ELECTRICAL PANEL MDP SCHEDULE

VOLTS: 120/208V-3Ø-4W
MAINS: 2500 AMP MLO 100000 AIC
8 SETS 4#600 MCM al, 1#600 MCM al G IN (8) 4"C
MOUNTING: SURFACE

■ SWITCHING BREAKER
▲ GFI TYPE BREAKER
✱ AFCI TYPE BREAKER

CIRCUIT DESCRIPTION	TRIP AMPS	TOTAL VA	CKT NO.	A	B	C	CKT NO.	TOTAL VA	TRIP AMPS	CIRCUIT DESCRIPTION
Feed Panel OA	400	28005	1	●			2	2050	225	Feed Panel OB
		28030			●			18080		
		32240				●		17230		
Feed Standby Transfer Switch	800	75320	3	●			4			Feed Panel DWP moved to SBDP 1/25/2012
		74535			●					
		74203				●				
TVSS	30		5	●			6		50	Sewage Pumps added via sketch SKE5.01B moved to SBDP 1/25/2012
					●					
						●				
Spare	20		7	●			8		50	Sewage Pumps added via sketch SKE5.01B moved to SBDP 1/25/2012
					●					
						●				
Blank For Future Use			9	●			10			Blank For Future Use
					●					
						●				
Blank For Future Use			11	●			12			Blank For Future Use
					●					
						●				
Blank For Future Use			13	●			14			Blank For Future Use
					●					
						●				
Section 2 Feed From Section 1										
8 SETS 4#600 MCM al, 1#600 MCM al G										
Feed Apartment 1	100	5225	15	●			16	5225	100	Feed Apartment 2
		5225			●			5225		
Feed Apartment 3	100	5225	17			●	18	5225	100	Feed Apartment 4
		5225		●				5225		
Feed Apartment 5	100	5225	19		●		20	5225	100	Feed Apartment 6
		5225				●		5225		
Feed Apartment 7	100	5225	21	●			22	5225	100	Feed Apartment 8
		5225			●			5225		
Feed Apartment 9	100	5225	23			●	24	5225	100	Feed Apartment 10
		5225		●				5225		
Feed Apartment 11	100	5225	25		●		26	5225	100	Feed Apartment 12
		5225				●		5225		
Feed Apartment 13	100	5225	27	●			28	5225	100	Feed Apartment 14
		5225			●			5225		
Feed Apartment 15	100	5225	29			●	30	5225	100	Feed Apartment 16
		5225		●				5225		
Feed Apartment 17	100	5225	31		●		32	5225	100	Feed Apartment 18
		5225				●		5225		
Feed Apartment 19	100	5225	33	●			34	5225	100	Feed Apartment 20
		5225			●			5225		
Spare	20		35			●	36		20	Spare
Section 3 Feed From Section 1										
8 SETS 4#600 MCM al, 1#600 MCM al G										
Feed Apartment 21	100	5225	37	●			38	5225	100	Feed Apartment 22
		5225			●			5225		
Feed Apartment 23	100	5225	39			●	40	5225	100	Feed Apartment 24
		5225		●				5225		
Feed Apartment 25	100	5225	41		●		42	5225	100	Feed Apartment 26
		5225				●		5225		
Feed Apartment 27	100	5225	43	●			44	5225	100	Feed Apartment 28
		5225			●			5225		
Feed Apartment 29	100	5225	45			●	46	5225	100	Feed Apartment 30
		5225		●				5225		
Feed Apartment 31	100	5225	47		●		48	5225	100	Feed Apartment 32
		5225				●		5225		
Feed Apartment 33	100	5225	49	●			50	5225	100	Feed Apartment 34
		5225			●			5225		
Feed Apartment 35	100	5225	51			●	52	5225	100	Feed Apartment 36
		5225		●				5225		
Feed Apartment 37	100	5225	53		●		54	5225	100	Feed Apartment 38
		5225				●		5225		
Feed Apartment 39	100	5225	55	●			56	5225	100	Feed Apartment 40
		5225			●			5225		
Spare	20		57			●	58		20	Spare

TOTAL VA		
	A	27124
	B	263934
	C	249070
TOTAL CONNECTED LOAD		784128

SEE BUILDING LOAD CALC SHEET FOR DIVERSIFIED APARTMENT LOADS.

ELECTRICAL PANEL SBDP SCHEDULE

VOLTS: 120/208V-3Ø-4W
MAINS: 800 AMP MLO 100000 AIC
3 SETS 4#400 MCM al, 1#3/0al G IN (3) 3"C
MOUNTING: SURFACE

■ SWITCHING BREAKER
▲ GFI TYPE BREAKER
✱ AFCI TYPE BREAKER

CIRCUIT DESCRIPTION	TRIP AMPS	TOTAL VA	CKT NO.	A	B	C	CKT NO.	TOTAL VA	TRIP AMPS	CIRCUIT DESCRIPTION	
Feed Panel SBA	175	1412	1	●			2	2176	300	Feed Panel SAC	
		14772			●			22831			
		1782				●		19735			
Feed Panel SBB	80	6022	3	●			4	5534	60	Feed Panel SBC	
		5732			●			3404			
		6022				●		4334			
Feed Elevator	125	10440	5	●			6	8292	100	Feed Panel DPH (moved from MDP 12/25/2012)	
		10440			●			8292			
		10440				●		8292			
Heating Pumps P1 & P2	50	2004	7	●			8	3600	50	Sewage Pumps Dosing Chamber (moved from MDP 12/25/2012)	← FINAL SIZE T.B.D.
		2004			●			3600			
		2004				●		3600			
Blank For Future Use			9	●			10	3600	50	Sewage Pumps Clear Well (moved from MDP 12/25/2012)	← FINAL SIZE T.B.D.
					●			3600			
						●		3600			
Blank For Future Use			11	●			12			Blank For Future Use	
					●						
						●					
Blank For Future Use			13	●			14			Blank For Future Use	
					●						
						●					

TOTAL VA		
	A	75320
	B	74535
	C	74203
TOTAL CONNECTED LOAD		224064

Building Load Calc Sheet

Job Name: Northbrook Village II Berlin MA
Buiding Apartment Load

General lighting:
Unit Square Feet: 20747 x 3 Watts per Square foot = 622
39 x Small Appliances @ 3000 = 1170
Total Lighting = 1792

First 3000 @ 100% = 300
3001 - 120000 @35% = 4089
120001 and up @25% = 1481
Total = 58,78

39 x Refrigerator @ 830 va x 75% = 2427
39 x Bath Heater @ 1500 va = 5850
39 x A/C Unit 2 @ 1500 va = 1170
39 x Range Per N.E.C. = 6150
39 x Ceiling Fan 2 @ 1440 va x 75% = 8424

Total For 39 Apartments = 4042
1 Unbalanced Unit = 1288
Total For 40 Apartments = 477

Unit Load Calc Sheet

Job Name: Northbrook Village II Berlin MA
Typical Unit

General lighting:
Unit Square Feet: 538 x 3 Watts per Square foot = 1617 va
Small Appliances = 3000 va

Total Lighting = 4617 va

First 3000 @ 100% = 3000 va
3001 - 120000 @35% = 566 va
120001 and up @25% = 0 va

Total = 3566 va

Refrigerator 1 @ 830w = 830 va
Bath Heater @ 1500w = 1500 va
A/C Units 2 @ 1500w = 3000 va
Range 1 @ 8000w = 8000 va
Ceiling Fan 2 @ 1440w = 2880 va

Total Unit Load = 19776 / 208 = 95.1 A

COPPER
CONNECTIO
PIPE. CONNE
ENTRANCE INTO
FEET OF METAL P

#3/0 COPPER TO TELE

#3/0 COPPER TO TELEPHONE

24" X 6" X 1/4" PREMANUFACTURED CO
GROUND BAR WITH INSULATED WALL STAN
& PRE-DRILLED HOLES & TAMPER RESISTAN
BOLT CONNECTIONS THROUGH HOLES.

COPPER GROUND WITH LISTED CLAMP-ON CONNECTION TO INDOOR ABOVEGROUND WATER PIPE, CONNECTED WITHIN 5 FEET OF POINT OF ENTRANCE INTO THE BUILDING (HAVING 10 FEET OF METAL PIPE IN GROUND).

COPPER GROUND EXOTHERMICALLY WELDED TO BUILDING STEEL.

COPPER GROUND EXOTHERMICALLY WELDED TO ROD ELECTRODES (THREE 5/8" X 10'-0" COPPER CLAD GROUND RODS, 10'-0" APART, LOOPED IN A TRIAD WITH #2 COPPER. PROVIDE HANDHOLE & COVER ACCESS. (VEHICLE RATED)

2 SINGLE POINT GROUND DETAIL

Scale: N.T.S.

NOTES

1. SEE SYMBOLS, SCHEDULES, NOTES & DETAILS.
2. ALL GROUNDING & BONDING WIRING SHALL BE SIZED PER N.E.C. REQUIREMENTS.

DOMESTIC WATER PUMP
DWP
120/208V-3Ø-4
FURNISH & INSTALL 100A 42
NEUTRAL PANELBOARD IN DOM
PUMP HOUSE. COORDINATE BREA
EQUIPMENT SUPPLIER (PROVIDE 20%
(P-20A CIRCUIT BREAKER FOR FUTURE