

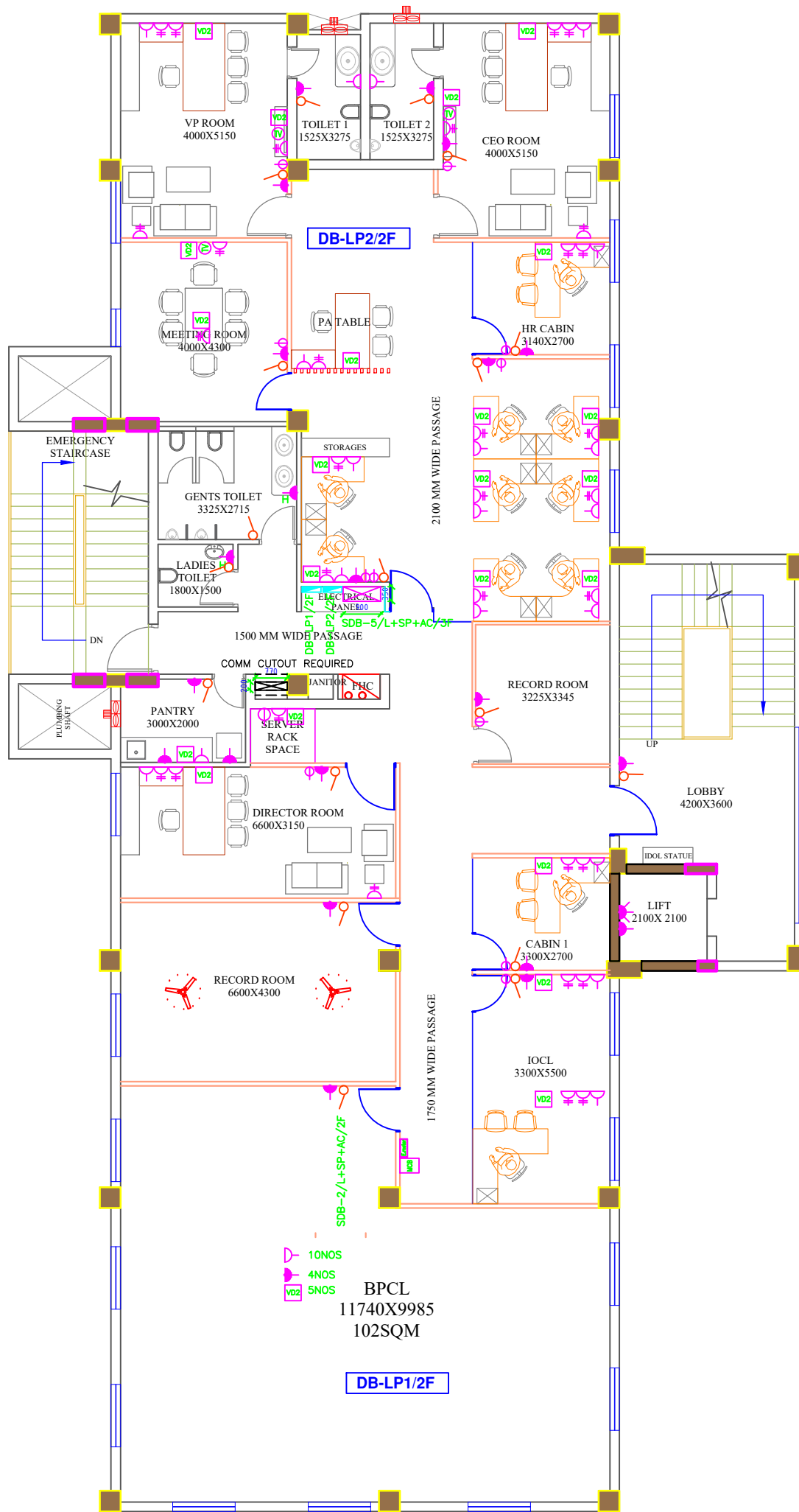
LEGEND :-

- 16A ONE WAY SWITCH FOR PROJECTOR
- 6A SWITCH SOCKET OUTLET (RAW POWER)
- 6A SWITCH SOCKET OUTLET (TWIN) (RAW POWER) (1NO SWITCH & 2NOS SOCKET)
- 16A SOCKET OUTLET (RAW POWER) FOR OVERHEAD PROJECTOR
- 16A SWITCH SOCKET OUTLET (RAW POWER)
- 16A SWITCH SOCKET OUTLET (RAW POWER) FOR HAND DRYER
- VOICE/DATA OUTLET
- TV OUTLET
- JUNCTION BOX FOR OVERHEAD PROJECTOR
- 20A, 3PIN PVC MOULDED P/S (RAW POWER)
- 20A, 3PIN PVC MOULDED SWITCH & SOCKET (RAW POWER)
- SWITCH BOARD
- EXHAUST FAN
- SUB ELECTRICAL METER
- MCB
- CEILING FAN

NOTES :-

1. PLEASE REFER TO ARCHITECT FOR ALL LEVELS/ MOUNTING HEIGHTS.
2. ALL LEVELS/ MOUNTING HEIGHTS ARE TO BE TAKEN TO THE BOTTOM OF OUTLET BOX.
3. ALL CONDUITS FOR RAW / UPS POWER ABOVE FALSE CEILING / DROPS ON COLUMN OR WALL SURFACE SHALL BE 25MM DIA 16 SWG MS.
4. ALL CONDUITS FOR RAW / UPS POWER IN FLOOR SHALL BE 25MM DIA PVC (2MM WALL THICKNESS)

REV. NO.	DATE OF REV.	DESCRIPTION
R2	02.07.20	ELECT DRG REVISED
R1	29.06.20	ARCH & ELECT DRG REVISED
PROJECT		
ADMINISTRATIVE BUILDING		
CLIENT		
 D.A.F.F.P.L. SHAHBAD, MOHAMMADPUR, IGI AIRPORT, NEW DELHI		
ARCHITECTS		
 MILLENNIUM CITY MULTIVENTURES Pvt.Ltd. 302, UNITECH ARCADE, SOUTH CITY-4, SECTOR-49, GURUGRAM-122018, HARYANA, INDIA		
STATUS		
TENDER DRAWING		
DRAWING TITLE		
STILT FLOOR PLAN (RECEPTACLE LAYOUT)		
SCALE :	1 : 100	DRAWN BY : Kamboj
DATE :	02.05.2022	CHECKED BY : Parveen
REVISION NO. :	RD	APPROVED BY :
DRAWING NO. : MCMVPL/DAFFPL/E-01		



10NOS
 4NOS
 5NOS
 BPCL
 11740X9985
 102SQM
 DB-LP1/2F

LEGEND :-

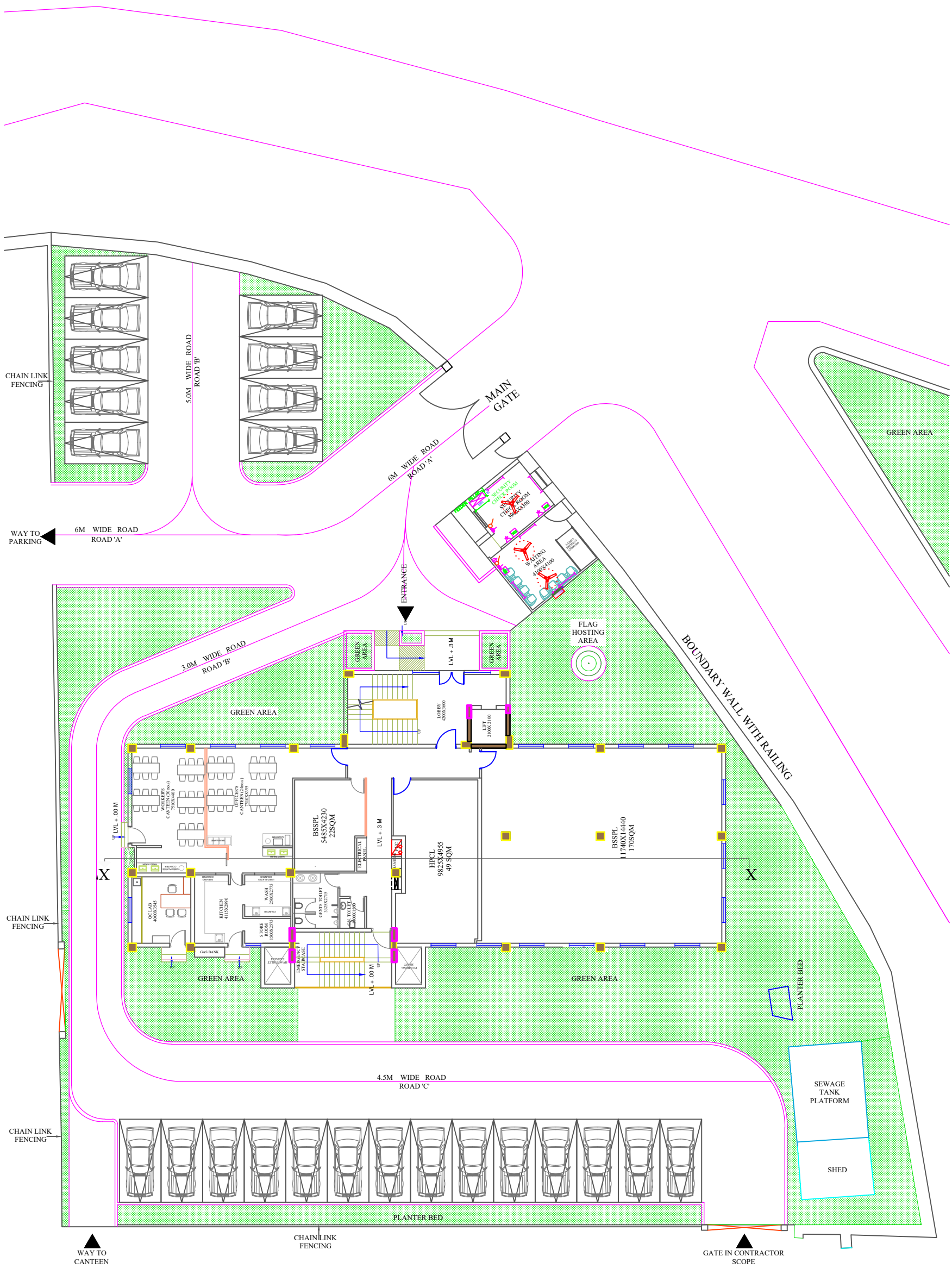
- 16A ONE WAY SWITCH FOR PROJECTOR
- 6A SWITCH SOCKET OUTLET (RAW POWER)
- 6A SWITCH SOCKET OUTLET (TWIN) (RAW POWER)
- 16A SOCKET OUTLET (RAW POWER) FOR OVERHEAD PROJECTOR
- 16A SWITCH SOCKET OUTLET (RAW POWER) FOR OVERHEAD PROJECTOR
- 16A SWITCH SOCKET OUTLET (RAW POWER) FOR HAND DRYER
- VOICE/DATA OUTLET
- TV OUTLET
- JUNCTION BOX FOR OVERHEAD PROJECTOR
- 20A, 3PIN PVC MOULDED P/S (RAW POWER)
- 20A, 3PIN PVC MOULDED SWITCH & SOCKET (RAW POWER)
- SWITCH BOARD
- EXHAUST FAN
- SUB ELECTRICAL METER
- MCB
- CEILING FAN

- NOTES :-**
1. PLEASE REFER TO ARCHITECT FOR ALL LEVELS/ MOUNTING HEIGHTS.
 2. ALL LEVELS/ MOUNTING HEIGHTS ARE TO BE TAKEN TO THE BOTTOM OF OUTLET BOX.
 3. ALL CONDUITS FOR RAW / UPS POWER ABOVE FALSE CEILING / DROPS ON COLUMN OR WALL SURFACE SHALL BE 25MM DIA 16 SWG MS.
 4. ALL CONDUITS FOR RAW / UPS POWER IN FLOOR SHALL BE 25MM DIA PVC (2MM WALL THICKNESS)

REV. NO.	DATE OF REV.	DESCRIPTION							
R2	02.07.20	ELECT DRG REVISED							
R1	29.06.20	ARCH & ELECT DRG REVISED							
PROJECT	ADMINISTRATIVE BUILDING								
CLIENT	D.A.F.F.P.L. SHAHBAD, MOHAMMADPUR, IGI AIRPORT, NEW DELHI								
ARCHITECTS	MILLENNIUM VENTURES MILLENNIUM CITY MULTIVENTURES Pvt.Ltd. 302, UNITECH ARCADE, SOUTH CITY-4, SECTOR-49, GURUGRAM-122018, HARYANA, INDIA								
STATUS	TENDER DRAWING								
DRAWING TITLE	SECOND FLOOR PLAN (RECEPTACLE LAYOUT)								
SCALE :	1 : 100	DRAWN BY :	Kamboj						
DATE :	02.05.2022	CHECKED BY :	Parveen						
REVISION NO. :	RD	APPROVED BY :							
		DRAWING NO. :	MCMVPL/DAFFPL/E-03						

NOTES:

- DO NOT SCALE THE DRAWING.
- THE DIMENSIONS SHOULD BE CHECKED AND VERIFIED BEFORE THE EXECUTION OF WORK AT SITE.
- ANY DISCREPANCY FOUND IN THE DRAWING/AT SITE SHOULD BE BROUGHT TO THE NOTICE OF THE ARCHITECTS.
- ALL DIMENSIONS / MEASUREMENTS SHOULD BE READ AND NOT MEASURED.
- ONLY LATEST DRAWINGS TO BE REFERRED, SUPERCEDED DRAWINGS NOT TO BE KEPT ON SITE.
- DRAWINGS ARE CROSS REFERENCED AND ARE TO BE READ IN CONJUNCTION WITH OTHER DRAWINGS AS INDICATED.



NOTES :-

- PLEASE REFER TO ARCHITECT FOR ALL LEVELS/ MOUNTING HEIGHTS.
- ALL LEVELS/ MOUNTING HEIGHTS ARE TO BE TAKEN TO THE BOTTOM OF OUTLET BOX.
- ALL CONDUITS FOR RAW / UPS POWER ABOVE FALSE CEILING / DRIPS ON COLLIER OR WALL SURFACE SHALL BE 25MM DIA 16 SWG MS.
- ALL CONDUITS FOR RAW / UPS POWER IN FLOOR SHALL BE 25MM DIA PVC (2MM WALL THICKNESS)

LEGEND :-

- SWITCH BOARD
- 6A SWITCH SOCKET OUTLET (110V) (9MM POWER)
- 16A SWITCH & 2KWS SOCKET
- 16A SWITCH SOCKET OUTLET (9MM POWER)
- VOICE/DATA OUTLET
- TV OUTLET
- FUSE UNIT IN PVC HOUSED OUTLET BOX AT CEILING LEVEL FOR HAND DRYER AS WELL AS INFRARED FLUSH VALVES.
- CEILING FAN

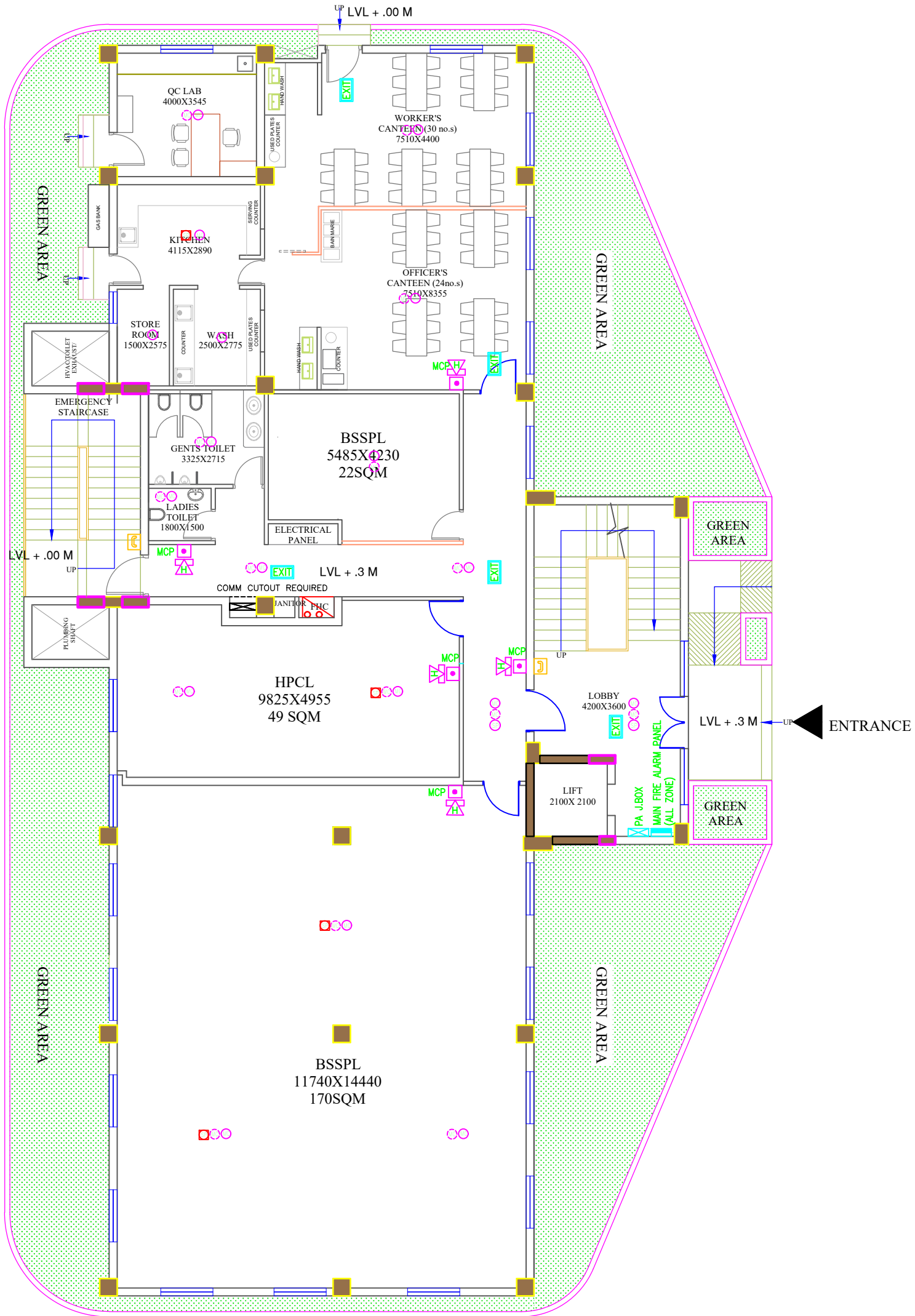
DETAIL OF LIGHTING FIXTURES

NO	DESCRIPTION	LEGEND	CATALOGUE NO	FIXTURE TYPE
1	1 X 20W LED LIGHT FIXTURE		BN108C LED20S-4000 L120 PSU WH	SURFACE MOUNTED
2	1 X 40W LED LIGHT FIXTURE		BN108C LED40S-4000 L120 PSU WH	SURFACE MOUNTED

PROJECT	ADMINISTRATIVE BUILDING		
CLIENT	D.A.F.F.P.L SHAHBAD, MOHAMMADPUR, IGI AIRPORT, NEW DELHI		
ARCHITECTS	MILLENNIUM CITY MULTIVENTURES PVT.LTD. 302, UNITECH ARCADIA,SOUTH CITY-II, SECTOR-49,GURUGRAM-122016, HARYANA, INDIA		
STATUS	TENDER DRAWING		
DRAWING TITLE	SITE PLAN (RECEPTACLE LAYOUT)		
SCALE :	1 : 100	DRAWN BY :	Kamboj
DATE :	02.05.2022	CHECKED BY :	Parveen
REVISION NO. :	RO	APPROVED BY :	
DRAWING NO. :	MCMVPL/DAFFPL/E-05		

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LEGEND :-

- MULTICRITERION DETECTOR
- MULTICRITERION DETECTOR (ABOVE FALSE CEILING)
- MANUAL CALL POINT
- HOOTER + STROBE
- RECESSED TYPE SPEAKER
- SURFACE MOUNTED SPEAKER
- FAULT ISOLATOR
- TALK BACK UNIT
- CONTROL MODULE FOR HOOTER, PA, TALK BACK & VENT FAN
- MONITOR MODULE FOR FLOW SWITCH
- FLUORESCENT EXIT SIGNAGES

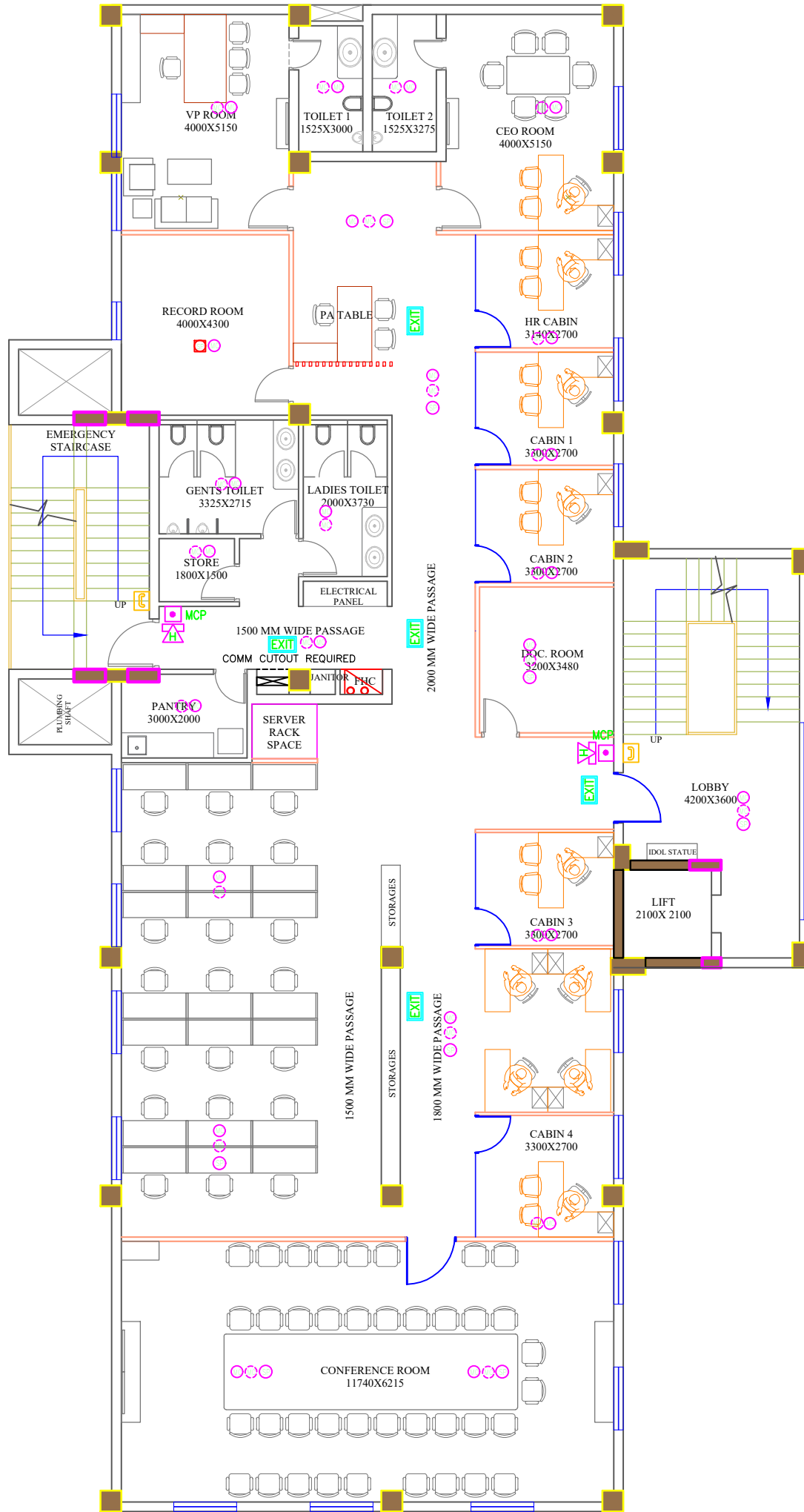
GENERAL NOTES FOR FIRE ALARM SYSTEM

- DETECTORS ABOVE FALSE CEILING ARE TO BE LOCATED NEAR LIGHT FIXTURE TO ENABLE EASY ACCESS/MAINTENANCE.
- ELECTRICAL CONTRACTOR IS REQUIRED TO CO-ORDINATE POSITION OF ALL DETECTORS ABOVE/BELOW FALSE CEILING WITH FIXTURE, DUCTS & PIPES ETC. AND ENSURE THAT POSITIONING IS CARRIED OUT CORRECTLY.
- POSITION OF ALL DETECTORS SHOWN ON THE DRAWING IS INDICATIVE AND THESE SHOULD BE LOCATED CAREFULLY AFTER PROPER CO-ORDINATION & NEAR RETURN AIR PATHS WHERE EVER POSSIBLE.
- OPTICAL DETECTORS SHALL BE PROVIDED IN ALL LOFT AREA WHERE AHU'S ARE LOCATED.
- UNLESS OTHERWISE MENTIONED CONDUITS FOR FIRE ALARM SYSTEM SHALL BE MS 20 MM DIA (16 SWG)
- FAULT ISOLATOR TO BE PROVIDED AFTER EVERY 20 ADDRESSABLE DEVICES.

PROJECT	ADMINISTRATIVE BUILDING
CLIENT	 D.A.F.F.P.L. SHAHBAD, MOHAMMADPUR, IGI AIRPORT, NEW DELHI
ARCHITECTS	 MILLENNIUM VENTURES MILLENNIUM CITY MULTIVENTURES Pvt.Ltd. 302, UNITECH ARCADIA, SOUTH CITY-II, SECTOR-49, GURUGRAM-122018, HARYANA, INDIA
STATUS	TENDER DRAWING
DRAWING TITLE	STILT FLOOR PLAN (FIRE ALARM, PA & TALK BACK SYSTEM LAYOUT)
SCALE	1 : 100
DATE	02.05.2022
REVISION NO.	RD
DRAWN BY	Kamboj
CHECKED BY	Parveen
APPROVED BY	
DRAWING NO.	MCMVPL/DAFFPL/E-06

NOTES:

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- DRAWINGS ARE CROSS REFERENCED AND ARE TO BE READ IN CONJUNCTION WITH OTHER DRAWINGS AS INDICATED.



LEGEND :-

- MULTICRITERION DETECTOR
- MULTICRITERION DETECTOR (ABOVE FALSE CEILING)
- MANUAL CALL POINT
- HOOTER + STROBE
- RECESSED TYPE SPEAKER
- SURFACE MOUNTED SPEAKER
- FAULT ISOLATOR
- TALK BACK UNIT
- CONTROL MODULE FOR HOOTER, PA, TALK BACK & VENT FAN
- MONITOR MODULE FOR FLOW SWITCH
- FLUORESCENT EXIT SIGNAGES

GENERAL NOTES FOR FIRE ALARM SYSTEM

- DETECTORS ABOVE FALSE CEILING ARE TO BE LOCATED NEAR LIGHT FIXTURE TO ENABLE EASY ACCESS/MAINTENANCE.
- ELECTRICAL CONTRACTOR IS REQUIRED TO CO-ORDINATE POSITION OF ALL DETECTORS ABOVE/BELOW FALSE CEILING WITH FIXTURE, DUCTS & PIPES ETC. AND ENSURE THAT POSITIONING IS CARRIED OUT CORRECTLY.
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- UNLESS OTHERWISE MENTIONED CONDUITS FOR FIRE ALARM SYSTEM SHALL BE MS 20 MM DIA (16 SWG)
- FAULT ISOLATOR TO BE PROVIDED AFTER EVERY 20 ADDRESSABLE DEVICES.

PROJECT **ADMINISTRATIVE BUILDING**

CLIENT D.A.F.F.P.L. SHAHBAJ, MOHAMMADPUR, IGI AIRPORT, NEW DELHI

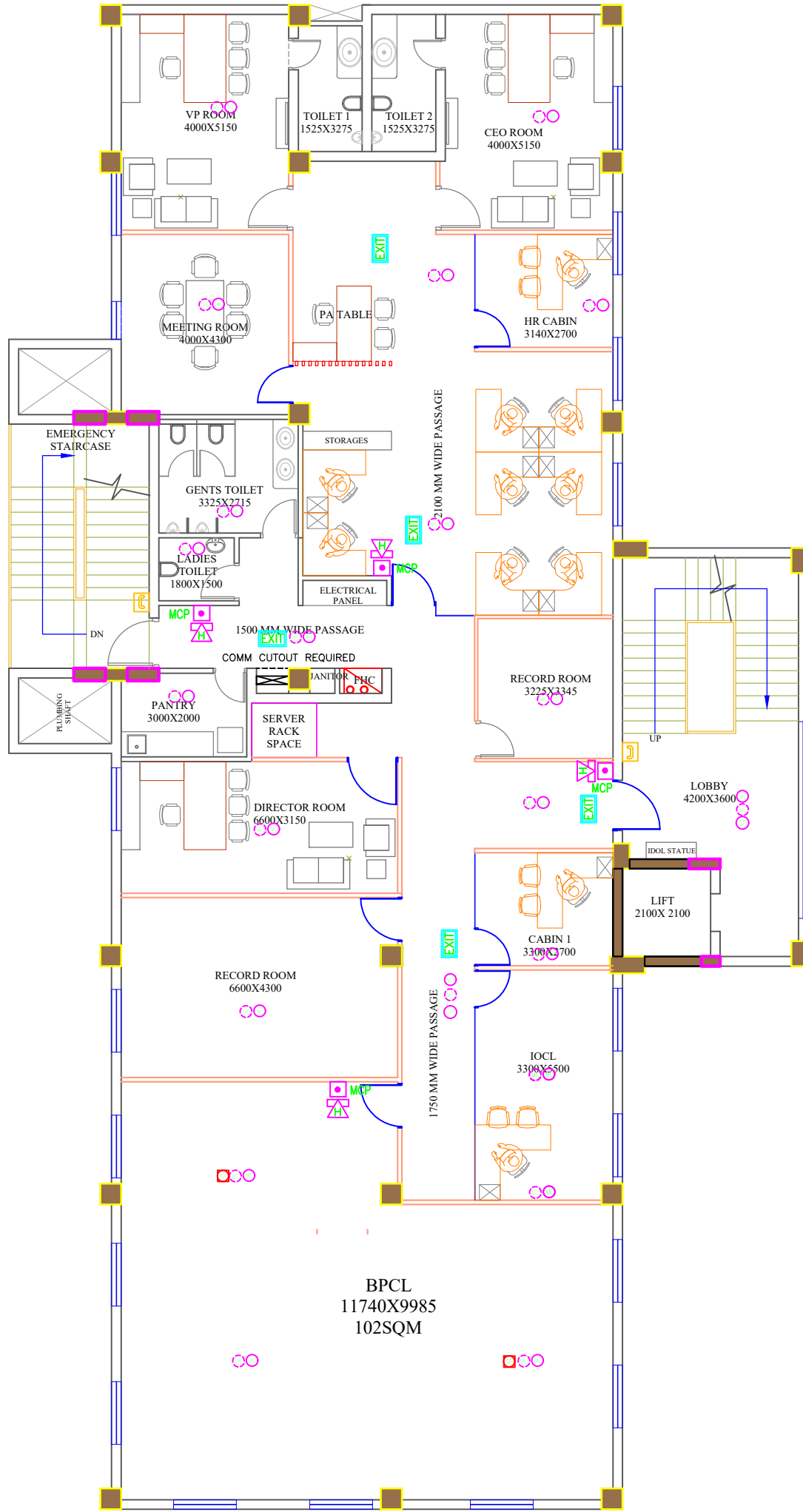
ARCHITECTS MILLENNIUM VENTURES MILLENNIUM CITY MULTIVENTURES Pvt.Ltd. 302, UNITECH ARCADIA, SOUTH CITY-II, SECTOR-49, GURUGRAM-122018, HARYANA, INDIA

STATUS **TENDER DRAWING**

DRAWING TITLE **FIRST FLOOR PLAN (FIRE ALARM, PA & TALK BACK SYSTEM LAYOUT)**

SCALE : 1 : 100 DRAWN BY : Kambaj
DATE : 02.05.2022 CHECKED BY : Parveen
REVISION NO. : RD APPROVED BY :

DRAWING NO. : **MCMVPL/DAFFPL/E-07**



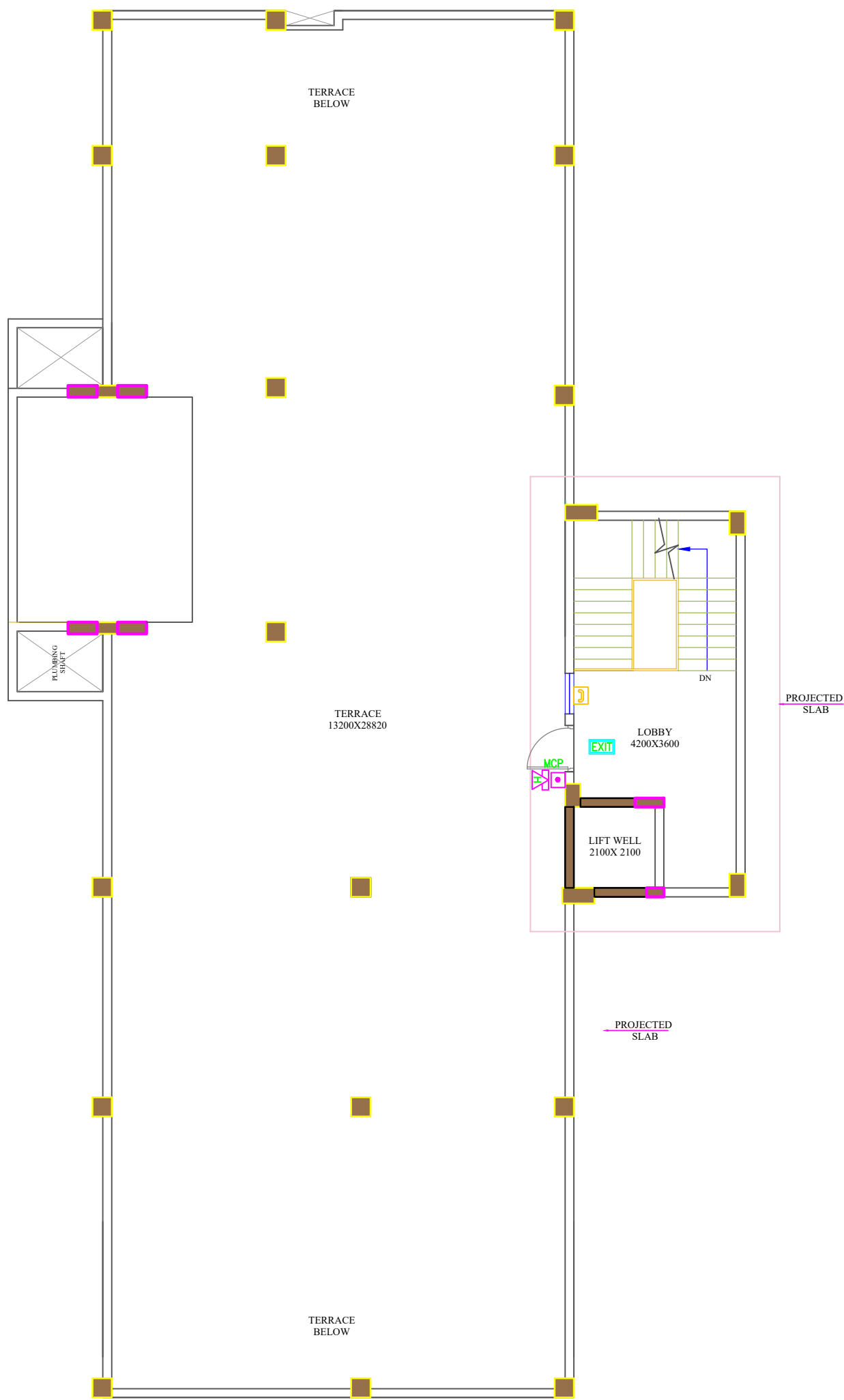
LEGEND :-

	MULTICRITERION DETECTOR
	MULTICRITERION DETECTOR (ABOVE FALSE CEILING)
	MANUAL CALL POINT
	HOOTER + STROBE
	RECESSED TYPE SPEAKER
	SURFACE MOUNTED SPEAKER
	FAULT ISOLATOR
	TALK BACK UNIT
	CONTROL MODULE FOR HOOTER, PA, TALK BACK & VENT FAN
	MONITOR MODULE FOR FLOW SWITCH
	FLUORESCENT EXIT SIGNAGES

GENERAL NOTES FOR FIRE ALARM SYSTEM

1. DETECTORS ABOVE FALSE CEILING ARE TO BE LOCATED NEAR LIGHT FIXTURE TO ENABLE EASY ACCESS/MAINTENANCE.
2. ELECTRICAL CONTRACTOR IS REQUIRED TO CO-ORDINATE POSITION OF ALL DETECTORS ABOVE/BELOW FALSE CEILING WITH FIXTURE, DUCTS & PIPES ETC. AND ENSURE THAT POSITIONING IS CARRIED OUT CORRECTLY.
3. POSITION OF ALL DETECTORS SHOWN ON THE DRAWING IS INDICATIVE AND THESE SHOULD BE LOCATED CAREFULLY AFTER PROPER CO-ORDINATION & NEAR RETURN AIR PATHS WHERE EVER POSSIBLE.
4. OPTICAL DETECTORS SHALL BE PROVIDED IN ALL LOFT AREA WHERE AHU'S ARE LOCATED.
5. UNLESS OTHERWISE MENTIONED CONDUITS FOR FIRE ALARM SYSTEM SHALL BE MS 20 MM DIA (16 SWG)
6. FAULT ISOLATOR TO BE PROVIDED AFTER EVERY 20 ADDRESSABLE DEVICES.

PROJECT	ADMINISTRATIVE BUILDING
CLIENT	 D.A.F.F.P.L. SHAHBAD, MOHAMMADPUR, IGI AIRPORT, NEW DELHI
ARCHITECTS	 MILLENNIUM VENTURES MILLENNIUM CITY MULTIVENTURES Pvt.Ltd. 302, UNITECH ARCADIA, SOUTH CITY-II, SECTOR-49, GURUGRAM-122018, HARYANA, INDIA
STATUS	TENDER DRAWING
DRAWING TITLE	SECOND FLOOR PLAN (FIRE ALARM, PA & TALK BACK SYSTEM LAYOUT)
SCALE :	1 : 100
DATE :	02.05.2022
REVISION NO. :	RD
DRAWN BY :	Kamboj
CHECKED BY :	Parveen
APPROVED BY :	
DRAWING NO. :	MCMVPL/DAFFPL/E-08



LEGEND :-

	MULTICRITERION DETECTOR
	MULTICRITERION DETECTOR (ABOVE FALSE CEILING)
	MANUAL CALL POINT
	HOOTER + STROBE
	RECESSED TYPE SPEAKER
	SURFACE MOUNTED SPEAKER
	FAULT ISOLATOR
	TALK BACK UNIT
	CONTROL MODULE FOR HOOTER, PA, TALK BACK & VENT FAN
	MONITOR MODULE FOR FLOW SWITCH
	FLUORESCENT EXIT SIGNAGES

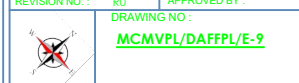
GENERAL NOTES FOR FIRE ALARM SYSTEM

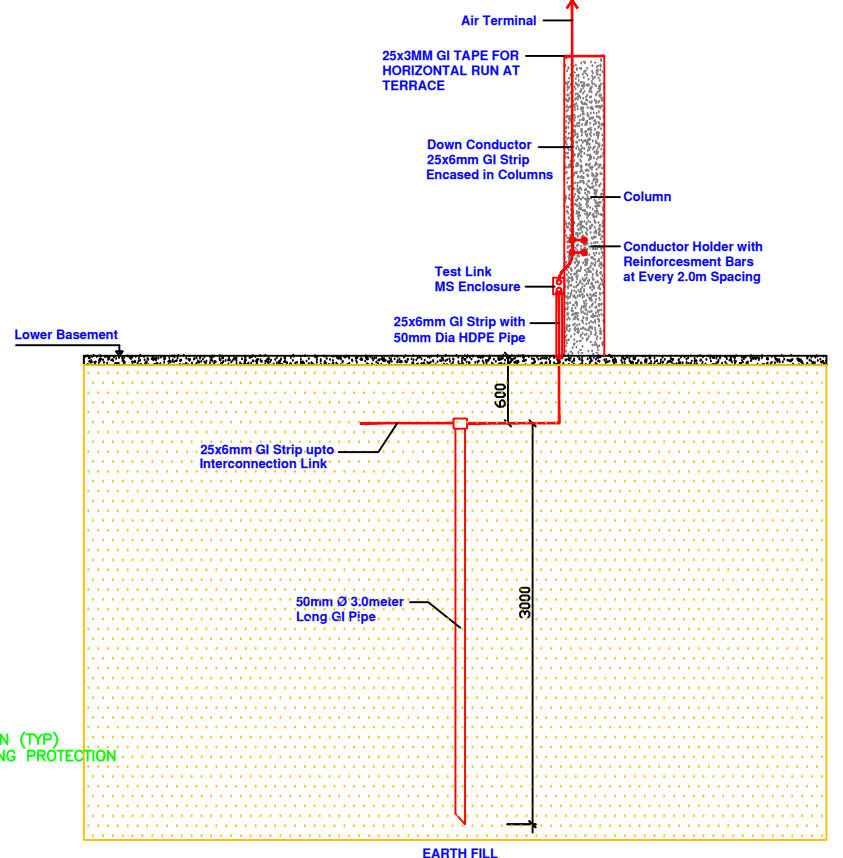
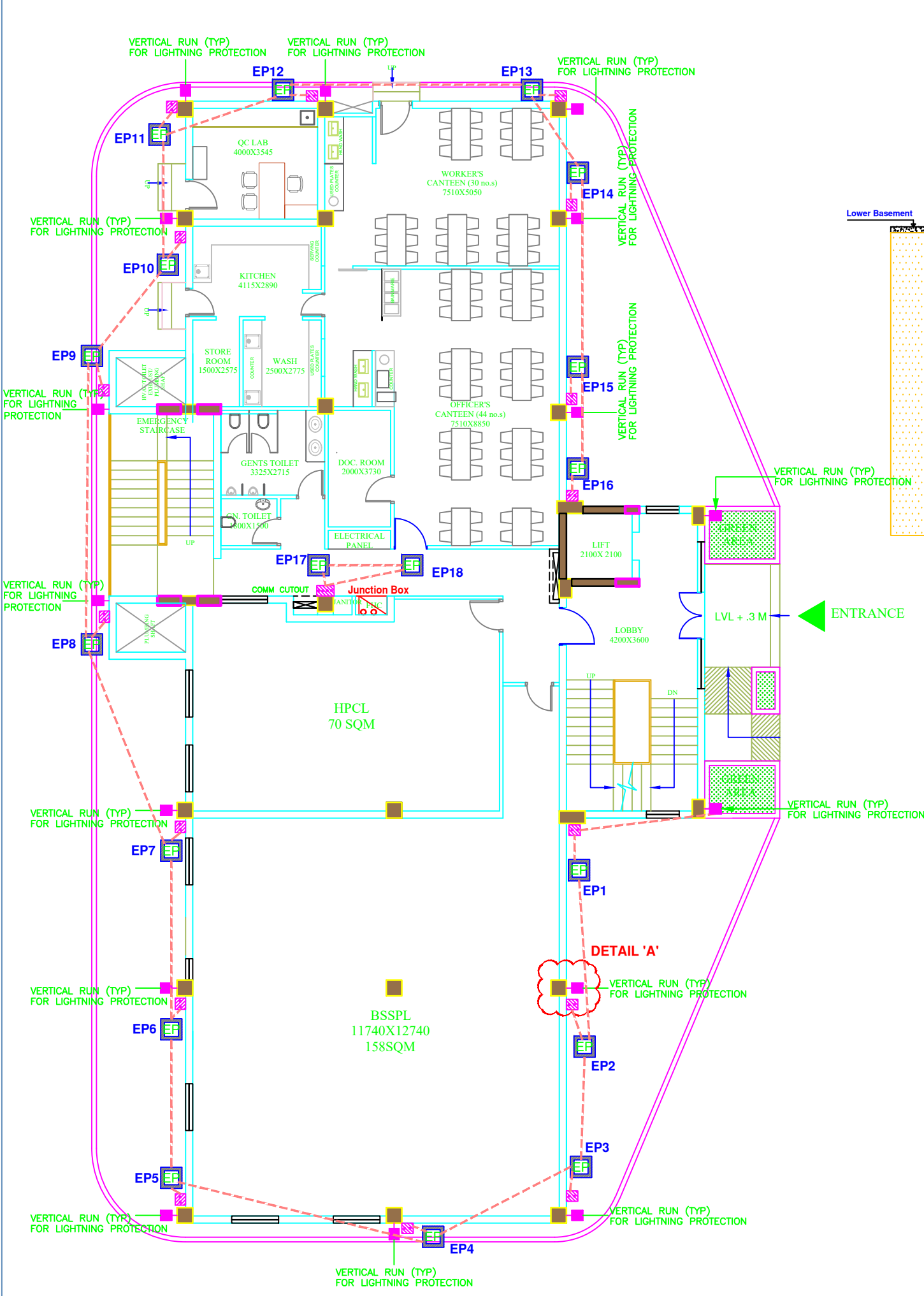
1. DETECTORS ABOVE FALSE CEILING ARE TO BE LOCATED NEAR LIGHT FIXTURE TO ENABLE EASY ACCESS/MAINTENANCE.
2. ELECTRICAL CONTRACTOR IS REQUIRED TO CO-ORDINATE POSITION OF ALL DETECTORS ABOVE/BELOW FALSE CEILING WITH FIXTURE, DUCTS & PIPES ETC. AND ENSURE THAT POSITIONING IS CARRIED OUT CORRECTLY.
3. POSITION OF ALL DETECTORS SHOWN ON THE DRAWING IS INDICATIVE AND THESE SHOULD BE LOCATED CAREFULLY AFTER PROPER CO-ORDINATION & NEAR RETURN AIR PATHS WHERE EVER POSSIBLE.
4. OPTICAL DETECTORS SHALL BE PROVIDED IN ALL LOFT AREA WHERE AHU'S ARE LOCATED.
5. UNLESS OTHERWISE MENTIONED CONDUITS FOR FIRE ALARM SYSTEM SHALL BE MS 20 MM DIA (16 SWG)
6. FAULT ISOLATOR TO BE PROVIDED AFTER EVERY 20 ADDRESSABLE DEVICES.

PROJECT	ADMINISTRATIVE BUILDING
CLIENT	 D.A.F.F.P.L. SHAHBAD, MOHAMMADPUR, IGI AIRPORT, NEW DELHI
ARCHITECTS	 MILLENNIUM VENTURES MILLENNIUM CITY MULTIVENTURES Pvt.Ltd. 302, UNITECH ARCADIA, SOUTH CITY-II, SECTOR-49, GURUGRAM-122018, HARYANA, INDIA
STATUS	TENDER DRAWING
DRAWING TITLE	TERRACE FLOOR PLAN (FIRE ALARM, PA & TALK BACK SYSTEM LAYOUT)

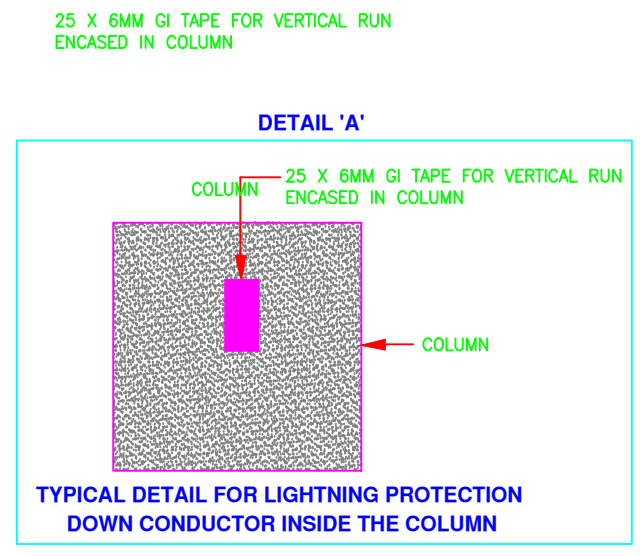
SCALE :	1 : 100	DRAWN BY :	Kamboj
DATE :	02.05.2022	CHECKED BY :	Parveen
REVISION NO. :	RD	APPROVED BY :	

DRAWING NO. :	MCMVPL/DAFFPL/E-9
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TYPICAL LIGHTNING PROTECTION EARTHING ARRANGEMENT



TYPICAL DETAIL FOR LIGHTNING PROTECTION DOWN CONDUCTOR INSIDE THE COLUMN

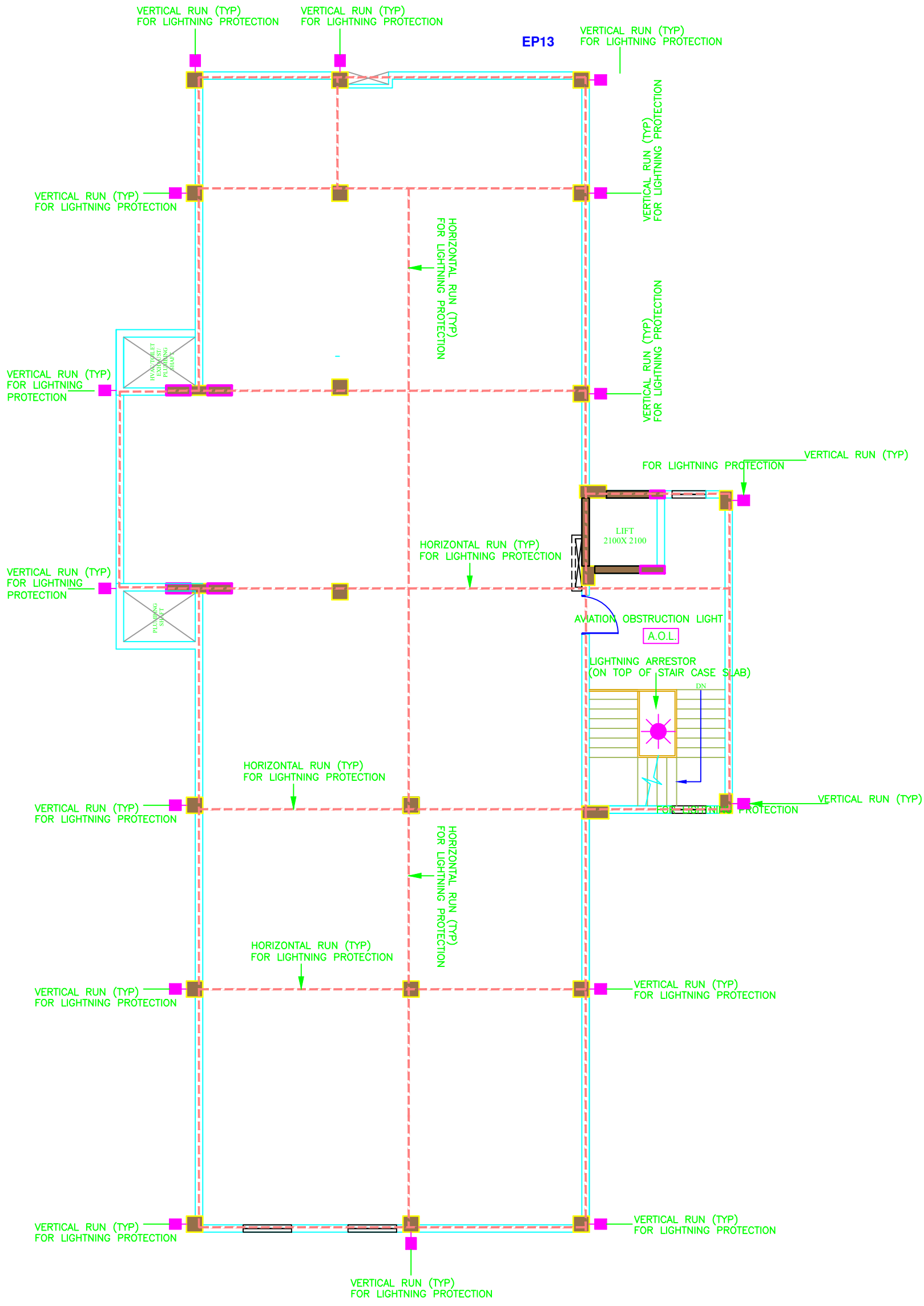
DETAIL OF EARTH PITS/EARTH TAPES

NO.	EARTH PIT NO.	TYPE OF PLATE/PIPE	PLATE/PIPE SIZE	TYPE OF TAPE	TAPE SIZE
1.	LIGHTNING PROTECTION – EP1 TO EP14	GI PIPE	50MM DIA GI PIPE	GI	25 X 6
2.	MDB-1/L+SP+AC/ST-15 – EP15	GI PLATE	900X900X6	GI	50 X 10
3.	MDB-1/L+SP+AC/ST-16 – EP16	GI PLATE	900X900X6	GI	50 X 10
4.	DATA RACK – EP17	CU PIPE	40MM DIA CU PIPE	CU	25 X 6
5.	DATA RACK – EP18	CU PIPE	40MM DIA CU PIPE	CU	25 X 6






LEGEND :-



	EARTH PIT
	TEST LINK JUNCTION BOX
	25x6MM GI TAPE

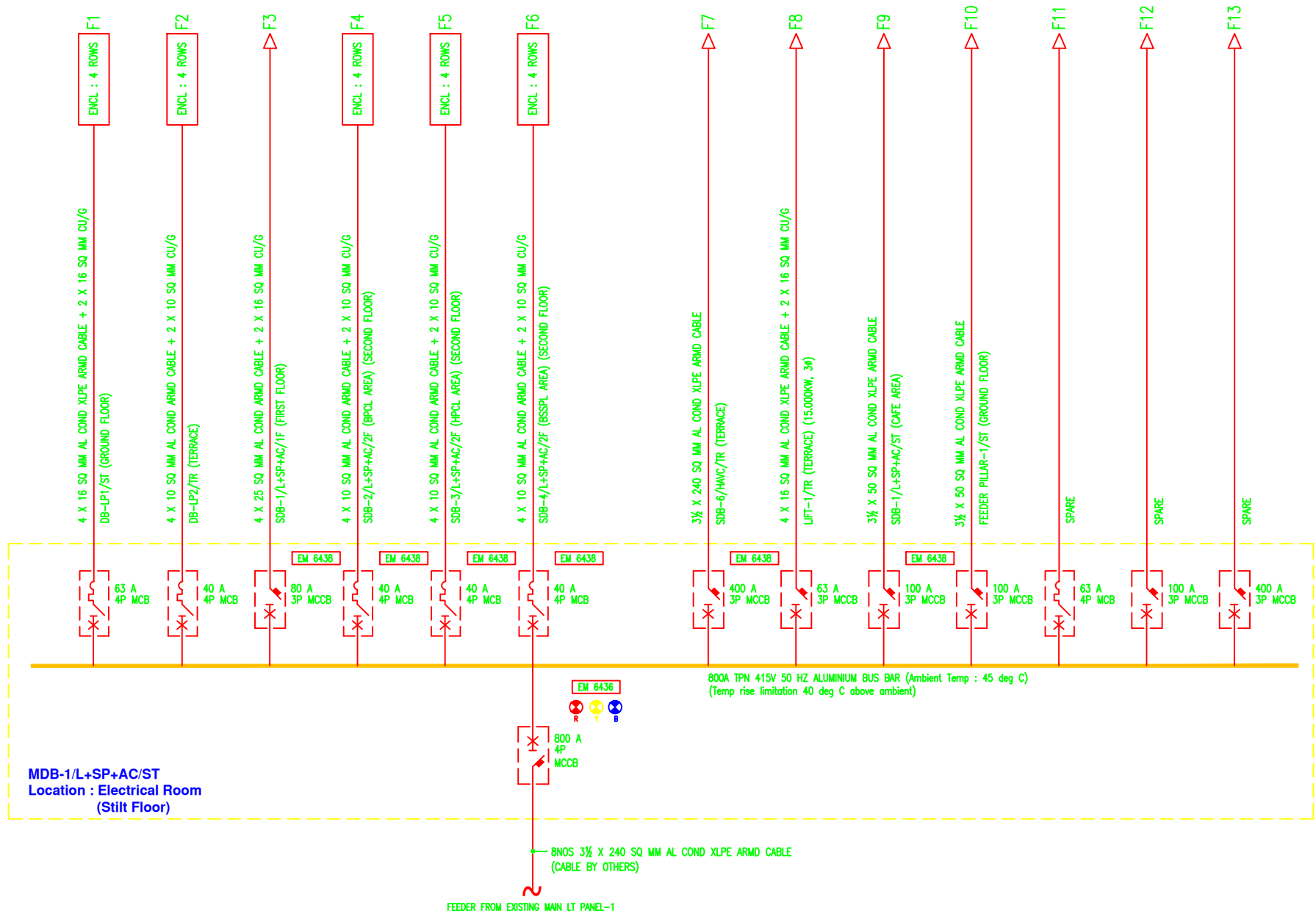
PROJECT	ADMINISTRATIVE BUILDING
CLIENT	 D.A.F.F.P.L. SHAHBAD, MOHAMMADPUR, IGI AIRPORT, NEW DELHI
ARCHITECTS	 MILLENNIUM CITY MULTIVENTURES Pvt.Ltd. 302, UNITECH ARCADIA, SOUTH CITY-II, SECTOR-49, GURUGRAM-122018, HARYANA, INDIA
STATUS	TENDER DRAWING
DRAWING TITLE	STILT FLOOR PLAN LIGHTNING PROTECTION LAYOUT
SCALE	1 : 100
DATE	02.05.2022
REVISION NO.	RD
DRAWN BY	Kamboj
CHECKED BY	Parveen
APPROVED BY	
DRAWING NO.	MCMVPL/DAFFPL/E-10



LEGEND :-

-  LIGHTNING ARRESTOR
-  AVIATION OBSTRUCTION LIGHT
-  25x6MM GI TAPE FOR VERTICAL RUN
-  25x3MM GI TAPE FOR HORIZONTAL RUN AT TERRACE
-  25x6MM GI TAPE FROM TEST JOINT CLAMP UPTO EARTH ELECTRODE

PROJECT	ADMINISTRATIVE BUILDING		
CLIENT	 D.A.F.F.P.L. SHAHBAD, MOHAMMADPUR, IGI AIRPORT, NEW DELHI		
ARCHITECTS	 MILLENNIUM CITY MULTIVENTURES Pvt.Ltd. 302, UNITECH ARCADIA, SOUTH CITY-II, SECTOR-49, GURUGRAM-122018, HARYANA, INDIA		
STATUS	TENDER DRAWING		
DRAWING TITLE	TERRACE LIGHTNING PROTECTION LAYOUT		
SCALE :	1 : 100	DRAWN BY :	Kamboj
DATE :	02.05.2022	CHECKED BY :	Parveen
REVISION NO. :	RD	APPROVED BY :	
		DRAWING NO. :	MCMVPL/DAFFPL/E-11



MDB-1/L+SP+AC/ST
 Location : Electrical Room
 (Stilt Floor)

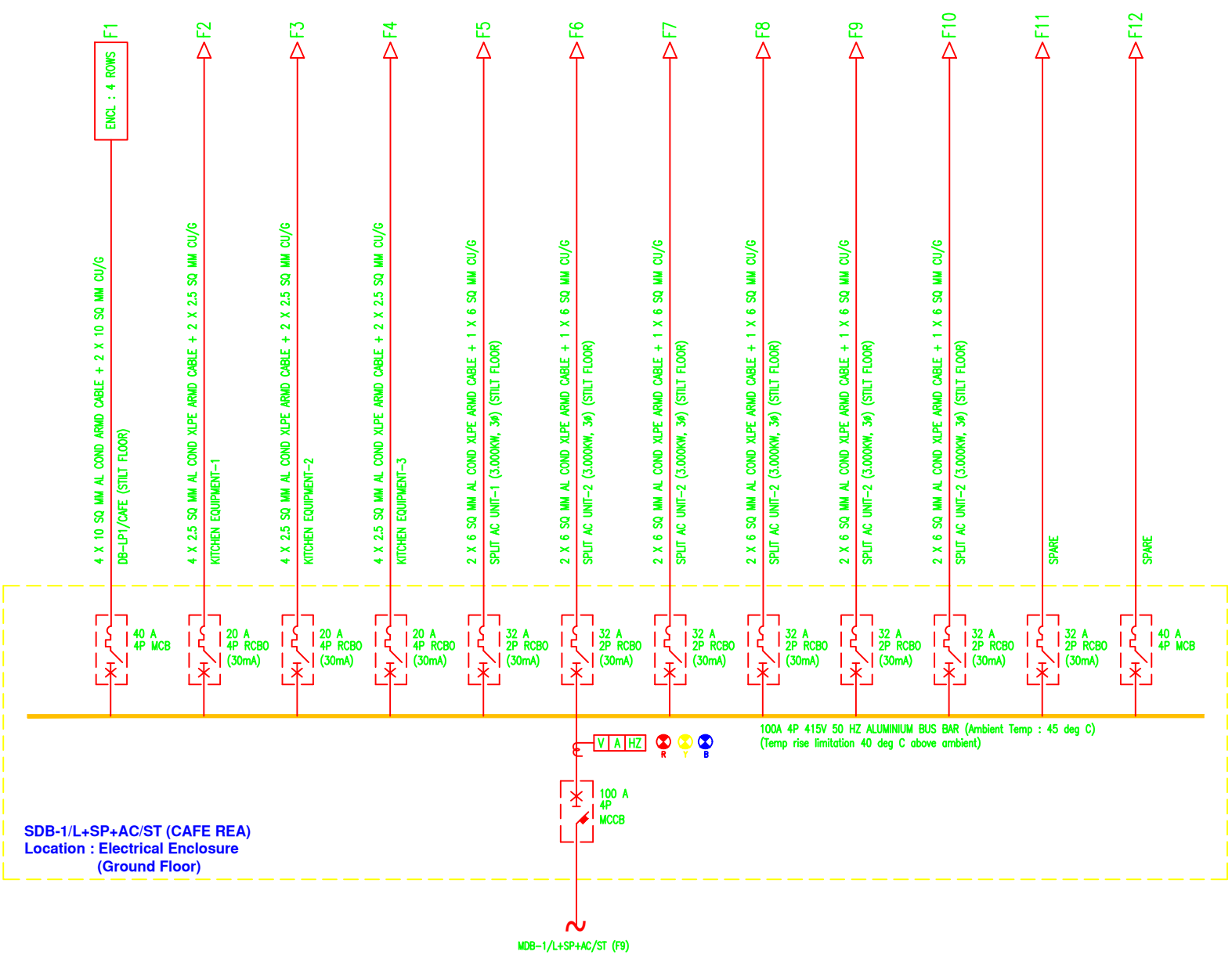
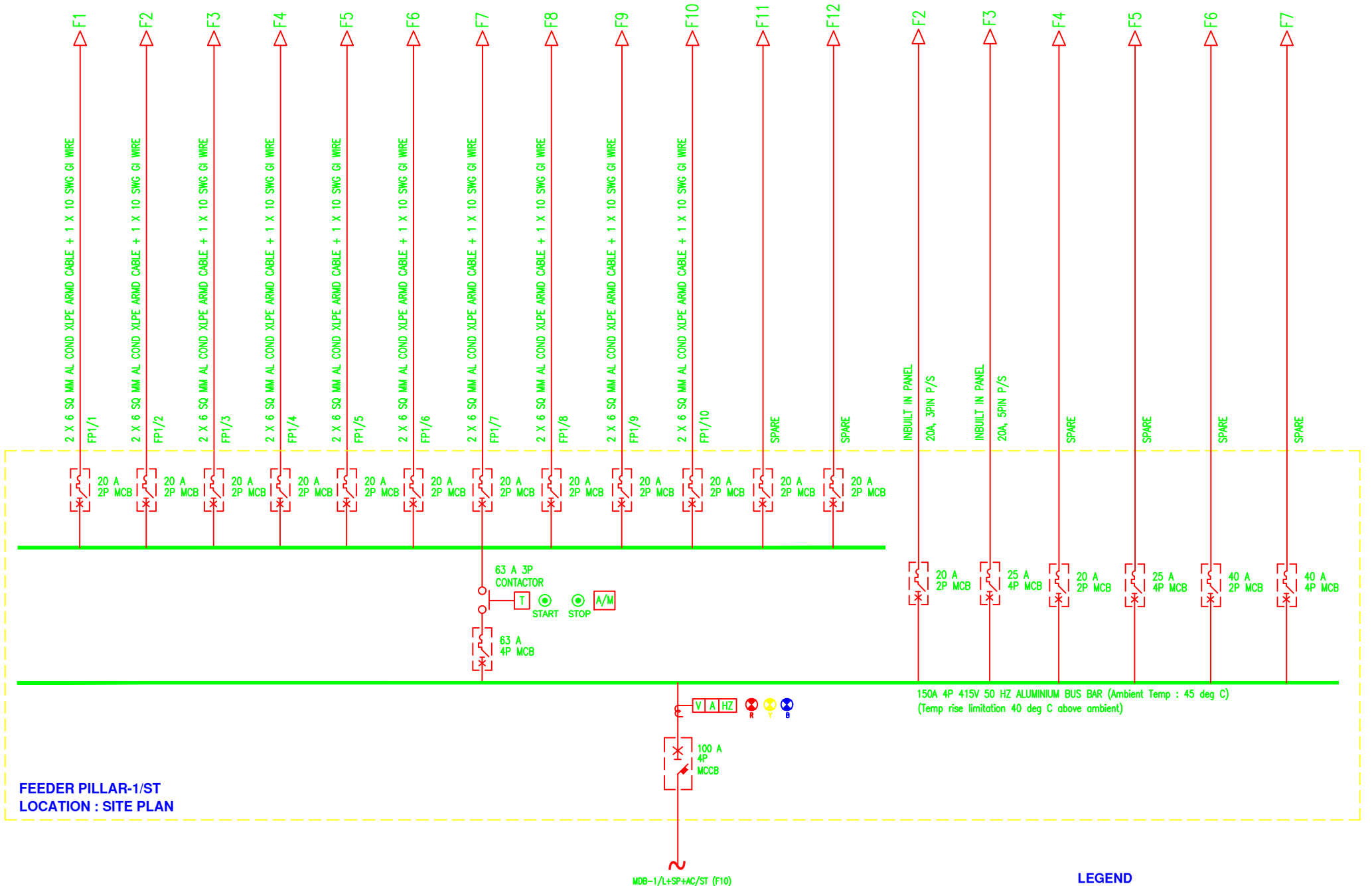
800A TPN 415V 50 HZ ALUMINIUM BUS BAR (Ambient Temp : 45 deg C)
 (Temp rise limitation 40 deg C above ambient)

BNOS 3 1/2 X 240 SQ MM AL COND XLPE ARMED CABLE
 (CABLE BY OTHERS)
 FEEDER FROM EXISTING MAIN LT PANEL-1

LEGEND

- MOULDED CASE CIRCUIT BREAKER
- MINATURE CIRCUIT BREAKER
- EL+MCB
- DIGITAL AMMETER WITH BUILT-IN SELECTOR SWITCH
- DIGITAL VOLTMETER WITH BUILT-IN SELECTOR SWITCH
- FREQUENCY METER
- INDICATION LAMP (LED TYPE)
- CURRENT TRANSFORMER
- PVC INSULATED COPPER EARTH WIRE
- PVC INSULATED COPPER WIRE FOR DEDICATED EARTH
- ISOLATED GROUND SUPPLY
- ENERGY METER
- TOTAL CONNECTED LOAD
- TOTAL MAXIMUM DEMAND LOAD

PROJECT	ADMINISTRATIVE BUILDING	
CLIENT	 D.A.F.F.P.L. SHAHBAD, MOHAMMADPUR, IGI AIRPORT, NEW DELHI	
ARCHITECT'S	 MILLENNIUM CITY MULTIVENTURES PVT.LTD. 302, UNITECH, SIKINDRA SOUTH CITY-4, SECTOR-49, GURUGRAM-120116, HARYANA, INDIA	
STATUS	TENDER DRAWING	
DRAWING TITLE	SCHEMATIC DIAGRAM	
SCALE	NTS	DRAWN BY: Kamboj
DATE	07.05.2022	CHECKED BY: Parveen
REVISION NO.	R2	APPROVED BY:
DRAWING NO.	MCMVPL/DAFFPL/SC-01	



LEGEND

	MOULDED CASE CIRCUIT BREAKER
	MINIATURE CIRCUIT BREAKER
	EL+MCB
	DIGITAL AMMETER WITH BUILT-IN SELECTOR SWITCH
	DIGITAL VOLTMETER WITH BUILT-IN SELECTOR SWITCH
	FREQUENCY METER
	INDICATION LAMP (LED TYPE)
	CURRENT TRANSFORMER
	PVC INSULATED COPPER EARTH WIRE
	PVC INSULATED COPPER WIRE FOR DEDICATED EARTH
	ISOLATED GROUND SUPPLY
	ENERGY METER
	TOTAL CONNECTED LOAD
	TOTAL MAXIMUM DEMAND LOAD

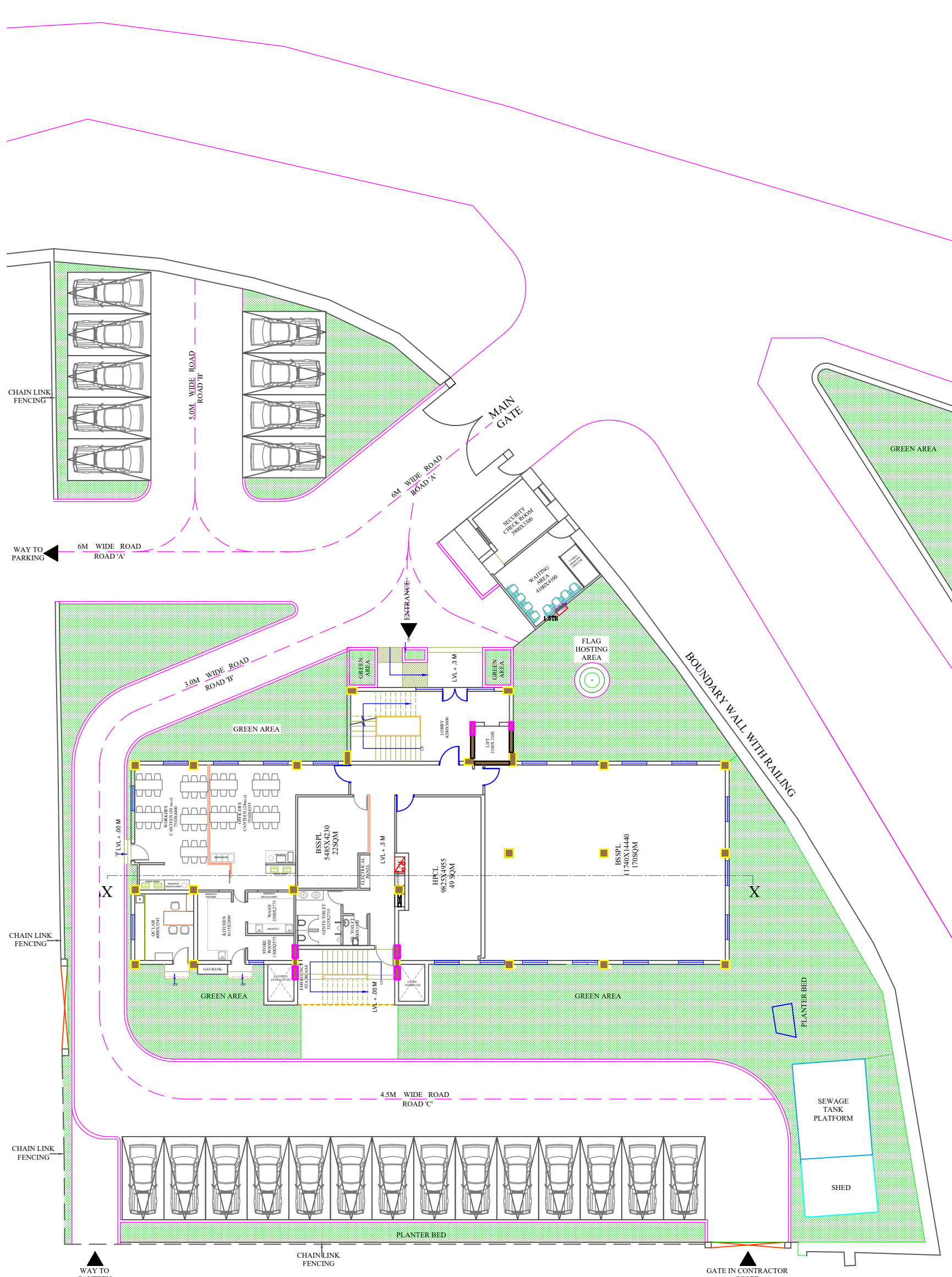
PROJECT	ADMINISTRATIVE BUILDING
CLIENT	D.A.F.F.P.L. SHAHBAD, MOHAMMADPUR, IGI AIRPORT, NEW DELHI
ARCHITECT'S	MILLENNIUM VENTURES MILLENNIUM CITY MULTIVENTURES PVT.LTD. 302, UNITECH, SIKINDRA SOUTH CITY-4, SECTOR-49, GURUGRAM-120116, HARYANA, INDIA
STATUS	TENDER DRAWING
DRAWING TITLE	SCHEMATIC DIAGRAM
SCALE	NTS
DATE	07.05.2022
REVISION NO.	R2
DRAWN BY	Kambiq
CHECKED BY	Parveen
APPROVED BY	
DRAWING NO.	MCMVPL/DAFFPL/SC-02

NOTES:

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- DRAWINGS ARE CROSS REFERENCED AND ARE TO BE READ IN CONJUNCTION WITH OTHER DRAWINGS AS INDICATED

HVAC LEGEND:-

SYMBOL	DESCRIPTION
	SUPPLY AIR DUCT
	TFA SUPPLY AIR DUCT
	PRESSURIZATION DUCT
	EXHAUST DUCT
	REFRIGERANT PIPE
	CONDENSATE DRAIN PIPE
	TOILET EXHAUST GRILLE
	AIR TIGHT PARTITION
	CASSETTE UNIT
	HI-WALL UNIT
	PROPELLER FAN
	DU DOOR UNDER CUT
	WINDOW AC



REV. NO.	DATE OF REV.	BY	DESCRIPTION
R4	05-07-2020	SK	REVISED AS PER COMMENTS
R3	27-06-2020	SK	REVISED AS PER LATEST ARCHITECT'S LAYOUT
R2	18-03-2020	SK	REVISED AS PER LATEST ARCHITECT'S LAYOUT
R1	06.03.2020	SK	CAPACITY OF AC EQUIPMENT REVISED DUE TO REVISION IN GLASS IN ELEVATION

PROJECT
ADMINISTRATIVE BUILDING

CLIENT

 D.A.F.F.P.L.
 SHAHBAD, MOHAMMADPUR,
 IGI AIRPORT, NEW DELHI

ARCHITECTS

 MILLENNIUM VENTURES
 MILLENNIUM CITY MULTIVENTURES Pvt.Ltd.
 302, UNITECH ARCADIA, SOUTH CITY-II,
 SECTOR-49, GURUGRAM-122018,
 HARYANA, INDIA

MEP CONSULTANTS
 Flabellum Design Studio Pvt. Ltd.
 4th Floor, Plaza Mall, MG Road,
 Iffco Chowk, Gurgaon (HR) - 122002
 Ph. No. 9873979157
 flabellumdesign@gmail.com

STATUS
TENDER DRAWING

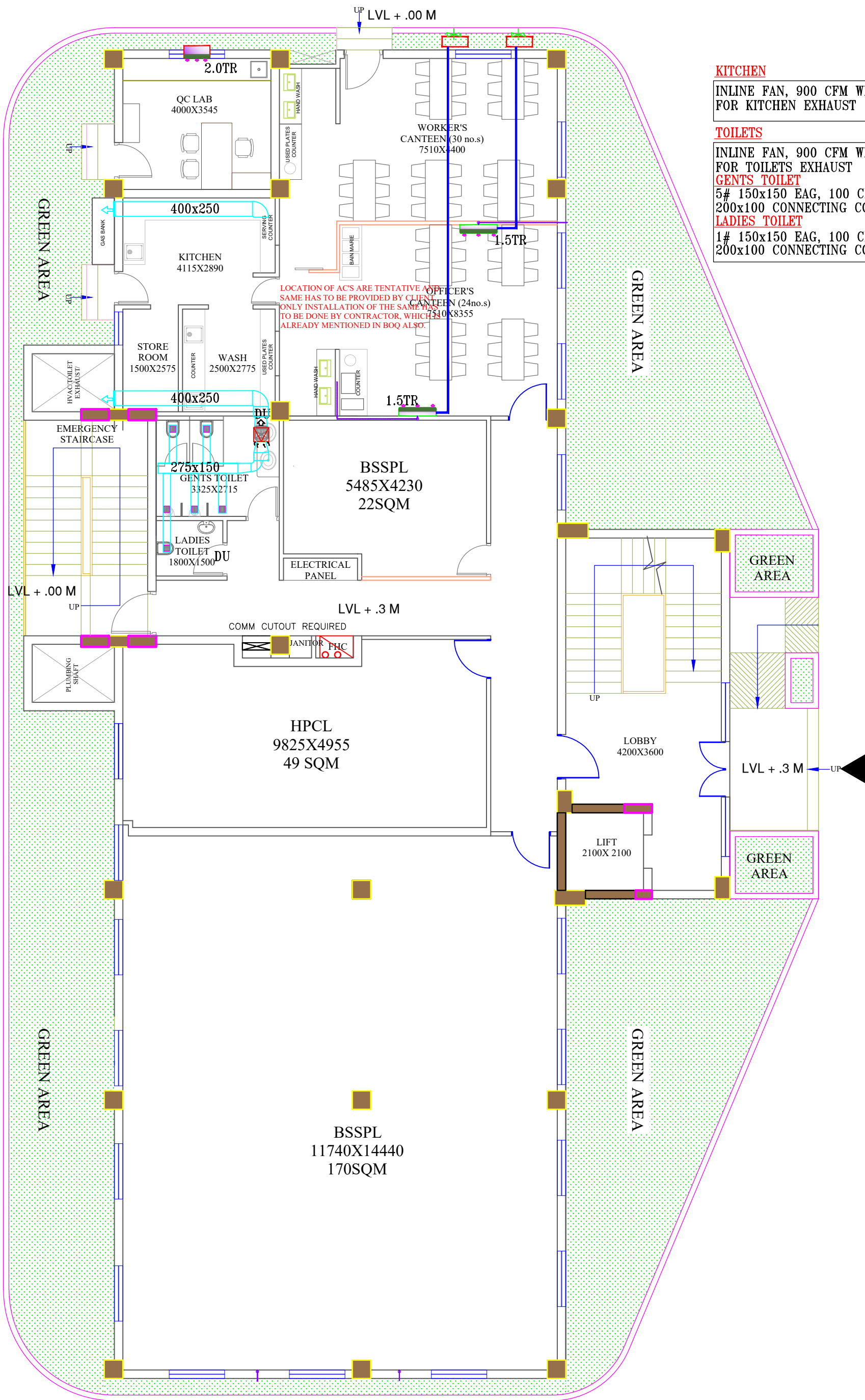
DRAWING TITLE
HVAC SYSTEM LAYOUT
SITE PLAN

SCALE : 1:75 @ A2 DRAWN BY : SANDEEP
 DATE : 21-05-2022 CHECKED BY : GAURAV

REVISION NO. : R0 DRAWING APPROVED BY :

DRAWING NO. :

 DAFFPL/FDS/12056/HVAC/01



KITCHEN
 INLINE FAN, 900 CFM W
 FOR KITCHEN EXHAUST

TOILETS
 INLINE FAN, 900 CFM W
 FOR TOILETS EXHAUST
GENTS TOILET
 5# 150x150 EAG, 100 C
 200x100 CONNECTING CO
LADIES TOILET
 1# 150x150 EAG, 100 C
 200x100 CONNECTING CO

LOCATION OF AC'S ARE TENTATIVE OFFICER'S
 SAME HAS TO BE PROVIDED BY CLIENT
 ONLY INSTALLATION OF THE SAME HAS
 TO BE DONE BY CONTRACTOR, WHICH IS
 ALREADY MENTIONED IN BOQ ALSO.

- NOTES:**
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REV. NO.	DATE OF REV.	BY	DESCRIPTION
R4	05-07-2020	SK	REVISED AS PER ARCHITECTS COMMENTS
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R2	18-03-2020	SK	REVISED AS PER LATEST ARCHITECT'S LAYOUT
R1	06.03.2020	SK	CAPACITY OF AC EQUIPMENT REVISED DUE TO REVISION IN GLASS IN ELEVATION

PROJECT
 ADMINISTRATIVE BUILDING

CLIENT

 D.A.F.F.P.L.
 SHAHBAD, MOHAMMADPUR,
 IGI AIRPORT, NEW DELHI

ARCHITECTS


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 SECTOR-49, GURUGRAM-122018,
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 Ph. No. 9873979157
 flabellumdesign@gmail.com

STATUS
 TENDER DRAWING

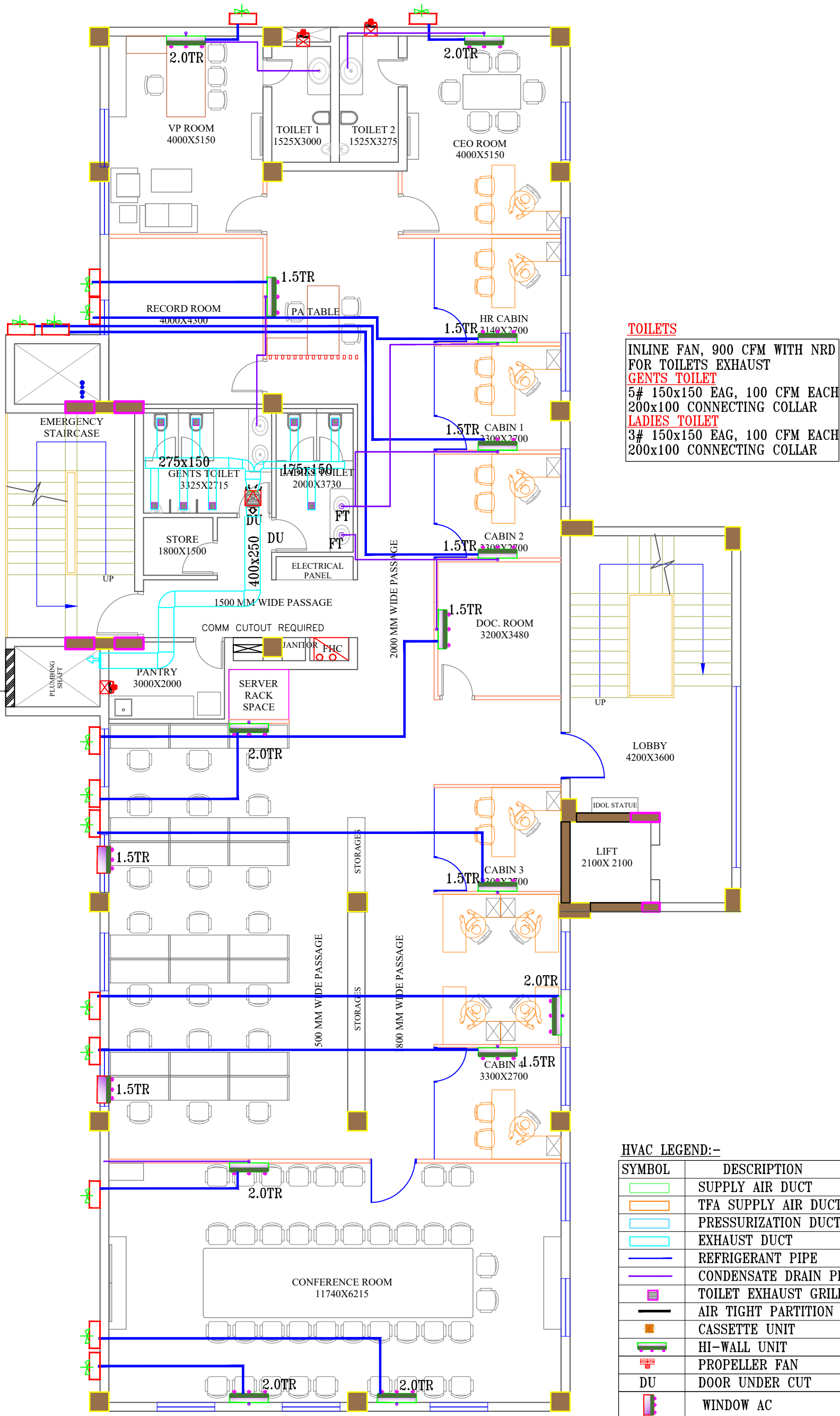
DRAWING TITLE
 HVAC SYSTEM LAYOUT
 GROUND FLOOR PLAN

SCALE : 1:75 @ A2
 DATE : 21-05-2022
 REVISION NO. : R0

DRAWN BY : SANDEEP
 CHECKED BY : GAURAV
 APPROVED BY :

 DRAWING NO :
 DAFFPL/FDS/12056/HVAC/02

NOTES:

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TOILETS
 INLINE FAN, 900 CFM WITH NRD FOR TOILETS EXHAUST
GENTS TOILET
 5# 150x150 EAG, 100 CFM EACH
 200x100 CONNECTING COLLAR
LADIES TOILET
 3# 150x150 EAG, 100 CFM EACH
 200x100 CONNECTING COLLAR

HVAC LEGEND:-

SYMBOL	DESCRIPTION
	SUPPLY AIR DUCT
	TFA SUPPLY AIR DUCT
	PRESSURIZATION DUCT
	EXHAUST DUCT
	REFRIGERANT PIPE
	CONDENSATE DRAIN PIPE
	TOILET EXHAUST GRILLE
	AIR TIGHT PARTITION
	CASSETTE UNIT
	HI-WALL UNIT
	PROPELLER FAN
	DOOR UNDER CUT
	WINDOW AC

R4	05-07-2020	SK	REVISED AS PER ARCHITECT'S COMMENTS
R3	27-06-2020	SK	REVISED AS PER LATEST ARCHITECT'S LAYOUT
R2	18-03-2020	SK	REVISED AS PER LATEST ARCHITECT'S LAYOUT
R1	06.03.2020.	SK	CAPACITY OF AC EQUIPMENT REVISED DUE TO REVISION IN GLASS IN ELEVATION
REV. NO.	DATE OF REV.	BY	DESCRIPTION

PROJECT
ADMINISTRATIVE BUILDING

CLIENT



D.A.F.F.P.L.
 SHAHBAD, MOHAMMADPUR,
 IGI AIRPORT, NEW DELHI

ARCHITECTS



MILLENNIUM VENTURES
 MILLENNIUM CITY MULTIVENTURES Pvt.Ltd.
 302, UNITECH ARCADIA, SOUTH CITY-II,
 SECTOR-49, GURUGRAM-122018,
 HARYANA, INDIA

MEP CONSULTANTS


Flabellum Design Studio Pvt. Ltd.
 4th Floor, Plaza Mall, MG Road,
 Iffco Chowk, Gurgaon (HR) - 122002
 Ph. No. 9873979157
 flabellumdesign@gmail.com

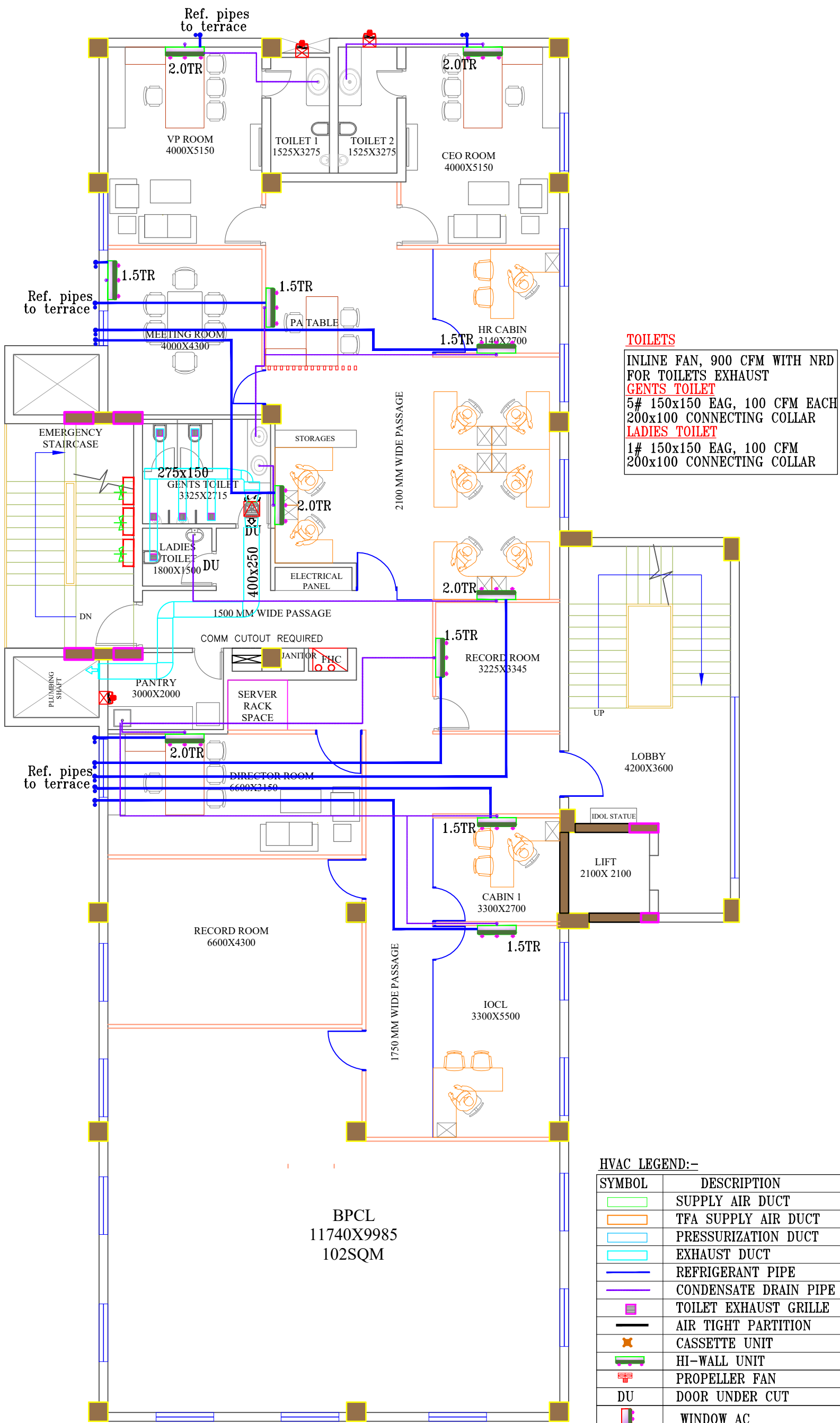
STATUS
TENDER DRAWING

DRAWING TITLE
**HVAC SYSTEM LAYOUT
 FIRST FLOOR PLAN**

SCALE :	1:75 @ A2	DRAWN BY :	SANDEEP
DATE :	21-05-2022	CHECKED BY :	GAURAV
REVISION NO. :	R0	APPROVED BY :	

DRAWING NO. :
DAFFPL/FDS/12056/HVAC/03





TOILETS
 INLINE FAN, 900 CFM WITH NRD FOR TOILETS EXHAUST
GENTS TOILET
 5# 150x150 EAG, 100 CFM EACH
 200x100 CONNECTING COLLAR
LADIES TOILET
 1# 150x150 EAG, 100 CFM
 200x100 CONNECTING COLLAR

HVAC LEGEND:-

SYMBOL	DESCRIPTION
	SUPPLY AIR DUCT
	TFA SUPPLY AIR DUCT
	PRESSURIZATION DUCT
	EXHAUST DUCT
	REFRIGERANT PIPE
	CONDENSATE DRAIN PIPE
	TOILET EXHAUST GRILLE
	AIR TIGHT PARTITION
	CASSETTE UNIT
	HI-WALL UNIT
	PROPELLER FAN
	DOOR UNDER CUT
	WINDOW AC

BPCL
 11740X9985
 102SQM

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R1	06.03.2020	SK	CAPACITY OF AC EQUIPMENT REVISED DUE TO REVISION IN GLASS IN ELEVATION

PROJECT: **ADMINISTRATIVE BUILDING**

CLIENT: D.A.F.F.P.L.
 SHAHBAD, MOHAMMADPUR,
 IGI AIRPORT, NEW DELHI

ARCHITECTS: MILLENNIUM VENTURES
 MILLENNIUM CITY MULTIVENTURES Pvt.Ltd.
 302, UNITECH ARCADIA, SOUTH CITY-II,
 SECTOR-49, GURUGRAM-122018,
 HARYANA, INDIA

MEP CONSULTANTS: Flabellum Design Studio Pvt. Ltd.
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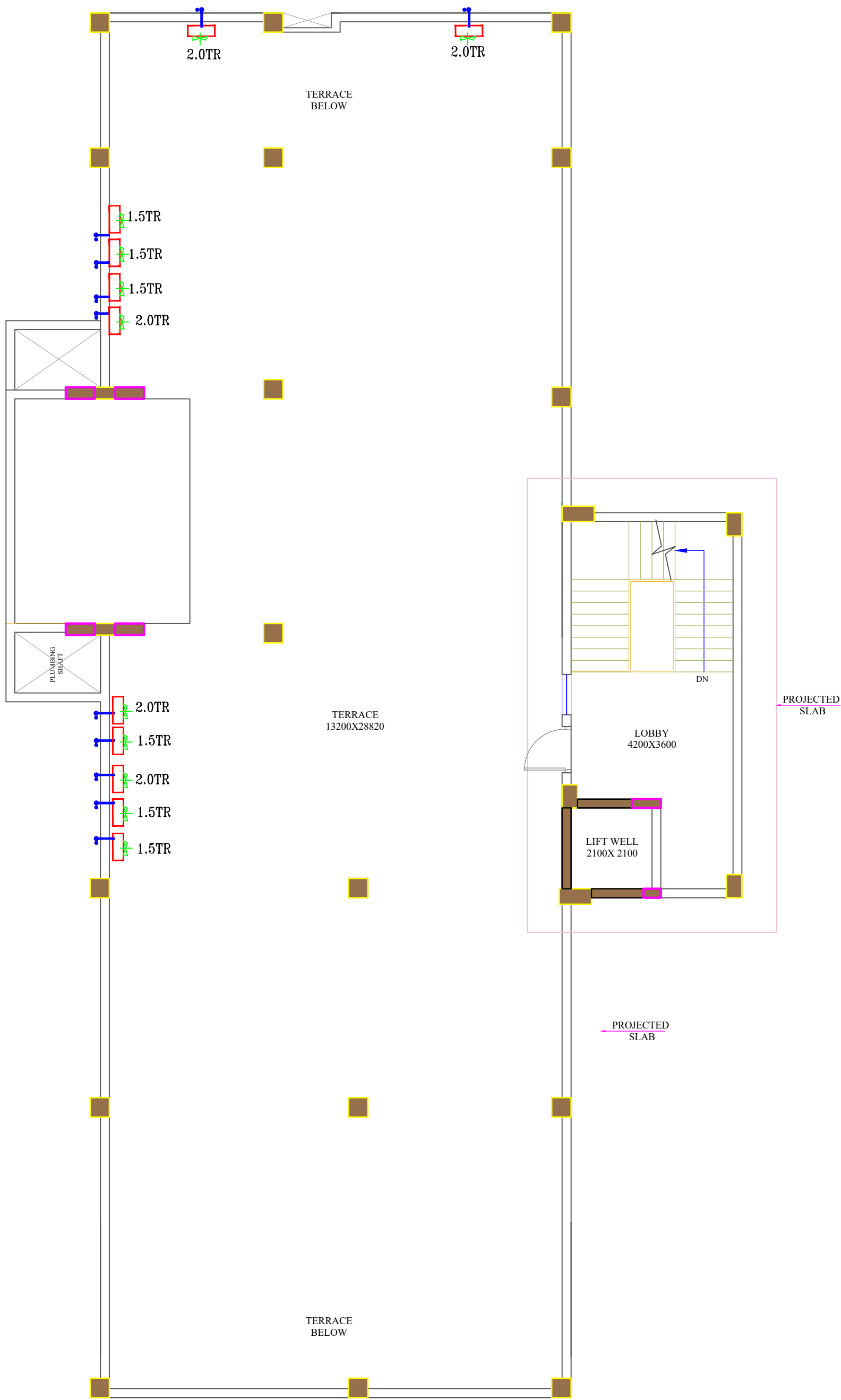
STATUS: **TENDER DRAWING**

DRAWING TITLE: **HVAC SYSTEM LAYOUT
 SECOND FLOOR PLAN**

SCALE :	1:75 @ A2	DRAWN BY :	SANDEEP
DATE :	21-05-2022	CHECKED BY :	GAURAV
REVISION NO. :	R0	APPROVED BY :	

DRAWING NO: **DAFFPL/FDS/12056/HVAC/04**

TYPE AND CAPACITY OF EQUIPMENT'S ARE FOR REFERENCE ONLY. SAME MIGHT BE CHANGED WITH INTERIOR LAYOUT. APPROVAL OF THE SAME SHOULD BE TAKEN FROM CONSULTANT/ ARCHITECT/CLIENT BEFORE PROCEEDING FURTHER.



NOTES:

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PROJECT
ADMINISTRATIVE BUILDING

CLIENT

 D.A.F.F.P.L.
 SHAHBAD, MOHAMMADPUR,
 IGI AIRPORT, NEW DELHI

ARCHITECTS

 MILLENNIUM VENTURES
 MILLENNIUM CITY MULTIVENTURES Pvt.Ltd.
 302, UNITECH ARCADIA, SOUTH CITY-II,
 SECTOR-49, GURUGRAM-122018,
 HARYANA, INDIA


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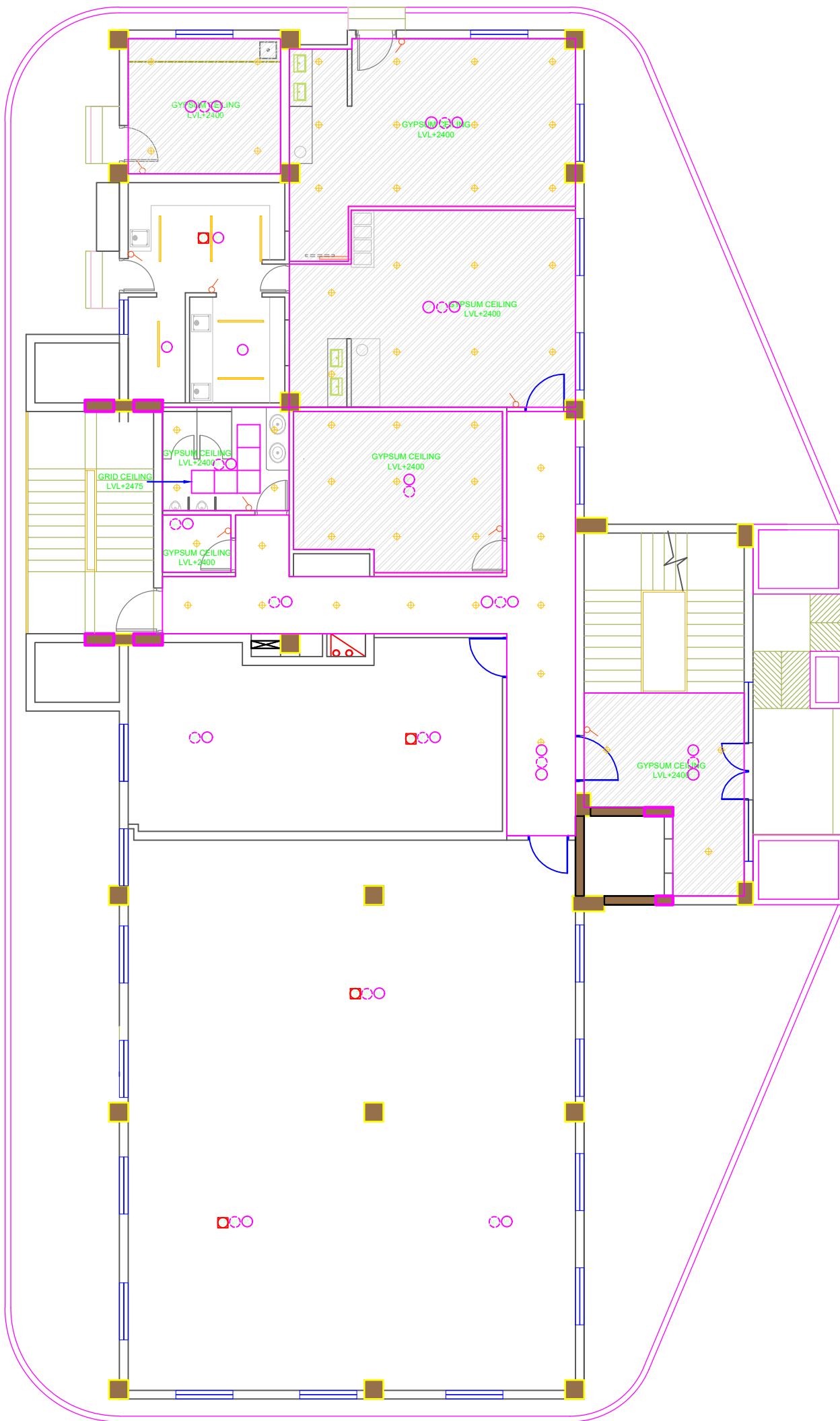
STATUS
TENDER DRAWING

DRAWING TITLE
HVAC SYSTEM LAYOUT
TERRACE FLOOR PLAN

SCALE : 1:75 @ A2 DRAWN BY : SANDEEP
 DATE : 21-05-2022 CHECKED BY : GAURAV

REVISION NO. : R0 APPROVED BY :

DRAWING NO :
 **DAFFPL/FDS/12056/HVAC/05**



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LEGEND:

LEGENDS	
	12 WATT LED LIGHT FIXTURE
	36 WATT LED PANEL LIGHT
	6A ONE WAY SWITCH
	CR INDICATE CRITICAL / EMERGENCY LIGHT
	4' T-5 LIGHTS
	COVE LIGHT
	HANGING LIGHT
	MULTICRITERION DETECTOR
	MULTICRITERION DETECTOR (ABOVE FALSE CEILING)
	RECESSED TYPE SPEAKER
	SURFACE MOUNTED SPEAKER

PROJECT **ADMINISTRATIVE BUILDING**

CLIENT D.A.F.F.P.L.
SHAHBAD, MOHAMMADPUR,
IGI AIRPORT, NEW DELHI

ARCHITECTS MILLENNIUM
VENTURES
MILLENNIUM CITY MULTIVENTURES Pvt.Ltd.
302, UNITECH ARCADIA, SOUTH CITY-II,
SECTOR-49, GURUGRAM-122018,
HARYANA, INDIA

STATUS **TENDER DRAWING**

DRAWING TITLE **GROUND FLOOR PLAN
(FIRE ALARM, PA &
TALK BACK SYSTEM LAYOUT)**

SCALE : 1 : 100 DRAWN BY : Kamboj

DATE : 07.05.2022 CHECKED BY : Parveen

REVISION NO. : RD APPROVED BY :

DRAWING NO. : **MCMVPL/DAFFPL/RCP-01**

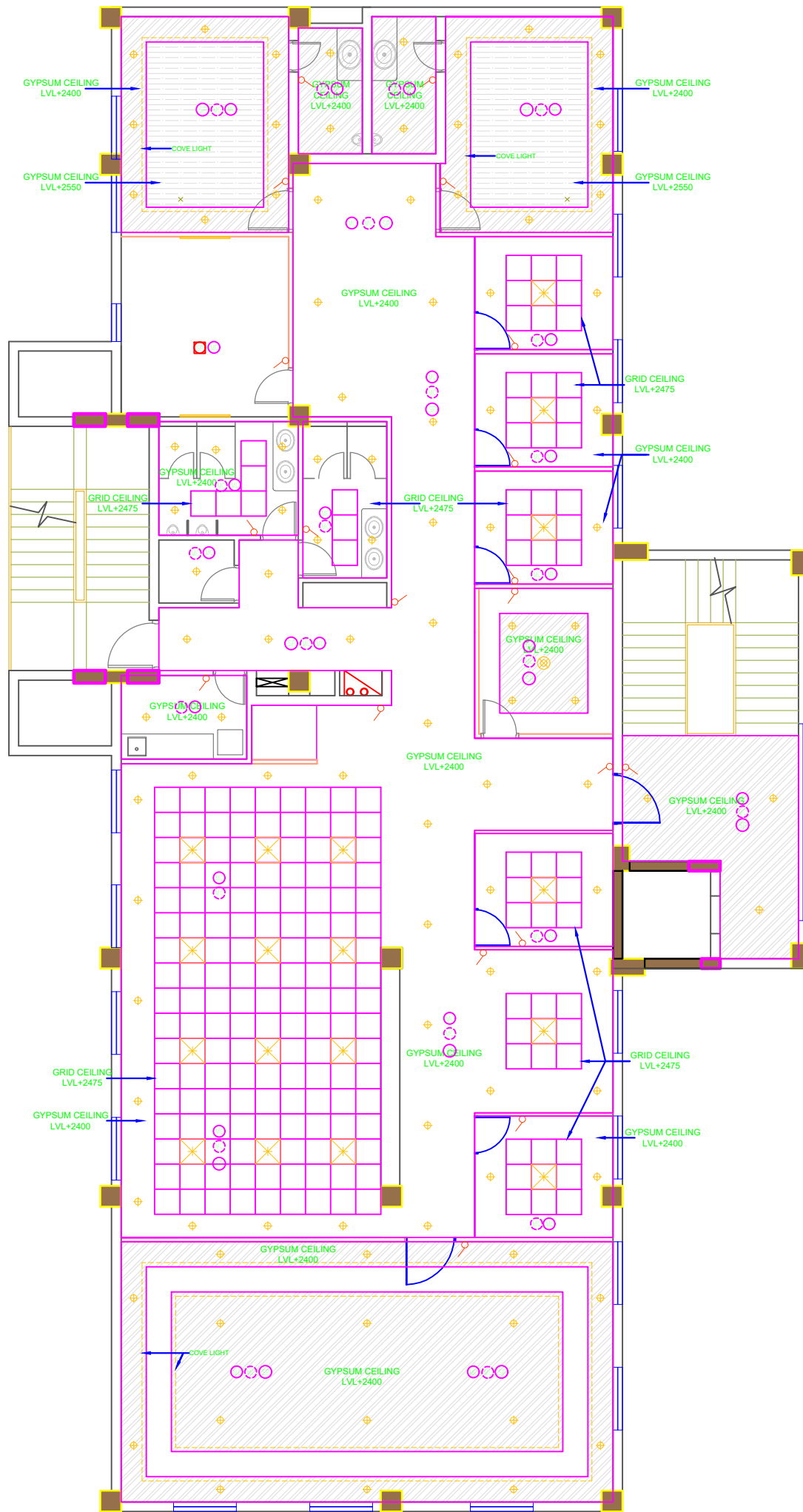


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LEGEND:

LEGENDS	
	12 WATT LED LIGHT FIXTURE
	36 WATT LED PANEL LIGHT
	6A ONE WAY SWITCH
	CR INDICATE CRITICAL / EMERGENCY LIGHT
	4' T-5 LIGHTS
	COVE LIGHT
	HANGING LIGHT
	MULTICRITERION DETECTOR
	MULTICRITERION DETECTOR (ABOVE FALSE CEILING)
	RECESSED TYPE SPEAKER
	SURFACE MOUNTED SPEAKER



PROJECT ADMINISTRATIVE BUILDING

CLIENT

 D.A.F.F.P.L.
 SHAHBAD, MOHAMMADPUR,
 IGI AIRPORT, NEW DELHI

ARCHITECTS

 MILLENNIUM VENTURES
 MILLENNIUM CITY MULTIVENTURES Pvt.Ltd.
 302, UNITECH ARCADIA, SOUTH CITY-II,
 SECTOR-49, GURUGRAM-122018,
 HARYANA, INDIA

STATUS TENDER DRAWING

DRAWING TITLE
**FIRST FLOOR PLAN
 (FIRE ALARM, PA &
 TALK BACK SYSTEM LAYOUT)**

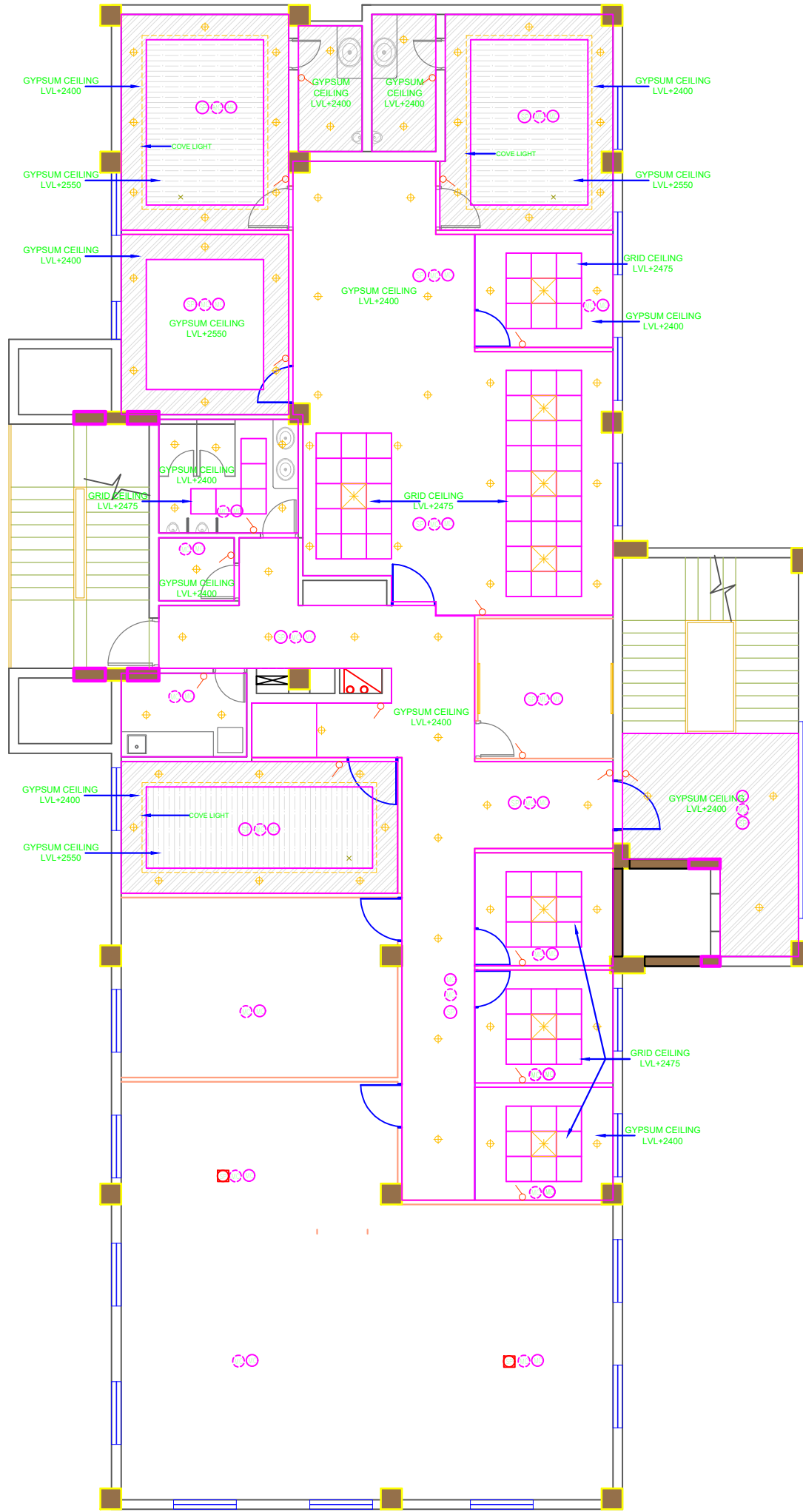
SCALE : 1 : 100 DRAWN BY : Kambaj

DATE : 07.05.2022 CHECKED BY : Parveen

REVISION NO. : RD APPROVED BY :

DRAWING NO. : MCMVPL/DAFFPL/RCP-02



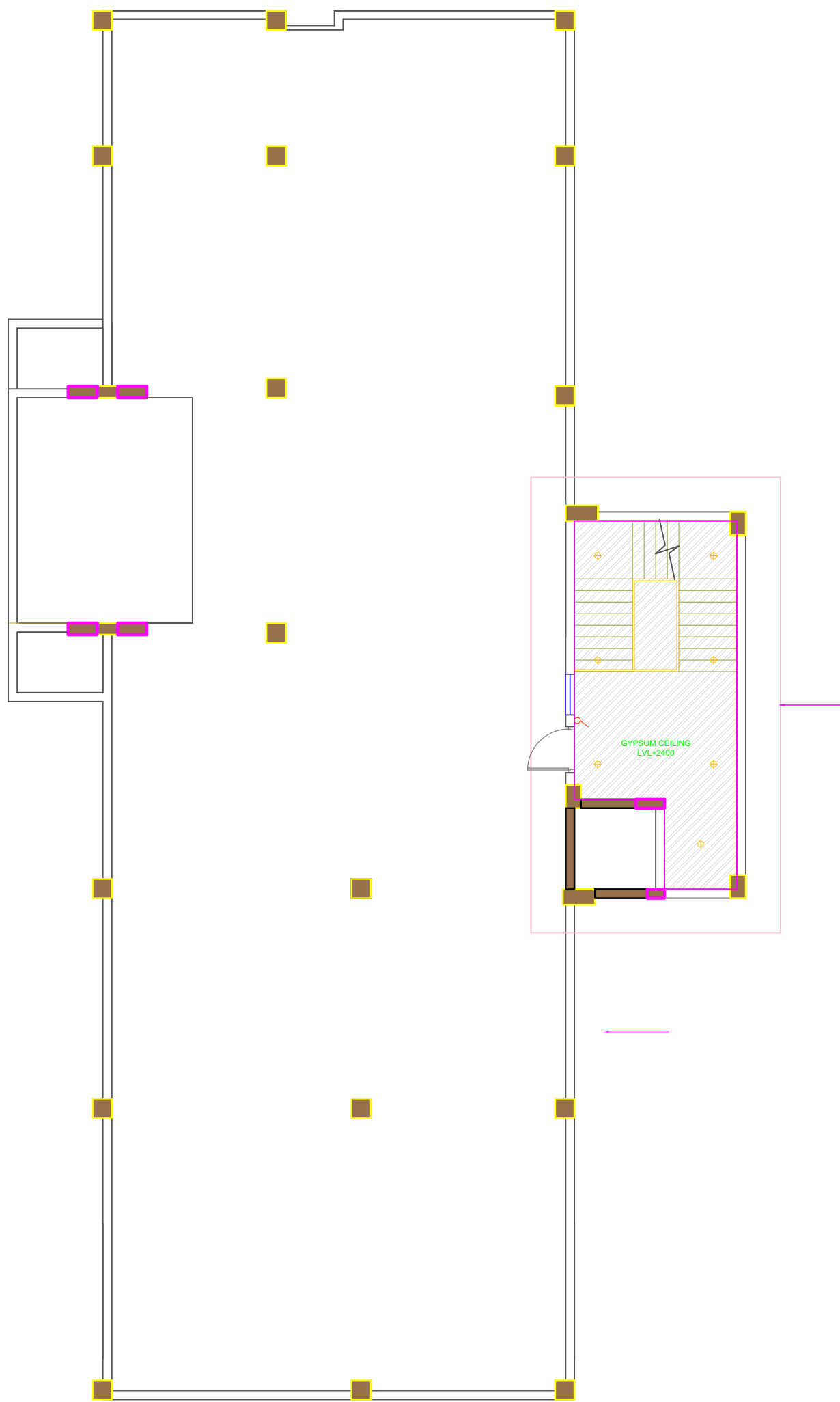


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LEGEND:

LEGENDS	
	12 WATT LED LIGHT FIXTURE
	36 WATT LED PANEL LIGHT
	6A ONE WAY SWITCH
	CR INDICATE CRITICAL / EMERGENCY LIGHT
	4' T-5 LIGHTS
	COVE LIGHT
	HANGING LIGHT
	MULTICRITERION DETECTOR
	MULTICRITERION DETECTOR (ABOVE FALSE CEILING)
	RECESSED TYPE SPEAKER
	SURFACE MOUNTED SPEAKER

PROJECT	ADMINISTRATIVE BUILDING
CLIENT	 D.A.F.F.P.L. SHAHBAD, MOHAMMADPUR, IGI AIRPORT, NEW DELHI
ARCHITECTS	 MILLENNIUM VENTURES MILLENNIUM CITY MULTIVENTURES Pvt.Ltd. 302, UNITECH ARCADIA, SOUTH CITY-II, SECTOR-49, GURUGRAM-122018, HARYANA, INDIA
STATUS	TENDER DRAWING
DRAWING TITLE	SECOND FLOOR PLAN (FIRE ALARM, PA & TALK BACK SYSTEM LAYOUT)
SCALE :	1 : 100
DATE :	07.05.2022
REVISION NO. :	RD
DRAWN BY :	Kamboj
CHECKED BY :	Parveen
APPROVED BY :	
DRAWING NO. :	MCMVPL/DAFFPL/RCP-03



NOTES:

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LEGEND:

LEGENDS	
	12 WATT LED LIGHT FIXTURE
	36 WATT LED PANEL LIGHT
	6A ONE WAY SWITCH
CR	CR INDICATE CRITICAL / EMERGENCY LIGHT
	4' T-5 LIGHTS
	COVE LIGHT
	HANGING LIGHT
	MULTICRITERION DETECTOR
	MULTICRITERION DETECTOR (ABOVE FALSE CEILING)
	RECESSED TYPE SPEAKER
	SURFACE MOUNTED SPEAKER

PROJECT ADMINISTRATIVE BUILDING

CLIENT

 D.A.F.F.P.L.
 SHAHBAD, MOHAMMADPUR,
 IGI AIRPORT, NEW DELHI

ARCHITECTS

 MILLENNIUM VENTURES
 MILLENNIUM CITY MULTIVENTURES Pvt.Ltd.
 302, UNITECH ARCADIA, SOUTH CITY-II,
 SECTOR-49, GURUGRAM-122018,
 HARYANA, INDIA

STATUS TENDER DRAWING

DRAWING TITLE
**TERRACE FLOOR PLAN
 (FIRE ALARM, PA &
 TALK BACK SYSTEM LAYOUT)**

SCALE : 1 : 100 DRAWN BY : Kamboj
 DATE : 07.05.2022 CHECKED BY : Parveen

REVISION NO. : RD APPROVED BY :
 DRAWING NO. :
MCMVPL/DAFFPL/RCP-04

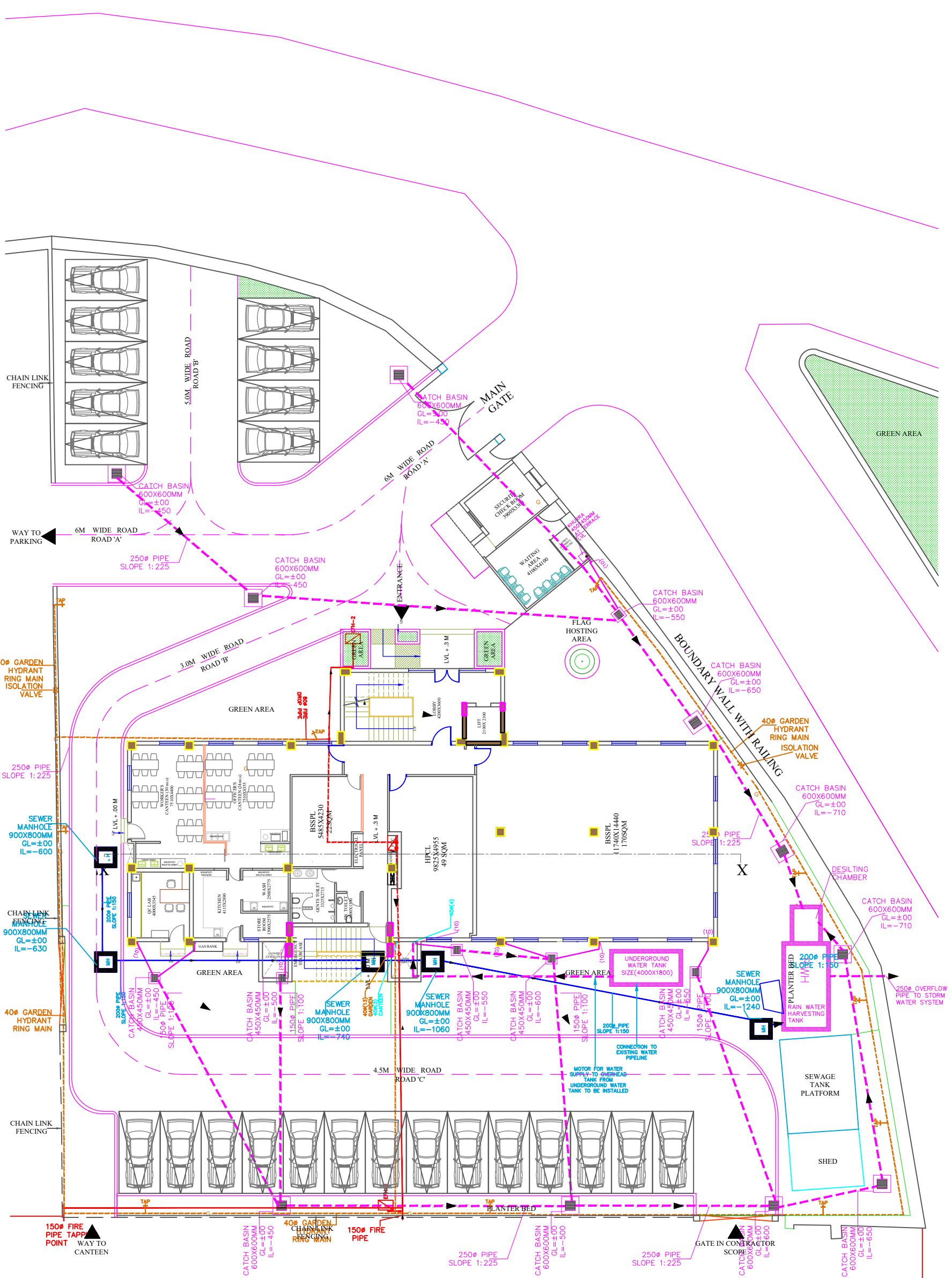


NOTES:

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PLUMBING LEGEND:-

	SEWER MANHOLE
	SEWER PIPE
	CATCH BASIN
	STORM WATER PIPE
	GARDEN HYDRANT PIPE
	GARDEN TAP
	EXTERNAL FIRE HYDRANT
	FIRE PIPE
	WATER SUPPLY PIPE



REV. NO.	DATE OF REV.	BY	DESCRIPTION
PROJECT	ADMINISTRATIVE BUILDING		
CLIENT	 D.A.F.F.P.L. SHAHBAD, MOHAMMADPUR, IGI AIRPORT, NEW DELHI		
ARCHITECTS	 MILLENNIUM VENTURES MILLENNIUM CITY MULTIVENTURES Pvt.Ltd. 302, UNITECH ARCADIA, SOUTH CITY-II, SECTOR-49, GURUGRAM-122018, HARYANA, INDIA		
MEP CONSULTANTS	Flabellum Design Studio Pvt. Ltd. Vatika India Next E1, T102, Gurgaon-21 Gurgaon (HR)-122004 Ph. 0124-4936847 flabellumdesign@gmail.com		
DRAWING STRUCTURE CONSULTANT	ABL Structural Consultants Pvt. Ltd.  H-6/209, AGGARWAL TOWER, NETAJI SUBHASH PLACE, PITAMPURA, DELHI-110034, PH: 9811038352 . 011- 45650222.		
TITLE	SITE PLAN		
SCALE :	NTS	DRAWN BY: GAUTAM	
DATE :	02-05-2022	CHECKED BY: D.K.	
REVISION NO. :	RO	APPROVED BY:	
DRAWING NO : DAFPL/MCMVPL/2022/PL-01			

SITE PLAN

NOTES:

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PLUMBING LEGEND:-

(1)	110ØOD WASTE & VP
(2)	110ØOD SOIL & VP
(3)	COLD WATER DROP PIPE
(4)	RISER TO OHT.
(5)	FLOOR TRAP
(6)	FLOOR DRAIN
(7)	40ØOD DROP PIPE
(8)	40ØOD DROP PIPE (URINAL)
(9)	110Ø PIPE
(10)	160ØRWP
(11)	FLOOR CLEAN OUT
(12)	DROP CONN.
(13)	FLUSHING WATER SUPPLY
(14)	FLUSHING WATER RISER

PLUMBING LEGEND:-

	SEWER MANHOLE
	SEWER PIPE
	CATCH BASIN
	STORM WATER PIPE
	GARDEN HYDRANT PIPE
	GARDEN TAP
	EXTERNAL FIRE HYDRANT
	FIRE PIPE
	WATER SUPPLY PIPE

REV. NO.	DATE OF REV.	BY	DESCRIPTION

PROJECT: **ADMINISTRATIVE BUILDING**

CLIENT:
D.A.F.F.P.L.
SHAHBAD, MOHAMMADPUR,
IGI AIRPORT, NEW DELHI

ARCHITECTS:
MILLENNIUM VENTURES
MILLENNIUM CITY MULTIVENTURES Pvt.Ltd.
302, UNITECH ARCADIA, SOUTH CITY-II,
SECTOR-49, GURUGRAM-122018,
HARYANA, INDIA

MEP CONSULTANTS: **Flabellum Design Studio Pvt. Ltd.**
Vatika India Next
E1, 1102, Gurgaon-21
Gurgaon (HR)-122004
Ph. 0124-4936847
flabellumdesign@gmail.com

DRAWING STRUCTURE CONSULTANT:
ABL Structural Consultants Pvt. Ltd.
H-6/209, AGGARWAL TOWER,
NETAJI SUBHASH PLACE,
PITAMPURA, DELHI-110034,
PH: 9811038352, 011- 45650222.

**PLUMBING DRAWING
STILT FLOOR PLAN**

SCALE: NTS DRAWN BY: GAUTAM

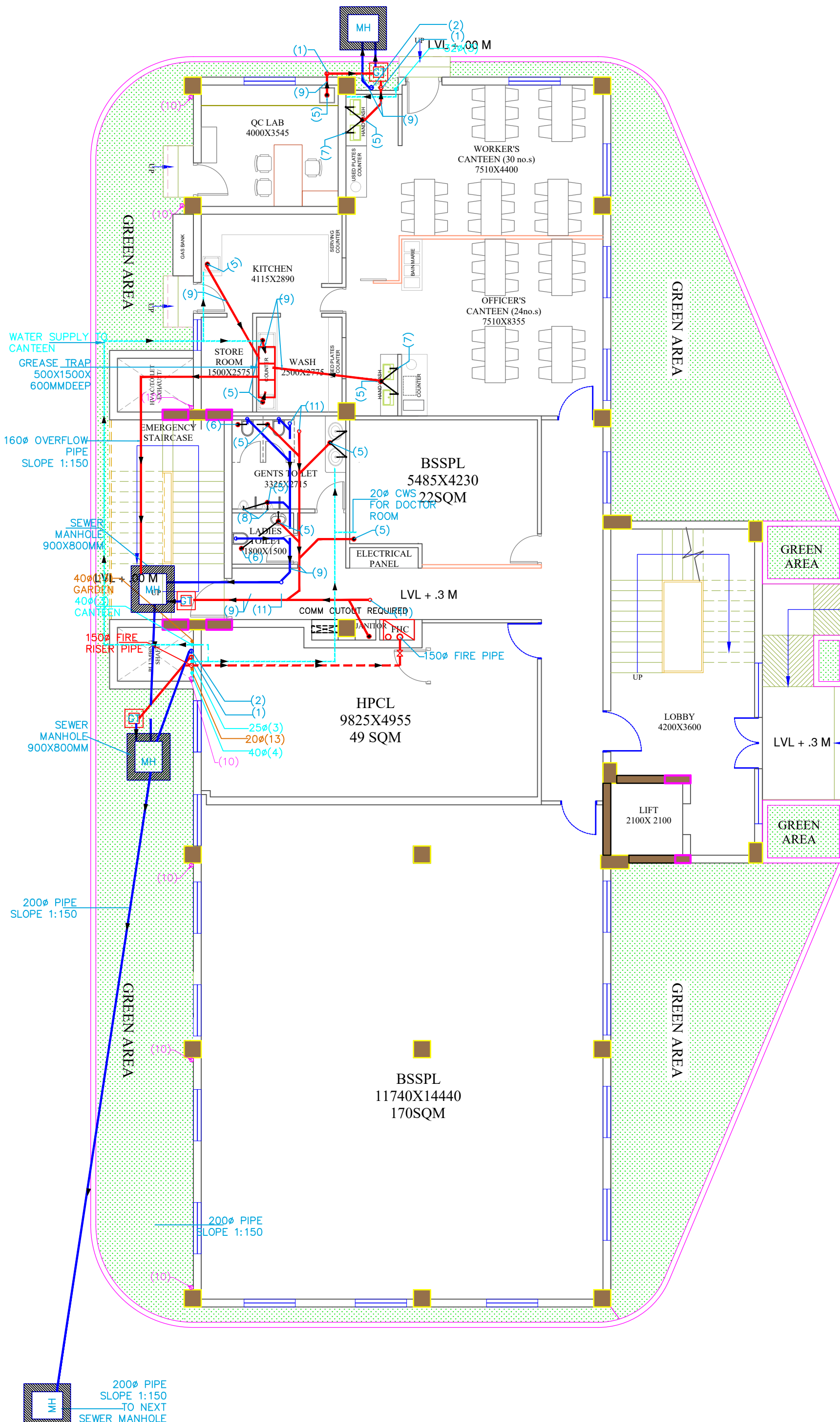
DATE: 02-05-2022 CHECKED BY: D.K

REVISION NO.: RO APPROVED BY:

DRAWING NO:

DAFFPL/MCMVPL/2022/PL-02

FDR TENDER ADVANCE CDPI
 FDR APPROVAL GOOD FOR CONSTRUCTION



NOTES:

- DO NOT SCALE THE DRAWING.
- THE DIMENSIONS SHOULD BE CHECKED AND VERIFIED BEFORE THE EXECUTION OF WORK AT SITE.
- ANY DISCREPANCY FOUND IN THE DRAWING/AT SITE SHOULD BE BROUGHT TO THE NOTICE OF THE ARCHITECTS.
- ALL DIMENSIONS / MEASUREMENTS SHOULD BE READ AND NOT MEASURED.
- ONLY LATEST DRAWINGS TO BE REFERRED. SUPERCEDED DRAWINGS NOT TO BE KEPT ON SITE
- DRAWINGS ARE CROSS REFERENCED AND ARE TO BE READ IN CONJUNCTION WITH OTHER DRAWINGS AS INDICATED

PLUMBING LEGEND:-

(1)	110ØD WASTE & VP
(2)	110ØD SOIL & VP
(3)	COLD WATER DROP PIPE
(4)	RISER TO OHT.
(5)	FLOOR TRAP
(6)	FLOOR DRAIN
(7)	40ØD DROP PIPE
(8)	40ØD DROP PIPE (URINAL)
(9)	110Ø PIPE
(10)	160ØRWP
(11)	FLOOR CLEAN OUT
(12)	DROP CONN.
(13)	FLUSHING WATER SUPPLY
(14)	FLUSHING WATER RISER

PLUMBING LEGEND:-

	SEWER MANHOLE
	SEWER PIPE
	CATCH BASIN
	STORM WATER PIPE
	GARDEN HYDRANT PIPE
	GARDEN TAP
	EXTERNAL FIRE HYDRANT
	FIRE PIPE
	WATER SUPPLY PIPE

REV. NO.	DATE OF REV.	BY	DESCRIPTION

PROJECT	ADMINISTRATIVE BUILDING		
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CLIENT	 D.A.F.F.P.L. SHAHBAD, MOHAMMADPUR, IGI AIRPORT, NEW DELHI		
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ARCHITECTS	 MILLENNIUM VENTURES MILLENNIUM CITY MULTIVENTURES Pvt.Ltd. 302, UNITECH ARCADIA, SOUTH CITY-II, SECTOR-49, GURUGRAM-122018, HARYANA, INDIA		
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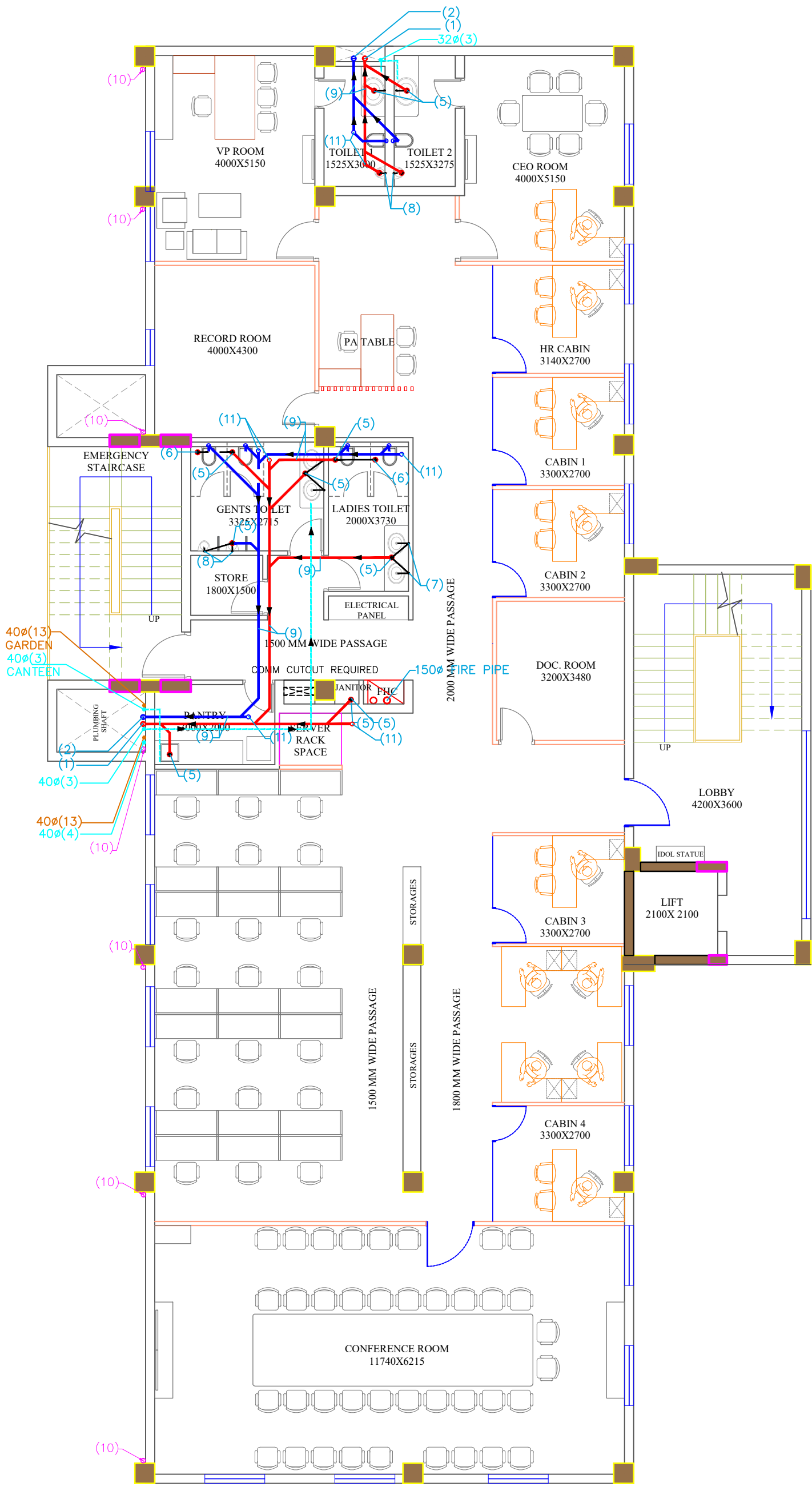
MEP CONSULTANTS	Flabellum Design Studio Pvt. Ltd. Vatika India Next E1, 1102, Gurgaon-21 Gurgaon (HR)-122004 Ph. 0124-4936847 flabellumdesign@gmail.com		
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DRAWING STRUCTURE CONSULTANT	ABL Structural Consultants Pvt. Ltd. H-6/209, AGGARWAL TOWER, NETAJI SUBHASH PLACE, PITAMPURA, DELHI-110034, PH: 9811038352, 011- 45650222.		
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**PLUMBING DRAWING
FIRST FLOOR PLAN**

SCALE :	NTS	DRAWN BY :	GAUTAM
DATE :	02-05-2022	CHECKED BY :	D.K
REVISION NO. :	RO	APPROVED BY :	

DRAWING NO :	
DAFFPL/MCMVPL/2022/PL-03	
	FDR TENDER ADVANCE CDPY FDR APPROVAL GOOD FOR CONSTRUCTION



NOTES:

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PLUMBING LEGEND:-

(1)	110ØD WASTE & VP
(2)	110ØD SOIL & VP
(3)	COLD WATER DROP PIPE
(4)	RISER TO OHT.
(5)	FLOOR TRAP
(6)	FLOOR DRAIN
(7)	40ØD DROP PIPE
(8)	40ØD DROP PIPE (URINAL)
(9)	110Ø PIPE
(10)	160ØRWP
(11)	FLOOR CLEAN OUT
(12)	DROP CONN.
(13)	FLUSHING WATER SUPPLY
(14)	FLUSHING WATER RISER

PLUMBING LEGEND:-

	SEWER MANHOLE
	SEWER PIPE
	CATCH BASIN
	STORM WATER PIPE
	GARDEN HYDRANT PIPE
	GARDEN TAP
	EXTERNAL FIRE HYDRANT
	FIRE PIPE
	WATER SUPPLY PIPE

REV. NO.	DATE OF REV.	BY	DESCRIPTION

PROJECT	ADMINISTRATIVE BUILDING
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CLIENT	 D.A.F.F.P.L. SHAHBAD, MOHAMMADPUR, IGI AIRPORT, NEW DELHI
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ARCHITECTS	 MILLENNIUM VENTURES MILLENNIUM CITY MULTIVENTURES Pvt.Ltd. 302, UNITECH ARCADIA, SOUTH CITY-II, SECTOR-49, GURUGRAM-122018, HARYANA, INDIA
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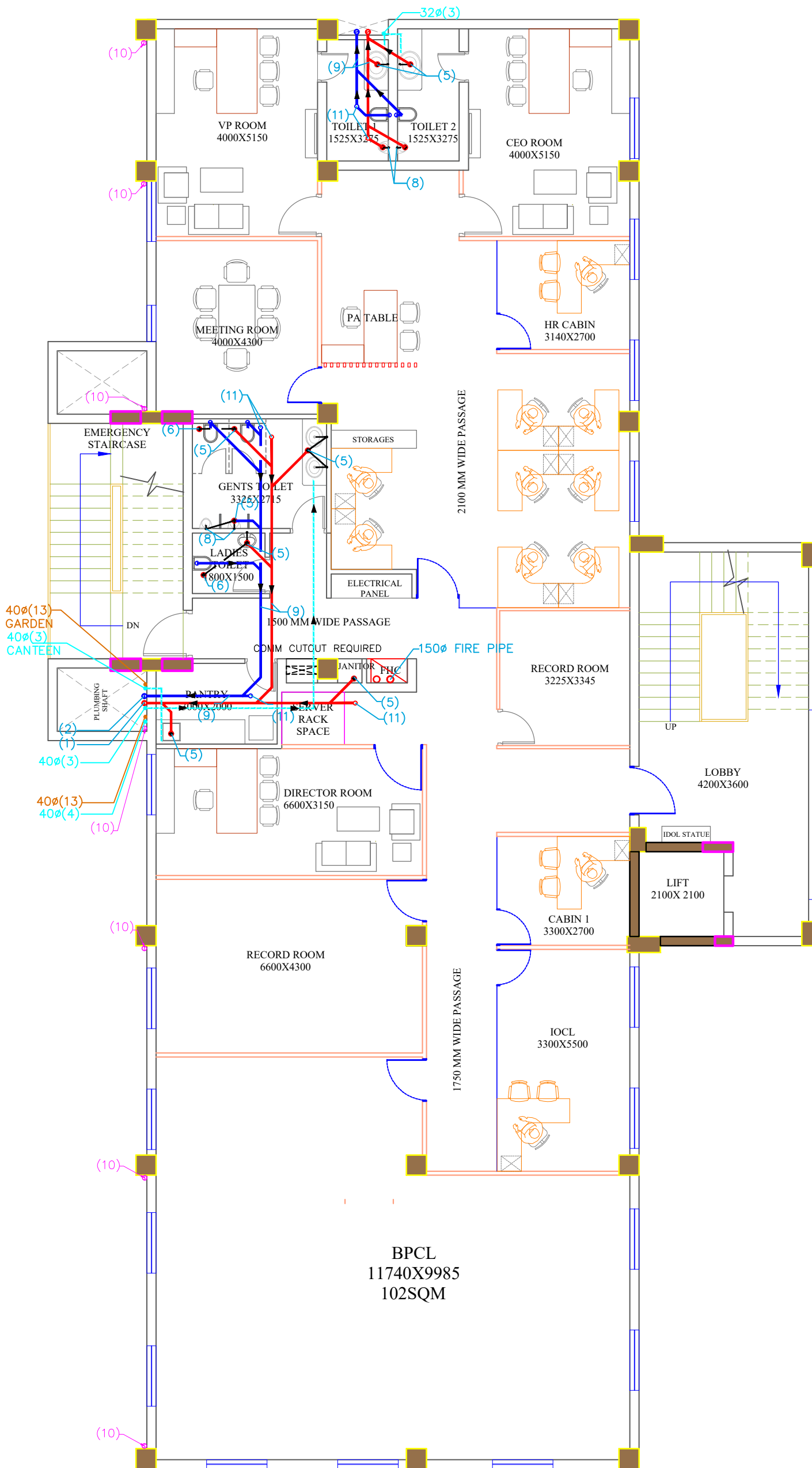
MEP CONSULTANTS	Flabellum Design Studio Pvt. Ltd. Vatika India Next E1, 1102, Gurgaon-21 Gurgaon (HR)-122004 Ph. 0124-4936847 flabellumdesign@gmail.com
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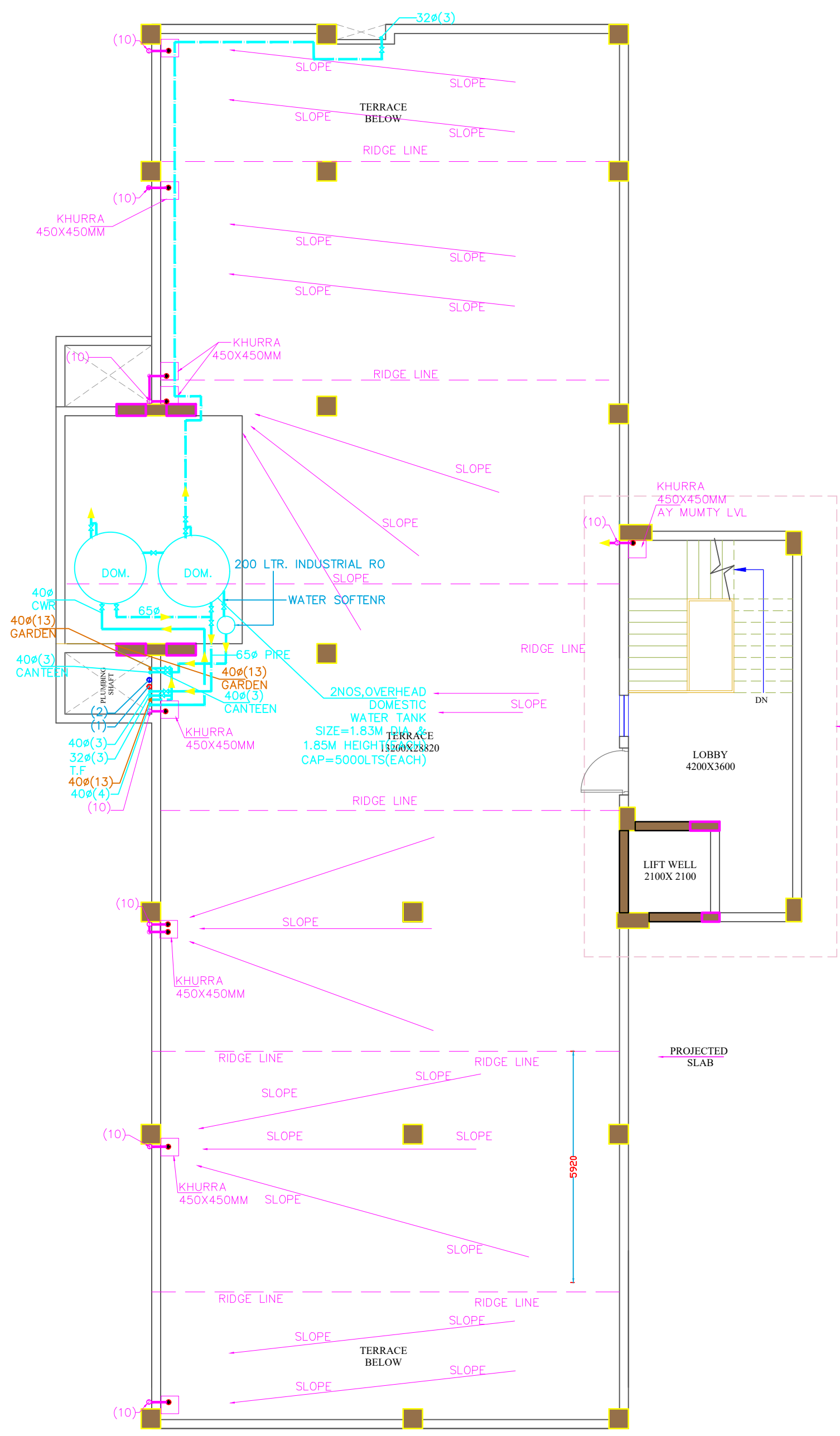
DRAWING STRUCTURE CONSULTANT	ABL Structural Consultants Pvt. Ltd. H-6/209, AGGARWAL TOWER, NETAJI SUBHASH PLACE, PITAMPURA, DELHI-110034, PH: 9811038352, 011- 45650222.
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DRAWING TITLE	PLUMBING DRAWING SECOND FLOOR PLAN
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SCALE :	NTS	DRAWN BY :	GAUTAM
DATE :	02-05-2022	CHECKED BY :	D.K
REVISION NO. :	RO	APPROVED BY :	

DRAWING NO :	DAFFPL/MCMVPL/2022/PL-04
 FDR TENDER ADVANCE CDPI FDR APPROVAL GOOD FOR CONSTRUCTION	





NOTES:

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PLUMBING LEGEND:-

(1)	110ØOD WASTE & VP
(2)	110ØOD SOIL & VP
(3)	COLD WATER DROP PIPE
(4)	RISER TO OHT.
(5)	FLOOR TRAP
(6)	FLOOR DRAIN
(7)	40ØOD DROP PIPE
(8)	40ØOD DROP PIPE (URINAL)
(9)	110Ø PIPE
(10)	160ØRWP
(11)	FLOOR CLEAN OUT
(12)	DROP CONN.
(13)	FLUSHING WATER SUPPLY
(14)	FLUSHING WATER RISER

PLUMBING LEGEND:-

	SEWER MANHOLE
	SEWER PIPE
	CATCH BASIN
	STORM WATER PIPE
	GARDEN HYDRANT PIPE
	GARDEN TAP
	EXTERNAL FIRE HYDRANT
	FIRE PIPE
	WATER SUPPLY PIPE

REV. NO.	DATE OF REV.	BY	DESCRIPTION

PROJECT	ADMINISTRATIVE BUILDING		
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CLIENT	 D.A.F.F.P.L. SHAHBAD, MOHAMMADPUR, IGI AIRPORT, NEW DELHI		
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ARCHITECTS	 MILLENNIUM VENTURES MILLENNIUM CITY MULTIVENTURES Pvt.Ltd. 302, UNITECH ARCADIA, SOUTH CITY-II, SECTOR-49, GURUGRAM-122018, HARYANA, INDIA		
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MEP CONSULTANTS	Flabellum Design Studio Pvt. Ltd. Vatika India Next E1, 1102, Gurgaon-21 Gurgaon (HR)-122004 Ph. 0124-4936847 flabellumdesign@gmail.com		
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DRAWING STRUCTURE CONSULTANT	 ABL Structural Consultants Pvt. Ltd. H-6/209, AGGARWAL TOWER, NETAJI SUBHASH PLACE, PITAMPURA, DELHI-110034, PH: 9811038352, 011- 45650222.		
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DRAWING TITLE	PLUMBING DRAWING THIRD FLOOR PLAN		
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SCALE :	NTS	DRAWN BY :	GAUTAM
DATE :	02-05-2022	CHECKED BY :	D.K
REVISION NO. :	RO	APPROVED BY :	

DRAWING NO.:	
DAFFPL/MCMVPL/2022/PL-05	

C & I - BOQ OF ADMINISTRATIVE
BUILDING AT
SHAHBAD MOHAMMADPUR
NEW DELHI

Tender Document
Summary Sheet

BILL OF QUANTITY**PROJECT : DAFFPL ADMIN BUILDING, NEW DELHI****TOTAL SUMMARY OF COST**

Master Summary		Cost
S No	SUMMARY	Cost in INR w/o taxes
A	CIVIL WORK - ADMIN BLDG, CANTEEN, GUARD ROOM, BOUNDARY WALL, ROAD PAVED AREA & INTERIOR WORKS	
B	ELECTRICAL WORK	
C	PLUMBING WORK	
D	FIRE FIGHTING	
E	HVAC	
F	LIFT	
	TOTAL ESTIMATED COST w/o taxes	-
	GST AS PER APPLICABLE	-
	TOTAL ESTIMATED COST with taxes	-

**C & I - BOQ OF ADMINISTRATIVE
BUILDING AT
SHAHBAD MOHAMMADPUR
NEW DELHI**

Tender Document
Civil & Interiors
(Schedule of Quantities)

BILL OF QUANTITY**PROJECT : DAFFPL ADMIN BUILDING, NEW DELHI****CIVIL & INTERIOR SUMMARY OF COST**

Master Summary		Final BOQ Breakup
S No	SUMMARY	Cost in INR
A	CIVIL WORK - ADMIN BLDG, CANTEEN, GUARD ROOM, BOUNDARY WALL, ROAD PAVED AREA & INTERIOR WORKS	-
TOTAL ESTIMATED COST w/o taxes		-

BILL OF QUANTITY : MAIN BUILDING						
Sl. No.	DSR - Items	Description of item	Unit	Qty	Rate (Rs.)	Amount (Rs.)
	A	EARTH WORK:				
1	2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.				
	2.6.1	All kinds of soil	cum	950.00		0.00
2	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	cum	750.00		0.00
3	2.26	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials.				
	2.26.1	All kind of soil	cum	650.00		0.00
4	2.27	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	cum	50.00		0.00
5	NS	Providing and filling good earth brought from out side including ramming ,watering	cum	350.00		0.00
6	NS	Providing ,Lifting ,Shifting Extra Excavated earth upto 5.0 km or as directed	cum	250.00		0.00
	B	CONCRETE WORKS				
6	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
	4.1.8	1:4:8 (1 Cement : 4 coarse sand :8 graded stone aggregate 40 mm nominal size)	Cum	110.00		0.00
7	4.11	Providing and laying damp-proof course 50mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand(zone-III) : 4 graded stone aggregate 20mm nominal size).	sqm	65.00		0.00
8	4.13	Providing & applying a coat of residual petroleum bitumen of grade of VG-10 of approved quality using 1.7kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	sqm	65.00		0.00
	C	Reinforced Cement Concrete Work				
9	5.33	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. (Note :- Cement content considered in this item is @ 330 kg/cum. Excess/less cement used as per design mix is able/recoverable separately).				
a	5.33.1	All Work up to plinth level	cum	205		0
		Grade slab	cum	35		0
b	5.33.2	All Work above plinth level	cum	495		0
10	5.9	Centering and shuttering including strutting, propping etc. and removal of form for :				
a	5.9.1	Foundations, footings, bases of columns, etc. for mass concrete	sqm	125		0
b	5.9.2	Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.	sqm	145.00		0.00
c	5.9.3	Suspended floors, roofs, landings, balconies and access platform	sqm	1550.00		0.00
d	5.9.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers	sqm	950.00		0.00
e	5.9.6	Columns, Pillars, Piers, Abutments, Posts and Struts	sqm	600.00		0.00
f	5.9.7	Stairs, (excluding landings) except spiral-staircases	sqm	100.00		0.00
11	5.22	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level..				
a	5.22.6	Thermo-Mechanically Treated bars of grade Fe-500D or more	Kg	24500.00		0.00
12	5.22 A	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.				
	5.22A.6	Thermo-Mechanically Treated bars of grade Fe-500D or more.	Kg	60500.00		0.00
		Thermo-Mechanically Treated bars of grade Fe-500D or more. In grade slab	Kg	5000.00		0.00
	D	Brick Work / Block work				
13	6.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:				
	6.1.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	50.00		0.00
14	6.47	Providing and laying autoclaved aerated cement blocks masonry with 230mm/300 mm thick AAC blocks in super structure above plinth level up to floor V level with RCC band at sill level and lintel level with approved block laying polymer modified adhesive mortar all complete as per direction of Engineer-in-Charge. (The payment of RCC band and reinforcement shall be made for separately).	cum	225.00		0.00
15	6.38	Providing and laying autoclaved aerated cement blocks masonry with 100 mm thick AAC blocks in super structure above plinth level up to floor V level in cement mortar 1:4 (1 cement : 4 coarse sand). The rate includes providing and placing in position 2 Nos 6 mm dia M.S. bars at every third course of masonry work.	cum	45.00		0.00
	E	Cladding work				

Sl. No.	DSR - Items	Description of item	Unit	Qty	Rate (Rs.)	Amount (Rs.)
16	8.2	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels. Basic rate - 900 Rs.sqm.				
	8.2.2	Granite of any colour and shade				
a	8.2.2.1	Area of slab upto 0.50 sqm	sqm	5.00		0.00
b	8.2.2.2	Area of slab over 0.50 sqm	sqm	20.00		0.00
18	8.31	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete. Basic rate of tile - 350 Rs/sqm.	sqm	320		0
	F	Steel work				
19	10.28	Providing and fixing Mild steel railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of mild steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	kg	1650.00		0.00
20	10.25	Mild Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.				
	10.25.2	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	kg	1500.00		0.00
	G	Flooring work				
21	16.68	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with line sand	sqm	RO		0.00
22	11.26	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :				
	11.26.1	25 mm thick	sqm	RO		0.00
23	11.27	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete	sqm	90.00		0.00

Sl. No.	DSR - Items	Description of item	Unit	Qty	Rate (Rs.)	Amount (Rs.)
24	11.56	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing , curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge. Basic rate 950 Rs/Sqm				
	11.56.1	Polished Granite stone slab as per approved shade.	sqm	190.00		0
25	11.41	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joints with white cement and matching pigments etc. complete.				
	11.41.2	Size of Tile 600x600 mm, Basic rate of tile 500 Rs/Sqm	sqm	1010.00		0
26	11.47	Providing and laying Vitrified tiles in different sizes (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS: 15622, of approved brand & manufacturer, in all colours and shade, in skirting, riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).				
	11.47.2	Size of Tile 600x600 mm, Basic rate of tile 500 Rs/Sqm	sqm	65.00		0
		H Finishing				
27	13.1	12 mm cement plaster of mix :				
	13.1.2	1:6 (1 cement: 6 fine sand)	sqm	1500.00		0.00
28	13.2	15 mm cement plaster on the rough side of single or half brick wall of mix :				
	13.2.2	1:6 (1 cement: 6 fine sand)	sqm	1600.00		0.00
29	13.60	Providing & applying of wall painting with acrylic emulsion paint of approved brand including putty & primerto give smooth finishon wall and to give an even shade :				
	13.60.1	Two or more coats on new work	sqm	1900.00		0.00
	13.60	Providing & applying of brand including putty & primer to give smooth finishon wall and to give an even shade :	sqm	400.00		0.00
30	13.45	Finishing walls with textured exterior paint of required shade :				
	13.45.1	New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including priming coat of exterior primer applied @ 2.20kg/10 sqm	sqm	1155.00		0.00
31	13.61	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
	13.61.1	Two or more coats on new work	sqm	10.00		0.00
		I Aluminium work				
32	21.1	Providing and fixing aluminium work for windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge.(Glazing, paneling and dash fasteners to be paid for separately) :Powder coated aluminium (minimum thickness of powder coating 50 micron) For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately) With float glass panes of 5 mm thickness (weight not less than 12.50 kg/ sqm) complete with all hardware as per approved design. Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete.				
a	21.1.1	For fixed/openable portion	sqm	240		0
	21.1.1.2	Providing and fixing aluminium work for doors and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge.(Glazing, paneling and dash fasteners to be paid for separately) :Powder coated aluminium (minimum thickness of powder coating 50 micron) For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately) With float glass panes of 5 mm thickness (weight not less than 12.50 kg/ sqm) & Providing and fixing 12 mm thick prelaminate particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminium doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineerin- charge. complete with all hardware as per approved design. Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete.	sqm	40		0
		J UPVC work				

Sl. No.	DSR - Items	Description of item	Unit	Qty	Rate (Rs.)	Amount (Rs.)
33		Providing and fixing factory made UPVC white colour casement/ Casement cum fixed glazed door comprising of UPVC multichambered frame, sash and mullion (where ever required) extruded profiles duly reinforced with 1.60± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to UPVC profile), uPVC extruded glazing beads of appropriate dimension, EPDM gasket, zinc alloy (white powder coated) 3D hinges and one handle on each side of panels along with zinc plated mild steel multi point locking having transmission gear, cylinder with keeps and one side key, G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws, etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. Note: For uPVC frame, sash and mullion extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. Casement door with 3D hinges made of (big series) frame 67 x 64 mm & sash 67 x 110 mm both having wall thickness of 2.3 ± 0.2 mm and single glazing bead/ double glazing bead of appropriate dimension. (Area of door upto 2.00sqm).sqm	sqm	0		0
	L	Water proofing work				

Sl. No.	DSR - Items	Description of item	Unit	Qty	Rate (Rs.)	Amount (Rs.)
37	22.5	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying :	sqm	110.00		0.00
	a	First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/ sqm. This layer will be allowed to air cure for 4 hours.				
	b	Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. (The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.)				
38	22.7	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations:				
	a	Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment.				
	b	Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs.				
	c	After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge				
	d	Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in- charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep.				
	e	The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test."All above operations to be done in order and as directed and specified by the Engineer-in-Charge :	sqm	425.00		0.00
	22.7.1	With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	sqm	18.00		0.00
	L	Miscellaneous work				
39	9.105	Providing and fixing partition upto ceiling height consisting of G.I. frame and required board, including providing and fixing of frame work made of special section power pressed/ roll form G.I. sheet with zinc coating of 120 gms/ sqm(both side inclusive), consisting of floor and ceiling channel 50mm wide having equal flanges of 32 mm and 0.50 mm thick, fixed to the floor and ceiling at the spacing of 610 mm centre to centre with dash fastener of 12.5 mm dia meter 50 mm length or suitable anchor fastener or metal screws with nylon plugs and the studs 48 mm wide having one flange of 34 mm and other flange 36 mm and 0.50 mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610 mm centre to centre by 6 mm dia bolts and nuts, including fixing of studs along both ends of partition fixed flush to wall with suitable anchor fastener or metal screws with nylon plugs at spacing of 450 mm centre to centre, and fixing of boards to both side of frame work by 25 mm long dry wall screws on studs, floor and ceiling channels at the spacing of 300 mm centre to centre. The boards are to be fixed to the frame work with joints staggered to avoid through cracks, Galvanised M.S. fixing channel of 99 mm width (0.9 mm thick having two flanges of 9.5 mm each with zinc coating of 120 gms/sqm(both side inclusive)) to be provided at the horizontal joints of two boards, fixed to the studs using metal to metal flat head screws, including jointing and finishing to a flush finish with recommended jointing compound, jointing tape, angle beads at corners (25 mm x 25 mm x 0.5 mm), joint finisher and two coats of primer suitable for board as per manufacture's specification and direction of engineer in charge all complete.				
	9.105.1	75mm overall thickness partition with 12.5 mm thick double skin tapered edged plain Gypsum plaster board conforming : to IS 2095: (part 1) : 1996 (Board with BIS certification marks)	sqm	425.00		0.00

Sl. No.	DSR - Items	Description of item	Unit	Qty	Rate (Rs.)	Amount (Rs.)
40	12.45	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with :-				
a	12.45.1	12.5 mm thick tapered edge gypsum plain board conforming to IS: 2095- (Part I) : 2011 (Board with BIS certification marks)	sqm	400.00		0.00
41	12.52	Providing and fixing tiled false ceiling of specified materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams/ sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x 1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanised butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per				
	12.52.2	GI Metal Ceiling Lay in perforated Tegular edge global white color tiles of size 595x595 mm and 0.5 mm thick with 8 mm drop; made of GI sheet having galvanizing of 100 gms/sqm (both sides inclusive) and 20% perforation area with 1.8 mm dia holes and having NRC (Noise Reduction Coefficient) of 0.5, electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending and perforation, and backed	sqm	450.00		0.00
46	NS	Providing & fixing frames glazed door snuffers using 12 mm thick toughened glass with all necessary hardware required & necessary floor / glass cutting, making holes etc complete as per design & detailed drawings.The door will be fixed on Dorma / Ozone/ Make fitting as top Pivot ,top patch , bottom patch ,Floor Spring , corner lock with lock keeper plate , door handle as approved etc.	sqm	54.00		0.00
47	NS	Providing & fixing single glazed partition of 12 mm thick toughened glass as per design and drawing.Rate includes the supply/ fixing of 12 mm toughened glass, silicon between glass to glass joint as per site requirement & also including concealed wooden framework & 12 mm thick painted MDF strip required to fix the section as per detail drawing, hardware & accessories	sqm	60.00		0.00
48	NS	Supplying & fixing ACP cladding over façade work including all necessary framework, silicon taping & rain water coping etc. complete with hardwares. make Alstone	sqm			0.00
50	NS	Providing and Fixing fire exist door 1200x2100 incl. panic bar	no.s	3.00		0.00
50	NS	Providing and Fixing of Wooden doors including framing	no.s	25.00		0.00
51	2.35	Supplying, Diluting and injecting chemical emulsion for POST-CONSTRUCTIONAL anti-termite treatment as per CPWD specification.	sqm	500.00		0.00
52	NS	MAKING CORE CUTS OF REQUIRED SIZE AND SHAPE IN RCC WORK at designated locations. Size of core cut above 100 mm x 100 mm, 150 mm x 150 mm & up to 300 mm x 300 mm or 300 mm dia	no.s	30.00		0.00
53						
54	NS	Clearing of site as where it is basis and complete clearing of Site including shifting of material, debris and leveling.	Ls	1.00		0.00
		GRAND TOTAL				0.00

GENERAL NOTES FOR THE INTERIOR CONTRACTOR

- * The following costing is based on item rate format wherein Quantities may vary as per actuals but rates remain firm.
- * Many items in the BOQ mentioned with base cost. If base rate increases/ decreases, Adjustment would be done.
- * All Hardwood to be seasoned and painted with anti-termite and fire retardant paints.
- * All partition to be erected from floor to the bottom of the ceiling, filled with sound insulated material, as specified & directed by the architect.
- * All openings for the cutouts for ducting/raceways/cables etc. in the partitions to be closed & made air tight.
- * All Veneers to be seasoned and melamine polished to shade as / Architects approval
- * All main materials to be firmly Approved by the Architect/Client before execution and approved sample to be properly display. at the site during construction period.
- * All Soft boards (Sitatex) make shall have wooden beading al-around for edge protections.
- * All medium ht partition with CP teak wood coping with polish complete.
- * All junction of gypsum and glass partitoin includes concealed wooden framework & melamine polished wooden beading to hold glass.
- * Contractor shall provide all necessary protection of glass / flooring until handover.
- * General housekeeping & site security would be included in quoted rates.

S.No.	Item No.	Items	Unit	Qty	Rate	Amount
1		ANTISTATIC ACCESS FLOOR/ VINYL & LWF WORKS				
	1.01	RAISED ANTISTATIC ACCESS FLOORING : (Range: 150mm-225mm): Panel:- The Access raised floor shall be medium grade FS 800H panel and also point load of 3.6 KN and UDL of 1350 KN/m2; panels manufactured from steel with lightweight cementitious core in the size 600 X 600 X 35 mm. The top panel shall be finished with high abrasion, anti-static High Pressure Laminate with PVC beading on all sides to provide protection of edges.	Sqm	RO		-
	1.02	TRANSITION Z PROFILE : Providing & Fixing Of AL. profile between carpet, Vinyl or other floor of size 28mmx10mm jointing as required or advised.(Transaction or equivalent)	Rm	70		-
	1.03	SS L CORNER TRIM :P/F SS L shape corner trim of size 25x25 mm designed for use at all corner junction upon columns edges, to providing a neat edge and a safe transition.	Rm	30		-
2		FALSE CEILING				
	2.01	TRAP DOORS : P/F Trap doors in ceiling made of 19 mm thick commercial board with concealed wooden frame section as per detail drawing & finished in laminate complete with all necessary hardware required. Size: 1200x1200	nos	16		-
3.00		Panelling and Cladding				
	3.01	Fabric Panelling : P/I Fabric mounted pin-board panels using 12 mm thick tackboard surface on 12 mm thick MDF cladding duly covered in suitable fabric as selected by Architect.	Sqm	18		-
	3.02	Laquered glass Cladding : Providing & pasting 5 mm thk bevelled all edges as per design planilaque glass cladding on 8 mm thick ply including cutting, edge polish& nasting complete as & where required as per design.	Sqm	18		-
	3.03	50 mm Aluminium SKIRTING : Supply & installation of 50 mm high skirting with PVC cover and Corner Complete.	Rm	290		-
4.00		Internal Signages				
	4.01	General Room Signage : Providing and installing General office signages made out of 6 mm thick acrylic sheet with SS Stud, with vinyl slider on top, as desired. Complete with adhesive/ 3M double sided tape etc. (250 x 75 mm)	nos	28		-
	4.02	Toilet Signages : Providing and Fixing Internal signages for toilets and pantry made out of 6 mm thick acrylic sheet with SS studs, overall size to be 125 mm X 125mm. Complete with adhesive/ 3M double sided tape etc.	nos	14		-
	4.03	Illuminated Fire Exit Signages : Providing and installing LED 2hr battery operated fire exit signage at locations indicated by the architect including all exit points and directional signage.	nos	15		-
	4.04	Lift Lobby Signage : Fabricating and installing Main signage at Lobby of corporate logo as per company's supplied art work. Logo to be in 15/18mm Thk. 3D acrylic/MDF letter cut outs. Signage of owner's logo, Powder coated, typeface Etc. as required. Overall size of Logo to be between 600mm to 600mm Ht.	nos	4		-
	4.05	Providing and Fixing of Door PUSH / PULL Signage's of S.S finish with Acid etched lettering of approved shade and of size 200 x 50 mm. The S.S signage shall be pasted using double-sided tape of 3M make on the Glass doors / Flush doors.	nos	12		-
5.00		Films & Graphics				
	5.01	3M Crystal Glass Film - Frosted (7725-324 with custom plotting) :-Supply & Installation of 3M Crystal Glass film FROSTED (Sparkle effect) with approved artwork, cut using digital plotter. Self-adhesive, bubble-free installation to be done on clean glass , by Authorized Installers only.3M Interior Warranty for a period of 15 Years for interior application, 3 Years for exterior application to be submitted along with invoice.	Sqm	56		-
6.00		Blinds				
	6.01	Roller Blinds with 5% openness factor :- Supply & Installation of manually operated roller Blinds. HARDWARE; TOP TUBE : Made of extruded aluminium with 38 mm Dia. and wall thickness of 1.2 mm with spline adoptable to accommodate clutch of UNISOLIL/ACMEDA make. CLUTCH MECHANISM : Moulded plastic having self lubrication with Glass fibre reinforcement, having a minimum lifting capacity of 8 lbs weight capality - 8 lbs Head adoptability - 38 mm OPERATING CHAIN : PLASTIC / STEEL ball chain adoptable to the clutch pitch for smooth operation of blinds. LOCKING MEMBER : Plastic/ steel stop locks for limit setting adoptable to the steel chain. Bonding (Fabric > Tube) : 30/36 mm wide double sided adhesive tape of 3M for strong holding capacity. SPRING BOOSTERS : provided as per the	Sqm	240		-
	6.02	Roller Blinds 100% opaque as projector screen :- Supply & Installation of manually operated roller Blinds. HARDWARE; TOP TUBE : Made of extruded aluminium with 38 mm Dia. and wall thickness of 1.2 mm with spline adoptable to accommodate clutch of UNISOLIL/ACMEDA make. CLUTCH MECHANISM : Moulded plastic having self lubrication with Glass fibre reinforcement, having a minimum lifting capacity of 8 lbs weight capality - 8 lbs Head adoptability - 38 mm OPERATING CHAIN : PLASTIC / STEEL ball chain adoptable to the clutch pitch for smooth operation of blinds. LOCKING MEMBER : Plastic/ steel stop locks for limit setting adoptable to the steel chain. Bonding (Fabric > Tube) : 30/36 mm wide double sided adhesive tape of 3M for strong holding capacity. SPRING BOOSTERS : provided as per the	Sqm	25		-
7.00		Toilet Cubical				
	7.01	ITEM DESCRIPTION Made from solid grade compact high pressure laminate as per IS:2046 manufactured under high specific pressure > 5 MPa and temperature >120oC with bunch of kraft papers impregnated with thermosetting phenolic resin and decorative papers made of Alpha cellulose fiber impregnated with thermosetting melamine resin which provide superior scratch, abrasion, heat, chemical, impact, graffiti & moisture resistance along with anti-bacterial properties. Panels have a black core that when machined, presents a distinctive black edge. Front panel, door & divider panel to be fix vertically by using extruded grade aluminum alloy epoxy powder coated profiles. Panel thickness 12 mm. Design no. as specified by Arch. / Engr. in suede finish. Size of panels to				
	7.02	Nylon Cubicles: Std Sizes (W x D x H) - 950 mm x 1350 mm x 2003 mm, (Height is including 150 mm gap from bottom) Door Size- 600 mm	Nos	8		-
8.00		Carpet / Vinyl Flooring				
	8.01	Supplying & installing vinyl floor to be laid on cement screed.	Sqm	RO		-
	8.02	Providing and fixing Carpet tiles 5-6mm thick solution died PP VLOC construction having pile weight 750g/ sqm and 22.1 oz/sqyards with quarter ton/random plank pattern on monolithic installation, to be laid on cement screed ready to receive carpet tile. Base Rate :Rs 85/sft. ADHESIVE - PIDILITE KPS	Sqm	232		-

9.00		Main Signage on Building Façade				
	9.01	DAFFPL Signage: Providing and installing of Corporate signage as per company's supplied art work. Logo in 3D acrylic with LED light modules complete framing in water proof encasing with timer control for day night on/off. Overall height of logo to be 2400mm as per DAFFPL standard & design.	nos	1		-
10.00		Fire Door				
	10.01	FIRE RATED DOORS, 1200 mm WIDE: P&F Fully insulated Steel Composite light Flush Fire Doors with 1 hour fire rating in conformance with IS 3614 Part 2 and BS 476 Part 22. Door frames to be double rebate profile of 143 mm width and 57 mm height manufactured from 16 gauge galvanized steel, profile to have bending radius of 1.4 mm supplied in Knock down form for butt joint assembly at site. Door Shutter in 46 mm thick manufactured from two 18 gauge galvanized steel sheets lock seam jointed at stile edges to form a double skin fully flush shell. Infill of Propertory insulation material to be provided for structural rigidity & additional reinforcements & sound Insulation for all hardware fixtures as required. Door Shutter in 46 mm thick manufactured from two 18 gauge galvanized steel sheets lock seam jointed at stile edges to form a double skin fully flush shell. Infill of Propertory insulation material to be provided for structural rigidity & additional reinforcements & sound Insulation for all hardware fixtures as required.Overall door size to be 2100 x 1000 mm. Hardware set to be as follows: <ul style="list-style-type: none"> • Dorma Door Closer TS 91 – Standard Arm • SS Hinges, 4 Nos. • Dorset SS lever handle with mortise lock. • Panic Bar with single point rim panic latch. 	nos	1		-
		Grand Total				-

BILL OF QUANTITY : Boundary Wall						
Sl. No.	DSR - Items	Description of item	Unit	Qty	Rate (Rs.)	Amount (Rs.)
1	2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.				
	2.6.1	All kinds of soil	cum	15.00		0.00
2	4.2	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc., up to floor five level, excluding the cost of centering, shuttering and finishing:				
	4.2.1	1:2:4 (1 Cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size)	Cum	5.00		0.00
3	10.2	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	Kg	850.00		0.00
4		Wall painting with apex paint of approved brand and manufacture to give an even shade : Two or more coats on new work	sqm	200.00		0.00
5	13.61	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
	13.61.1	Two or more coats on new work	sqm	200.00		0.00
7	15.3	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in- charge.	cum	10.00		0.00
8	15.7	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.				
	15.7.5	Supply and Install 4m x 3m (two panel) motorised swing main entrance gates with push button system. Gates should be on MS painted in desired shade as per the design & details to be provided motors to have 24 months warranty	Nos.	1.00		0.00
9	NS	Repairing of existing chainlink fencing & creating green wall as per design.	sqm	135.00		0.00
GRAND TOTAL						0.00

BILL OF QUANTITY : ROAD PAVED AREA

Sl. No.	DSR - Items	Description of item	Unit	Qty	Rate (Rs.)	Amount (Rs.)
1	NS	Preparation and consolidation of subgrade with power road roller of 8 to 12 tonne capacity including making good the undulations etc. with earth of quarry spoils etc. and rerolling the subgrade.	sqm	1010		0
2	NS	Supplying and stacking at site.				
a	NS	Providing and laying 90 mm to 20 mm size stone aggregate, compacted in a layer of 150mm in compacted by using road roller of 8-12 tonne.	cum	151.00		0.00
3	NS	Providing and laying water bound macadam with specified stone aggregate stone screening and binding material i.e. moorum, earth etc. includind screening, sorting, spreading to template and consolidation with power road roller of 8 to 10 tonne capacity etc.complete. (ALL WORK AS PER CPWD SPECIFICATIONS)	cum	305.00		0.00
4	NS	Providing and laying design mix cement concrete of M-30 grade, in roads/ taxi tracks/ runways, using cement content as per design mix, using coarse sand and graded stone aggregate of 20 mm nominal size in appropriate proportions as per approved & specified design criteria, providing dowel bars with sleeve/ tie bars wherever required, laying at site, spreading and compacting mechanically by using needle and surface vibrators, levelling to required slope/ camber, finishing with required texture, including steel form work with sturdy M.S. channel sections, curing, making provision for contraction/ expansion, construction & longitudinal joints (10 mm wide x 50 mm deep) by groove cutting machine, providing and filling joints with approved joint filler and sealants, complete all as per direction of Engineerin- charge (Item of joint fillers, sealants, dowel bars with sleeve/ tie bars to be paid separately).	Cum	135.00		0.00
5	NS	Providing and laying at or near ground level factory made kerb stone	Cum	28.00		0.00
6	NS	Providing and installing Flag platform including fastening of post for flag	LS	1.00		0.00
GRAND TOTAL						0

**ELECTRICAL BOQ OF ADMINISTRATIVE
BUILDING AT
SHAHBAD MOHAMMADPUR
NEW DELHI**

Tender Document
ELECTRICAL System
(Schedule of Quantities)

ELECTRICAL SUMMARY OF COST

#	Description	Amount (INR)
A.	LT Panels	-
B.	LT Cables, Cable Tray & Earthing	-
C.	Point Wiring	-
D.	Voice and Data for Under floor GI trunking	-
E.	Supplying & Fixing of Lighting Fixtures	-
F.	Prime Cost Item for External Lights & Poles.	-
G.	Addressable Fire Alarm System	-
H.	Conduit and Wiring for PA & Access Control	-
I.	Video Conferencing / AV Equipments	-
J.	Lightning Protection : Conventional System	-
	Total Cost	-

Say ~ Rupees. 0.00 Lakhs Only

BASIS OF CALCULATIONS FOR ESTIMATED COST FOR ITEMS 'A', 'B', 'C' and 'D'

Material Cost (less discounts) + Installation + Contractors Profit & Overheads @ 15%.

BASIS OF CALCULATIONS FOR ESTIMATED COST FOR ITEMS 'E','F','G','H' and 'I'

Material Cost (less discounts) + Installation + Contractors Profit & Overheads @ 10%

GST NOT INCLUDED in the above mentioned prices

Low Side Electrical Works

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
A. LT Panels					
Design and supply of the following cubicle type 2 mm/1.6 mm thick sheet steel enclosed (2 mm for body and 1.6 mm for doors), free standing / wall mounted indoor type MV Electrical Panels with dust and vermin proof, hinged and lockable doors complete with inter-connections, 75 mm MS channel, bonding to earth. (suitable for 415V, 3 Phase, 4 wire, 50 cycles supply system) including proper labeling of all panels as directed by the consultant (Panels shall be powder coated Siemens grey in colour or as approved)					
1	MDB - 1 / L+SP+AC / GF				
	i. Incoming				
-	800 Amps 4P MCCB (36 kA) (with Electronic Trip Unit)	No.	1		-
-	Spreaders	Set	2		-
-	Extended Rotary Operating Mechanism	No.	1		-
	ii. Metering (Digital)				
-	Digital MFM (EM 6436 or equal), CTs, CT shorting links, R/Y/B LED indicating lamps and control SP MCBs	Set	1		-
	iii. Outgoing				
-	400 Amps 3P+N MCCB (25 kA) (with Electronic Trip Unit)	No.	2		-
-	Spreaders	Set	4		-
-	Extended Rotary Operating Mechanism	No.	2		-
-	100 Amps 3P+N MCCB (25 kA) (With TMD Trip Unit)	No.	3		-
-	Spreaders	Set	6		-
-	Extended Rotary Operating Mechanism	No.	3		-
-	80 Amps 3P+N MCCB (25 kA) (With TMD Trip Unit)	No.	2		-
-	Spreaders	Set	4		-

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
-	Extended Rotary Operating Mechanism	No.	2		-
-	63 Amps 3P+N MCCB (25 kA) (With TMD Trip Unit)	No.	1		-
-	Spreaders	Set	2		-
-	Extended Rotary Operating Mechanism	No.	1		-
-	63 Amps 4P MCB (10 kA) (C - Curve)	No.	3		-
-	40 Amps 4P MCB (10 kA) (C - Curve)	No.	4		-
-	Digital Dual Energy Meter EM 6438 with RS 485 Port, CTs, CT shorting links and control SP MCBs.	No.	7		-
iv.	Enclosure				
-	Fabrication, 800 Amps, TPN Aluminum Bus Bar, PVC Sleeving, Control / Power wiring & hardware.	Set	1		-
2	SDB - 1 / L+SP+AC / 1F(ISO)				
i.	Incoming				
-	80 Amps 4P MCCB (25 kA) (With TMD Trip Unit)	No.	1		-
-	Spreaders	Set	2		-
-	Extended Rotary Operating Mechanism	No.	1		-
ii.	Metering (Digital)				
-	Digital V A F Meter with built in Selector Switch (EM 6459 or equal), CTs, CT shorting links, R/Y/B LED indicating lamps and control SP MCBs	Set	1		-
iii.	Outgoing				
-	40 Amps 4P MCB (10 kA) (C - Curve)	No.	3		-
iv.	Enclosure				
-	Fabrication, 100 Amps, TPN Aluminum Bus Bar, PVC Sleeving, Control / Power wiring & hardware.	Set	1		-

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
3	SDB - 2 / L+SP+AC / 2F (BPCL Area)				
-	Distribution Board 4 Rows to accommodate 39/42 MCBs + incomer (13/14 modules per row) DB – LP1 / 2F	No.	1		-
i	Incomer				
-	40A 4P Isolator	No.	1		-
-	40A 2P ELCB (30mA)	No.	3		-
ii	Outgoings				
-	6-32A SP MCB ('C' Curve)	No.	30		-
-	Blank Plate	No.	16		-
4	SDB - 3 / L+SP+AC / GF (HPCL Area)				
-	Distribution Board 4 Rows to accommodate 39/42 MCBs + incomer (13/14 modules per row) DB – LP2 / 2F	No.	1		-
i	Incomer				
-	40A 4P Isolator	No.	1		-
-	40A 2P ELCB (30mA)	No.	3		-
ii	Outgoings				
-	6-32A SP MCB ('C' Curve)	No.	30		-
-	Blank Plate	No.	16		-
5	SDB - 4 / L+SP+AC / GF (BSSPL Area)				
-	Distribution Board 4 Rows to accommodate 39/42 MCBs + incomer (13/14 modules per row) DB – LP3 / 2F	No.	1		-
i	Incomer				
-	40A 4P Isolator	No.	1		-
-	40A 2P ELCB (30mA)	No.	3		-
ii	Outgoings				
-	6-32A SP MCB ('C' Curve)	No.	30		-

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
-	Blank Plate	No.	16		-
6	SDB - 5 / L+SP+AC / 2F(DAFFPL)				
i.	Incoming				
-	80 Amps 4P MCCB (25 kA) (With TMD Trip Unit)	No.	1		-
-	Spreaders	Set	2		-
-	Extended Rotary Operating Mechanism	No.	1		-
ii.	Metering (Digital)				
-	Digital V A F Meter with built in Selector Switch (EM 6459 or equal), CTs, CT shorting links, R/Y/B LED indicating lamps and control SP MCBs	Set	1		-
iii.	Outgoing				
-	40 Amps 4P MCB (10 kA) (C - Curve)	No.	3		-
iv.	Enclosure				
-	Fabrication,100 Amps, TPN Aluminum Bus Bar, PVC Sleeving, Control / Power wiring & hardware.	Set	1		-
7	Fixing, Testing and Commissioning of three/single phase sub-meters (complete as required):	No.	3		-
8	SDB - 1 / L+SP+AC / GF (CAFE AREA)				
i.	Incoming				
-	100 Amps 4P MCCB (25 kA) (with TMD Trip Unit)	No.	1		-
-	Spreaders	Set	2		-
-	Extended Rotary Operating Mechanism	No.	1		-
ii.	Metering (Digital)				
-	Digital V A F Meter with built in Selector Switch (EM 6459 or equal), CTs, CT shorting links, R/Y/B LED indicating lamps and control SP MCBs	Set	1		-
iii.	Outgoing				
-	40 Amps 4P MCB (10 kA) (C - Curve)	No.	2		-
-	32 Amps 2P RCBO (30mA)	No.	7		-
-	20 Amps 4P RCBO (30mA)	No.	3		-
iv.	Enclosure				
-	Fabrication, 100 Amps, FP Aluminum Bus Bar, PVC Sleeving, Control / Power wiring & hardware.	Set	1		-

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
9	Feeder Pillar - 1 (Outdoor Type)				
	i. Incoming				
-	100 Amps 4P MCCB (25 kA) (with TMD Trip Unit)	No.	1		-
-	Spreaders	Set	2		-
-	Extended Rotary Operating Mechanism	No.	1		-
	ii. Metering (Digital)				
-	Digital V A F Meter with built in Selector Switch (EM 6459 or equal), CTs, CT shorting links, R/Y/B LED indicating lamps and control SP MCBs	Set	1		-
	iii. Outgoing				
-	63 Amps 4P MCB (10 kA) (C - Curve)	No.	1		-
-	40 Amps 4P MCB (10 kA) (C - Curve)	No.	1		-

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
-	25 Amps 4P MCB (10 kA) (C - Curve)	No.	2		-
-	40 Amps 2P MCB (10 kA) (C - Curve)	No.	1		-
-	20 Amps 2P MCB (10 kA) (C - Curve)	No.	14		-
-	63 Amps 3P Contactor	No.	1		-
-	On, Off, Push Buttons	Set	1		-
-	Multifunction Timer	No.	1		-
-	A/M Selector Switch	No.	1		-
-	20A, 3 Pin, Single Phase PVC moulded Socket & Plug Top (To be fixed outside Feeder Pillar - one side).	No.	1		-
-	20A, 5 Pin, Three Phase PVC moulded Socket & Plug Top (To be fixed outside Feeder Pillar - other side).	No.	1		-
iii.	Enclosure				
-	Fabrication, 150 Amps, FP Aluminum Bus Bar, PVC Sleeving, Control / Power wiring & hardware.	Set	1		-
10	Fixing, Testing and Commissioning of the following MDBs / SDBs (complete as required):				
a.	MDB - 1 / L+SP+AC / GF	No.	1		-
b.	SDB - 1 / L+SP+AC / 1F(IOUSL)	No.	1		-
c.	SDB - 2 / L+SP+AC / 2F (BPCL Area)	No.	1		-
d.	SDB - 3 / L+SP+AC / GF (HPCL Area)	No.	1		-
e.	SDB - 4 / L+SP+AC / GF (BSSPL Area)	No.	1		-
f.	SDB - 5 / L+SP+AC / 2F(DAFFPL)	No.	1		-
g.	SDB - 1 / L+SP+AC / GF (CAFE AREA)	No.	1		-
h.	Feeder Pillar - 1 (Outdoor Type)	No.	1		-

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
11	Distribution Boards				
-	Supplying the following 18 SWG Distribution Boards (Double Door type - IP 42) . Including proper labeling as directed along with separate Neutral Link for each Phase, Earth link and separate dedicated Earth link in case of UPS Distribution Boards as well as necessary Bus links etc. The distribution boards shall confirm to specifications. Chrome plated panel locks / finger operated knobs shall be provided as per approved GA drawings.				
a.	Distribution Board 4 Rows to accommodate 39/42 MCBs + incomer (13/14 modules per row) DB – LP1 / GF, LP1 / CAFÉ / GF, LP2 / TR	No.	3		-
i	Incomer				
-	63A 4P Isolator	No.	1		-
-	63A 2P ELCB (30mA)	No.	3		-
-	40A 4P Isolator	No.	2		-
-	40A 2P ELCB (30mA)	No.	6		-
ii	Outgoings				
-	6-32A SP MCB ('C' Curve)	No.	60		-
-	Blank Plate	No.	48		-
b	Distribution Board 4 Rows to accommodate 39/42 MCBs + incomer (13/14 modules per row) DB – LP1 / 1F, LP2 / 1F	No.	2		-
i	Incomer				
-	40A 4P Isolator	No.	2		-
-	40A 2P ELCB (30mA)	No.	6		-
ii	Outgoings				
-	6-32A SP MCB ('C' Curve)	No.	45		-
-	Blank Plate	No.	32		-

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
c.	Distribution Board 4 Rows to accommodate 39/42 MCBs + incomer (13/14 modules per row) DB – LP1 / 2F, LP2 / 2F	No.	2		-
i	Incomer				
-	40A 4P Isolator	No.	2		-
-	40A 2P ELCB (30mA)	No.	6		-
ii	Outgoings				
-	6-32A SP MCB ('C' Curve)	No.	40		-
-	Blank Plate	No.	32		-
12.	Fixing, Testing & Commissioning of the following Distribution Boards (Double Door type - IP 42). Along with Incoming & Outgoing MCBs / ELCBs / Isolators (complete as required) including duly laminated circuit charts and proper labeling.				
a.	Flush Mounting Double Door MS Enclosure with 4 Rows to accommodate 39 / 42 MCBs + Incomer (13 / 14 modules per row)	No.	7		-
13	Supplying the following MCCB / Changeover Switch in Sheet Steel Enclosure along with Incoming and Outgoing Cable Boxes suitable for Termination of Aluminum Cable				
a.	63A 4 Pole MCCB (25kA) in sheet steel enclosure surface mounted on the wall (for Lift)	No.	1		-
14	Fixing, Testing & Commissioning of the following MCCB / Changeover Switch in sheet steel enclosure surface mounted on the wall				
a.	63A 4 Pole MCCB (25kA) in sheet steel enclosure surface mounted on the wall (for Lift)	No.	1		-
15	Supplying PVC moulded Switch Socket Plug Top along with Mounting Enclosure. (IP 66) and Surround Plate				
a.	20A, 3 pin, single phase PVC moulded Plug and Switch Socket	No.	15		-
16	Fixing, Testing & Commissioning of PVC moulded Switch Socket outlet				
a.	20A, 3 pin, single phase PVC moulded Plug and Switch Socket	No.	15		-

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
17	Supplying the following MCCB type Isolator in suitable weather proof type enclosure surface mounted on the wall (for A/C Unit)				
a.	20A 4Pole MCB type Isolator in sheet steel enclosure	No.	2		-
c.	63A 4Pole MCB type Isolator in sheet steel enclosure	No.	7		-
18	Fixing, Testing & Commissioning of the following MCCB type Isolator surface mounted on the wall				
a.	20A 4Pole MCB type Isolator in sheet steel enclosure	No.	2		-
b.	63A 4Pole MCB type Isolator in sheet steel enclosure	No.	7		-
Total Carried Over To Summary					-
B.	LT Cables, Cable Tray & Earthing				
I.	LT Cables				
1	Supplying the following 1100V grade XLPE Insulated aluminum conductor armoured cables.				
a.	4 C x 35 Sq. mm	RM	RO		-
b.	4 C x 25 Sq. mm	RM	158		-
c.	4 C x 16 Sq. mm	RM	162		-
d.	4 C x 10 Sq. mm	RM	270		-
e.	4 C x 6 Sq. mm	RM	68		-
f.	4 C x 2.5 Sq. mm	RM	68		-
g.	3½ C x 240 Sq. mm	RM	450		-
h.	3½ C x 150 Sq. mm	RM	Rate Only		-
i.	3½ C x 70 Sq. mm	RM	Rate Only		-

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
j.	3½ C x 50 Sq. mm	RM	180		-
k.	2 C x 10 Sq. mm	RM	Rate Only		-
l.	2 C x 6 Sq. mm	RM	450		-
2	Laying and fixing of XLPE insulated aluminum / conductor armoured cables of 1.1 kV grade of size 120 Sq. mm to 240 Sq. mm on cable tray / surface mounted along with misc. accessories like Cable Ties / Saddles / Cable Tags at both ends of cable etc. including making proper connections as required. (Including providing cable marker as required)	RM	45		-
3	Laying and fixing of XLPE insulated aluminum / conductor armoured cables of 1.1 kV grade of size 35 Sq. mm to 95 Sq. mm on cable tray / surface mounted along with misc. accessories like Cable Ties / Saddles / Cable Tags at both ends of cable etc. including making proper connections as required. (Including providing cable marker as required)	RM	180		-
4	Laying and fixing of XLPE insulated aluminum / conductor armoured Cable of 1.1 kV grade of size 2.5 Sq. mm to 25 Sq. mm on cable tray / surface mounted along with misc. accessories like Cable Ties / Saddles / Cable Tags at both ends of cable etc. including making proper connections as required. (Including providing cable marker as required)	RM	1174.5		-
5	Digging and back filling 600 mm wide and 750 mm deep trench for laying cable for External cables as required alongwith sand and brick lining as per IS specification	RM	180		-
6	Supplying & Making Terminations of the following XLPE insulated aluminum conductor armoured cables of 1100V grade including cost of thimbles / lugs, Double compression nickel plated brass glands, cables sockets, insulation tape & crimping etc. complete as required				
a.	4 C x 35 Sq. mm	No.	Rate Only		-
b.	4 C x 25 Sq. mm	No.	18		-
c.	4 C x 16 Sq. mm	No.	6		-
d.	4 C x 10 Sq. mm	No.	18		-

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
e.	4 C x 6 Sq. mm	No.	4		-
f.	4 C x 2.5 Sq. mm	No.	6		-
g.	3½ C x 240 Sq. mm	No.	2		-
h.	3½ C x 150 Sq. mm	No.	Rate Only		-
i.	3½ C x 70 Sq. mm	No.	Rate Only		-
j.	3½ C x 50 Sq. mm	No.	4		-
k.	2 C x 10 Sq. mm	No.	Rate Only		-
l.	2 C x 6 Sq. mm	No.	32		-
7	Providing & laying the following PVC Insulated armoured copper control cables including termination				
a.	2 core 2.5 Sq mm	RM	90		-
b.	2 core 1.5 Sq mm	RM	Rate Only		-
8	Wiring for PVC moulded Plug & Socket with FR-LSH PVC insulated stranded copper conductor 1100 Volt grade wires in existing conduit and making suitable end connections with suitable sized lugs, sleeves etc. complete as required				
a.	2 x 4 Sq. mm + 1 x 4 Sq mm Earth	RM	225		-
b.	2 x 2.5 Sq. mm + 1 x 2.5 Sq mm Earth	RM	Rate Only		-
9	Providing and fixing of 25mm dia 16 SWG MS conduit on surface including cost of providing saddles, inspection boxes, tees etc as required.	RM	225		-
II.	Cable Trays				
1	Providing and fixing the following 14 SWG Perforated Galvanised cable tray along with necessary suspenders (9 MM dia GI) (not more than 1000 MM long) at equal intervals of 900 MM as directed. Including cost of providing and fixing supporting steel, nuts, bolts, washers and dash fasteners as required. The installation shall be complete in all respects (Please note this is not a ladder type tray, perforated cable tray is to be considered) (All accessories like tees, bends vertical / horizontal shall be factory fabricated and cost of these to be included in the rate. Site fabricated accessories are not acceptable)				

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
a.	40 x 1000 x 40 MM	RM	Rate Only		-
b.	40 x 750 x 40 MM	RM	Rate Only		-
c.	40 x 600 x 40 MM	RM	27		-
d.	40 x 450 x 40 MM	RM	23		-
e.	40 x 300 x 40 MM	RM	45		-
f.	40 x 200 x 40 MM	RM	90		-
III. Earthing					
1	Supplying and fixing of the following tapes / wires including all necessary fixing accessories and effecting connections including insulated supports wherever required, complete in all respects (As per specifications)				
a.	50 x 10 MM GI TAPE	RM	45		-
b.	50 x 6 MM GI TAPE	RM	90		-
c.	25 x 6 MM GI TAPE	RM	90		-
d.	25 x 3 MM GI TAPE	RM	360		-
e.	8 SWG GI Wire	RM	Rate Only		-
f.	10 SWG GI Wire	RM	450		-
g.	50 x 6 MM COPPER TAPE (With heat shrinkable sleeve on tape)	RM	Rate Only		-
h.	25 x 6 MM COPPER TAPE (With heat shrinkable sleeve on tape)	RM	68		-
i.	25 x 3 MM COPPER TAPE (With heat shrinkable sleeve on tape)	RM	Rate Only		-
2	Providing & drawing the following FR-LSH PVC Insulated Copper Conductor 1100 Volt grade Wire for Earthing including cost of thimbles / lugs insulation tape and crimping etc. complete as required including terminations				
a.	16 Sq. mm	RM	693.00		-
b.	10 Sq. mm	RM	540		-
c.	6 Sq. mm	RM	135		-
d.	4 Sq. mm	RM	Rate Only		-

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
e.	2.5 Sq. mm	RM	135		-
3	Providing Maintenance free Earthing Stations (GI plate earthing) complete as per I.S. specifications (GI plate 900 x 900 x 6 mm) including digging and backfilling of earth pit. (With Heavy Duty Manhole)	No.	2		-
4	Providing Earthing Stations (Copper Plate Earthing) complete as per I.S. specifications (Copper plate 600 x 600 x 6 mm) including digging and backfilling of earth pit. (With Heavy Duty Manhole).	No.	Rate Only		-
5	Providing Maintenance free earthing stations (16 SWG Copper pipe earthing) complete as per I.S. specifications (Copper pipe shall be 40 MM dia) surrounded with suitable quantity of ground enhancing material (complying with IEEE clause 14.5d) (Copper pipe 16 feet and depth of pit 17 feet). (With Heavy Duty Manhole)	No.	2		-
6	Providing and laying the following UPVC pipe including digging and back filling of trench up to a maximum depth of 600 mm				
a.	300 MM DIA (6 Kg per Sq cm - Class 3)	RM	25		-
b.	200 MM DIA (6 Kg per Sq cm - Class 3)	RM	50		-
7	Providing Manholes 1000 x 1000 x 1200 MM deep along with manholes covers suitable for vehicular movement. (Structure as per Site Conditions, specifications as per Architect)	No.	2		-
Total Carried Over To Summary					-

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
C. Point Wiring					
1	Wiring for First Light Point with 2 x 2.5 Sq. mm. FR-LSH PVC Insulated Copper conductor 1100 Volt grade wires in surface/recessed mounted 25mm dia MS conduit as directed, including earthing of the Fixtures with 2.5 Sq. mm. FR-LSH PVC Insulated Copper Earth Wire. (Please note MS Conduit & Wire for this item also to be included in this item) (Including providing GI Flexible conduit for 'Tee' to Fixture). (MCB to Light Point) (Cost of MCB not to be included in this item)	No.	8		-
2	Wiring for Looped Light Point with 2 x 2.5 Sq. mm. FR-LSH PVC Insulated Copper conductor 1100 Volt grade wires in surface mounted 25mm dia MS conduit as directed, including earthing of the Fixtures with 2.5 Sq. mm. FR-LSH PVC Insulated Copper Earth Wire. (Please note MS Conduit & Wire for this item also to be included in this item) (Including providing GI Flexible conduit for 'Tee' to Fixture).	No.	35		-
3	Wiring for First Light Point with 2 x 2.5 Sq. mm. FR-LSH PVC Insulated Copper conductor 1100 Volt grade wires in recess mounted 25mm dia PVC conduit as directed, including earthing of the Fixtures with 2.5 Sq. mm. FR-LSH PVC Insulated Copper Earth Wire. Including cost of cutting and filling chases for recesses conduiting complete as per specifications and as required (for Staircase)	No.	6		-
4	Wiring for Looped Light Point with 2 x 2.5 Sq. mm. FR-LSH PVC Insulated Copper conductor 1100 Volt grade wires in recess mounted 25mm dia PVC conduit as directed, including earthing of the Fixtures with 2.5 Sq. mm. FR-LSH PVC Insulated Copper Earth Wire. Including cost of cutting and filling chases for recesses conduiting complete as per specifications and as required (for Staircase)	No.	35		-
5	Wiring for First Light Point with 2 x 2.5 Sq. mm. FR-LSH PVC Insulated Copper conductor 1100 Volt grade wires in surface mounted 25 mm dia MS conduit as directed, including earthing of the Fixtures and Outlet Box with 2.5 Sq. mm. FR-LSH PVC Insulated Copper Earth Wire. (Please note MS Conduit & Wire for this item also to be included in this item) (Including providing GI Flexible conduit for 'Tee' to Fixture). Including providing 6 Amps switches and outlet box and accessories as required	No.	75		-

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
6	Wiring for Looped Light Point with 2 x 2.5 Sq. mm. FR-LSH PVC Insulated Copper conductor 1100 Volt grade wires in surface mounted 25mm dia MS conduit as directed, including earthing of the Fixtures with 2.5 Sq. mm. FR-LSH PVC Insulated Copper Earth Wire. (Please note MS Conduit & Wire for this item also to be included in this item) (Including providing GI Flexible conduit for 'Tee' to Fixture)	No.	150		-
7(a)	Wiring for Exhaust Fans Point with 2x2.5 Sq. mm. FR-LSH PVC Insulated Copper conductor 1100 Volt grade wires in surface mounted 25 mm dia MS conduit as directed, including earthing with 2.5 Sq. mm. FR-LSH PVC insulated copper earth wire (Please note MS Conduit & Wire for this item also to be included in this item) including providing 6 Amps switch in outlet box at a suitable location as indicated in drawing and 6 Amps socket near the Exhaust Fan and accessories as required including exhaust fan	No.	8		-
7(b)	Wiring for Ceiling/Wall Fan Point with 2x2.5 Sq. mm. FR-LSH PVC Insulated Copper conductor 1100 Volt grade wires in surface mounted 25 mm dia MS conduit as directed, including earthing with 2.5 Sq. mm. FR-LSH PVC insulated copper earth wire (Please note MS Conduit & Wire for this item also to be included in this item) including providing 6 Amps switch in outlet box at a suitable location as indicated in drawing and accessories as required including ceiling/wall fan.	No.	30		-
8	Wiring for 6 Amps Light Plug Outlet first point with 2x2.5 Sq. mm. FR-LSH PVC Insulated Copper conductor 1100 V grade wires in surface mounted 25 mm dia MS conduit as directed including earthing of the third pin & outlet box with 2.5 Sq. mm. FR-LSH PVC insulated copper earth wire (Please note MS Conduit & Wire for this item also to be included in the item) including providing 6 Amps switch socket outlet and outlet box & accessories as required. (No circuit shall be paid extra)	No.	15		-

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
9	Wiring for 6 Amps Light Plug Outlet looped point with 2x2.5 Sq. mm. FR-LSH PVC Insulated Copper conductor 1100 V grade wires in surface mounted 25 mm dia MS conduit as directed including earthing of the third pin & outlet box with 2.5 Sq. mm. FR-LSH PVC insulated copper earth wire (Please note MS Conduit & Wire for this item also to be included in the item) including providing 6 Amps switch socket outlet and outlet box & accessories as required. (No circuit shall be paid extra)	No.	50		-
10	Wiring for 6 Amps Light Plug Outlet first point with 2x2.5 Sq. mm. FR-LSH PVC Insulated Copper conductor 1100 V grade wires in surface mounted 25 mm dia MS conduit as directed including earthing of the third pin & outlet box with 2.5 Sq. mm. FR-LSH PVC insulated copper earth wire (Please note MS Conduit & Wire for this item also to be included in the item) including providing 6 Amps switch and 2 socket outlet and outlet box & accessories as required. (No circuit shall be paid extra)	No.	35		-
11	Wiring for 6 Amps Light Plug Outlet looped point with 2x2.5 Sq. mm. FR-LSH PVC Insulated Copper conductor 1100 V grade wires in surface mounted 25 mm dia MS conduit as directed including earthing of the third pin & outlet box with 2.5 Sq. mm. FR-LSH PVC insulated copper earth wire (Please note MS Conduit & Wire for this item also to be included in the item) including providing 6 Amps switch and 2 socket outlet and outlet box & accessories as required. (No circuit shall be paid extra)	No.	110		-

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
12	Wiring for 16 Amps Light Plug Outlet first point with 2x2.5 Sq. mm. FR-LSH PVC Insulated Copper conductor 1100 V grade wires in surface mounted 25 mm dia MS conduit as directed including earthing of the third pin & outlet box with 2.5 Sq. mm. FR-LSH PVC insulated copper earth wire (Please note MS Conduit & Wire for this item also to be included in the item) including providing 16 Amps switch socket outlet and outlet box & accessories as required. (No circuit shall be paid extra)	No.	30		-
13	Wiring for 16 Amps Light Plug Outlet looped point with 2x2.5 Sq. mm. FR-LSH PVC Insulated Copper conductor 1100 V grade wires in surface mounted 25 mm dia MS conduit as directed including earthing of the third pin & outlet box with 2.5 Sq. mm. FR-LSH PVC insulated copper earth wire (Please note MS Conduit & Wire for this item also to be included in the item) including providing 16 Amps switch socket outlet and outlet box & accessories as required. (No circuit shall be paid extra)	No.	45		-
14	Wiring for 20 Amps Light Plug Outlet first point with 2x4.0 Sq. mm. FR-LSH PVC Insulated Copper conductor 1100 V grade wires in surface mounted 25 mm dia MS conduit as directed including earthing of the third pin & outlet box with 2.5 Sq. mm. FR-LSH PVC insulated copper earth wire (Please note MS Conduit & Wire for this item also to be included in the item) including providing 20 Amps switch socket outlet and outlet box & accessories as required. (No circuit shall be paid extra)	No.	35		-

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
15	Wiring for 16 Amps (Hand Drier Unit) On Raw Power with 2x4.0 Sq. mm FR-LSH PVC Insulated Copper conductor 1100 V grade wires in surface mounted 25 mm dia MS conduit as directed, including earthing of outlet box with 1x4.0 Sq. mm FR-LSH PVC insulated copper earth wire. (Please note MS Conduit & Wire for this item also to be included in the item.) Including providing 16 Amps Switch Socket Unit and outlet box and accessories as required (First Point 16 Amps SSO) (No circuit shall be paid extra)	No.	4		-
16	Circuit wiring to First switch points / sub circuit with 2x2.5 sq. mm. FR-LSH PVC insulated copper conductor 1100 V grade wires in concealed or surface mounted 25 mm dia MS conduit as required. Including earthing with 2.5 sq. mm. FR-LSH PVC insulated copper conductor 1100 V grade green earth wire. Including cutting / chasing and making good in brick wall / concrete floor / PCC floor as directed. (Please note MS conduit / MS Tee / Saddles with Base / Accessories for this item is to be included in the item)	No.	50		-
17	Providing & fixing 16 SWG single compartment GI Trunking with 16 SWG openable covers at regular intervals along with necessary cable support system as directed including providing & fixing accessories like suitable Clamps, Dash Fasteners, Cable Ties, Gaskets etc. complete in all respects. (All Trunking is to be cleaned thoroughly, before pulling any wires / cables). Including earthing of the trunking with 4 sq. mm. FR-LSH PVC insulated Yellow + Green Copper Earth Wire with proper thimbles. All joints of GI Trunking shall be provided with proper couplers as directed. Including providing 300x300x60 mm deep Junction Boxes as required. (Please note Junction Boxes shall be part of the trunking item and shall not be paid extra).				

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
a.	50 x 250 x 50 mm deep	RM	85		
Total Carried Over To Summary					-
D.	Voice and Data for Under floor GI trunking				
1	Providing & fixing 16 SWG GI Junction boxes with suitable knockout holes along with GI cover as per site requirement. (Please note only L x B shall be considered for measurement)				
a.	50 mm deep	Sq. Ft	12		-
b.	75 mm deep	Sq. Ft	Rate Only		-
2	Providing & fixing of 2 mm thick 25 mm dia PVC conduit for LV system in recess including cost of tees, clamps, cutting and filling chases as required.				-
3	Providing and fixing of 25mm dia 16 SWG MS conduit for LV system on surface including cost of providing saddles with base, inspection boxes, tees etc as required				-
4	Wiring for TV Outlet in 25 mm dia MS conduit with 75 Ohms Coaxial Cable (RG - 6) (up to Shaft Only).				-

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
5	Supplying of computer cable UTP CAT VI	RM	4300		-
6	Laying of computer cable UTP CAT VI in existing PVC conduit	RM	4300		-
7	Fixing of " Jack " for Voice / Data with 1/2/3/4 Jacks	No.	175		-
8	Supplying of CAT VI I/O Jack				
a.	VD 1 (With one no. RJ 45 I/O Jack & face plate)	No.	Rate Only		-
b.	VD 2 (With two no. RJ 45 I/O Jack & face plate)	No.	125		-
c.	VD 4 (With four no. RJ 45 I/O Jack & face plate)	No.	40		-
9	Supplying and Fixing of Outlet Box suitable to mount Voice / Data Outlet with 1/2/3/4 Jacks	No.	124		-
10	Providing and fixing the following PVC Moulded front Plates				
a.	4 Module front plate	No.	5		-
b.	6 Module front plate	No.	2		-
c.	8 Module front plate	No.	2		-
11	Providing and fixing the following Accessories				
a.	1 Module blank plate	No.	15		-
b.	2 Module blank plate	No.	15		-
12	Providing and fixing the following 1.2 mm thick GI outlet box				
a.	4 - 5 Module	No.	10		-
b.	6 - 8 Module	No.	4		-
13.	Providing & laying the following PVC insulated PVC sheathed, annealed tinned copper conductor 0.6 mm Telephone Armoured Cable				
a	20 pair cable	RM	150		-
b	2 pair cable	RM	600		-
14.	Supplying, fixing, testing & commissioning of 1.2 mm thick MS tag box , of approved dimension and make, with suitable knockout holes, including providing and fixing of Krone Tags as required, MS boxes may be recessed or surface mounted as directed (including termination of all cables with ferrules at both ends). (Krone make).				
a	20 pair Tag boxes.	No.	2		-

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
b	10 pair Tag boxes.	No.	5		-
15.	Supplying and Fixing following 16 SWG GI Under Floor Box along with 16 SWG Stainless Steel Cover Plate. (310 x 310mm) & (210 x 210mm) (Please note all Junction Boxes are to be covered with thick polythene sheets during construction to prevent any foreign material / 'Malba' from entering the trunking).(All cleaning of underfloor raceways is to be carried out with vacuum cleaner).				-
a.	300 x 300 x 63 to less than 70 mm deep	No.	15		-
b.	200 x 200 x 63 to less than 70 mm deep	No.	50		-
16	Supplying and Fixing following 16 SWG GI Under Floor Box along with 10 SWG stainless steel Cover Plate. (310 x 310mm) & (210 x 210mm) (Please note all Junction Boxes are to be covered with thick polythene sheets during construction to prevent any foreign material / 'Malba' from entering the trunking).(All cleaning of underfloor raceways is to be carried out with vacuum cleaner).				-
a.	300 x 300 x 63 to less than 70 mm deep	No.	5		-
b.	200 x 200 x 63 to less than 70 mm deep	No.	10		-
17.	Supplying and fixing 16 SWG single compartment GI trunking with 16 SWG GI openable covers at regular intervals along with necessary cable support system as directed including providing and fixing accessories like dash fasteners cable ties etc. Complete in all respects. (All Trunking is to be cleaned thoroughly with industrial type vacuum cleaner, before pulling any wires / cables). Including earthing of the trunking with 4 sq. mm. FR-LSH PVC insulated Yellow + Green Copper Earth Wire with proper thimbles. (Cutting / chasing of Floor and making good shall be carried out by Civil Contractor). Please note all under floor GI Trunking shall be properly tapped with masking tape at all joints before PCC is filled into chased bed)				-
a.	40 x 250 x 40 mm deep (for Voice / Data System)	RM	40		-
b.	40 x 150 x 40 mm deep (for Voice / Data System)	RM	150		-

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
18.	Supplying and fixing 16 SWG single compartment GI trunking with 10 SWG MS openable covers at regular intervals along with necessary cable support system as directed including providing and fixing accessories like dash fasteners cable ties etc. Complete in all respects. (All Trunking is to be cleaned thoroughly with industrial type vacuum cleaner, before pulling any wires / cables). Including earthing of the trunking with 4 sq. mm. FR-LSH PVC insulated Yellow + Green Copper Earth Wire with proper thimbles. (Cutting / chasing of Floor and making good shall be carried out by Civil Contractor). Please note all under floor GI Trunking shall be properly tapped with masking tape at all joints before PCC is filled into chased bed).				
a.	40 x 250 x 40 mm deep (for Voice / Data System)	RM	10		-
b.	40 x 150 x 40 mm deep (for Voice / Data System)	RM	50		-
19.	Supplying and laying the following Cables for TV				
a.	RG 11	RM	Rate Only		-
b.	RG 6	RM	90		-
20	Providing and fixing the following 14 SWG Perforated Galvanised cable tray along with necessary suspenders (9 MM dia GI) (not more than 1000 MM long) at equal intervals of 900 MM as directed. Including cost of providing and fixing supporting steel, nuts, bolts, washers and dash fasteners as required. The installation shall be complete in all respects (Please note this is not a ladder type tray, perforated cable tray is to be considered) (All accessories like tees, bends vertical / horizontal shall be factory fabricated and cost of these to be included in the rate. Site fabricated accessories are not acceptable)				
i.	40 x 200 x 40 MM	RM	50		-
ii.	40 x 300 x 40 MM	RM	Rate Only		-
21	Providing and laying the following UPVC pipe including digging and back filling of trench up to a maximum depth of 600 mm				
a.	300 MM DIA (6 Kg per Sq cm - Class 3)	RM	Rate Only		-
b.	200 MM DIA (6 Kg per Sq cm - Class 3)	RM	25		-
22	Providing Manholes 1000 x 1000 x 1200 MM deep along with manholes covers suitable for vehicular movement. (Structure as per Site Conditions, specifications as per Architect)	No.	Rate Only		-

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
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Total Carried Over To Summary

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E. Supplying & Fixing of Lighting Fixtures

I. Supplying & Installation of Lighting Fixtures

1 Supplying the following light fixtures including reflectors & LED Lamps. (Samples of all lighting fixtures shall be submitted for Approval of the Owner / Architect before ordering)

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
a.	1 x 7 Watts Recessed Mounted LED Light Fixture	No	15		-
b.	1 x 10 Watts Recessed Mounted LED Light Fixture	No	Rate Only		-
c.	1 x 12 Watts Recessed Mounted LED Light Fixture	No	Rate Only		-
d.	1 x 15 Watts LED Recess Mounted Light Fixture	No.	250		-
e.	1 x 10 Watts Surface Mounted LED Bulkhead Light Fixture	No	25		-
f.	1 x 15 Watts Surface Mounted LED Light Fixture	No	25		-
g.	1 x 20 Watts Surface Mounted LED Light Fixture	No	15		-
h.	1 x 40 Watts Surface Mounted LED Light Fixture	No	18		-
i.	1 x 34 Watts LED Recess Mounted Light Fixture	No	23		-
j.	1 x 36 Watts LED Recess Mounted Light Fixture	No	40		-
k.	LED Flasher type Aviation Obstruction Lights with photo switch	No.	1		-
l.	Rechargeable Emergency Light Fixture	No.	30		-
m.	3 Watts LED Ni Cd Battery backup up to 2 hrs emergency Exit light . The sample shall be submitted before ordering.	No	10		-
Total Carried Over To Summary					-
F.	Prime Cost Item for External Lights & Poles.				
1	Prime Cost for purchase of External Lights & Poles for miscellaneous Areas, as required by Architect	LS	1		-
	Note : Contractor shall purchase in the open market at competitive rates. External Lights & Poles of quality, size and make approved by the Engineer / Employer				

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
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The Contractor shall quote in the prime cost item the percentage amount he would charge over the actual cost of materials. (Contractor will be paid the actual cost of materials supported by vouchers plus percentage amount over it as per the quotation for this item)

A set of approved samples shall be lodged with the Engineer / Employer until the completion of the work. The rates for the purchase of material must be competitive. In case the Engineer / Employer is able to obtain lower quotation in the open market for any material similar in specification to the one claimed by the Contractor, he will be paid according to competitive rates obtained by the engineer / Employer plus percentage amount over it as per this item and not according to the Employer's claim

Contractor's percentage for Overheads, Receiving, Handling, Storing, Fixing, Testing, Commissioning & Profits for Purchasing for Prime Cost Items.

- 10% -

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
Total Carried Over To Summary					-
G. Addressable Fire Alarm System					
1.	Supply, fixing, testing and commissioning of the following:				
a.	Multi Criteria Detector (Addressable Type)	No.	100		-
b.	Control Module (Addressable Type)	No.	20		-
c.	Manual Call Point (Addressable Type)	No.	12		-
d.	Hooter + Strobe (105 db) (Addressable Type)	No.	12		-
e.	Fault Isolator (Analogue Addressable Type)	No.	2		-
f.	Monitor Module (Addressable Type)	No.	10		-
g.	Responde Indicator	No.	60		-
h.	Fire Fighter's Telephone jacks complete as required (UL Listed)	No.	14		-
2.	Supplying, Receiving, Unloading, Storing, Handling, Shifting to its location, Fixing, Testing & Commissioning of 1 loop, Microprocessor based Analogue Addressable modular expandable to 2 Loops Fire Alarm Control Panel complete with central processing module, Network communication card, RS 232 / RS 485 (For Networking Feature) Communication Card graphic LCD display with primary power supply as 230 Volt AC with 24 Volt SMF battery with two time more capacity than the system requires, when the entire system working including suitably battery charger. The battery shall also be able to support the system for 24 hours during normal operation and for minimum 30 minutes during an emergency condition	No.	1		-
3.	Addition or deletion of 1 Loop Card.	No.	Rate Only		-
4.	Supplying, Receiving, Unloading, Storing, Handling, Shifting to its location, Fixing, Testing & Commissioning of 1 Zone, Microprocessor based Modular expandable Main Fire Alarm Control Panel with window type annunciation to indicate fire and fault, led lamps for visual indication, audio-alarm unit, push buttons for acknowledge, test, reset, complete with power supply of 24 V DC, 7 AH from 230 V AC and backed up by a maintenance free battery system (SMF battery shall be Hitachi make or equal). including testing and commissioning of complete fire alarm installation by specialized agency supplying Fire Alarm Panel.	No.	RO		-

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
5.	Supplying, Receiving, Unloading, Storing, Handling, Shifting to its location, Fixing, Testing & Commissioning of 2 Zone, Microprocessor based Modular expandable Main Fire Alarm Control Panel with window type annunciation to indicate fire and fault, led lamps for visual indication, audio-alarm unit, push buttons for acknowledge, test, reset, complete with power supply of 24 V DC, 7 AH from 230 V AC and backed up by a maintenance free battery system (SMF battery shall be Hitachi make or equal). including testing and commissioning of complete fire alarm installation by specialized agency supplying Fire Alarm Panel.	No.	RO		-
6.	Wiring to Addressable Fire Alarm Devices				
a.	Wiring to Multi Criteria Detector / Control Module / MCP / Fault Isolator with 2 x 1.5 sq. mm FR-LSH PVC insulated 1100V Grade copper conductor wire in surface mounted 20 mm dia 16 SWG MS conduit / MS Tee / Saddles with Base / Accessories as directed including providing GI flexible conduit as required.	No.	Rate Only		-
b.	Wiring to first addressable device and wiring from last device to Fire Alarm Panel with 2 x 1.5 sq. mm FR-LSH PVC insulated 1100V Grade copper conductor wire in surface mounted 20 mm dia 16 SWG MS conduit / MS Tee / Saddles with Base / Accessories as directed including providing GI flexible conduit as required.	RM	Rate Only		-
c.	Wiring from Hooter, Flow Switch and MCC for fan / AHU with 2 x 1.5 sq. mm FR-LSH PVC insulated 1100V Grade copper conductor wire in surface mounted 20 mm dia 16 SWG MS conduit / MS Tee / Saddles with Base / Accessories as directed including providing GI flexible conduit as required.	RM	Rate Only		-
d.	Wiring for Power supply to Hooter from Main Fire Alarm Panel with 2 x 2.5 sq mm FR-LSH PVC insulated 1100 V grade copper conductor wire in surface mounted 25 mm dia 16 SWG MS conduit / MS Tee / Saddles with Base / Accessories as directed including providing GI flexible conduit as required.	RM	Rate Only		-
7.	Supplying, Receiving, Unloading, Storing, Handling, Shifting to its location, laying, termination, testing & commissioning of Wiring for Fire Alarm System				

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
a.	Wiring to Fire Alarm Devices with Fire Survival Armoured Cable (600 / 1000 Volt) with Class-2 annealed 2 x 1.5 sq.mm copper conductor having cross linkable Halogen Free Insulation with Glass Mica (Fire barrier) tape along with Low Smoke Zero Halogen (LSZH) inner & outer sheath as per BS 7846 : 2009 should retain circuit integrity up to 3 Hours @ 950° as per BS - 6387 C.W.Z. and BS EN50200 Annexure - E (Fire Survival Armoured Cable shall be fixed by means of space bar saddles with base at intervals not more than 450mm) including necessary glands.	RM	1950		-
b.	Providing, Receiving, Unloading, Storing, Handling, Shifting to its location, Laying, Termination, Testing & Commissioning of Armoured Fiber Cable 9/125 Micrometers (single mode) with suitable terminations. The single fibre optics network shall be used for Fire detection, Digital Voice & Fire Fighters Telephone for data transfer (100 Mb).	RM	500		-
8.	Supplying and fixing 1.2 mm thick MS junction / outlet boxes with suitable knockout holes and 3 mm thick Hylam sheet cover.				
a.	100 x 100 x 50 mm deep.	No.	80		-
9.	Testing and commissioning of complete Fire Alarm Installation be specialist agency supplying fire alarm panel.	LS	-		-
Total Carried Over To Summary					-
H.	Conduit and Wiring for PA & Access Control				
I	PA System (Conduit & Wiring)				
1.	Providing & fixing Philips make Speakers. Speakers shall be LBD 0606 (6 Watts Read Power) including line matching transformer (Ceiling Recessed with mounting clamp - White colour)	No.	20		-
2.	Providing & fixing Philips make Speakers. Speakers shall be LBD 8363 metallic enclosue (4 Watts Read Power) including line matching transformer (surface mounted)	No.	Rate Only		-
3.	Providing & fixing Volume Control with operating knob in GI outlet Box complete with cover plate and blank plate. (Sample to be approved by Architect)	No.	Rate Only		-
4.	Wiring to speakers in existing 20 mm dia MS conduit. 24 / 0.20 mm PVC insulated twin twisted flexible annealed tinned copper wire including GI flexible conduit.	RM	Rate Only		-

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
5.	Wiring to PA with Fire Survival Armoured Cable (600 / 1000 Volt) with Class-2 annealed 2 x 1.5 sq.mm copper conductor having cross linkable Halogen Free Insulation with Glass Mica (Fire barrier) tape along with Low Smoke Zero Halogen (LSZH) inner & outer sheath as per BS 7846 : 2009 should retain circuit integrity up to 3 Hours @ 950° as per BS - 6387 C.W.Z. and BS EN50200 Annexure - E (Fire Survival Armoured Cable shall be fixed by means of space bar saddles with base at intervals not more than 450mm) including necessary glands.	RM	700		-
6.	Supply & Installation of 180 watt Audio Amplifier with Aux & Mic attachment provision.	No.	1		-
II Access Control System					
1.	Providing and laying PVC insulated, shielded and sheathed 8 core 24 AWG stranded copper conductor control cabling for Access Control System in existing MS conduit including GI flexible conduit.	RM	RO		-
2.	Providing and laying PVC insulated, shielded and sheathed 6 core 24 AWG stranded copper conductor control cabling for Access Control System in existing MS conduit including GI flexible conduit.	RM	Rate Only		-
3.	Providing and laying PVC insulated, sheathed 4 core 24 AWG stranded copper conductor control cabling for Access Control System in existing MS conduit including GI flexible conduit.	RM	RO		-
4.	Providing & fixing the following MS conduit surface mounted including MS Tee / Saddles with Base / Accessories as directed.				
i.	20 mm dia 16 SWG	RM	RO		-
ii.	25 mm dia 16 SWG	RM	RO		-
5.	Providing & fixing 16 SWG single compartment GI Trunking with 16 SWG openable covers at regular intervals along with necessary cable support system as directed including providing & fixing accessories like suitable Clamps, Dash Fasteners, Cable Ties, Gaskets etc. complete in all respects. (All Trunking is to be cleaned thoroughly, before pulling any wires / cables). Including earthing of the trunking with 4 sq. mm. FR-LSH PVC insulated Yellow + Green Copper Earth Wire with proper thimbles. All joints of GI Trunking shall be provided with proper couplers as directed. Including providing 300x300x60 mm deep Junction Boxes as required. (Please note Junction Boxes shall be part of the trunking item and shall not be paid extra)				
a.	50 x 250 x 50 mm deep	RM	Rate Only		-

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
b.	50 x 150 x 50 mm deep	RM	Rate Only		-
6.	The Access Control System should be integrated with fire alarm system to disengage all doors in case of activation of fire alarm. Main Access controller based on Proximity card authentications. Proximity Card Readers. Proximity Cards. SITC of EM lock capacity of holding pressue of 600lbs including U Clamps. SITC of Push Button. SITC of SQL based Access Management Software. SITC of Power Supply 12 V for Locks. Except Stilt Floor, Each Floor have 1 access control at Office Entry & 2nd at Emergency exit	No.	RO		-
Total Carried Over To Summary					-
I. Video Conferencing/AV Equipments					
1.	Video Conferencing Equipment, HD Video, HD Audio , HD Data; Inbuilt multiparty facility with 3 parties; inbuilt data sharing people+content software; one microphone array Wall speaker 16 watt-6no.s, Amplifier 80WATT, Cable Cubby-AV (HDMI+AUDIO+VGA), VGA cable-30 mtr, HDMI cable-30 mtr, Audio Cable-45 Mtr, Speaker Cable, Rack Console, Testing & Installation	No.	Rate Only		-
2.	Wifi LED projector as having 5000 Lumens output (with 20000 hours warranty)	No.	Rate Only		-
3.	Providing and fixing automated projector screen	No.	Rate Only		-
Total Carried Over To Summary					-

#	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
J.	Lightning Protection : Conventional System				
1	Supplying and fixing of the following tapes / wires / clamps including all necessary fixing accessories and effecting connections (As per specifications)				
a.	25 x 6 MM GI TAPE (Vertical Runs)	RM	300		-
b.	Conductor Holder at every 2 meter with reinforced Bar	No.	350		-
b.	25 x 3 MM GI TAPE (Horizontal Runs)	RM	400		-
2	Providing & fixing of Air Terminal 1.5 meter long, 16mm dia, Aluminium Alloy along with suitable clamp for connection with GI Strip of 25x3mm	No.	1		-
3	Providing Maintenance Free Earthing Stations (B Class GI pipe Earthing) complete as per I.S. specifications (GI pipe shall be 50 MM dia) (GI pipe 16 feet & depth of pit 17 feet); surrounded with suitable quantity of Ground Enhancing Material (complying with IEEE clause 14.5d) including digging and backfilling of earth pit; 1 No. GI Flat of size 25x6mm shall be brought up to Test Link Box to restrict earth resistance to 1ohm	No.	14		-
4	Supplying & Fixing of GI earth test links in 16 SWG MS enclosure with cover as directed (450x300x100 MM deep) and suitable for 25x6 MM GI strip.	No.	14		-
5	Providing and laying the following HDPE pipe				
a.	50 MM DIA (HDPE Pipe)	RM	60		-
Total Carried Over Summary					-

**PLUMBING BOQ OF ADMINISTRATIVE
BUILDING AT
SHAHBAD MOHAMMADPUR
NEW DELHI**

Tender Document
PLUMBING System
(Schedule of Quantities)

<u>PLUMBING SUMMARY OF COST</u>		
SECTION	DESCRIPTION	AMOUNT
A	SANITARY FIXTURES & FITTINGS	0.00
B	WATER SUPPLY	0.00
C	INTERNAL DRAINAGE (SOIL, WASTE & VENT PIPES)	0.00
D	EXTERNAL SEWAGE & STORM WATER DRAINAGE	0.00
	Total Cost in Rs.	0.00

D.A.F.P.L .I.G.I AIRPORT, NEW DELHI							
PLUMBING/SANITARY WORKS							
SUB AEAD A: SANITARY FIXTURES & FITTINGS							
S.NO.	DESCRIPTION	QTY	UNIT	SUPPLY RATE	INSTALLATION RATE	SUPPLY AMOUNT	INSTALLATION AMOUNT
	NOTE: In case of owner supplied items following items will be supplied by the client:						
	a) All Sanitary fixtures like water closets, wash basins, urinals etc. brackets for fixing sanitary fixtures,all CP fittings like taps, mixers,health faucets etc.cement,sand ,aggregate,Reinforcement bars (if required),bricks.						
1.1	Providing & fixing glazed vitreous china single trap syphonic pattern having back inlet ,supporting chair ,wall hung water closet with cistern complete with all internal fittings/accessories and CP brass flush bend (European type) water closet with seat and lid, with C.P. brass hinges and rubber buffers, adapter, rubber joints fixed to W.C., C.P. brass screwed washers including cutting and making good the walls and floors wherever required and HDPE wc pan connector including jointing with white cement complete in all respects.						
1.1.1	Wall hung W.C. pan (White colour)with white plastic seat & lid "Thermoset moulded (bakelite) IS 2548 Part I						
1.1.1.1	Supply & installation, testing & commissioning of sanitary fixtures as per above details. Basic rate: Rs.10000/-	10	Each				
1.1a	Providing & fixing glazed vitreous china single trap syphonic pattern having back inlet ,supporting chair ,wall hung water closet with cistern complete with all internal fittings/accessories and CP brass flush bend (European type) water closet with seat and lid, with C.P. brass hinges and rubber buffers, adapter, rubber joints fixed to W.C., C.P. brass screwed washers including cutting and making good the walls and floors wherever required and HDPE wc pan connector including concealed flush tank & accessories jointing with white cement complete in all respects.						
1.1a.1	Wall hung W.C. pan (White colour)with white plastic seat & lid "Thermoset moulded (bakelite) IS 2548 Part I (including concealed flush tank with flushing plate)						
1.1a.1.1	Supply & installation, testing & commissioning of sanitary fixtures as per above details. Basic rate: Rs.19000/-	4	Each				
1.2	Providing & fixing glazed vitreous china wash basin with R.S. or C.I. brackets painted white, 32mm C.P. brass waste of standard pattern, 32 mm dia. C.P. brass bottle trap and union 32 mm dia C.P. pipes to wall flange. complete including cutting and making good the walls wherever required.						
1.2.1	Wash basin counter top (White colour). Basic price Rs. 2500/-						
1.2.1.1	For supply & installation, testing & commissioning of sanitary fixtures as per above details	18	Each				
1.2.3	Flat back wash basin (white colour)of size: 450x325 mm.						
1.2.3.1	For supply & installation, testing & commissioning of sanitary fixtures as per above details	QR	Each				
1.3	Providing & fixing 15mm C.P. brass single pillar tap for basin without popup waste system with 450mm long copper pipes and brass nuts.						
1.3.1	For supply & installation, testing & commissioning of sanitary fixtures as per above details	17	Each				

1.4.	Providing & fixing vitreous chinaware urinal comprising						
	Large flat back wall hung urinal in glazed vitreous China new. Basic price: Rs 6000/-						
	15 mm electrically operated solenoid valve with infra red sensor mounted in a box with SS Cover.						
	CP brass chromium plated flush piping from valve to urinal terminated with a 15 mm screwed spreader						
1.4.1	32 mm nominal bore CP cast brass waste	10	Each				
1.4.2.1	32 mm nominal bore CP cast bottle trap with extension pipe rubber adopter for waste connection						
1.4.2	For supply & installation, testing & commissioning of sanitary fixtures as per above details.	9	Each				
1.5	Providing & fixing urinal partition of Opaque acrylic solid surface size 680 x 300 mm complete with brackets bolts nuts for grouting to wall complete in all respects.						
1.5.1	For supply & installation, testing & commissioning of sanitary fixtures as per above details	6	Each				
1.6	Providing & fixing stainless steel sink R.S. or C.I. brackets painted, 40mm C.P. waste, C.P. brass chain and rubber plug, 40mm C.P. cast brass bottle with necessary union complete including cutting and making good the walls wherever required						
1.6.1	Stainless steel sink single bowl with drain board approved make.						
1.6.1.1	For supply & installation, testing & commissioning of sanitary fixtures as per above details	3	Each				
1.6.2	Providing & fixing stainless steel sink R.S. or C.I. brackets painted, 40mm C.P. waste, C.P. brass chain and rubber plug, 40mm C.P. cast brass bottle with necessary union complete including cutting and making good the walls wherever required						
1.6.2	Stainless steel sink Double bowl with drain board approved make.						
1.6.2.1	For supply & installation, testing & commissioning of sanitary fixtures as per above details	3	Each				
1.7	Providing & fixing Sink Mixer with Swinging Casted Spout (Table Mounted Model) with 450mm long Copper Pipes & Braqss Nuts.						
1.7.1	For supply & installation, testing & commissioning of sanitary fixtures as per above details	6	Each				
1.8	Providing & fixing 15 mm dia C.P. brass angle valves with 450mm long C.P. Copper connecting pipe union nut C.P. cast brass wall flange.						
1.8.1	For supply & installation, testing & commissioning of sanitary fixtures as per above details	50	Each				
1.9	Providing & fixing toilet paper holder including cutting and making good the walls.						
1.9.1	For supply & installation, testing & commissioning of sanitary fixtures as per above details	14	Each				
1.10	Providing & fixing Towel ring with brackets fixed to wooden cleats with C.P. brass screws.						
1.10.1	For supply & installation, testing & commissioning of sanitary fixtures as per above details	4	Each				
1.11	Providing & fixing liquid soap dispenser with stainless steel lid and brackets fixed to wooden cleats with C.P. brass screws.						

1.11.1	For supply & installation, testing & commissioning of sanitary fixtures as per above details	13	Each				
1.12	Providing & fixing C.P. brass twin coat hooks fixed on toilet door with C.P. brass screws.						
1.12.1	For supply & installation, testing & commissioning of sanitary fixtures as per above details	4	Each				
1.14	Providing & fixing beveled edge mirror 5.5mm thick of superior quality plate glass complete with 6mm thick marine ply sheet ground fixed to wooden cleats with CP brass screws and washers with 40 mm wide teak wood frame as per design including polishing (MODI FLOAT GLASS) or approved equivalent.						
1.14.1	For supply & installation, testing & commissioning of sanitary fixtures as per above details	16	Sqm				
1.14	Providing & fixing Health Faucet with 8mm dia, 1M long PVC tube and wall hook..						
1.15.1	For supply & installation, testing & commissioning of sanitary fixtures as per above details	14	Each				
1.16	Providing & fixing stainless steel fully automatic "No Touch" hand drier suitable to operate on 220 volts, single phase 50 hz., A.C. power supply.						
1.16.1	For supply & installation, testing & commissioning of sanitary fixtures as per above details	4	Each				
1.17	Providing & fixing stainless steel paper towel dispenser.						
1.17.1	For supply & installation, testing & commissioning of sanitary fixtures as per above details. Basic rate Rs-2000/-	13	Each				
1.18	Providing & fixing, testing and commissioning of storage type electric water heater with automatic thermostatic control electric element, pressure release valve, brackets fixed to expansion fasteners with M.S. nuts and bolts all complete including cutting and making good the walls wherever required.						
1.18.1	15 litres capacity						
1.18.1.1	For supply & installation, testing & commissioning of sanitary fixtures as per above details	RO	Each				
1.20	Providing & fixing wall mounted 35 mm dia. Galvanised powder coated grab bar including cutting & making good the walls.						
1.20.1	For supply & installation, testing & commissioning of sanitary fixtures as per above details.	RO	Each				
1.21	Providing & fixing 15 mm dia C.P. brass bib cock with Hose union of approved quality.						
1.21.1	For supply & installation, testing & commissioning of sanitary fixtures as per above details.	12	Each				
1.22	Providing & fixing 15 mm dia C.P. brass bib cock with C.P. wall flange of approved quality.						
1.22.1	For supply & installation, testing & commissioning of sanitary fixtures as per above details.	4	Each				
1.23	Providing & fixing 15mm C.P. brass single pillar tap for basin with 450mm long copper pipes and brass nut - Make: Jaquar; Model :continental range						
1.23.1	For supply & installation, testing & commissioning of sanitary fixtures as per above details	RO	Each				
1.24	Providing & fixing white vitreous china orissa pan water closet(size 580x440mm) with 100mm dia cast iron P or S trap,10lts cap- low level white glazed vitreous china flushing cistern complete with all internal fittings/ accessories,C.I. Brackets,32mm dia flush pipe with fittings and clamps,20mm dia overflow pipe including cutting & making good the walls, floors.						

1.24.1	For supply & installation, testing & commissioning of sanitary fixtures(White colour) as per above details.	RO	Each				
1.25	Providing & fixing 15mm C.P. brass push tap for basin with 450mm long copper pipes and brass nut - Make: Jaquar; Model :PRS-031						
1.25.1	For supply & installation, testing & commissioning of sanitary fixtures as per above details	RO	Each				
1.26	Providing & fixing 15mm C.P. brass sink spout(single) complete with all accessories.						
1.26.1	For supply & installation, testing & commissioning of sanitary fixtures as per above details	RO	Each				
1.27	Providing & fixing C.P. towel rail 450mm long complete with all accessories.						
1.27.1	For supply & installation, testing & commissioning of sanitary fixtures as per above details	RO	Each				
1.28	Providing, fixing, testing & commissioning of industrial RO with flow rate 200 to 250 Lit/hr , Power : 1.5 KW, Min inlet pressure 0.5 kg/cm2,Output TDS: Around than 100 ppm including 500ltr. Tank.						
1.28.1	For supply & installation, testing & commissioning of sanitary fixtures as per above details	1	Each				
1.29	For supply & installation, testing & commissioning of 2HP motor for water supply from underground water tank to overhead tank including gate valve.	1	Each				
1.31	For supply & installation, testing & commissioning of Automatic Water Softener System, Capacity: 1000LPH, 500LPH	1	Each				
	NOTE:-						
i.	Detail of Sanitary fixture are for the information of the Contractor,however model/makes of all sanitary fixtures shall be selected by Architect/Interior designer/Project manager and the same shall be binding for execution.						
ii.	No additional fixing cost shall be paid for change in type of sanitary fixtures.						
iii.	Contractor to receive all the above mentioned items & store at place as directed at site in case supply is by Client .						
	TOTAL CARRIED OVER TO SUMMARY						

SUB HEAD B: WATER SUPPLY							
S.NO	DESCRIPTION	QTY	UNIT	SUPPLY RATE	INSTALLMENT RATE	SUPPLY AMOUNT	INSTALLMENT AMOUNT
1	Providing and fixing Chlorinated polyvinyl Chloride (CPVC) pipes-SDR-11,havings thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing.This includes jointing of pipes & fittings with CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in charge,fixing at wall/ceiling level supported by clamps, hangers, structural steel supports, etc.Cost shall include making connections with G.I. pipes & fittings including testing the pipes to 10.0 kg/sq.cm after installation & before conealing the pipes (for at least 24 hours).						
	a) 15 mm outer dia	55	RM				
	b) 20 mm outer dia	150	RM				
	c) 25 mm outer dia	130	RM				
	d) 32 mm outer dia	80	RM				
	e) 40 mm outer dia	40	RM				
	f) 50 mm outer dia	25	RM				
	g) 65mm inner dia (for main water supply to underground tank)	100	RM				
2	Providing and fixing Chlorinated polyvinyl Chloride (CPVC) pipes-SDR-11,havings thermal stability for cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing.This includes jointing of pipes & fittings with CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in charge.Cost shall include excavation in all kind of soil, dewatering, refilling, watering, ramming & removing the surplus excavated material and making good the same complete as required, testing the pipes to 10.0 kg/sq.cm after installation & before concealing the pipes (for at least 24 hours).						
	a) 20 mm outer dia	50	RM				
	b) 25 mm outer dia	10	RM				
	c) 32 mm outer dia	10	RM				
	d) 40 mm dia	200	RM				
	e) 50 mm dia	RO	RM				
	f) 62.5 mm inner dia	RO	RM				
3	Providing & fixing gun metal lever operated ball valve. Tested to a pressure of 15 Kg / Sqcm. Including flanges/union, nuts, bolts, washer etc. Complete as required.						
	a) 15 mm dia	2	NOS				
	b) 20 mm dia	10	NOS				
	c) 25 mm dia	7	NOS				
	d) 32 mm dia	7	NOS				
	e) 40 mm dia	4	NOS				
	f) 50 mm dia	4	NOS				
4	Providing and fixing in position of approved quality G.M. float valve with copper ball float and brass rods of required length suitable for working pressure of 5 Kg/sqcm of the following sizes:						
	a) 32 mm dia	2	NO				
	b) 40 mm dia	2	NO				
5	Constructing brick masonry chamber (for housing valves, Meters etc.) of brick work with bricks of class designation 75 in cement mortar 1 : 5 (1 cement:5 finesand) plastering internal face with cement mortar 1 : 3 (1 cement: 3 fine sand and rough plaster on outer face with a floating coat of neat cement. R.C.C top slab with heavy duty SFRC manhole cover and frame of 600 mm dia. Including excavation, dewatering, refilling, watering, ramming and removing the surplus excavated material complete as required. (All sizes are clear internal sizes).						
	a) Size 600 x 600 x 900 mm deep	1	NO.				

S.NO	DESCRIPTION	QTY	UNIT	SUPPLY RATE	INSTALLMENT RATE	SUPPLY AMOUNT	INSTALLMENT AMOUNT
6	Making connection from Existing Water Supply line including necessary excavation & making good the same including cutting, boring and tapping the Existing line by providing and installing ferrule / Tee connections with necessary fittings as required and making good the same. The rate for this item also includes complete services from the contractor for liaisoning works such as filing necessary applications submission of forms for approval to the municipal of the authorities depositing the fees other amounts as required getting the premises / installations, inspected and approved and all other formalities required till the water connection is obtained. All the expenses incurred in authorities, following up this regard shall be borne by the Contractor except for the payments to be made for any security deposit etc. which will be reimbursed on production of original voucher.	1	JOB				
7	Supplying, installing, testing and commissioning of triple layer HDPE water storage tank including holes for inlet, outlet, overflow level indicator drain complete.						
	a) Capacity 5000 Lts.	2	SET				
8	Providing and fixing electronic type level indicator for water tank mounted in panel with level display, alarm when water level is low or high, full range from one level to four level display and manual reset for alarm etc. with electrical wiring conduit supports from wall & ceiling probs and all other accessories complete as required.	2	NOS.				
9	Disinfection of water supply pipes with 50ppm of chlorine solution and flushing the entire pipeline complete as required.	RO	JOB				
10	Providing & fixing 6mm thick nitril rubber insulation on hot water pipes-15 to 50 mm dia pipes burried inside walls.	RO	RM				
11	Providing & fixing 12mm thick nitril rubber insulation on hot water pipes-15 to 54 mm dia exposed pipes.	RO	RM				
12	Providing and fixing 24 SWG Al. sheet metal cladding over pipe insulation, 50mm overlapped and hold the same with self-tapping screws and all joints to be sealed with sealent (tarfelt strip) complete as required.						
	a) 15 mm dia pipe --- SP insulation 25 mm thick	QR	RM				
	b) 20 mm dia pipe --- SP insulation 25 mm thick	30	RM				
	c) 25 mm dia pipe --- SP insulation 25 mm thick	30	RM				
	d) 32 mm dia pipe --- SP insulation 25 mm thick	40	RM				
	e) 40 mm dia pipe --- SP insulation 25 mm thick	50	RM				
13	Providing & fixing automatically operated air release valve 25 mm dia with isolation valve.	1	NO				
14	Providing & fixing electrically operated Motorized Butterfly Valves with by pass piping & all fittings , by pass valves (3nos) for filling of overhead tanks complete with High & Low level control switches to control the valves. The level controllers shall be installed in overhead tanks.The system should be complete in all respect with accessories ,220 volt V AC/24 volt DC , IP67 electrical water level control unit , copper control wiring in wheather proof casing etc. from butterfly valves to control unit .						
	a) 40 mm dia	1	NO				
TOTAL CARRIED TO SUMMARY							

SUB HEAD C:INTERNAL DRAINAGE (SOIL, WASTE & VENT PIPES)							
S.NO	DESCRIPTION	QTY	UNIT	SUPPLY RATE	INSTALLATION RATE	SUPPLY AMOUNT	INSTALLATION AMOUNT
1	Providing, fixing, jointing and testing in position of ISI marked UV stabilized UPVC pipes for soil, waste and vent, Type-B as per IS : 13592 suitable for rubber ring joints, including all neccessary specials and fittings (confirming to IS:14735) i.e. bends, tees, junctions (with or without doors), reducers, WC connectors, couplers, cowls, clamps, rubber rings, clean outs ,access pieces at ends of main pipes (for roding) etc. fixing at wall/ ceiling/ floor level supported by clamp, hangers & structural steel supports etc. in concealed / inside duct / under floor & basement ceiling / external work etc. including chase cutting as required, excavation and back filling in all kind of soils, suspended from floor under false ceiling or embedding the pipes laid under floors / building in 75 mm. around 1:2:4 cement concrete (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including cost of shuttering for proper completion of the work, breaking and making good the walls and floors etc. after pipes have been duly laid and tested. The rubber ring shall confirm to IS:5382.						
	The Pipes will be supported with threaded G I rods & clamps on 50x50x5 mm slotted angle. The cost will include all support arrangements. The work includes commissioning of all pipes lines as per drawings and specifications and as directed by engg-in-charge at site.						
	a) 75 mm outer dia	10	RM			0	0
	b) 110 mm outer dia	220	RM			0	0
	c) 160 mm outer dia	8	RM			0	0
2	Providing and laying 1:2:4 cement conc. 100 mm thick all round the pipe including 100mm thick bed concrete for the following M.S./C.I./C.I. class L.A./UPVC pipes and specials below floor including necessary shuttering etc. complete as required.						
	a) 75 mm dia pipe	10	RM			0	0
	b) 100 mm dia pipe	40	RM			0	0
	c) 150 mm dia pipe	8	RM			0	0
3	Providing, fixing, jointing and testing in position ISI marked (IS:4985) UPVC pipes of min 6 Kg/ Sqcm rating with fitting for waste pipe from fixtures to floor trap including reduces, enlarger, socket, couplers, bends, tees etc including fixing at wall/ ceiling level supported by clamp & hangers etc. cutting holes in wall/ floors/ slabs and making good the same with cement concrete 1:2:4 complete as required.						
	a) 40 mm outer dia	60	RM			0	0
	b) 50 mm outer dia	35	RM			0	0
	c) 63 mm outer dia	12	RM			0	0
4	Providing & fixing UPVC Floor trap of self cleansing design with CP Jali complete in all respects. (Make : Supreme / Finolex / Prince).Multi trap connection to be provided with each floor trap.						
	a) 100 mm inlet and 100 mm outlet.	35	NOS			0	0
	b) 100 mm inlet and 75 mm outlet.	2	NOS			0	0
5	Providing & fixing 110m x 63mm PVC waste with reducer including cutting chases, the floor / slab complete as required.Cost shall include heavy duty CP grating of approved make.	18	Nos			0	0
6	Providing and fixing upvc floor drain (80mm x 63mm Elbow) or (110 x 63 mm Elbow) with cement mortar, complete in all respect.Cost shall include heavy duty CP grating of approved make.	2	Nos			0	0

Estimate

S.NO	DESCRIPTION	QTY	UNIT	RATE	RATE	AMOUNT	AMOUNT
7	Providing and fixing in position G.I. pipe and fittings of heavy class 'C' conforming to IS:1239 (for waste pipe from bottle trap to floor trap & vent pipe) Including fixing at wall / ceiling level supported by clamps and hangers etc. Cutting holes in wall/floors/slabs, cutting chases and making good the same with cement concrete 1:2:4 complete as required.						
	a) 32 mm dia	RO	RM				
	b) 40 mm dia	RO	RM				
	c) 50 mm dia	RO	RM				
8	Providing and fixing G.I. clean out plug with suitable inlet key for opening male threaded joint with GI pipe & socket. Including drip seal to CI pipes or CI class LA pipes complete as required.						
	a) 100 mm dia	6	NOS			0	0
9	Providing & fixing rain water Khurras of required depth with lead flashing around the pipe with one piece lead sheet of 3 mm thick set on a layer of cold bitumen. Including Heavy duty CI/MS grating as per drawing complete as required.						
	a. Khurras' size 300x300 mm with 150dia leaf strainer	1	NOS			0	0
	b. 'Khurras' size 450x450 mm. 250dia CI grating	7	NOS			0	0
10	Providing, fixing, jointing and testing in position of ISI marked UV stabilized UPVC pipes for rain water Type B as per IS : 13592 suitable for rubber ring joints, including all necessary specials and fittings (confirming to IS:14735) i.e. bends, tees, junctions (with or without doors), reducers, WC connectors, couplers, cowls, clamps, rubber rings, clean outs etc. fixing at wall/ ceiling/ floor level supported by clamp & hangers etc. in concealed / inside duct / under floor & basement ceiling / external work etc. including chase cutting as required, excavation and back filling in all kind of soils, suspended from floor under false ceiling or embedding the pipes laid under floors / building in 75 mm. around 1:2:4 cement concrete (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including cost of shuttering for proper completion of the work, breaking and making good the walls and floors etc. after pipes have been duly laid and tested. The rubber ring shall confirm to IS:5382.						
	The Pipes will be supported with threaded G I rods & clamps on 50x50x5 mm slotted angle. The cost will include all support arrangements. The work includes commissioning of all pipes lines as per drawings and specifications and as directed by engg-in-charge at site.						
	a) 75 mm outer dia	RO	RM				
	b) 110 mm outer dia	20	RM			0	0
	c) 160 mm outer dia	125	RM			0	0
	TOTAL CARRIED TO SUMMARY					0	0

SUBHEAD D :EXTERNAL SEWAGE & STORM WATER DRAINAGE							
S.NO	DESCRIPTION	QTY	UNIT	SUPPLY RATE	INSTALLATION RATE	SUPPLY AMOUNT	INSTALLATION AMOUNT
1	Providing fixing, jointing and testing in position the following UPVC pipes (working pressure 10 kg/sqcm) conforming to IS: 4985 for drainage cut to required lengths including all necessary fittings and specials such as bends, junctions, offsets, making proper connections. Including providing PCC thrust block at 2 mtr. centre to centre. Pipe to be laid below ground level in trenches upto required depth including excavation in all kind of soil, dewatering, refilling, watering, ramming & removing the surplus excavated material and making good the same complete as required. For external storm water drainage						
	a) 110 mm dia	RO	RM				
	b) 160 mm dia	40	RM				
	c) 200 mm dia	150	RM				
	d) 250 mm dia	RO	RM				
2	Providing and laying 150 mm thick cement concrete 1:4:8 (1 cement:4 fine sand:8 graded stone aggregate 40mm nominal size) around pipes including 150 mm thick bed concrete as per standard design.						
	a) 100 mm dia pipe	RO	RM				
	b) 160 mm dia pipe	15	RM				
	c) 200 mm dia pipe	65	RM				
	d) 250 mm dia pipe	RO	RM				
3	Providing, laying, jointing and testing socketed and spigotted RCC pipes (NP2 Class) conforming to IS:458 jointed with rubber rings & laid to correct levels below ground in trenches upto required depth including excavation in all kind of soil (hard rock) dewatering, refilling, watering, ramming and removing the surplus excavated material and making good the same complete as required. For Sewer water drainage.						
	a) 150 mm dia	15	RM				
	b) 250 mm dia	65	RM				
	c) 300 mm dia	RO	RM				
4	Providing & laying 150 mm thick cement concrete 1:4:8 around RCC pipes including 150 mm thick bed concrete as per standard design, including shuttering & timbering						
	a) 150 mm dia pipe	40	RM				
	b) 250 mm dia pipe	150	RM				
	c) 300 mm dia pipe	QR	RM				
5	Providing and fixing stoneware gully trap grade 'A' of the following sizes with C.I. grating embedded in brick masonry chamber of required size and trap to be set in cement concrete 1:2:4, both side 12mm thick plastering with floating cast of neat cement. Making necessary connections & providing water tight C.I. cover with frame. Including necessary excavation Including necessary excavation, dewatering, refilling, watering, ramming and removing the surplus excavated material and making good the same complete as required.						
	a) 180X150 mm outlet	4	NOS				
	b) 150X100 mm outlet	QR	NOS				

S.NO	DESCRIPTION	QTY	UNIT	SUPPLY RATE	INSTALLATION RATE	SUPPLY AMOUNT	INSTALLATION AMOUNT
6	Constructing brick masonry inspection chamber of the following sizes in brick work of class 75 in cement mortar 1:5 work in cement mortar 1:5 (1 cement:5 fine sand), R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm. nominal size) foundation concrete 1:4:8 mix(1 cement:4 coarse sand:8 size).Inside plastering 12 mm thick with cement motor 1:3 (1 cement : 3 coarse sand) and rough plastering on outside with a floating coat of neat foot rests at 300 mm spacing, banching and making channels with 1:2:4 cement concrete neatly finished, including excavation, in all kind of soil (hard rock), dewatering, refilling, watering, ramming and removing the surplus excavated cement providing MS material making good the same complete including cover as required.						
	a) Inside size 60x45 cm (upto 60 cm maximum depth).	RO	NO				
	b) Inside size 90x80 cm (upto 90 cm maximum depth).	5	NOS				
	c) Extra over 'b'above for depth exceeding 90 cm & upto 120 cm.	2	NOS				
7	Constructing brick masonry circular manhole 1.22m internal dia at bottom and 0.56m dia at top in cement mortar 1:4 (1 cement :4 coarse sand) inside cement plaster 12mm thick with cement mortar 1:3 (1 cement :3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1 Cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) and making necessary channel in cement concrete 1:2:4 mix (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete all complete as per standard design:						
	1.68 m deep with S.F.R.C. cover and frame (heavy duty, HD-20 grade designation) 560mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182kg., fixed in cement concrete 1:2:4 mix (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering shuttering all complete. (Excavation, foot rests and 12mm thick cement plaster at the external surface shall be paid separately)	RO					
8	Extra depth for circular type manhole 1.22 m internal dia (at bottom) with beyond 1.68 m to 2.29m	RO					
9	Providing & fixing cast iron manhole cover with frame.						
	a) Medium duty double seal of size 500mm internal diameter.Total weight of cover & frame to be not less than 116 Kg.	RO	NOS				
	b) Heavy duty double seal of size 560mm internal diameter. Total weight of cover & frame to be not less than 208 Kg.	RO	NOS				
10	Construction of catch basins of the following sizes in brick work with bricks of class 75 in cement mortar 1:5 (One cement, 5 finesand) necessary foundation concrete (1:4:8). Inside plastering 12mm thick with cement Mortar 1:3 and rough plaster on outside with a floating coat of neat cement. Including the R.C.C. top slab for fixing the MS grating with frame. Including necessary excavation, dewatering, refilling, watering, ramming, removing, the surplus excavated material and making good the same complete as required.						

S.NO	DESCRIPTION	QTY	UNIT	SUPPLY RATE	INSTALLATION RATE	SUPPLY AMOUNT	INSTALLATION AMOUNT
	a) Internal size 600x600x450 mm	12	NOS				
	b) Internal size 450x450x450 mm	8	NO				
11	Providing & fixing SFRC heavy duty grating of size 550 x 500 mm with frame for catch basin of approved design.	8	NO				
12	Providing & fixing SFRC heavy duty grating of size 650 x 650 mm with frame for catch basin of approved design.	12	NOS				
13	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910 on 12 mm dia steel bar conforming to IS : 1786 having minimum cross section as 23 mm X 25 mm and over all minimum length 263 mm and width as 165 mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30 X 20 X 15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design.	30	NOS				
14	Providing and fixing over straight or curved drain M.S. grating with fixed frame of angle 60mm x 60mm x 6mm size fixed to concrete with 25mm x 3 mm hold fasts approx. 100 mm long welded at interval of 600 mm and welded cross braced at 1200 mm interval by 50 mm x 6 mm thick MS flats. The removable grating shall be made of with outer frame of size 600 mm long with M.S. angle 50mm x 50mm x 6mm having welded cross members on one direction with M.S. flats of size 44 mm x 6 mm at a spacing of 30 mm c/c. Including two of synthetic enamel paints over a coat of primer complete as required.						
	a) 200 mm wide	RO	RM				
	b) 300 mm wide	RO	RM				
15	Providing and fixing in position G.I. vent with brass mosquito proof coupling and air filter including return bend, complete as required. The entire fitting shall be hot dipped galvanised.						
	a) 50 mm dia	3	NOS				
16	Constructing open surface drain with first class bricks in cement mortar 1:4(1cement:4fine sand)including earth excavation,100mm thick bed concrete1:5:10(1cement:5fine sand: 10graded stone aggregate 40mm nominal size) and 25mm thick cement concrete1:2:4(1cement:2fine sand: 4graded stone aggregate 12.5mm nominal size),12mm cement plaster 1:4(1cement 4coarse sand)with a floating coat of neat cement inside the drain,its top & exposed sides including disposal of surplus earth as directed at site.						
	a) Size 300mmwide & 550mm average depth.	RO	RM				
17	Providing,boring,lowering and fixing 200mm dia UPVC (Working pressure-6kg/sqcm) pipes with 3mm size slots upto 5m depth as per drawing & direction of engineer in charge complete in all respects.Cost shall include approval from Ground Water Authority.	30	RM				

S.NO	DESCRIPTION	QTY	UNIT	SUPPLY RATE	INSTALLATION RATE	SUPPLY AMOUNT	INSTALLATION AMOUNT
18	Making connection from Existing Municipal sewer/storm water manhole including necessary excavation & making good the same including all civil works. The rate for this item also includes complete services from the contractor for liasoning works such as filing necessary applications submission of forms for approval to the municipal authorities depositing the fees other amounts as required getting the premises / installations, inspected and approved and all other formalities required till the sewer connection is obtained. All the expenses incurred in authorities, following up this regard shall be borne by the Contractor except for the payments to be made for any security deposit etc. which will be reimbursed on production of original voucher.	1	JOB				
19	Constructing Oil & Grease Chamber size 2500x750mm internal size of 1000mm depth in brick work of class 75 with cement mortar (1:5) Inside 12mm thick with cement mortar 1:3 with floating coat of neat cement and rough plaster on outside, RCC top slab with 500mm dia medium duty manhole cover with frame (weight of cover 58 kg. & weight of frame 58 kg.), 150mm thick foundation concrete (1 : 4 : 8), necessary excavation, dewatering, refilling, watering, ramming and removing the surplus excavated material and making good the same complete as required.	1	NO				
20	Providing, laying, jointing and testing socketed and spigotted RCC pipes (NP3 Class) conforming to IS:458 jointed with rubber rings & laid to correct levels below ground in trenches upto required depth including excavation in all kind of soil (hard rock) dewatering, refilling, watering, ramming and removing the surplus excavated material and making good the same complete as required. These pipes to be provided at road crossings.						
	a) 150 mm dia	RO	RM				
	b) 250 mm dia	RO	RM				
	c) 300 mm dia	RO	RM				
21	Constructing RCC Rain water harvesting tank (size 5.0mx2.5m & 3.50 m depth) complete with all associated civil works like RCC walls,RCC top slab,foundation concrete, excavation in all kinds of soil, backfilling , disposal of surplus excavated earth complete as per detail drawing & authority.	1	NO				
22	Supplying and filling in Rain water harvesting tank coarse sand 1.5 to 2.0mm including all associated works.	4	Cum				
23	Supplying and filling in Rain water harvesting tank stone boulders 50 - 200 mm size including all associated works complete.	4	Cum				
24		4	Cum				
25	Supply pea-gravel of approved quality in stacks and then packing the same into the annular space between the tubewell assembly and bore hole.	4	Cum				
TOTAL CARRIED TO SUMMARY							

**FIRE FIGHTING BOQ OF ADMINISTRATIVE
BUILDING AT
SHAHBAD MOHAMMADPUR
NEW DELHI**

Tender Document
FIRE FIGHTING System
(Schedule of Quantities)

FIRE FIGHTING SUMMARY OF COST		
SECTION	DESCRIPTION	COST (In Rs.)
A	FIRE PIPING,HYDRANTS & ACCESSORIES	0.00
	Total Cost in Rs.	0.00

D.A.F.F.P.L ,I.G.I AIRPORT, NEW DELHI
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SUB-HEAD - A (Fire Piping, Hydrants, Sprinklers and Accessor

S.NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	Providing, laying, jointing and testing of following sizes of pipes conforming to IS-1239 with all accessories like all fittings (upto 50mm dia threaded M.S.forged fittings and above 50 mm dia MS forged fittings with welded joints shall be used) fittings including tees, elbows, reducers, flanges, rubber gaskets, nuts bolts, washer. And fixing the pipe on floor / wall /ceiling with suitable size clamps, hangers, structural steel supports as per specification. And G.I. pipe sleeve to be provided wherever the pipes are crossing the walls/floors and sealing the sleeves as per consultants requirements including cutting holes and chases in brick, R.C.C work and making good the same to original conditions complete in all respects.Arrows showing direction of flow to be marked(with paint of approved colour) on each pipe at locations as decided at site.				
(a)	For wet riser & sprinkler System - M.S. `C' Heavy class pipe				
	a)25 mm dia(4.04mm thickness) screwed joint	RO	RM		0
	b)32 mm dia(4.05mm thickness)screwed joint	RO	RM		0
	c) 40 mm dia(4.05mm thickness)screwed joint	RO	RM		0
	d) 50 mm dia(4.5mm thickness)screwed joint	RO	RM		0
	e) 65 mm dia(4.5mm thickness)	RO	RM		0
	f) 80 mm dia(4.85mm thickness)	RO	RM		0
	g)100 mm dia(5.4mm thickness)	RO	RM		0
	h)150 mm dia(5.4mm thickness)	RO	RM		0
2	Prividing two coats of synthetic enamel paint of approved shade over a coat of primer. Including painting of legends both direction arrow as per the approval of the architects / consultants.				
	a)25 mm dia	RO	RM		0
	b)32 mm dia	RO	RM		0
	c) 40 mm dia	RO	RM		0
	d) 50 mm dia	RO	RM		0
	e) 65 mm dia	RO	RM		0
	f) 80 mm dia	RO	RM		0
	g)100 mm dia	RO	RM		0
	h)150 mm dia	RO	RM		0
S.NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT

Estimate

3	Providing, laying, jointing and testing in trenches the following sizes of M.S. class `C' (heavy class) pipes conforming to IS:1239 with accessories like fittings including tees, elbows, reducers, flanges, rubber gaskets, G.I. nuts, bolts and washers and providing 150mm thick fine sand layer all around the pipe, including excavation in all kind of soil/ hard rock, refilling, ramming and removing the excavated surplus material and making good the same complete as required.				
	a) 80 mm dia	RO	RM		0
	b) 100 mm dia	RO	RM		
	c) 150 mm dia	62	RM		0
4	Providing protection to embedded M.S pipes and fittings by wrapping 4mm thick pypkote protection including proper overlaps on joints.				
	a) 80 mm dia	RO	RM		0
	b) 100 mm dia	RO	RM		
	c) 150 mm dia	40	RM		0
5	Providing and fixing gun metal ball valve suitable for pressure 15 Kg/Cm2 and conforming to IS: 778 of the following size including providing necessary union / flange.				
	a) 25 mm dia	RO	NOS.		0
	b) 50 mm dia	RO	NOS.		0
6	Providing & fixing of butterfly valve suitable for pressure 15 Kg/Sqcm. with flanges, nut bolts & gaskets complete required.				
	a) 65 mm dia	RO	NO.		0
	b) 80 mm dia	RO	NOS		0
	c) 100 mm dia	RO	NOS		0
	d) 150 mm dia	4	NOS		0
7	Providing and fixing of C.I. wafer type check valve suitable for pressure 15 Kg/Sqcm. with flanges, Nut, bolts & washers, painting etc. complete as required.				
	a) 150 mm dia	RO	NO		
S.NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT

Estimate

8	Providing & fixing double flanged flexicon rubber expansion joint with unit control of standard length as per manufacturers specs. Tested to a pressure of 15Kg/Sqcm including rubber gaskets, flanges, nuts, bolts and washers complete as required.				
	a) 150 mm dia	QR	NO		
9	Providing and fixing C.I.'Y' strainer with bronze perforated sheet basket tested to a pressure of 15 Kg/sqcm including rubber gasket, flanges, nuts, bolts and washers, complete as required.				
	a) 150 mm dia	QR	NO.		
10	Providing and fixing inlet breaching having C.I. body four way gun metal 63 mm dia instantaneous inlets conforming to IS 903 fitted with non return valves, 25 mm dia gun metal drain cock, blank cap, brass chains and 150 mm dia flanges with all accessories suitable for local fire tender complete as required.	1	NO		0
11	Providing and fixing 4 mm thick glass door of size 2.1 m x 1.2 m with anodized aluminium frame of size 0.10 x 0.05 M with centre opening for fire hose cabinet. Suitably marked on the outside with the letters "FIRE HOSE" including locking arrangement. All aluminium work to be in Red P.O. colour.	4	NOS		0

Estimate

S.NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
12	Approval of fire (NOC) system from local fire authority at initial & various other stages of works, including preparation of report / integration with Fire alarm system and preparation of drawings as per local fire authority. Contractor shall include cost of all liasion works which are not explicitly mentioned above but are mandatory to have fire authority approved.	1	L.S.		
13	Providing & fixing C.P.brass quartzoid bulb sprinklers of size 15mm dia (Pendent type) to be operated at 68Deg.C complete.				
	a) Pendant type	RO	NOS.		0
	b) Side wall type	RO	NOS.		0
	c) Concealed type	RO	NOS.		0
	d) Upright type	RO	NOS.		0
14	Providing & Fixing of installation control valve with turbine type automatic Alarm Gong to be connected with control valve, drain & test valve as per manufacturer's specifications complete.				
	a) 100 mm dia	1	NO.		0
15	Providing, fixing, testing & commissioning of MS air cushion tank on top of each riser fabricated from 6mm thick MS plate, 250 mm in diameter and 1.2 m in height with dished ends fabricated from 8mm thick MS plate with Air release valve with stop cock, flanged inlet connection and drain arrangement with 25mm dia valve, pressure guage with gun metal stop cock complete with all accessories as required.	RO	NOS.		0
16	Providing, jointing and testing of sprinklers through flexible connections(1000mm long,internal diameter 25mm & outlet connection15mm dia.) as per requirement at site.Make-SeungJin-Korea.The flexible connectors shall be supported through false ceiling through clamps or as directed at site.The flexible connector shall be suitable for working pressure12 kg/sqcm .	RO	NOS		0
S.NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT

Estimate

17	Providing and fixing signages printed on photoluminescent U1000 aluminium sheet of 1.0 mm (+ -10%) containing lumigen II as base chemical, covered under UV stablized coating and of appropriate size (Glo-lite or eq. Make) including fixing on wall, door, ceiling etc. with proper clamps, hangers, cleats anchor fasteners etc. complete in all respects as diercted by Engineer-in-charge	5000	SQ INCH		0
A-1	SUPPLY & INSTALLATION ONLY OF ITEMS AS MENTIONED BELOW				
1	Providing & fixing gun metal fire hydrant valve with 80 mm N.B. flanged inlet, brass spindal, one no. 63 mm dia female instantaneous outlet, G.M. coupling,blank cap, chain. Conforming to IS:5290. Including tapping from wet riser complete as required.	4	NOS		0
2	Providing & fixing swinging type First Aid hose reel in red colour with 36 mts long and 20 mm dia dia heavy duty rubber water hose, 20 mm dia globe valve stop cock, terminating with G.M. coupling & nozzle of 5mm outlet with shut off valve confirming to IS 8090 - 1976 complete with drum and brackets for fixing on wall, bolts & nuts conforming to IS:884-1969 complete as required.	4	NOS	0	0
3	Providing and Fixing Hose pipe, 63 mm dia and 15 mts long, duly reinforced, rubber lined suitable for brusting pressure not less than 22 Kg/Sqcm. conforming to IS 636-1988 type A with gun metal heavy duty instantaneous type coupling (Pair male & female parts) conforming to IS 903. Complete as required (two nos. for each hydrant)	12	NOS		0
S.NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT

Estimate

4	Providing and fixing weather proof cabinet of size not less than 0.6 x 0.6 x 0.45 mtr made out of M.S. sheet not less than 1.5 mm thick having central opening and 4 mm thick glazed glass doors (Two nos.) suitably marked on the outside 'with the letters "FIRE HOSE" including necessary locking arrangement and painting in red colour suitable to accomodate, external yard hydrant valve, 2 nos 15 mtr long Hose pipe, branch pipe, nozzle and fire man's axe. It shall be mounted on boundary wall complete as required.	2	NOS		0
5	Providing, jointing and testing of automatically operated Halotron fire extinguishers(cap-5kg,temperature rating-5kg,temperature rating-68degc,test pressure-30bar) complete with all accessories/fittings.-Minimax make.	5	Each		0
6	Providing & fixing gun metal fire hydrant valve with 100 mm N.B. flanged inlet, brass spindal, two no. 63 mm dia each female instantaneous outlets, G.M. coupling,blank cap, chain. Conforming to IS:5290. Including tapping from wet riser complete as required.	2	NOS		0
TOTAL CARRIED TO SUMMARY					0

**HVAC BOQ OF ADMINISTRATION
BUILDING AT
SHAHBAD MOHAMMADPUR
NEW DELHI**

Tender Document

HVAC System

(Schedule of Quantities)

HVAC SUMMARY OF COST

ITEM	DESCRIPTION	AMOUNT
A.	HI-WALL AC UNIT WORK	-
B.	INLINE FANS	-
C.	AIR DISTRIBUTION	-
D.	THERMAL INSULATION	-
E.	KITCHEN VENTILATION	-
	TOTAL	-

GST will Be Extra

HVAC-SCHEDULE OF QUANTITIES (DAFPL, NEW DELHI)							
ITEM	DESCRIPTION	UNIT	QTY.	SUPPLY RATE	INSTALLATION RATE	SUPPLY AMOUNT	INSTALLATION AMOUNT
A	HI-WALL AC UNIT WORK						
1	Supply of Air-Cooled HI-WALL MOUNTED SPLIT ACs (HWS) complete with cordless remote control, safety feature as per the design & specifications and approval / instruction of the consultant - DAIKIN/MITSUBISHI ELECT. Nominal CAPACITY- 1.0 TR. (5 STAR)Supplied by client Nominal CAPACITY- 1.5 TR. (5 STAR)Supplied by client Nominal CAPACITY- 1.5 TR. (5 STAR)Supplied by client Nominal CAPACITY- 2.0 TR. (5 STAR)Supplied by client	Nos. Nos. Nos. Nos.	4 8 3 12			- - -	
2(a)	Dismantling/Removal of Air-Cooled HI-WALL MOUNTED SPLIT AC's/Window Ac's complete with cordless remote control, safety feature as per the design & specifications and approval / instruction of the consultant. Scope of contractor includes shifting of these AC's as per direction of EIC & ensure no gas leakage until installation. - DAIKIN/MITSUBISHI ELECT. Nominal CAPACITY- 1.5 TR. (5 STAR)	Nos.	8			-	
2(b)	Installation,testing & commissioning of Air-Cooled HI-WALL MOUNTED SPLIT ACs (HWS) complete with cordless remote control, safety feature as per the design & specifications and approval / instruction of the consultant - DAIKIN/MITSUBISHI ELECT. Nominal CAPACITY- 1.0 TR. (5 STAR) Nominal CAPACITY- 1.5 TR. (5 STAR) Nominal CAPACITY- 2.0 TR. (5 STAR)	Nos. Nos. Nos.	4 11 12			- - -	
2	REFRIGERANT PIPING Providing & fixing of Interconnected Refrigerant piping circuit of required sizes with imported copper tubes duly insulated with NITRILE RUBBER TUBE, complete with supports & properly clamped as per design, specifications and approval / instruction of the consultant HI-WALL SPLIT – 1.5/2.0 TR. (HWS)	RMT	310			-	-
3	Providing & fixing of Interconnected Electrical wiring between Room and condensing units including Power cables from Power supply switch/socket to condensing units , conduit, Fittings etc. as required complete as per design and specifications of the manufacturer and approval / instruction of the consultant HI-WALL SPLIT – 1.5/2.0 TR. (HWS)	RMT	320			-	-
4	Supply, Fabrication & fixing of Wall mounted/floor standing MS angle iron stands for Condensing units with painting complete as per design, specifications and approval / instruction of the consultant HI-WALL SPLIT – 1.5/2.0 TR. (HWS)	Nos.	27			-	-
5	DRAIN PIPING Rigid PVC piping - 20 Kg Density with fittings & supports etc duly insulated with class 'O' Nitrile foam complete as per specifications						
a	25 mm dia	RMT	90			-	-
b	32 mm dia	RMT	120			-	-
c	40 mm dia	RMT	90			-	-
6	Supply & fixing of duty cycle timer for Split ACs complete as per design, specifications and approval / instruction of the consultant	RO					
7.(a)	Supply of Air-Cooled WINDOW ACs complete with cordless remote control, safety feature as per the design & specifications and approval / instruction of the consultant - DAIKIN/MITSUBISHI ELECT. Nominal CAPACITY- 1.5TR. (5 STAR)Supplied by client Nominal CAPACITY- 2.0TR. (5 STAR)Supplied by client	Nos. Nos.	3 1				
7.(b)	Installation,testing & commissioning of Air-Cooled WINDOW ACs complete with cordless remote control, safety feature as per the design & specifications and approval / instruction of the consultant - DAIKIN/MITSUBISHI ELECT. Nominal CAPACITY- 1.0 TR. (5 STAR)	Nos.	1				
A	TOTAL EQUIPMENT			Rs.	Rs.	-	-
B	INLINE FANS						
	Supply, installation, testing and commissioning of inline ducted fans of G.I. construction complete with centrifugal fan (TEFC (IP-44)with motor, drive, canvass connection at inlet & outlet complete with MCB panel with cabling and earthing (with 5 Rm). Fan shall be suitable for operation on 220+6% volts, 50 Hz, 1 Phase AC power supply. All single phase inline fans shall be provided with factory filled speed regulation and as per specification and drawings.						

ITEM	DESCRIPTION	UNIT	QTY.	SUPPLY RATE	INSTALLATION RATE	SUPPLY AMOUNT	INSTALLATION AMOUNT
1	Toilet Exhaust Air Air Quantity : 900 CFM Static Pressure : 15 mm wg Fan Motor H.P: 0.15 H.P or as per actual selection meeting other technical parameters	No.	4			-	-
2	Propeller Fans Supply installation, testing of propeller fan with gravity louver, single phase 240Volts 50Hz, with 3 pin top, cable etc as per specifications and drawings. 200 dia to 300 mm dia	No.	8			-	-
3	AXIAL FLOW FANS Supply .Installation testing and commissioning of Vane Axial Fans with impeller having adjustable pitch angle blades and complete with suitable TEFC motor and drive assembly. The fan shall be suitable for ceiling/floor installation along with spring isolators or as recommended by the manufacturer. Fan motor shall be VFD compatible & shall be of high efficiency Class EFF-1(Only for normal working fans). Motor shall be suitable for 415 ± 10% V, 3 Phase, 50 ± 3%Hz electrical supply.Fan & motor shall be selected for minimum 40mm Static pressure.Total static pressure shall be checked by vendor. Change in static pressure will not attract any price implication. The complete fan assembly alongwith the motor & drive assembly shall be fire rated i.e. suitable to operate upto 250°C for 2 hours and meet the duty parameters.The fan shall be selected for low noise level and low RPM as per technical specifications. Price shall also include double sleeve fire retardant flexible connection on both sides of the fan. The fan duty shall be as follows:						
a	6500 CFM, 30 mm SP fresh air in case of fire (Non-fire rated) Liftwell Pressurization	No.	1			-	-
4	CO/CO2 sensor for regulating fresh air	Nos.	R/o				
B	TOTAL 'INLINE FANS'			Rs.	Rs.	-	-
C	AIR DISTRIBUTION						
1	Site Fabricated GI Duct Supply, fabrication, Installation, testing and commissioning of site fabricated rectangular ducts using G.I Sheets (120GSM coating). The price shall include factory fabricated MS flanges (wherever required), turning vanes, splitter dampers, supports (factory fabricated, full threaded G.I rod/hangers & G.I slotted channel), sealant, neoprene gasket, access door etc.as required and as per ISI specifications.The joints shall be with least leak and shall be tested with pressure testing machine.						
a	24 gauge galvanized sheet steel	sqm.	75			-	-
b	22 gauge galvanized sheet steel	sqm.	25			-	-
c	20 gauge galvanized sheet steel	sqm.	5			-	-
d	18 gauge galvanized sheet steel	sqm.	R/o				

ITEM	DESCRIPTION	UNIT	QTY.	SUPPLY RATE	INSTALLATION RATE	SUPPLY AMOUNT	INSTALLATION AMOUNT
2	Dampers						
i	Supply, installation, testing and commissioning of (18G) GI volume control duct damper complete with neoprene rubber gaskets, nuts, bolts, screws linkages, flanges etc, as per specifications.	sqm.	RO				
ii	Supply, Installation and Testing of multiblade type Collar damper of galvanised steel sheet, provided with suitable links, levers and quadrants for manual control of volume of air flow and for proper balancing of air distribution as per approved shop floor drawings and specifications.	sqm.	RO				
3	SUPPLY / RETURN AIR DIFFUSERS						
3.1	Supply, installation, testing and balancing of powder coated extruded aluminium construction grid ceiling diffusers with removable core & collar damper/volume control dampers as per approved drawings and specifications Neck size 450x450 & 300x300	sqm.	5			-	-
3.2	Supply, installation, testing and balancing of powder coated extruded aluminium construction grid return air diffusers with removable core & without volume control damper as per specifications. Neck size 450x450 & 300x300	sqm.	4			-	-
3.3	Supply, Installation, Testing and commissioning of 3 - slot supply air diffusers as per approved shop drawings and colour . Each diffuser will be equipped with removable core and a aluminum volume control damper which will be key operated.	Sqm	R/o				
3.4	Supply, Installation, Testing and commissioning of 3 - slot supply air diffusers as per approved shop drawings and colour . Each diffuser will be equipped with removable core and a aluminum volume control damper which will be key operated.	Sqm	R/o				
4	SUPPLY / RETURN AIR GRILLES						
4.1	Supplying & fixing of powder coated extruded aluminium Supply Air Grills with aluminium volume control dampers as per specifications.	sqm.	R/o				
4.2	Supplying & fixing of powder coated extruded aluminium Supply Air double louvered Grills with aluminium volume control dampers as per specifications.	sqm.	R/o				
4.3	Supplying & fixing of powder coated extruded aluminium return air grill with louvers but without volume control dampers complete as required.	sqm.	R/o				
4.4	Supplying & fixing of powder coated extruded aluminium return air double louvered grill but without volume control dampers complete as required.	sqm.	R/o				
5	Supply, fabrication, installation and testing the flexible connections constructed of fire resistance flexible double canvas sleeve as per the approved shop drawings.	No.	R/o				
6	Supply, installation, testing and balancing of powder coated /Anodised extruded aluminium construction louvers with bird screen for exhaust/fresh air as per specifications and approved drawings.	sqm.	R/o				
7	Supply, Installation and Testing of air transfer grilles of approved make and colour. Powder coated extruded aluminium air transfer grill	Sqm.	R/o				
8	Supplying, Fixing, testing and commissioning of motorized fire dampers with sleeve in supply air duct/main branch and return air path as and where required of required sizes i/c control wiring, the damper shall be motorized and spring return so as to close the damper in the event of power failure automatically and open the same in case of power being restored. The spring return action shall be inbuilt mechanism and not externally mounted. The damper shall also be closed in the event of fire signal complete as required and as per specifications. The damper to be fire rated for 120 minutes at 250 degree.						
8.1	Fire damper	sqm.	R/o				
8.2	Actuator (230 V)	Each	R/o				
C.	TOTAL ' AIR DISTRIBUTION'			Rs.	Rs.	-	-
D.	THERMAL INSULATION						
1	Supply and Application of acoustic lining within the supply air duct with 15 mm thick open cell nitrile rubber with anti microbial propoerties (180-220 Kg/cum density) with UL approved as per specifications and drawings.						
1.1	15 mm thick acoustic lining	sqm.	R/o				

ITEM	DESCRIPTION	UNIT	QTY.	SUPPLY RATE	INSTALLATION RATE	SUPPLY AMOUNT	INSTALLATION AMOUNT
2	Supply and installation of external thermal insulation on ducts. Insulation shall be closed cell chemically cross linked polyethylene foam with thermal conductivity not exceeding 0.032 W/moK at an average temperature of 25 deg C. Density of the material shall be 25-30 Kg/m ³ and shall be single layer up to 18mm thickness. The insulation material shall be fire rated for Class 1 as per BS-476 Part 7 with non-toxic smoke. Quoted price shall be inclusive of adhesive, tapes as per specification.						
2.1	13 mm thick insulation	sqm.	R/o				
2.2	19 mm thick insulation for supply & return air ducts.	sqm.	R/o				
D.	TOTAL ' THERMAL INSULATION'			Rs.	Rs.	-	-
E.	KITCHEN VENTILATION						
1.1	<p>DRY SCRUBBER UNIT - Zeco/waves/Edgeetech /Rvdair Supply, Installation, testing and commissioning of Scrubber each comprising of electrostatic precipitation technology, dry type air cleaner to remove oil, DIDW Backward curves Fan with casing 25mm thick PUF insulation , smoke and fumes from exhaust air, as per the Specifications.</p> <p>Electrostatic Precipitator Module of following specifications with UV Ozone Lamp</p> <p>Electrostatic section shall be made of 16 gauge galvanised sheet, high bake epoxy powder coated, washable type aluminium mesh pre filters, Ionizing-Collecting cell(s) shall be of one-piece construction minimum 13.38" inches deep in direction of airflow. All support framing, end plates and ionizer ground electrodes shall be 0.090 inch thick aluminum. Both repelling and collector plates shall be 0.020 inch thick aluminum, 9.125 inch deep in direction of airflow and rigidly retained in place with tubular spacers and tie rods.Spacing between plates shall be no less than 0.175 inch. Ionizing electrodes shall be heavy duty tungsten wire rigidly supported both vertically and laterally. High voltage support insulators shall be of made of Teflon, including center hole, glazed to enhance dielectric strength and retard tracking. Insulators shall be mounted out of the airstream, to reduce contaminant buildup. All high voltage electrical connections within each tier of cells, shall be between cells and automatically made when cells are installed. Average efficiency of 90% for single pass base on ASHRAE test method at flow rates of 800 –1500CFM per module. Power supplies shall be 100% solid state CE Listed, Module of capacity above 3000 CFM shall be equipped with Pulse width modulating (PWM)The system should be fitted with interlock switch for safety . The system should allow connection to a fan section . All units should have Arc Suppression & Auto Restart, Performance Indicator Lights to indicate the status of the air cleaning system. Power Consumption should not be more than 50 watts per ESP cell.</p> <p>Operating Voltage : 220V, 50 Hz Ionizing Voltage : 12.5 to 13 KVDC Collector Cell Voltage : 6 to 6.5 KVDC Power Consumption : Not more than 50W per cell. Air Moving Capacities shall be as follows:</p> <p>Ionizing-Collecting cell(s) shall be of one-piece construction consisting of a series of repelling & collection plates. Both repelling and collector plates shall be aluminum alloy material, rigidly retained in place with tubular spacers and tie rods. Each plate shall be corrugated, perpendicular to airflow direction. Each cell shall weigh not more than 15 kg with at least 9 ionizing wires maximum number of collection plates up 55 numbers per ESP cell. Minimum collection plate area per 1000 CMH of air flow thru ESP Cell Should not less than 1.8sqmt Not less than MERV 15 Exhaust air unit of following specifications</p> <p>factory fabricated double skin exhaust air unit comprising of 1No.DIDW GI fan & motor, Backward curved, complete with base frame,casing made out of 0.63mm galvanised sheet having flanged & bolted panels insulated with PUF injected between outer skin and inner skin.The exhaust air unit shall be complete with motor, belt drive package of the following capacities. The unit shall be integrated & connected with above for kitchen including all necessary accessories to complete the installation.</p>						
1.1	3500 CFM@55 mmSP	Nos.	1			-	-
1.2	DOUBLE SKINNED AIR WASHER UNITS Ambassador/Carvaire/Zeco/Edgeetech						

ITEM	DESCRIPTION	UNIT	QTY.	SUPPLY RATE	INSTALLATION RATE	SUPPLY AMOUNT	INSTALLATION AMOUNT
	<p>Supply, installation, testing & commissioning of factory fabricated double skin Air-Washer comprising of DIDW GI fan, backward curved, complete with base frame,casing made out of 0.63mm galvanised sheet(Both skins) having flanged & bolted panels insulated with 48 MM THICK & 48KG /M3 PUF injected between outer skin and inner skin.(The inner skin shall be PVC / Fibreglass lined also), wet section & tank sump shall be made of stainless steel 18G SS 304.,The Air-washer shall be complete with fill of depth 200mm & face velocity across the fill shall be limited to152 MPM.The complete Air-washer shall be with two bend PVC eliminator.The Air - washer shall have an efficiency of 90% & shall be complete with motor, belt drive package, GI B Class interconnecting piping,valves, strainer NRV, aluminum viscous filters ,water pumps(1working +1stand by) for each air washer etc. & of the following capacities.</p> <p>Air washer tank to be FRP lined . Airwasher 3000 CFM @ 50mm static No Of Fan For Each Air-washer = 1 forward curve Static Pressure = 50MM Fan Speed = Not exceeding 1000 RPM Motor Rating = Not Exceed 5 KW Noise level = not exceed 70 db at 3 meter distance Monoblock Pump = 0.75 KW- Single phase No. Of Pumps = 2 (1 No. Standby)</p>	No.	1			-	-
E.	TOTAL ' KITCHEN VENTILATION'			Rs.	Rs.	-	-

**LIFT BOQ OF ADMINISTRATIVE
BUILDING AT
SHAHBAD MOHAMMADPUR
NEW DELHI**

Tender Document

LIFT System

(Schedule of Quantities)

LIFT SUMMARY OF COST

SECTION	DESCRIPTION	COST (In Rs.)
A	LIFT (8-Passengers)	0.00
	Total Cost in Rs.	0.00

D.A.F.F.P.L ,I.G.I AIRPORT, NEW DELHI

LIFT

S.NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	Design, Fabrication, Supply, Installation, Commissioning, packing, forwarding, transportation to DAFFPL site, unloading, furnishing of final drawings and manuals ,handling at site, performance demonstration and performance acceptance etc. of 8 passenger capacity lift (AS PER THE TABLE 1), to make the system complete in all respects and required civil work as per technical Specification & as per the tender document.	1	No.		0
(a)	TABLE-1				
	Capacity - 8 Persons				
	Speed - 1 mps				
	Rise - 14.5 mtrs.				
	Stops - 4 Stops With (all opening on the same side)				
	Controller Type - ACD3-MR				
	Drive - VF Regenerative (Closed Loop)				
	Power Supply - 400/415 Volts (3 Phase AC) / or as per man specs.				
	Operation - Full collective operation				
	Machine - PM Gearless (Located above shaft)				
	Traction Media - Flat Coated Steel Belt / or as per manufacturers specification				
	Car Finish - Rear Panel =SS Hairline finish • Side Panels = SS Hairline finish • Front Panels = SS Hairline finish				
	False Ceiling Type - metallic with LED light fixtures				
	False Ceiling finish - Black Powder coated				
	Ventilation - Cross flow fan				
	Hand rails - Stainless Steel Mirror Finish Handrails on rear car panels				
	Flooring - Heavy duty Vinyl Tiles				
	Car Door finish - Stainless steel - Hairline finish				
	Landing Doors finish - Stainless steel - Hairline finish				
	Fire rated doors - Fire rating-60mins				
	Hoistway dimensions - (W x D mm) 2.1 m x 2.1m				
	Car dimensions - (W x D x H - mm) As per manufacturer specs				
	Car & Hoistway door type - Central opening (CO) doors				
	Door opening (W x H mm) - 800 mm W x 2100 mm H				
	Door operator - DC Door Operator				
	COP - Gien Buttons in Stainless Steel #4(Hairline)				
	Car position indicator - (RED LED) Scrolling Display				
	Hall fixtures - to				
	Hall fixtures face plate - Stainless Steel #4(Hairline)				
	Hall button arrangement - Hall Button with HPI				
	Standard features - Anti-nuisance Car Call Protection, Independent Service, Overload Device, Nudging, Emergency Firemen's Service, Emergency Car Light Unit, Infrared Curtain Door Protection, Door Time Protection, Emergency Alarm Button, Extra Door Time of Lobby & Parking, Door Open/Close Button, Manual Rescue Operation, Belt Inspection Drive, Auto Fan Cut Off				
	TOTAL CARRIED TO SUMMARY				0



SCHEDULE OF PRICES

The Bidder shall quote for the entire Works, such that the total Tender (lump sum) price *inter-alia* covers break ups of the price of all cost centres and applicable taxes thereon, if any, along with all its risks, obligations and liabilities set out in or to be reasonably inferred from the Tender Documents in respect of the procurement, supply, construction, erection, installation, setting to work, testing, pre commissioning, successful commissioning and completion of the Works, all in accordance with the requirements of the tender and applicable laws.

In the Schedule of Prices, the bidder shall quote all prices showing all taxes, duties, levies, and charges separately.

The Works shall be executed by the Contractor for a total Tender (lump sum) price as provided basis the Schedule of Prices.

The Bill of Quantities shall only serve the limited purpose of deriving the basis on which the lump sum price has been arrived.

The prices quoted by the bidder shall not be subject to adjustment during the term of the Contract.

PREMABLE

1. The Schedule of Prices includes the following:
 - (i) the Tender total comprising an aggregate of the following:
 - a) **Section A** - Supply
 - b) **Section B** - Execution

It is clarified that the Tender total, once formalized, will be a lump sum price inclusive of taxes. Conversely, the aggregate of the lump sum prices of Section A and Section B shall constitute the Tender Total.

- (ii) Bill of Quantities for the entire Works is for the limited purpose of understanding how the lump sum price has been derived. Bill of quantities (*as attached*) is tentative and only for guidance purposes.

2. Price Adjustment

All prices are firm and fixed for the duration of the Contract and are not subject to escalation for any cause, except as otherwise provided in the Contract. Payment of the Tender Total (lump sum price) comprising Sections A and Section B as per above Schedule of Prices, shall constitute full payment for performance of the Works and covers all costs of whatever nature incurred by the Contractor in accomplishing the Works in accordance with the provisions of the Contract.

The Contractor shall maintain all Works in progress until it is accepted. Contractor shall repair, rework or replace as necessary any work damaged or lost due to normal wear and tear, anticipated events, or conditions within its control. No separate payment shall be made for such maintenance costs which are deemed included in the original Contract Sum. Any failure to maintain the Works shall be considered a defect in accordance with the Conditions of tender.



B. THE TENDER TOTAL

The Tender Total comprises:

The Fixed Lump Sum of this Contract is: Section A + Section B, where

Section	Description	Amount in Rs	Taxes in Rs	Total Amount in Figures
A	SUPPLY	<u>NOT TO BE FILLED HERE</u>	<u>NOT TO BE FILLED HERE</u>	<u>NOT TO BE FILLED HERE</u>
B	ERECTION	<u>NOT TO BE FILLED HERE</u>	<u>NOT TO BE FILLED HERE</u>	<u>NOT TO BE FILLED HERE</u>
C	TOTAL	<u>NOT TO BE FILLED HERE</u>	<u>NOT TO BE FILLED HERE</u>	<u>NOT TO BE FILLED HERE</u>

NOTE: Prices are only be filled in “Price Bid” of tender. Above is only for illustration purpose.

THE BIDDERS ARE REQUIRED TO NOTE THAT THE CONTRACT SHALL BE AWARDED AND THE WORKS SHALL BE EXECUTED ON A LUMP SUM PRICE BASIS AND NOT ON UNIT RATE BASIS AND THE UNIT RATES (TO BE SUBMITTED BY THE SUCCESSFUL BIDDER) IN THE BILL OF QUANTITIES WHICH HAVE BEEN TABULATED ONLY FOR THE PURPOSE OF PROVIDING THE BASIS OF DERIVING THE LUMP SUM PRICE. BIDDERS MUST NOTE THAT THE BILL OF QUANTITIES IS SOLELY FOR GUIDANCE PURPOSES.

The successful bidder shall also give a breakdown and details of such prices vis-à-vis each of the cost centre/items as itemized in the Bill of Quantity/Schedule of Prices. A fully filled Indicative Bill of Quantities to arrive at the total lump-sum cost shall be submitted by successful bidder prior to award of contract.



DELHI AVIATION FUEL FACILITY PRIVATE LIMITED

ANNEXURE I – DEVIATION SHEET

EXCEPTION AND DEVIATIONS STATEMENT				
S.NO.	PAGE NO. OF TENDER DOCUMENT	CLAUSE NO.	SUBJECT	DEVIATIONS

Bidder shall list all the deviations in the following given format only on their Letterhead. The Deviation sheet should be submitted along with technical bid.

In case no deviation sheet is submitted along with technical bid, it would be concluded that bidder has accepted all specifications, terms and conditions.

Sign & Stamp of Bidder



DELHI AVIATION FUEL FACILITY PRIVATE LIMITED

ANNEXURE II – DECLARATION SHEET

Date:

DECLARATION

We, M/s _____ hereby, unconditionally accept all terms & conditions of TENDER NO.: DAFFPL/FF/2022-23/04 (JOB: TENDER FOR CONSTRUCTION OF NEW ADMINISTRATIVE BUILDING AT DAFFPL) including Scope of job, quantities, completion period, terms & condition without any deviations.

Sign & Stamp of Bidder

Note: In case of deviations (whether technical or commercial) the above declaration should not be submitted, and the deviations should be mentioned separately on bidders letter head with the heading "DEVIATION SHEET". In absence of "DEVIATION SHEET", it would be concluded that bidder has submitted his offer as per tender specifications, terms & conditions. Corrections in tender booklet will not be accepted.

Sign & Stamp of Bidder



DELHI AVIATION FUEL FACILITY PRIVATE LIMITED

ANNEXURE-III

PROFORMA OF BANK GUARANTEE (EARNEST MONEY DEPOSIT)

(On Non-Judicial Stamp paper for appropriate value)

BANK GUARANTEE NO. :

BANK GUARANTEE AMOUNT:

CLAIM:

(Till 120 days from date of submission of Proposal)

TENDER NO. /DATE:

JOB DESCRIPTION/

LOCATION:

Tender Security No. [*]

Name and Address of the Beneficiary: Delhi Aviation Fuel Facility (Private) Limited
Aviation Fuelling Station, Shahabad Mohammadpur, IGI Airport, New Delhi – 110 061, India

We [*name and address of the issuing bank*] have been informed that [*Name of the Interested party*] (hereinafter called the “Interested Party”) is submitting a proposal for the Award of the Works in response to a Request for Proposal (“RFP”) by Delhi Aviation Fuel Facility (P.) Ltd. (“DAFFPL” or ‘Beneficiary’) for [*Insert description of work*] (“Works”). The conditions of the RFP, which are set out in a documents entitled Request for Proposal dated [*Please insert*] require its offer to be supported by a Tender Security.

At the request of the Interested Party, we hereby irrevocably undertake to pay you without demur, the Beneficiary, any sum or sums not exceeding Rs. _____ [*Please insert*].

Upon receipt by us of your demand in writing and your written statement (in the demand) stating that:

- 1) The Interested Party has, without written consent of DAFFPL, withdrawn its offer after the latest time specified for its submission and before the expiry of its period of validity; or
- 2) The Interested Party has refused to accept the correction of errors in nits offer in accordance with the instructions to Interested parties contained in the RFP; or

Sign & Stamp of Bidder



DELHI AVIATION FUEL FACILITY PRIVATE LIMITED

- 3) DAFFPL entered in to the contract with the Interested party but the Interested party has failed to deliver the **COMPOSITE BANK GUARANTEE (SECURITY DEPOSIT & PERFORMANCE)** in compliance with the Contract conditions; or
- 4) The Interested Party has failed to enter into the Contract within 30 (Thirty) days of being required to do so by the Tender Officer.

Any demand for payment must contain your signature(s). The demand must be received by us at this office on or before the expiry of the earliest of the following dates, when this security guarantee shall expire and shall be returned to us:

- a) Date of issue of letter communicating to the Interested Party that it has not qualified for the contract or the Proposal submitted by the Interested Party is unsuccessful or the TENDER is withdrawn and/or cancelled by the Beneficiary; or
- b) 7 (seven) days after the date of delivery of an acceptable performance bond complying with the Contract conditions and execution of the Contract after the award of the works to the Interested Party; or
- c) 120 (One hundred twenty) days from the last date of submission of Proposal in accordance with the TENDER.

Date:

Signature:

Designation:

Name of the Branch

Sign & Stamp of Bidder



DELHI AVIATION FUEL FACILITY PRIVATE LIMITED

ANNEXURE-IV

PROFORMA OF COMPOSITE BANK GUARANTEE (SECURITY DEPOSIT & PERFORMANCE)

(On Non-Judicial paper of Rs. 100/-value)

To,

DAFFPL

Dear Sirs,

M/shave taken tender for the workfor DAFFPL,.

The tender Conditions of Contract provide that the Contractor shall pay a sum of Rs. (Rupees) as security deposit & performance guarantee in the form therein mentioned. The form of payment of security deposit & performance guarantee includes guarantee executed by Scheduled Bank at New Delhi, undertaking full responsibility to indemnify DAFFPL, in case of default. The said party have approached us at and their request and in consideration of the premises we having our office at have agreed to give such guarantees as hereinafter mentioned.

1. We -----hereby undertake and agree with you that if default shall be made by M/s. -----in performing any of the terms and conditions of the tender or in payment of any money payable to Daffpl. We shall on demand pay to you, without demur, protest or requiring you to seek recourse to M/s _____, in such matter as to you may direct the said amount of Rupees ----- only or such portion thereof not exceeding the said sum as you may from time to time require.
2. You will have the full liberty without reference to us and without effecting this guarantee, postpones for any time or from time to time the exercise of any of the powers and rights conferred on you under the contract with the said -----and to enforce or to forbear from endorsing any powers of rights or by reason of time being given to the said -----which under law relating to the sureties would but for provision have the effect of releasing us.
3. Your right to recover the said sum of Rs. ----- (Rupees -----) from us in manner aforesaid will not be affected or suspended by reason of the fact that any dispute or disputes have been raised by the said M/s. -----

Sign & Stamp of Bidder



DELHI AVIATION FUEL FACILITY PRIVATE LIMITED

- and/or that any dispute or disputes are pending before any officer, tribunal or court.
4. The guarantee herein contained shall not be determined or affected by the liquidation or winding up dissolution or change of constitution or insolvency of the said -----but shall in all respect and for all purposes be binding operative units payment of all money due to you in respect of such liabilities is paid.
 5. Our liability under this guarantee is restricted to Rupees -----our guarantee shall remain in force until -----unless a suit or action to enforce a claim under Guarantee is filed against us within six months from -----(which is date of expiry of guarantee) all our rights under the said guarantee shall be forfeited and we shall be relieved and discharged from all liabilities there under.
 6. NOT WITHSTANDING anything hereinbefore contained our liability under this Bank Guarantee is restricted to Rupees -----(Rupees -----).This Bank Guarantee shall be valid up to -----and we are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before -----.
 7. This guarantee is to be returned to us within fifteen (15) days from the date it ceases to be in force. If the guarantee is not returned to us within the date of aforementioned it shall be automatically cancelled.
 8. We have power to issue this guarantee in your favour under Memorandum and Articles of Association and the undersigned has full power to do under the Power of Attorney dated -----granted to him by the Bank.

Yours faithfully

-----Bank
By its Constituted Attorney
Signature of a person duly
Authorized to sign on behalf of the bank

Sign & Stamp of Bidder



DELHI AVIATION FUEL FACILITY PRIVATE LIMITED

Annexure- V

Form of Letter of Undertaking

[On the letterhead of the Interested Party]

Letter of Undertaking

Date:

Delhi Aviation Fuel Facility (Private) Limited
Aviation Fuelling Station, Shahabad Mohammadpur,
IGI Airport, New Delhi – 110 061, India

Re:

The undersigned Interested Party acknowledges that the TENDER issued is confidential and personal to the undersigned Interested Party and hereby undertakes and agrees as follows:

1. **“Confidential Information”** means the TENDER and everything contained therein, all documentation, data, particulars of the Works and technical or commercial information made by (or on behalf of) Delhi Aviation Fuel Facility (Private) Limited or obtained directly or indirectly from Delhi Aviation Fuel Facility (Private) Limited or its representatives by the undersigned Interested Party or which is generated by the undersigned Interested Party or any information or data that the undersigned Interested Party receives or has access to, as a result of the TENDER, as being confidential information of Delhi Aviation Fuel Facility (Private) Limited, provided that such term does not include information that (a) was publicly known or otherwise known to undersigned Interested Party prior to the time of such disclosure, (b) subsequently becomes publicly known through no act or omission by undersigned Interested Party or any person acting on its behalf.
2. The undersigned Interested Party shall maintain the confidentiality of Confidential Information in accordance with procedures adopted by the undersigned Interested Party in good faith to protect confidential information of third parties delivered to it, provided that the undersigned Interested Party may deliver or disclose Confidential Information to its authorized representatives who agree to hold confidential the Confidential Information substantially in accordance with the terms of this Undertaking.
3. The undersigned Interested Party shall not at any time whatsoever:
 - (i) Disclose, in whole or in part, any Confidential Information received directly or indirectly from the Delhi Aviation Fuel Facility (P) Limited to any third party.

Sign & Stamp of Bidder



DELHI AVIATION FUEL FACILITY PRIVATE LIMITED

(ii) Reproduce, publish, transmit, translate, modify, compile or otherwise transfer the Confidential Information.

4. In case the Proposal of the undersigned Interested Party is not accepted and immediately upon the acceptance of the Proposal of any of the other Interested Party, the undersigned Interested Party, shall:

(i) Return all Confidential Information including without limitation, all originals, copies, reproductions and summaries of Confidential Information; and

(ii) Destroy all copies of Confidential Information in its possession, power or control, which are present on magnetic media, optical disk or other storage device, in a manner that ensures that the Confidential Information is rendered unrecoverable.

5. The undersigned Interested Party shall certify to Delhi Aviation Fuel Facility (Private) Limited that it has returned or destroyed such Confidential Information to the Delhi Aviation Fuel (Private) Limited within two (2) days of such a request being made by Delhi Aviation Fuel (Private) Limited.

Name of Interested Party's

Signature of Authorized Representative

Sign & Stamp of Bidder



DELHI AVIATION FUEL FACILITY PRIVATE LIMITED

Annexure VI

DECLARATION to be submitted along with Technical Bid

(M/s. _____) hereby declare / clarify that we have not been banned or delisted by IOCL/BPCL/DIAL or any government or quasi Government agencies or Public Sector Undertakings.

Stamp & Signature of the bidder

NOTE: If a bidder has been banned by IOCL/BPCL/DIAL or any Government or quasi Government agencies or PSUs, this fact must be clearly stated with details. If this declaration is not given along with the technical bid, the tender will be rejected as non-responsive.

Sign & Stamp of Bidder



DELHI AVIATION FUEL FACILITY PRIVATE LIMITED

ANNEXURE VII

STATEMENT OF CREDENTIALS

(A)

1. NAME AND CORRESPONDENCE ADDRESS OF THE TENDERER

PERMANENT ADDRESS OF THE TENDERER

2. TELEPHONE NO. _____

MOBILE NO. _____

3. NAME OF CONTACT PERSON(s): _____

4. NAME OF THE AUTHORISED SIGNATORY: _____

5. E Mail ID: _____

Sign & Stamp of Bidder



DELHI AVIATION FUEL FACILITY PRIVATE LIMITED

(B) TYPE OF BUSINESS ENTITY:

1. YEAR OF ESTABLISHMENT OF THE FIRM: _____

2. SOLE PROPRIETORSHIP: - _____

(Give Name of the Proprietor)

OR

3. PARTNERSHIP FIRM?

(Give names of the Partners and enclose scan copy of Partnership deed)

1. _____

2. _____

3. _____

4. _____

OR

4. PRIVATE OR PUBLIC LIMITED COMPANY?

(Attach list of Directors and copy of Certificate of Incorporation as defined in "Other Mandatory Documents")

(C) Details of Completed Purchase Orders of minimum value as per Pre-qualification criteria (PQC/BQC) during last SEVEN years as specified in PQC/BQC of the tender.

Sign & Stamp of Bidder



DELHI AVIATION FUEL FACILITY PRIVATE LIMITED

Sl. No	Particulars	1	2	3
a	Party's Name to whom supplied, Clear Postal Address, Telephone/Fax Nos and E-Mail Address.			
b	<u>Purchase Order Details-</u>			
	PO Reference No.			
	PO Date			
	PO Value (Rs. in Lakhs)			
c	Quantity & place of supply			
d	Scheduled time of completion as per PO			
e	Date of commencement of supply			
f	Date of completion of supply			
g	Completion certificate reference and date			

Note: a. Tenderer should furnish copy of the above-referred orders (as defined under PQC documents) and

b. Enclose a separate statement if space is not sufficient.

(D) **Annual Turnover (as per Audited Balance Sheet) in following last THREE financial years**

SL No.	Financial Year	Value (Rs. In Lakhs)
1	2019-2020	
2	2020-2021	
3	2021-2022	

Sign & Stamp of Bidder



DELHI AVIATION FUEL FACILITY PRIVATE LIMITED

Note : Tenderer should furnish copy of audited accounts as proof of turnover (as defined under tender documents).

(E) INCOME TAX DETAILS:

i. Income Tax Returns Filed:

ASSESSMENT YEAR	DATE	ACKNOWLEDGEMENT NO
2019-2020		
2020-2021		
2021-2022		

Note: Tenderer should furnish copy of the Income Tax Return filed.

ii. Income Tax Assessment Orders for following three financial years:

ASSESSMENT YEAR	ASSESSMENT ORDER & DATE	REMARKS
2019-2020		
2020-2021		
2021-2022		

Copies of Income Tax assessment orders / return filed / acknowledgement order for the three years as indicated above.

(F) GST Registration Details:

GST Registration no	
---------------------	--

Note: Tenderer should furnish copies of above Tax Registration Certificates.

Sign & Stamp of Bidder



DELHI AVIATION FUEL FACILITY PRIVATE LIMITED

(G) Mode of EMD (Online EMD or BG):

i. If paid Online:

AMOUNT	Rs.
(RTGS/NEFT/NET BANKING)	
Transaction Detail	

ii. If Bank Guarantee submitted (following details to be given) :

Name of the Issuing Bank and Branch Address	Bank Guarantee No and Date	BG Amount Rs.	Date of issuance	Valid Upto

(H) Production Capacity Details: (in case of manufacturer)

S. N	Item	Factory/ Location	Installed/ Capacity	Already Committed Capacity (For current Purchase orders in hand)	Spare Capacity, If Any	Capacity Committed to DAFFPL against this tender
			A	B	C=A-B	

Sign & Stamp of Bidder



DELHI AVIATION FUEL FACILITY PRIVATE LIMITED

Factory License and Address Details:

- (J) **In case the bidder is not a manufacturer, the bidder should submit an undertaking on Letter Head that the bidder is capable of supplying the material / equipment as per tender requirement.**

- (K) **Pan Card Details**

**Relation of Pan Holder to Tenderer
(PROP./PARTNER/COMPANY ETC.)
(Tenderer is required to upload copy of PAN card as detailed in "Other Mandatory documents")**

- (L) **Details of Documents uploaded along with Tender documents in technical bid and confirmation required to be furnished by tenderer.**

Sign & Stamp of Bidder



DELHI AVIATION FUEL FACILITY PRIVATE LIMITED

PAYMENT TO VENDORS THROUGH ELECTRONIC MODE

Tenderers are requested to submit their Consent Letter as per the format given below along with the enclosures as required:

Dated:

To,
M/s DAFFPL.

Dear Sir,

With reference to your advice, we hereby agree to accept the payment of our bills through "RTGS/NEFT/Electronic Mode". The desired bank account details are given below:

1.	Name of Beneficiary	
2.	Name of the Beneficiary's Bank	
3.	Address of the Beneficiary's Bank Branch	
4.	Contact details of Branch with STD Code	
5.	Beneficiary's Bank Account No. (as per cheque copy)	
6.	Beneficiary's Account Type (SB/CC/CA)	
7.	Beneficiary's Bank IFSC Code (11 Digit)	
8.	Mobile No of Beneficiary (One Number only)	
9.	E-Mail Id of Beneficiary (One Mail Id only)	

A blank cancelled cheque leaf relating to the above bank account is enclosed for verifying the accuracy of the bank account details.

I hereby declare that the particulars given above are correct and complete.

(Signature of Account Holder)

Seal of the Vendor

Encl: Cancelled Cheque

Sign & Stamp of Bidder