPAN		LONGER SPAN	
		SUPPORT TOP	MIDSPAN BOT	SUPPORT TOP	MIDSPAN BOT
S1	125	8T@150 C/C	8T@150 C/C	8T@175 C/C	8T@200 C/C
S2	150	8T@125 C/C	8T@125 C/C	8T@150 C/C	8T@200 C/C
S3	200	10T@150 C/C	10T@150 C/C	10T@150 C/C	10T@150 C/C



- NOTES:**
- Basic reference code: IS456:2000, IS1893:2002(Part1), IS13920:1993(Reaffirm2002)
  - Due care shall be taken to ascertain that requisite strength of concrete is gained before commencement of de-shuttering. It shall comply with provisions of Clause No. 11.3 of IS456:2000.
  - Nominal covers:
 

I Footings	Mild	Moderate	Severe
II Columns & walls >200mm width (to links of column)	50	50	50
III Columns & walls with width of 200mm & below having reinf. of dia. 16mm & above (to links of column)	40	40	45
IV Columns & walls with width of 200mm & below having reinf. of dia. 12mm (to links of column)	40	40	45
V Slabs	25	30	45
VI Beams (to stirrups of beam)	20	30	45
VII Lift walls	40	40	45
  - For main reinf. up to 12mm diameter bar for mild exposure. The nominal cover may be reduced by 5mm for slabs & beams only.
  - Beams with depth more than 750mm, provide side-face reinforcement.
  - Substratum shall be approved from our office before laying P.C.C.
  - Minimum clear spacing between any two longitudinal bars in beam = 50mm.
  - All laps (Ld) shall be staggered & not more than 50% bars to be lapped at any given section.
  - Grade of Reinf.
 

GRADE OF REINF.	M20	M25	M30	M35	M40 & ABOVE
F415	48 X D	41 X D	38 X D	34 X D	30 X D
F450 (TMT)	57 X D	49 X D	46 X D	40 X D	36 X D
  - For bundled bars, Ld shall be increased by 10% for 2 bars in contact, 20% for 3 bars in contact and 33% for 4 bars in contact.
  - All buildings shall have its beams/depth beams at ground/first level.
  - If footings overlap with each other, necessary revision shall be obtained from our office.
  - Design is valid for number of floors as indicated in the drawing.
  - At any level where column size gets reduced in either dimension the beams/depth beams are essential.
  - For cantilevers, top bars to be anchored behind from external face of support for - Ld or span of cantilever - whichever is greater.

Grade of Steel: Fe500  
 Grade of Concrete: M 25  
 Pile Cap, Tie Beam: M 30  
 Column, Beam, Slab: M 40

STRUCTURAL CONSULTANT:

**JW** CONSULTANTS LLP  
 Formerly J.V. Sankar Associates  
 914, 3RD FLOOR, PRAHADEVI INDUSTRIAL ESTATE, VEER GANAKAVI MAHAL, PRAHADEVI, MUMBAI-400005  
 Tel: +91 22 68322845/46 Fax: +91 22 68322800

SCALE: DATE: DEALT: CHECKED:

STRUCTURAL ENGINEER:  
**SANJAY KUMAR DUBEY**  
 ME (Structure), CHARTERED ENGINEER (I)  
 SALT LAKE CITY, KOLKATA

**CERTIFICATE OF STRUCTURAL STABILITY**

WE HEREBY CERTIFY THAT THE FOUNDATION AND SUPERSTRUCTURE OF THE BUILDING PROPOSED FOR CONSTRUCTION ON PLOT 4 (OLD NO. 1290) WARD NO. 15 (OLD NO. 3129) HAVE BEEN SO DESIGNED BY ME/US WILL MAKE SUCH FOUNDATION & SUPER STRUCTURE SAFE IN ALL RESPECT INCLUDING THE CONSIDERATION OF BEARING CAPACITY & SETTLEMENT OF SOIL ETC.

JAY PRAKASH BHARAT KUMAR AGRAWAL  
 B. Arch., A.I.I.T.A.  
 Reg. No. GA/59/10098  
 ARCHITECT SL. NO. - 32(A)

SIGNATURE OF ARCHITECT

**SANJAY KUMAR DUBEY**  
 Structural Engineer, ESE-1/142  
 KOLKATA MUNICIPAL CORPORATION

SIGNATURE OF STRUCTURAL ENGG.

**B. C. BARMAN, IAS**  
 B. Arch., A.I.I.T.A.  
 Commissioner-in-Chief  
 Deptt. of L. & R. and R. & R.  
 Govt. of W. B.

SIGNATURE OF OWNER

JAY PRAKASH BHARAT KUMAR AGRAWAL  
 B. Arch., A.I.I.T.A.  
 Reg. No. GA/59/10098  
 ARCHITECT SL. NO. - 32(A)

SIGNATURE OF ARCHITECT

**SANJAY KUMAR DUBEY**  
 Structural Engineer, ESE-1/142  
 KOLKATA MUNICIPAL CORPORATION

SIGNATURE OF STRUCTURAL ENGG.

**SHYAMAL KUMAR MITRA, B.E. (CIVIL)**  
 GEO-TECHNICAL ENGINEER  
 ENROLLMENT NO. 01ER-HDC/01/0919

SIGN OF GEO-TECH ENGG.

TITLE: SUB & SUPER STRUCTURE (G+13 FL. BLOCK) (REHABILITATION)

PROJECT: REVISED PLAN OF RESIDENTIAL DEVELOPMENT AT PREMISES NO. 561, BONHOOGLY ARABLE LAND, HOLDING NO. 4 (OLD NO. 1290), WARD NO. 15 (OLD NO. 3129), DIST. NORTH 24 PARAGANAS, UNDER BARANAGAR MUNICIPALITY, FOR R.R. & R DEPARTMENT, GOVT. OF W.B. (BONHOOGLY TENEMENT SCHEME) IN THE CONTINUATION OF OLD BUILDING PERMIT NO. BSPW/372/31, DTD. 12.01.09. & SUBSEQUENTLY SANCTIONED VIDE BUILDING PERMIT NO. PWBS/357/15, DATED 10.12.2014 AND FURTHER SANCTIONED VIDE BUILDING PERMIT NO. PWBS/160/15 DATED 24.10.2016 & PARTIAL COMPLETION CERTIFICATE ISSUED VIDE MEMO NO. BMPW/C/249/15, DATED 05.01.17 FOR L.I.G. BLOCK A,B,C, D & CLUB COMMUNITY.

ARCHITECTS: **AGRAWAL & AGRAWAL**  
 BARODA & KOLKATA

SCALE: DATE: DEALT: CHECKED:  
 1:100 09.09.17



F-2

Sanctioned by the Councillors at their meeting held on 17.2.18 Vide Item No. 5(M)

Information should be given to the office before execution

Any deviation or alteration requires prior sanction of the Municipal Authority



Assistant Engineer P.W. Department Baranagar Municipality

**SANCTIONED**  
Chairman Baranagar Municipality

অনুমোদিত নম্বা

ইয়া ম. সি. ডবলিউ/আর.বি. 16/15  
তারিখ 11.5.18

