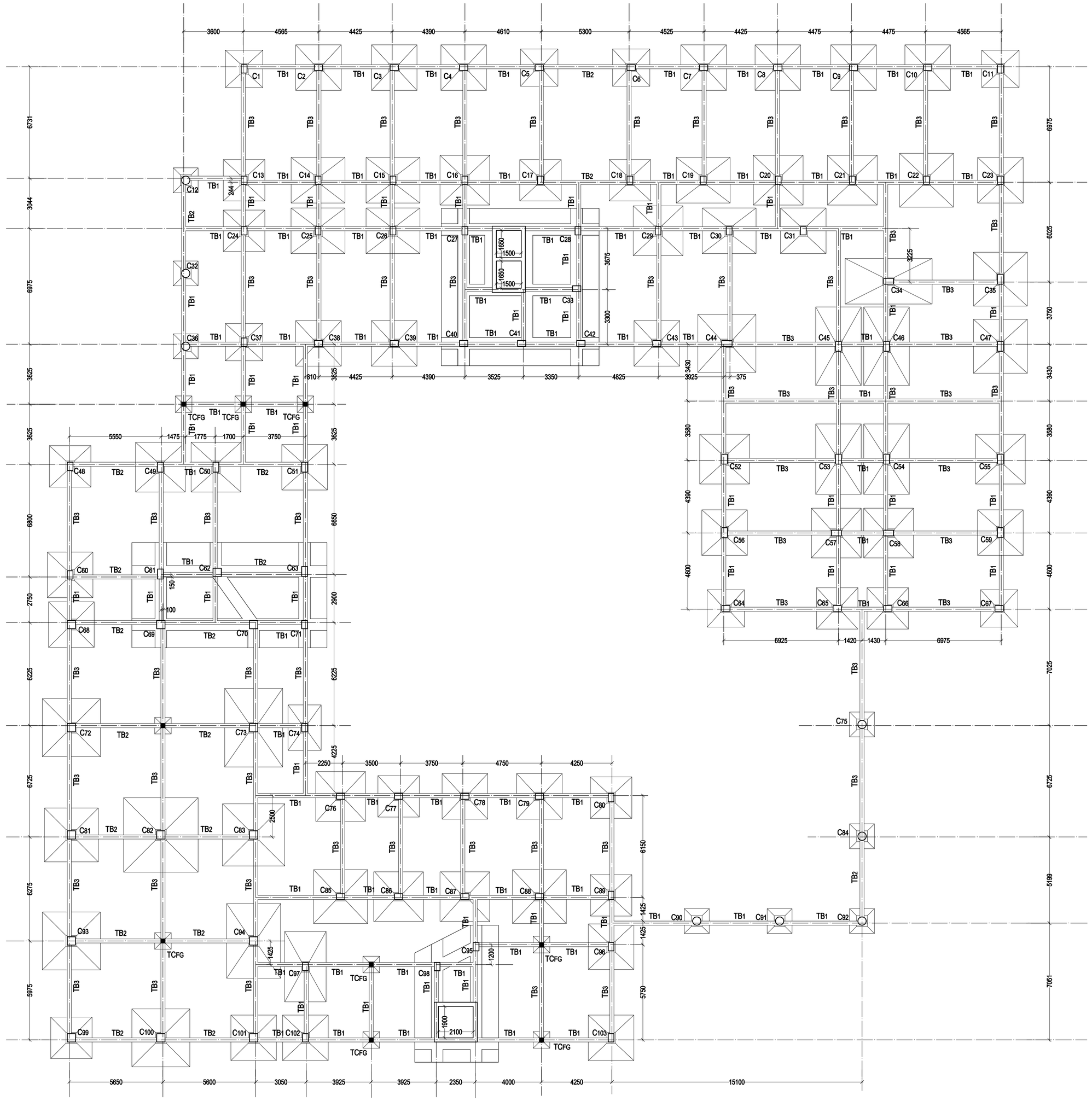
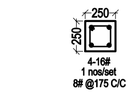


TIE-BEAM (AT ± 0.0 E.G.L) LAYOUT PLAN

SCALE - 1:100

SCHEDULE OF COLUMN :- (CONCRETE GRADE - M25)

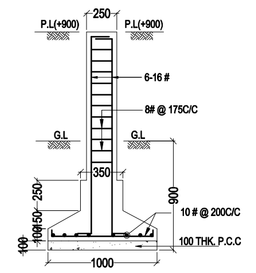
CONC. GRADE	Col.Mkd	C1,C5,C6,C11,C13, C17,C18,C24,C80, C85.	C2,C3,C4,C14,C15, C16,C19,C21,C22, C23,C25,C26,C28, C31,C33,C40,C41, C42,C64,C65,C66, C67,C74.	C20,C27,C29,C30, C37,C71,C79,C88, C97.	C7,C8,C9,C10,C36, C39,C43,C44,C48, C60,C76,C77,C78, C95,C96,C87,C90, C98,C68,C102, C103.	C35,C45,C46,C56, C59,C63.	C34,C47,C49,C50, C51,C52,C53,C54, C55,C57,C58,C91.	C69,C81,C99,C101.	C62,C69,C70,C83.	C72,C73,C82,C93, C94,C100.	C12,C32,C36,C75, C84,C90,C91,C92. (THROUGH OUT)
M 25	Col.Size	350X500	350X500	350X500	350X500	350X800	350X800	500X500	500X500	500X500	500 DIA.
	FND. TO 1ST FL. ROOF	4-20# + 8-16# (4Nos/Set)	8-20# + 4-16# (4Nos/Set)	12-20# (4Nos/Set)	14-20# (4Nos/Set)	16-20# (4Nos/Set)	4-25# + 12-20# (4Nos/Set)	16-20# (5Nos/Set)	8-25# + 8-20# (5Nos/Set)	16-25# (5Nos/Set)	4-20# + 4-16# 10# @150 C/C
		Lo = 1000mm	Lo = 1000mm	Lo = 1000mm	Lo = 1000mm	Lo = 1000mm	Lo = 1000mm	Lo = 1000mm	Lo = 1000mm	Lo = 1000mm	Lo = 1000mm
	STIRRUPS	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C
M 25	Col.Size	350X500	350X500	350X500	350X500	350X800	350X800	500X500	500X500	500X500	
	2ND. FL. LVL. TO 3RD. FL. LVL	12-16# (4Nos/Set)	4-20# + 8-16# (4Nos/Set)	6-20# + 6-16# (4Nos/Set)	8-20# + 6-16# (4Nos/Set)	8-20# + 8-16# (4Nos/Set)	16-20# (4Nos/Set)	8-20# + 8-16# (5Nos/Set)	16-20# (5Nos/Set)	8-25# + 8-20# (5Nos/Set)	
		Lo = 1000mm	Lo = 1000mm	Lo = 1000mm	Lo = 1000mm	Lo = 1000mm	Lo = 1000mm	Lo = 1000mm	Lo = 1000mm	Lo = 1000mm	
	STIRRUPS	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	
M 25	Col.Size	350X500	350X500	350X500	350X500	350X800	350X800	500X500	500X500	500X500	
	3RD. FL. LVL. TO REST.	8-16# + 4-12# (4Nos/Set)	12-16# (4Nos/Set)	12-16# (4Nos/Set)	4-20# + 10-16# (4Nos/Set)	16-16# (4Nos/Set)	12-20# + 4-16# (4Nos/Set)	16-16# (5Nos/Set)	8-20# + 8-16# (5Nos/Set)	16-20# (5Nos/Set)	
		Lo = 1000mm	Lo = 1000mm	Lo = 1000mm	Lo = 1000mm	Lo = 1000mm	Lo = 1000mm	Lo = 1000mm	Lo = 1000mm	Lo = 1000mm	
	STIRRUPS	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	ZONE A - 8# @ 125 C/C ZONE B - 8# @ 175 C/C	
	STIRRUP ARRANGEMENT IN COLUMNS										



DETAIL OF TOOL COLUMN(TC1)

SCALE-1:25

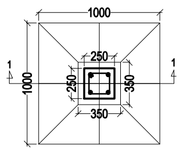
(FDN TO +900 MM.)



SEC. AT 1-1

SCALE=1:25

DETAIL OF TOOL COLUMN(TC1)
DETAIL OF FOOTING (FGtc)

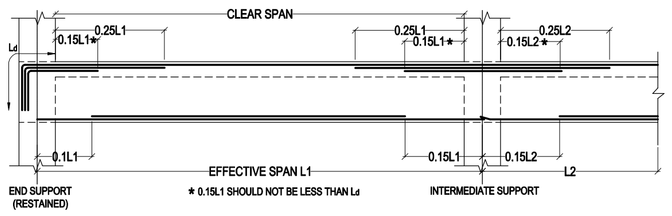


PLAN OF TOOL COLUMN FOUNDATION

SCALE=1:25

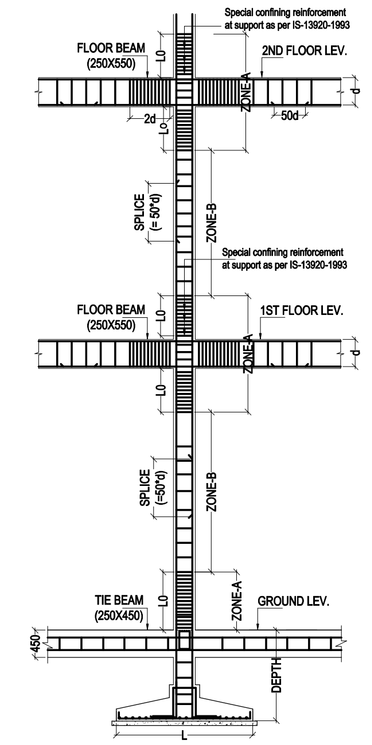
SCHEDULE OF TIE BEAM: (CONCRETE. GRADE - M25)

SL. NO.	BEAM MKD.	BEAM SIZE	ALTH. TOP	ALTH. BOTTOM	EXTRA REINFORCEMENT CONT.(T)	EXTRA REINFORCEMENT MID SPAN.(B)	EXTRA REINFORCEMENT DISCONT. EDGE.(T)	STIRRUPS
1.	TB1	250 X 400	3 - 16#	3 - 16#	2 - 12#	-----	2 - 12#	2L-8#@175CC (SUPP.) 2L-8#@200CC (SPAN.)
2.	TB2	250 X 400	3 - 16#	3 - 16#	1-16# + 1-12#	2 - 12#	1-16# + 1-12#	2L-8#@175CC (SUPP.) 2L-8#@200CC (SPAN.)
3.	TB3	250 X 400	3 - 16#	3 - 16#	2 - 16#	2 - 16#	2 - 16#	2L-8#@175CC (SUPP.) 2L-8#@200CC (SPAN.)



TYPICAL LONGITUDINAL SECTION OF TIE-BEAM

SCALE 1:25



LONGITUDINAL SECTION OF COLUMN

SCALE 1:50

STRUCTURAL NOTES :

1) ALL DIMENSIONS ARE IN MM. UNLESS OTHERWISE SPECIFIED.
2) GRADE OF CONCRETE - FOUNDATION = M25, TIE BEAM = M25, FLOOR BEAM= M25, COLUMN= M25, FLOOR SLAB= M25.
3) GRADE OF STEEL - H.Y.S.D. (Fe 550)
4) DO NOT SCALE THE DRAWING, WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
5) BASIS OF DESIGN IS LIMIT STATE METHOD .
6) LAPS & ANCHORAGE OF REINF. 50 TIMES DIA OF BARS.
7) CLEAR COVER TO MAIN REINFORCEMENT FOUNDATION = 50MM, FLOOR BEAM= 25 MM. COLUMN= 40 MM, SLAB= 20 MM.
8) BEARING CAPACITY OF PILE CONSIDERED AS PER SOIL REPORT.
9) DEPTH OF FOUNDATION 1.5M BELOW G.L.
10) THIS DRAWING IS A PRIVATE & CONFIDENTIAL DOCUMENT OF THE CONSULTANT. IT MUST NOT BE COPIED OR CHANGED WITHOUT THEIR CONSENT.

SIGNATURE OF OWNER

CERTIFICATE OF GEO-TECHNICAL ENGINEER.

IT IS CERTIFIED THAT THE COMPREHENSIVE GEO-TECHNICAL REPORT ON SOIL INVESTIGATION HAS BEEN PREPARED BY ME FOR DESIGN AND CALCULATION OF THE FOUNDATION BY ANALYZING THE SOIL SAMPLE FOR ESTIMATING THE BEARING CAPACITY OF THE SOIL ON WHICH FOUNDATION OF THE STRUCTURE WILL BE CONSTRUCTED.
I SHALL ALSO CHECK THE NATURE OF THE SOIL AFTER EXCAVATION AT SITE SO THAT FOUNDATION IS EXTENDED UP TO APPROPRIATE DEPTH THAT HAS BEEN PROPOSED IN THE GEO-TECHNICAL REPORT.

SIGNATURE OF GEO-TECHNICAL ENGG.

CERTIFICATE OF STRUCTURAL ENGINEER.

CERTIFY THAT THE STRUCTURAL DRAWING AND DESIGN OF BOTH THE FOUNDATION AND SUPER STRUCTURE OF THE BUILDING HAS BEEN MADE BY ME CONSIDERING THE SOIL TEST REPORT (AS PER THESE RULES AND THE REGULATIONS MADE UNDER THE ACT) AND ALSO CONSIDERING ALL POSSIBLE LOADS , SEISMIC LOAD AND THE MOMENTS GENERATED BY THE PROPOSED STRUCTURE AS PER THE BUREAU OF INDIAN STANDARD AND NATIONAL BUILDING CODE OF INDIA AND CERTIFIED THAT IT IS SAFE AND STABLE IN ALL RESPECT AND THESE PROVISIONS SHALL BE ADHERED TO DURING THE CONSTRUCTION.SURFACE STRENGTH OF ALL U.G.R. TOP SLAB & TOP OF BASEMENT SLAB BEYOND GROUND FLOOR SHALL NOT BE LESS THAN 45 M.T.

SIGNATURE OF STRUCTURAL ENGINEER

CERTIFICATE OF STRUCTURAL REVIEWER.

CERTIFY THAT THE STRUCTURAL DRAWING AND DESIGN OF BOTH THE FOUNDATION AND SUPER STRUCTURE OF THE BUILDING HAS BEEN MADE BY ME CONSIDERING THE SOIL TEST REPORT (AS PER THESE RULES AND THE REGULATIONS MADE UNDER THE ACT) AND ALSO CONSIDERING ALL POSSIBLE LOADS , SEISMIC LOAD AND THE MOMENTS GENERATED BY THE PROPOSED STRUCTURE AS PER THE BUREAU OF INDIAN STANDARD AND NATIONAL BUILDING CODE OF INDIA AND CERTIFIED THAT IT IS SAFE AND STABLE IN ALL RESPECT AND THESE PROVISIONS SHALL BE ADHERED TO DURING THE CONSTRUCTION.SURFACE STRENGTH OF ALL U.G.R. TOP SLAB & TOP OF BASEMENT SLAB BEYOND GROUND FLOOR SHALL NOT BE LESS THAN 45 M.T.

SIGNATURE OF STRUCTURAL REVIEWER

CERTIFICATE OF ARCHITECT

I DO HEREBY CERTIFY THAT PLANS, ELEVATIONS AND SECTIONS AND OTHER STRUCTURAL DETAILS OF THE PROPOSED BUILDING ON L.R PLOT NO-18(P),C.S PLOT NO.-272,(P),340(P),341(P),342(P),343,344,345(P),346,347,348,349 ,350(P),352,353(P),354(P),355(P)356(P),357(P),501(P),OF MOUZA -FARIDPUR, J.L NO-74,UNDER THE JURISDICTION OF DURGAPUR MUNICIPAL CORPORATION, HAVE BEEN PREPARED IN CONFORMITY WITH ALL RELEVANT PROVISIONS UNDER THE WEST BENGAL MUNICIPAL BUILDING RULES 2007.THIS IS ALSO TO CERTIFY THAT ALL RELEVANT NO OBJECTION CERTIFICATES FROM THE RESPECTIVE AUTHORITIES AS APPLICABLE IN THIS REGARD.

SIGNATURE OF ARCHITECT

PROJECT :

PROPOSED TWO STORIED AO & RBO AND THREE STORIED SBILD BANK'S BUILDING OF STATE BANK OF INDIA AT MAHATMA GANDHI AVENUE, KHATIAN NO-441, L.R PLOT NO-18(P), C.S PLOT NO.-272(P), 340(P), 341(P), 342(P), 343, 344, 345(P), 346, 347, 348, 349, 350(P), 352, 353(P), 354(P), 355(P), 356(P), 357(P), 501(P), OF MOUZA -FARIDPUR, P.S -DURGAPUR, J.L NO-74, DIST-PASCHIM BARDHAMAN, WEST BENGAL, PIN-713216.

CLIENT : **STATE BANK OF INDIA**

TITLE :

TIE BEAM LAYOUT PLAN, SCHEDULE OF COLUMNS & TIE BEAM .

ARCHITECT:

MISHRA & MISHRA CONSULTANCY SERVICES PVT. LTD.

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website : www.mmcsdesign.com

DATE -01.09.2025	PURPOSE : SANCTION
REV.DATE -	
SCALE -1:100,1:50, 1:25	DRAWING NO.: SBI/MMCS/STRUCTURE/ DURGAPUR-04/25-26
DRAWN BY - JAYANTA	
CHECKED BY - ANIRBAN /N.C	

NORTH :

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