LEGENDS

SYMBOLS	DESCRIPTION
	11 KV VCB (VACUUM CIRCUIT BREAKER)
	ACB (AIR CIRCUIT BREAKER)
	HRC FUSES
	(MCCB) MOULDED CASE CIRCUIT BREAKER
	POTENTIAL TRANSFORMER
	CURRENT TRANSFORMER
A	AMMETER
V	VOLTMETER
ASS	AMMETER SELECTOR SWITCH
VSS	VOLTMETER SELECTOR SWITCH
	INDICATING LAMP
EA	ENERGY ANALYZER WITH MDI
PF	POWER FACTOR METER
Hz	FREQUENCY METER
	CAPACITOR
VR	VOLTAGE RELAY
	M.C.B. (MINIATURE CIRCUIT BREAKER)
DM	DUAL REGISTER ENERGY METER
	ISOLATOR
	PUSH BUTTON
S/S L R	SELECTOR SWITCH
TRC	TRIP/NORMAL/CLOSE SWITCH WITH LOST MOTION DEVICE
	ANUNCIATION WINDOW WITH
86	MASTER TRIP RELAY
59	OVER VOLTAGE RELAY
95	TRIP CIRCUIT SUPERVISION RELAY
64	RESTRICTED EARTH FAULT RELAY
50	INST. O/C RELAY
51	IDMT RELAY
50/51	IDMT & INSTANTANEOUS RELAY
59	OVER VOLTAGE RELAY WITH TIMER
27	UNDER VOLTAGE RELAY WITH TIMER
2	TIMER
32	REVERSE POWER RELAY
87	DIFFERENTIAL RELAY
BC	BATTERY CHARGER
TS	TEMPERATURE SCANNER
51V	VOLTAGE RESTRAINED OVER CURRENT RELAY
51N	IDMT EARTH FAULT RELAY
51G	SENSITIVE EARTH FAULT RELAY

Interlocking Scheme For PLC load manager.

	Conditions	EQUIP.	DG-01 (1010 KVA)	CSS-01 (1600 KVA)	B/C	CSS-02 (1600 KVA)	D.G.- 02 (1010 KVA)	B/C	T/R-03 (1600 KVA)	D.G.- 03 (500 KVA)	B/C	D.G.- 04 (500 KVA)	TO COMMERCIAL
		ACB No.	1	2	8	3	4	9	5	6	10	7	11 #
			(BREAKER POSITION)										
Mains "ON"	Under normal condition total load is at Transformer.		OFF	ON	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	ON
Mains Failure	When max. demand load is upto 340 KW then load transferred to DG-03.		OFF	OFF	ON	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
	When max. demand load is upto 340 KW & DG-03 fails to start then load transferred to DG-04.		OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	ON	OFF
	When max. demand load is upto 340 KW & DG-04 fails to start then load transferred to DG-01.		ON	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
	When max. demand load is upto 340 KW & DG-01 fails to start then load transferred to DG-02.		OFF	OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
	When max. demand load is upto 687 KW then load transferred to DG-01.		ON	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
	When max. demand load is upto 687 KW & DG-01 fails to start then load transferred to DG-02.		OFF	OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
	When combined max. demand load of bus section-1 & 2 is upto 687 KW then load of bus section-1 & 2 transferred to DG-01,load of bus section-3 is at DG-03 & load of bus section-4 is at DG-04.		ON	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF
	When combined max. demand load of bus section-1 & 2 is upto 687 KW & DG-01 fails to start then load of bus section-1 & 2 transferred to DG-02,load of bus section-3 is at DG-03 & load of bus section-4 is at DG-04.		OFF	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	ON	OFF
	When combined max. demand load of bus section-2 & 3 is upto 340 KW then load of bus section-2 & 3 transferred to DG-03,load of bus section-1 is at DG-01 & load of bus section-4 is at DG-04.		ON	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	OFF
	When combined max. demand load of bus section-2 & 3 is upto 340 KW & DG-03 fails to start then load of bus section-2 & 3 transferred to DG-02,load of bus section-1 is at DG-01 & load of bus section-4 is at DG-04.		ON	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF
	When combined max. demand load of bus section-2 & 3 is upto 687 KW then load of bus section-2 & 3 transferred to DG-02,load of bus section-1 is at DG-01 & load of bus section-4 is at DG-04.		ON	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF
	When combined max. demand load of bus section-3 & 4 is upto 340 KW then load of bus section-3 & 4 transferred to DG-03,load of bus section-1 is at DG-01 & load of bus section-2 is at DG-02.		ON	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
	When combined max. demand load of bus section-3 & 4 is upto 340 KW & DG-03 fails to start then load of bus section-3 & 4 transferred to DG-04,load of bus section-1 is at DG-01 & load of bus section-2 is at DG-02.		ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	OFF
	When max. demand load exceeds from 687 KW and not fulfill any condition shown above then all the four DGs shall run independently at separate bus bar. ie. DG-01 at bus section 01,DG-02 at bus section -2,DG-03 at bus section-3 & DG-04 at bus section-4 .		ON	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	OFF

NOTES:-

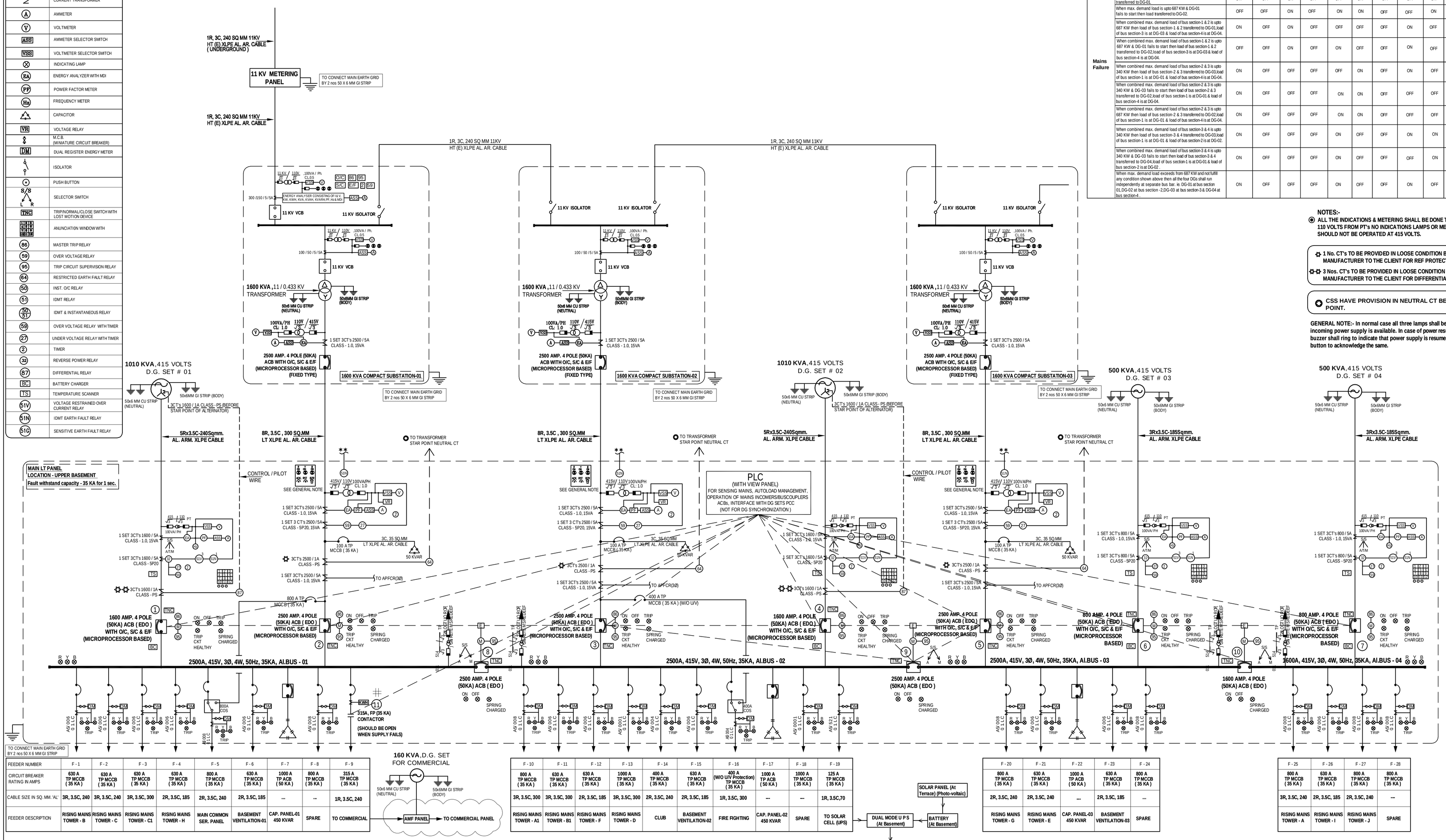
- **ALL THE INDICATIONS & METERING SHALL BE DONE THROUGH 110 VOLTS FROM PT's NO INDICATIONS LAMPS OR METERING SHOULD NOT BE OPERATED AT 415 VOLTS.**

1 No. CT's TO BE PROVIDED IN LOOSE CONDITION BY THE PANEL MANUFACTURER TO THE CLIENT FOR REF PROTECTION.

3 Nos. CT's TO BE PROVIDED IN LOOSE CONDITION BY THE PANEL MANUFACTURER TO THE CLIENT FOR DIFFERENTIAL PROTECTION.

CSS HAVE PROVISION IN NEUTRAL CT BEFORE STAR POINT.

GENERAL NOTE:- In normal case all three lamps shall be "ON" to indicate that incoming power supply is available. In case of power resumption after failure buzzer shall ring to indicate that power supply is resume, there shall be one push button to acknowledge the same.



FEEDER NUMBER	F - 1	F - 2	F - 3	F - 4	F - 5	F - 6	F - 7	F - 8	F - 9
CIRCUIT BREAKER RATING IN AMPS	630 A TP MCCB (35 KA)	630 A TP MCCB (35 KA)	630 A TP MCCB (35 KA)	630 A TP MCCB (35 KA)	800 A TP MCCB (35 KA)	630 A TP MCCB (35 KA)	1000 A TP ACB (50 KA)	800 A TP MCCB (35 KA)	315 A TP MCCB (35 KA)
CABLE SIZE IN SQ. MM. 'AL'	3R, 3.5C, 240	3R, 3.5C, 240	3R, 3.5C, 300	2R, 3.5C, 185	2R, 3.5C, 240	2R, 3.5C, 185	---	--	1R, 3.5C, 240
FEEDER DESCRIPTION	RISING MAINS TOWER - B	RISING MAINS TOWER - C	RISING MAINS TOWER - C1	RISING MAINS TOWER - H	MAIN COMMON SER. PANEL	BASEMENT VENTILATION-01	CAP. PANEL-01 450 KVAR	SPARE	TO COMMERCIAL

F - 10	F - 11	F - 12	F - 13	F - 14	F - 15	F - 16	F - 17	F - 18	F - 19
800 A TP MCCB (35 KA)	630 A TP MCCB (35 KA)	630 A TP MCCB (35 KA)	1000 A TP MCCB (35 KA)	400 A TP MCCB (35 KA)	630 A TP MCCB (35 KA)	400 A (W/O U/V Protection) TP MCCB (35 KA)	1000 A TP ACB (50 KA)	1000 A TP MCCB (35 KA)	125 A TP MCCB (35 KA)
3R, 3.5C, 300	3R, 3.5C, 300	2R, 3.5C, 185	3R, 3.5C, 300	2R, 3.5C, 240	2R, 3.5C, 185	1R, 3.5C, 300	---	---	1R, 3.5C,70
RISING MAINS TOWER - A1	RISING MAINS TOWER - B1	RISING MAINS TOWER - F	RISING MAINS TOWER - D	CLUB	BASEMENT VENTILATION-02	FIRE FIGHTING	CAP. PANEL-02 450 KVAR	SPARE	TO SOLAR CELL (UPS)

F - 20	F - 21	F - 22	F - 23	F - 24
800 A TP MCCB (35 KA)	630 A TP MCCB (35 KA)	1000 A TP ACB (50 KA)	630 A TP MCCB (35 KA)	800 A TP MCCB (35 KA)
2R, 3.5C, 240	2R, 3.5C, 240	---	2R, 3.5C, 185	---
RISING MAINS TOWER - G	RISING MAINS TOWER - E	CAP. PANEL-03 450 KVAR	BASEMENT VENTILATION-03	SPARE

F - 25	F - 26	F - 27	F - 28
800 A TP MCCB (35 KA)	630 A TP MCCB (35 KA)	800 A TP MCCB (35 KA)	800 A TP MCCB (35 KA)
3R, 3.5C, 240	2R, 3.5C, 185	2R, 3.5C, 240	---
RISING MAINS TOWER - A	RISING MAINS TOWER - I	RISING MAINS TOWER - J	SPARE

project

PROPOSED GROUP HOUSING AT

PLOT NO-GH-08, SECTOR 75,NOIDA FOR -
M/S AIMS MAX GARDENIA DEVELOPERS Pvt.Ltd.

title

ELECTRICAL DRAWING
(FOR TOWER - A,A1,B,B1,C,C1,D,E,F,G,H,I & J)

subtitle

MAINS SCHEMATIC DIAGRAM
(SHEET 01 OF 02)

drawing released for

- ☐ APPROVAL
- ☐ ADVANCE COPY
- ☐ SUBMISSION
- ■ CONSTRUCTION

drg. no. G-8 / 75 / ELEC / EXT. / 02-01
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date September 2015

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