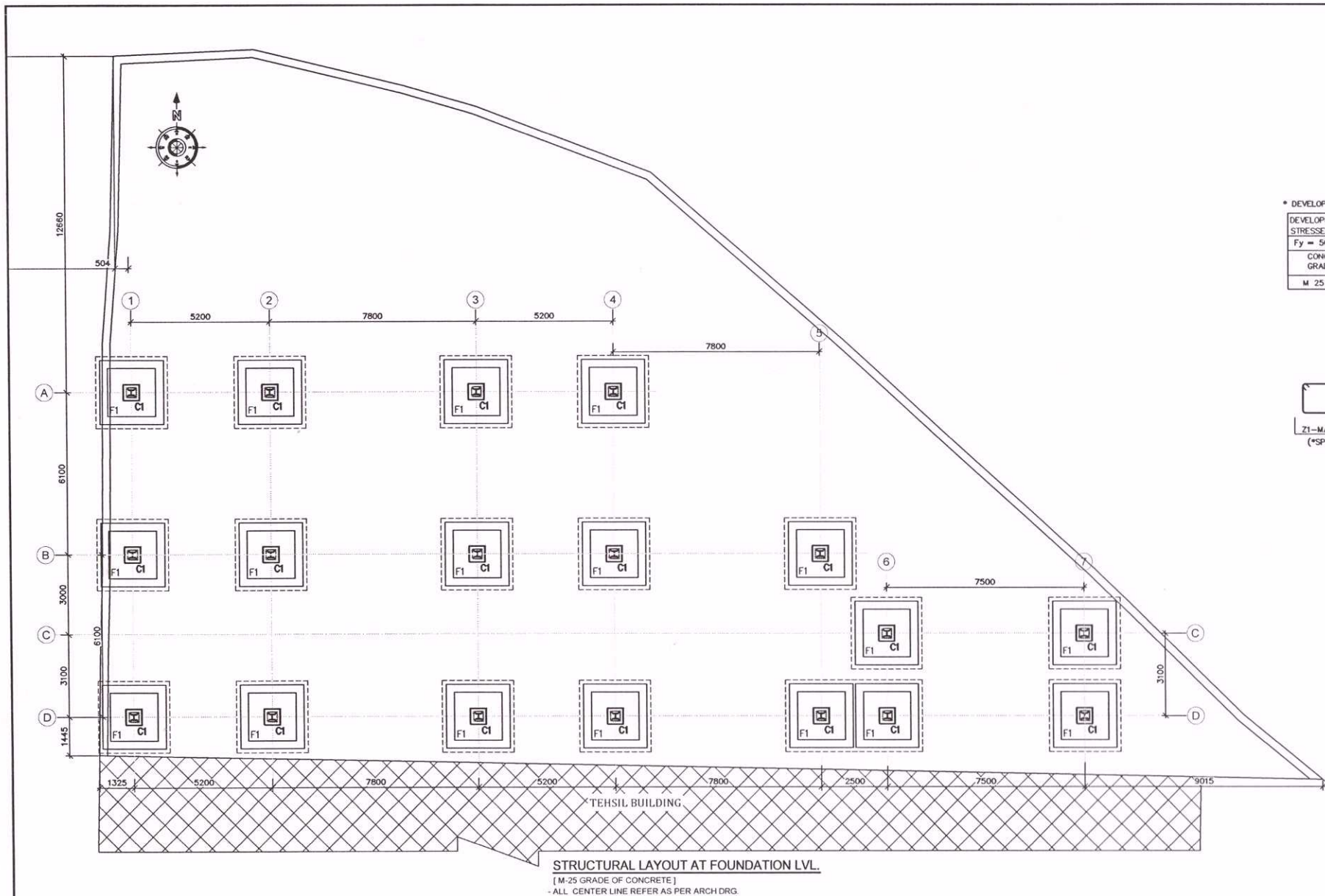




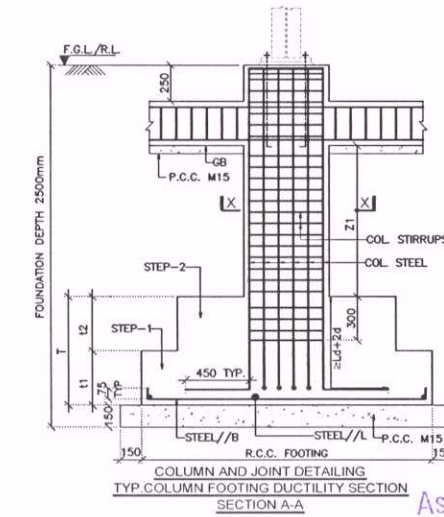
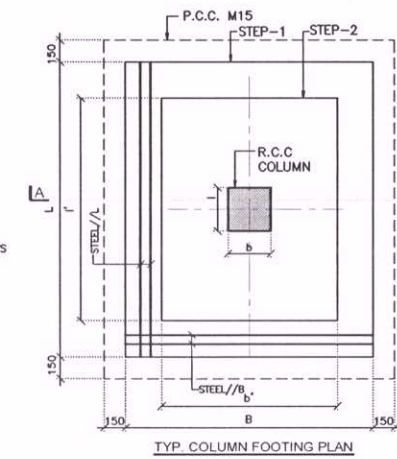
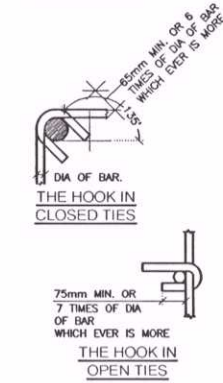
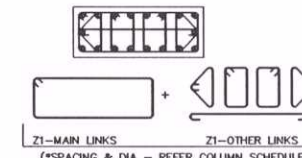
Z1 SHOULD NOT BE LESS THAN
(1) LARGER LATERAL DIMENSION OR
(2) L/6 OF CLEAR SPAN.
(3) 450 mm

db = DIAMETER OF THE BAR
ldc = DEVELOPMENT LENGTH
hc = CLEAR HEIGHT OF COLUMN

* DEVELOPMENT LENGTH For Fe = 5000 N/mm² SHALL BE AS FOLLOWS

DEVELOPMENT LENGTH (LAP LENGTH) FOR FULLY STRESSED DEFORMED BAR Fy = 5000 N/mm ²		
CONC. GRADE	TENSION BAR	COMP. BAR
M 25	48 ϕ	39 ϕ

(ϕ = DIAMETER OF BAR.)



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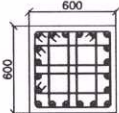
GENERAL NOTES:

- ALL DIMENSIONS ARE IN mm. AND LEVELS ARE AS SHOWN. ARE TO BE READ & NOT TO BE MISREAD.
- ALL R.C.C. SHALL BE MACHINE MIXED & MACHINE VIBRATED. ALL CONC. SHALL BE 100.
- FOR R.C.C. SHALL BE AS PER FOLLOWING:
 - CONC. - M25
 - STEEL - Fe 500
- FOR REINFORCEMENT COVER SHALL BE 50MM.
 - TOP: 50MM
 - SIDE: 50MM
 - BASE: 50MM
- MINIMUM CLEAR COVER TO CONCRETE:
 - 1. TOP: 50MM
 - 2. SIDE: 50MM
 - 3. BASE: 50MM
- FOR ALL DIMENSIONS LEVELS ETC. SHOULD BE CHECK WITH ARCHITECTURAL DRAWINGS BEFORE CONSTRUCTION. IF ANY DISCREPANCY/CONFLICT/INCONSISTENCY SHALL BE CONSULTED IMMEDIATELY.
- ALL CONCRETE SHALL BE MACHINE MIXED & MACHINE VIBRATED.
- MINIMUM CURING CONCRETE SHALL BE AS PER IS 456.
- SPECIAL NOTE: REGARDING SPACING OF LONGITUDINAL BARS OF COLUMN LAP SPICE SHALL BE PROVIDED AS IN THE DRAWING. HALF OF THE LENGTH NOT MORE THAN 50% OF THE BARS SHALL BE PLACED AT ONE SECTION. HOOPS SHALL BE PROVIDED OVER THE ENTIRE SPICE LENGTH NOT EXCEEDING 100 mm OR 1.5m.
- CLEAR SPICE BETWEEN TWO CONSECUTIVE LONGITUDINAL REINFORCEMENT SHALL BE EQUAL TO 35 mm OR LARGER OR LARGER REINFORCEMENT BAR, WHICHEVER IS MORE.
- MIN. PERIOD FOR REMOVAL OF FORMWORK FROM DATE OF CONCRETING SHALL BE AS BELOW:
 - SLAB: 7 DAYS
 - COLUMN: 14 DAYS
 - BEAM: 14 DAYS
- R.C.C. CONCRETE SHOULD BE CURED FOR A MINIMUM PERIOD OF 14 DAYS.
- ALL MATERIAL SUCH AS STEEL, CEMENT, SAND & AGGREGATE SHALL BE CONFIRMED TO IS SPECIFICATION & ALL WORK SHALL BE DONE IN A WORKMANLIKE MANNER.
- SPECIAL CURING REQUIREMENT OF COLUMN SHALL BE PROVIDED INTO THE FOOTING FOR AT LEAST 10 DAYS.
- PLEASE READ THIS DRAWING IN CONJUNCTION WITH ARCHITECTURAL DRAWING IF ANY DISCREPANCY FOUND CONSULT WITH STRUCTURAL ENGINEER/ARCHITECT.
- SOIL BEARING CAPACITY IS CONSIDERED AS 110 kN/m² AT 2.5 m FROM E.G.L. LVL. AS PER SOIL REPORT.
- FOR DESIGN SHALL BE PROVIDED BY GEOTECHNICAL CONSULTANT PRIOR TO FOUNDATION CONSTRUCTION.
- ALL R.C.C. SHALL BE MACHINE MIXED & MACHINE VIBRATED. ALL CONC. SHALL BE AS PER IS 456.
- FOUNDATION IS DESIGNED FOR SEISMIC ZONE 3 ONLY.

SCHEDULE OF CONCRETE GRADE	
ELEMENT	CONCRETE GRADE
FOOTING	M25
COLUMN & SHEAR WALL	M25
BEAM & SLAB	M25
D.H.W.T. & U.G.W.T.	M25

Dr. Mahesh Mungule
Assistant Professor, (Structural Engg.)
Department of Civil Engineering, IITRAM



FOUNDATION LVL	M25 : Fc5000 , COVER = 40MM CONFINING ZONE = FULL HEIGHT						
TO							
	<table><tr><td>Z1 MAIN LINK</td><td>Z1 OTHERS</td><td>Z2 LINKS</td></tr><tr><td>T8 ϕ 75</td><td>T8 ϕ 75</td><td>-----</td></tr></table>	Z1 MAIN LINK	Z1 OTHERS	Z2 LINKS	T8 ϕ 75	T8 ϕ 75	-----
	Z1 MAIN LINK	Z1 OTHERS	Z2 LINKS				
T8 ϕ 75	T8 ϕ 75	-----					
PLINTH BEAM LVL	 ϕT20 20-T20						
COLUMN MARKED	C1						
GROUPING NO.	GROUP-1						

SCHEDULE OF FOOTINGS (CONCRETE GRADE-M25) (FE 5000) (CLEAR COVER TO LONGITUDINAL R/F, -50MM)							
FOOTING NOS.	P.C.C. SIZE (B'xL')	STEP-1 SIZE (B'xL')	STEP-2 SIZE (b'x'l')	TOTAL DEPTH T	STEP-1 DEPTH t1	STEP-2 DEPTH t2	REINFORCEMENT BOTTOM
F1	2700 X 2700	2400 X 2400	1800 X 1800	750	300	450	T12 ϕ 100c/c

NO.	DATE	REVISION HISTORY	REVISOR BY	DRAWN BY
1	18.11.2022	PROJECT ARCHITECT : AP		
2		CHECKED BY : SB		
3		APPROVED BY : HP		
4		ELECTRICAL CONSULTANTS: HVAC		

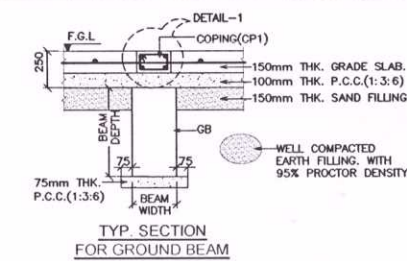
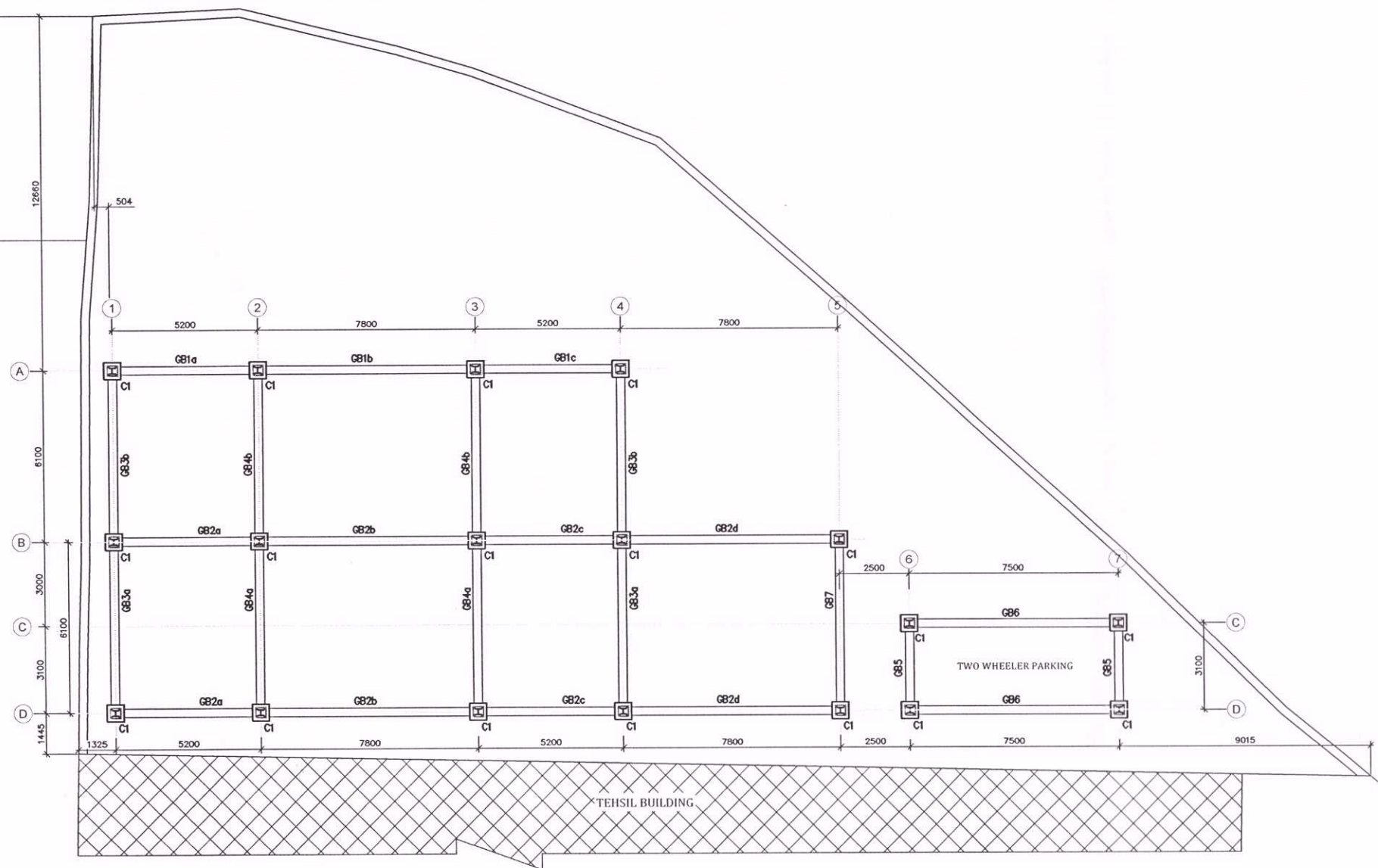
GOOD FOR CONSTRUCTION

CLIENT NAME: DEVELOPMENT OF AUTOMATED/MECHANIZED MULTILEVEL CAR PARKING SYSTEM AT TEHSIL CAMPUS, ROORKEE

DRAWING TITLE: FOUNDATION LAYOUT AND DETAILS

ARCHITECT & STRUCTURAL ENGINEERS
L.J. PURANI AND ASSOCIATES
203, BADA BUSINESS CENTER, ST. BAPPA'S COLLEGE GATEWAY, SURATNAGAR, AHMEDABAD 380 015.
TEL. (878) 2444318, FAX. (878) 2444319.
E-MAIL: purani@iitram.ac.in, purani@iitram.com

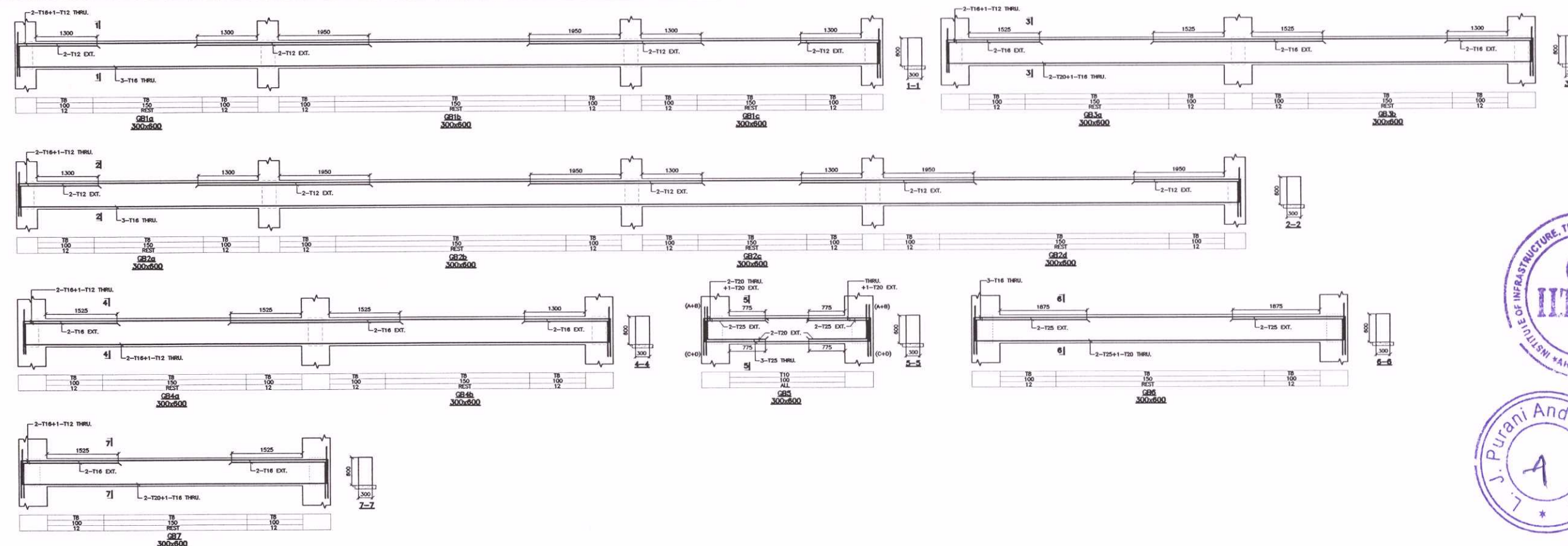
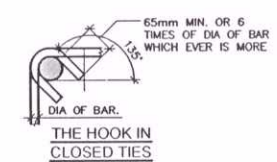
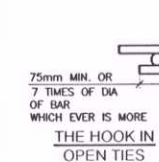
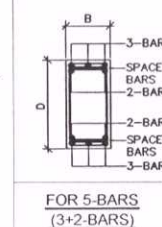
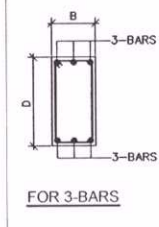
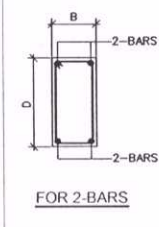
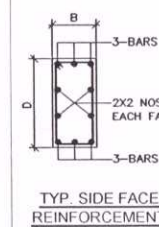
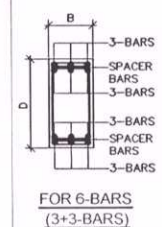
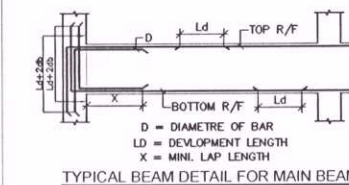
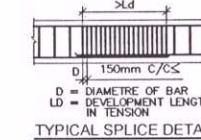
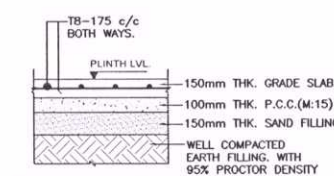
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TYPICAL CROSS SECTIONAL DETAILS FOR PLACEMENT OF MAIN REINFORCEMENT IN BEAMS

NOTES :

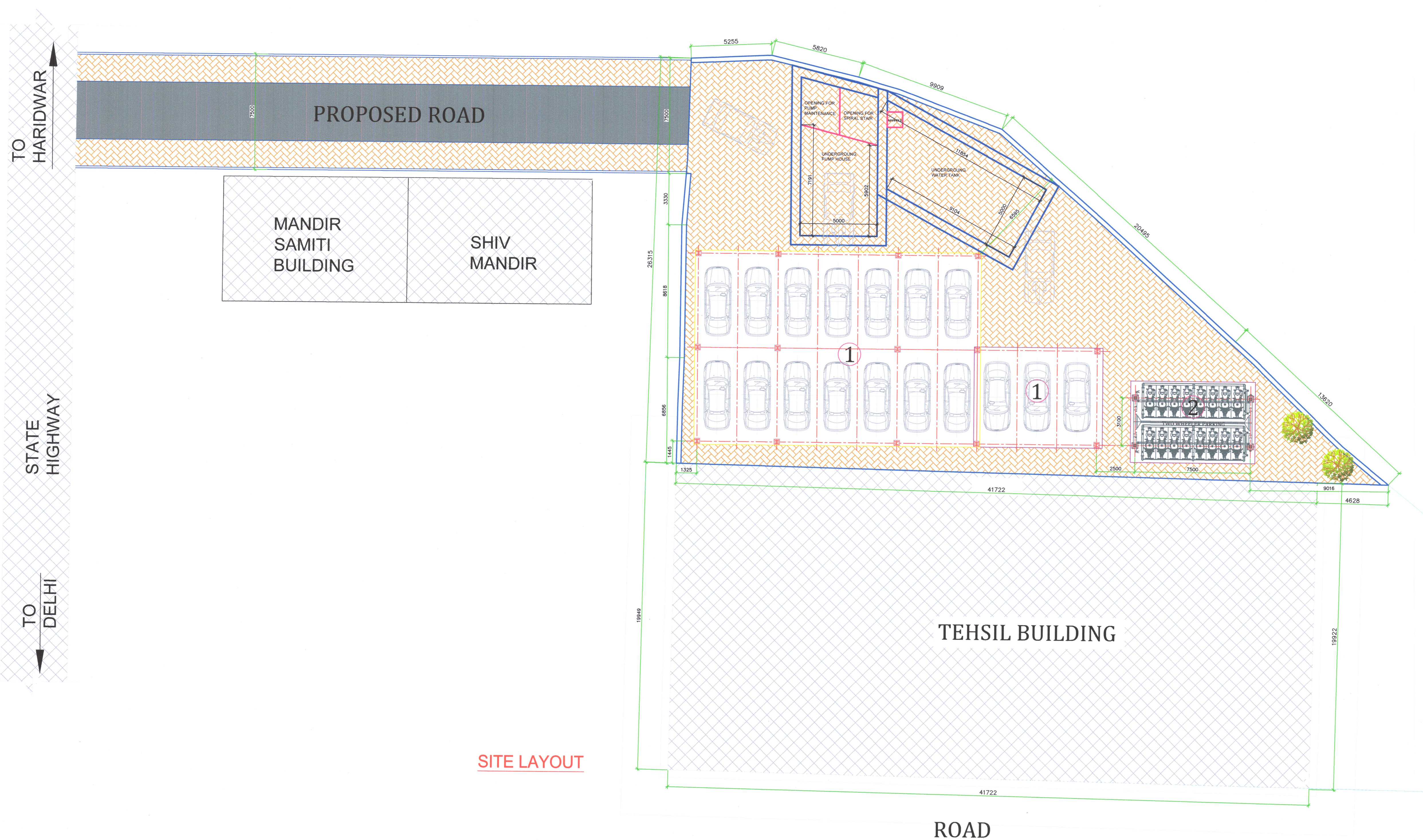
1. VERTICAL CLEAR SPACING BETWEEN TWO LAYERS OF BARS SHALL BE 25 MM OR LARGER BAR DIAMETER, WHICH EVER IS MORE.
2. BARS WITH HIGHER DIAMETER SHALL BE PLACED IN OUTER LAYER, WHERE EVER POSSIBLE.



Dr. Mahesh Mungule
Assistant Professor, (Structural Engg.)
Department of Civil Engineering, IITRAM



PRINTS ISSUED:							
DATE	REV.	ARCH.	CLIENT	CONTR.	SITE	TOTAL	REMARK
06.02.23	01	MAIL	---	---	---	---	FOR IFC.
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NO. DATE REVISION HISTORY						REVISED BY	DRAWN BY
GOOD FOR CONSTRUCTION							
CLIENT NAME: DEVELOPMENT OF AUTOMATED/ MECHANIZED MULTILEVEL CAR PARKING SYSTEM AT TEHSIL CAMPUS, ROORKEE							
DRAWING TITLE: GROUND BEAM LAYOUT & DETAILS							
DATE : 06.02.2023				PROJECT ARCHITECT : AP			
SCALE :				CHECKED BY : SD			
DRAWN BY : AP				APPROVED BY : NP			
ELECTRICAL CONSULTANTS:				HVAC			
ARCHITECT & STRUCTURAL ENGINEERS L.J. PURANI AND ASSOCIATES 101, BOLA BOMBESI COURT, 2, SURVEY'S CHUNG COMPLEX, NEARWATAPUR, HANUMANI TRIP BH. TEL. (9793)24444318, FAX. (9793)20551911. e-mail : info@ljpuri.com, ljpuri@gmail.com							
DRAWING NO.					PROJECT NO.		REVISION
DAMMP-TCR-02-300					2211014		01



SITE LAYOUT

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GENERAL NOTES:

(01) ALL DIMENSIONS ARE IN MM. AND LEVELS ARE TO BE READ & NOT TO BE MEASURED.

(02) ALL R.C.C. SHALL BE MACHINE MADE & MACHINE VIBRATED. ALL CONC. SHALL BE 1:2:4. ALL R.C.C. SHALL BE AS PER FOLLOWING.

(03) FOR REINFORCEMENT CONSIDER GRADE PE 250.

(04) MINIMUM CLEAR COVER TO CONCRETE -

1. FOOTING - 50 mm

2. COLUMN & BEAM - 40 mm

3. SLAB - 25 mm

(05) LAPPING OF LONGITUDINAL BARS SHALL BE STAGGERED TO AVOID CONCENTRATION OF REINFORCEMENT.

(06) FOR ALL DIMENSIONS, LEVELS ETC. SHOULD BE CHECKED WITH ARCHITECTURAL DRAWINGS BEFORE EXECUTION. IF FOUND ANY CONFLICT/DISCREPANCY PLEASE CONSULT TO CONSULTANT IMMEDIATELY.

LEGEND	
ROAD	—
BOUNDARY	—
DIMENSION	—
TREE	—
CONTOUR	—
BUILDING LINE	—
PAVER BLOCK	—
CAR PARKING	①
PARKING FOR BIKE	②
EXISTING	—

LEGEND	
TOTAL PLOT AREA	806 SQMT 8675.7 SQFT 963.9 SQYD
NUMBER OF CAR BLOCKS	2
TOTAL NUMBER OF BIKE	-
TOTAL NUMBER OF CARS	91
TOTAL NO. OF TWO WHEELERS	- 96

Nilesh L. Purani
C.O.A. CA/96/19836

DATE	REV.	ARCH.	CLIENT	CONTR.	SITE	TOTAL	REMARK
18.11.22	R0	MAIL	01	01	01	03	FOR G.F.C.

NO.	DATE	REVISION HISTORY	REVISED BY	DRAWN BY
1	18.11.2022	PROJECT ARCHITECT	AP	SB
2	18.11.2022	CHECKED BY	NP	NP
3	18.11.2022	APPROVED BY	NP	NP
4	18.11.2022	HVAC	NP	NP

GOOD FOR CONSTRUCTION

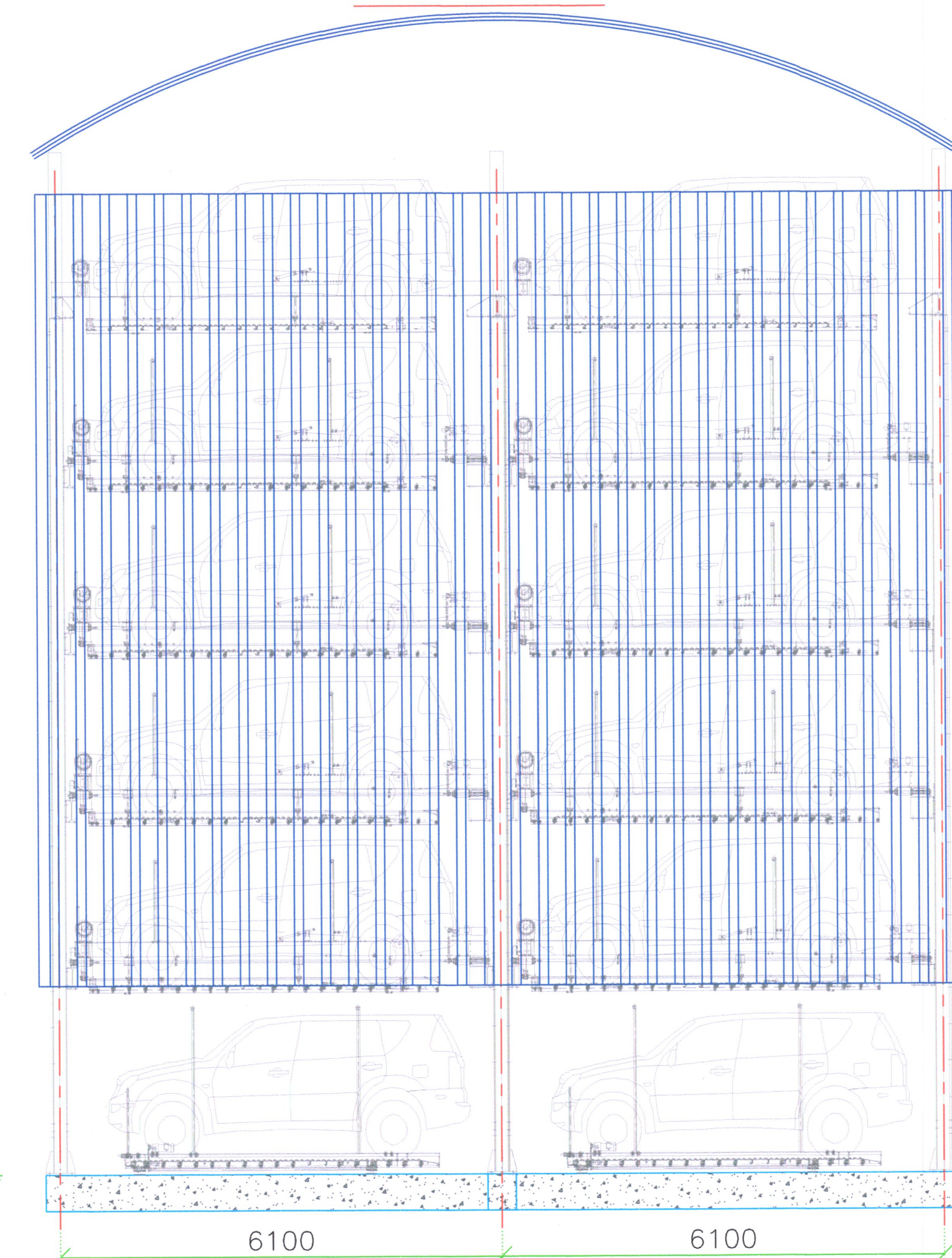
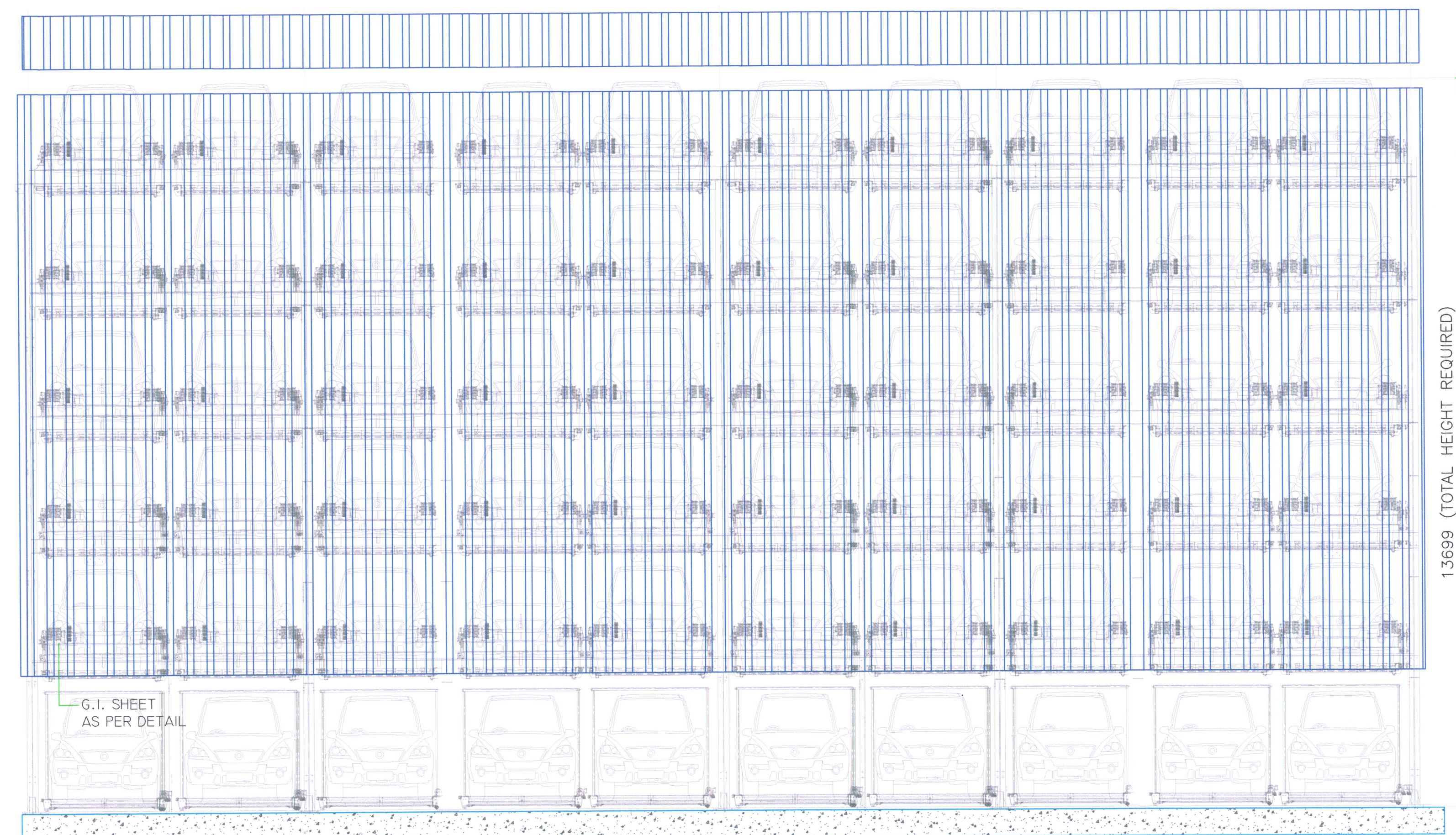
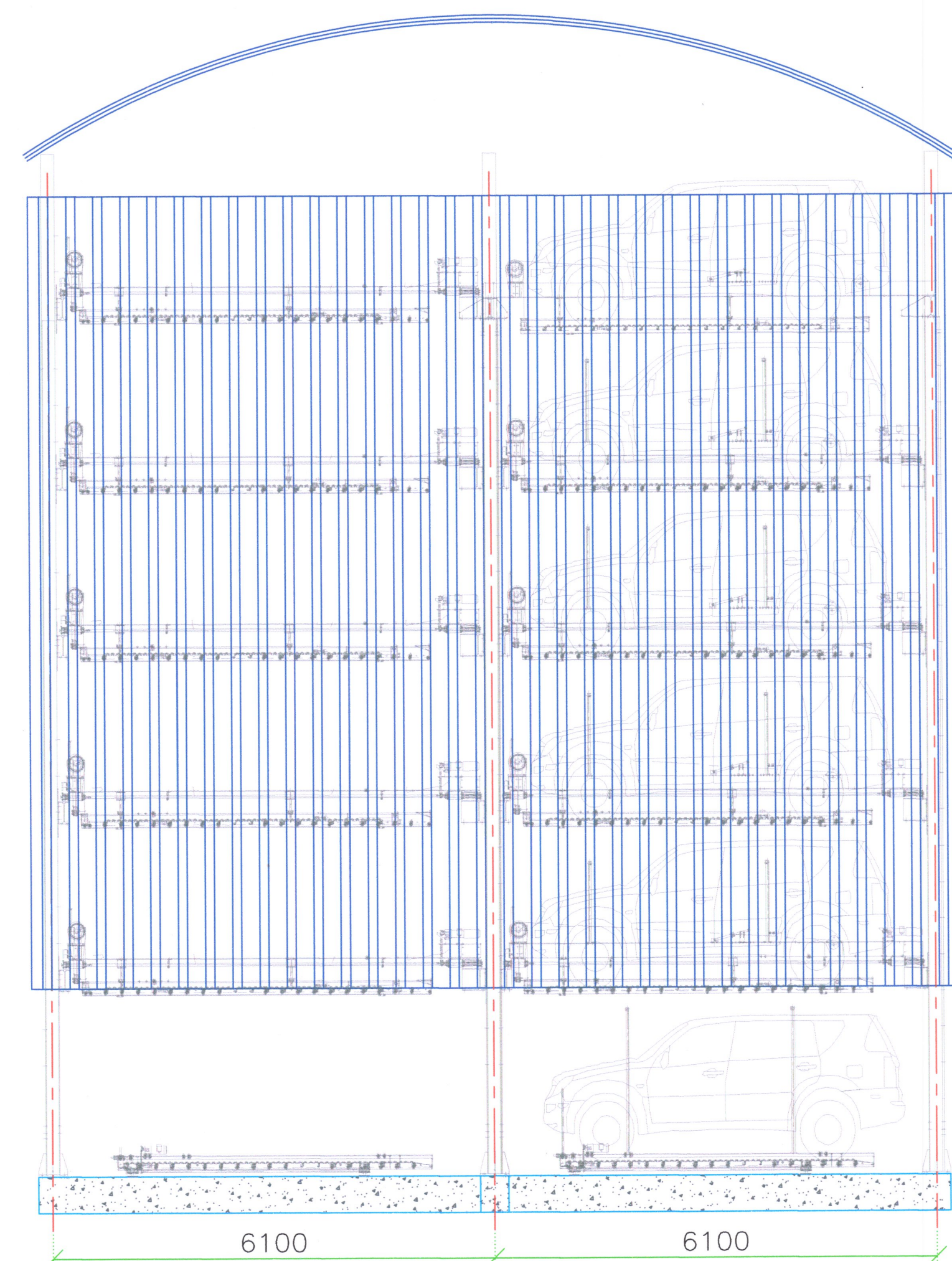
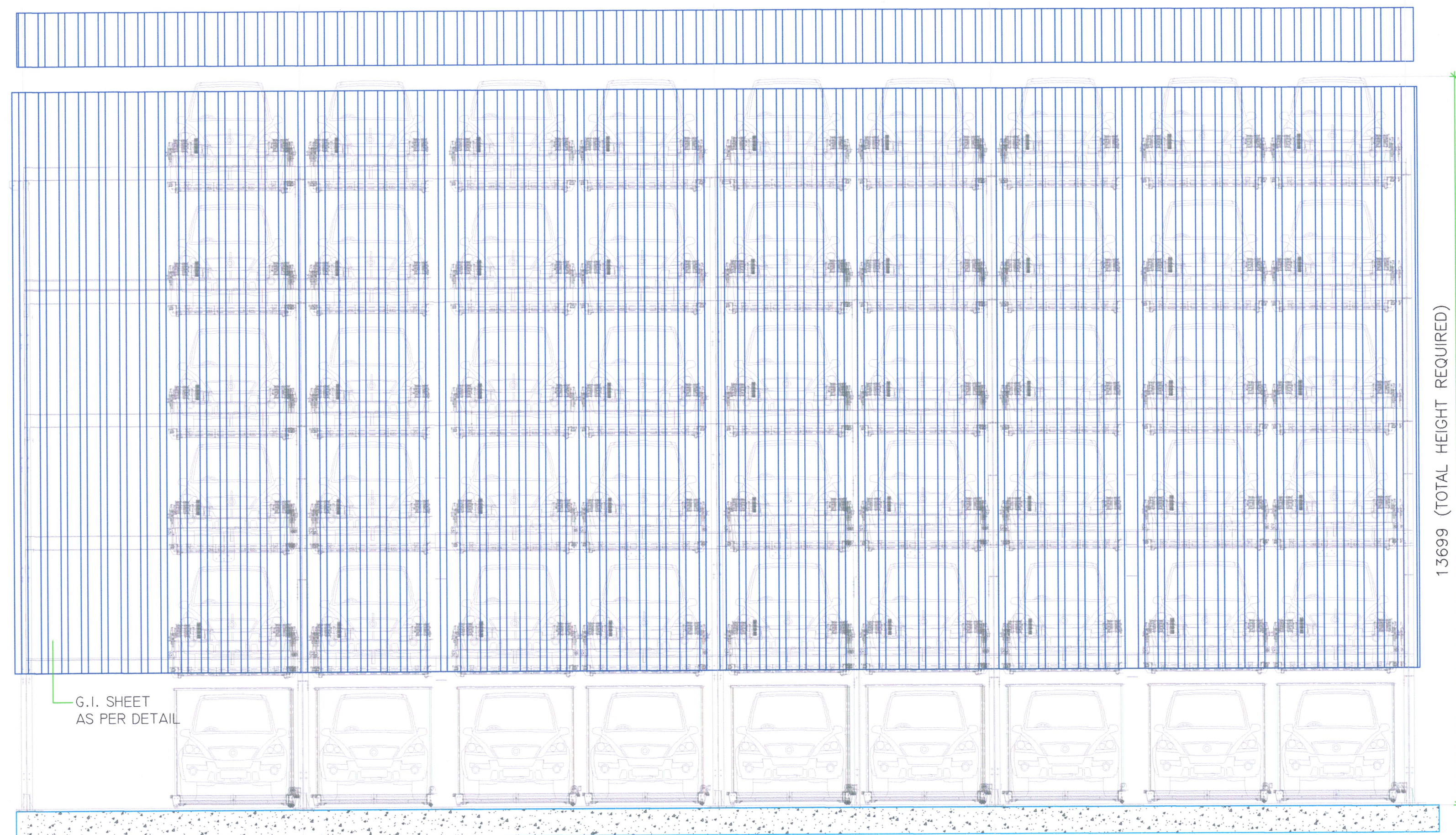
CLIENT NAME: DEVELOPMENT OF AUTOMATED/ MECHANIZED MULTILEVEL CAR PARKING SYSTEM AT TEHSIL CAMPUS, ROORKEE

DRAWING TITLE: SITE LAYOUT

DATE	18.11.2022	PROJECT ARCHITECT	AP
SCALE	-	CHECKED BY	SB
DRAWN BY	AP	APPROVED BY	NP
ELECTRICAL CONSULTANTS	-	HVAC	NP

ARCHITECT & STRUCTURAL ENGINEERS
L.J. PURANI AND ASSOCIATES
303, DDA BUSINESS CENTER, ST. XAVIER'S COLLEGE CORNER, NAVRANGPURA, AHMEDABAD 380 009,
T.E.L. : (079) 24448218, FAX : (079) 24448191,
E-MAIL : info@ljparchit.com

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PRIOR WRITTEN CONSENT OF THE FIRM.

GENERAL NOTES :

1. ALL DIMENSIONS ARE IN MM. AND LEVELS ARE IN M. DIMENSIONS ARE TO BE READ & NOT TO BE MEASURED.
2. ALL R.C. WORK TO BE MACHINE MIXED & MACHINE VIBRATED. ALL CONC. MIX FOR R.C.C. SHALL BE AS PER FOLLOWING :
3. R.C.C. : M20 (1:1.5:3) MINIMUM OTHERWISE SPECIFIED
4. FOR IMPROVEMENT CONSTRUCTION OF R.C.C. CONCRETE PLEASE CONSULT TO CONSULTANT
5. M.S. BARS CONFORMING TO IS 1786 - 2008
6. M.S. BARS CONFORMING TO IS 432 - 1962
7. MINIMUM CURE RATIO TO CONCRETE :

1. FOOTING	~ 50 mm	3. BEAM	~ 30 mm
2. COLUMN & SHEAR WALL	~ 50 mm	4. SLAB	~ 35 mm
8. LAPPING OF LONGITUDINAL BARS SHALL BE STAGGERED TO AVOID CONCENTRATION OF REINFORCEMENT
9. FOR ALL DIMENSIONS, LEVELS ETC. SHOULD BE CHECK WITH ARCHITECTURAL DRAWINGS BEFORE COMMENCEMENT OF WORK.

13
Nilesh L. Purani
C.O.A. CA/96/19836

PRINTS ISSUED:							
DATE	REV.	ARCH.	CLIENT	CONTR.	SITE	TOTAL	REMARK
25.11.22	R0	MAIL	-	-	-	-	FOR GFC.

[illegible]

NO.	DATE	REVISION HISTORY	REVISED BY	DRAWN BY
GOOD FOR CONSTRUCTION				

CLIENT NAME: **DEVELOPMENT OF AUTOMATED/
MECHANIZED MULTILEVEL CAR PARKING SYSTEM
AT TEHSIL CAMPUS, ROORKEE**

DRAWING TITLE:
TYPICAL PUZZLE PARKING SECTION

DATE	: 18.11.2022	PROJECT ARCHITECT	: AP
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SCALE : 1/2"	CHECKED BY : SB
DRAWN BY : AP	APPROVED BY : NP
ELECTRICAL CONSULTANTS :	H V A C

[illegible]

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