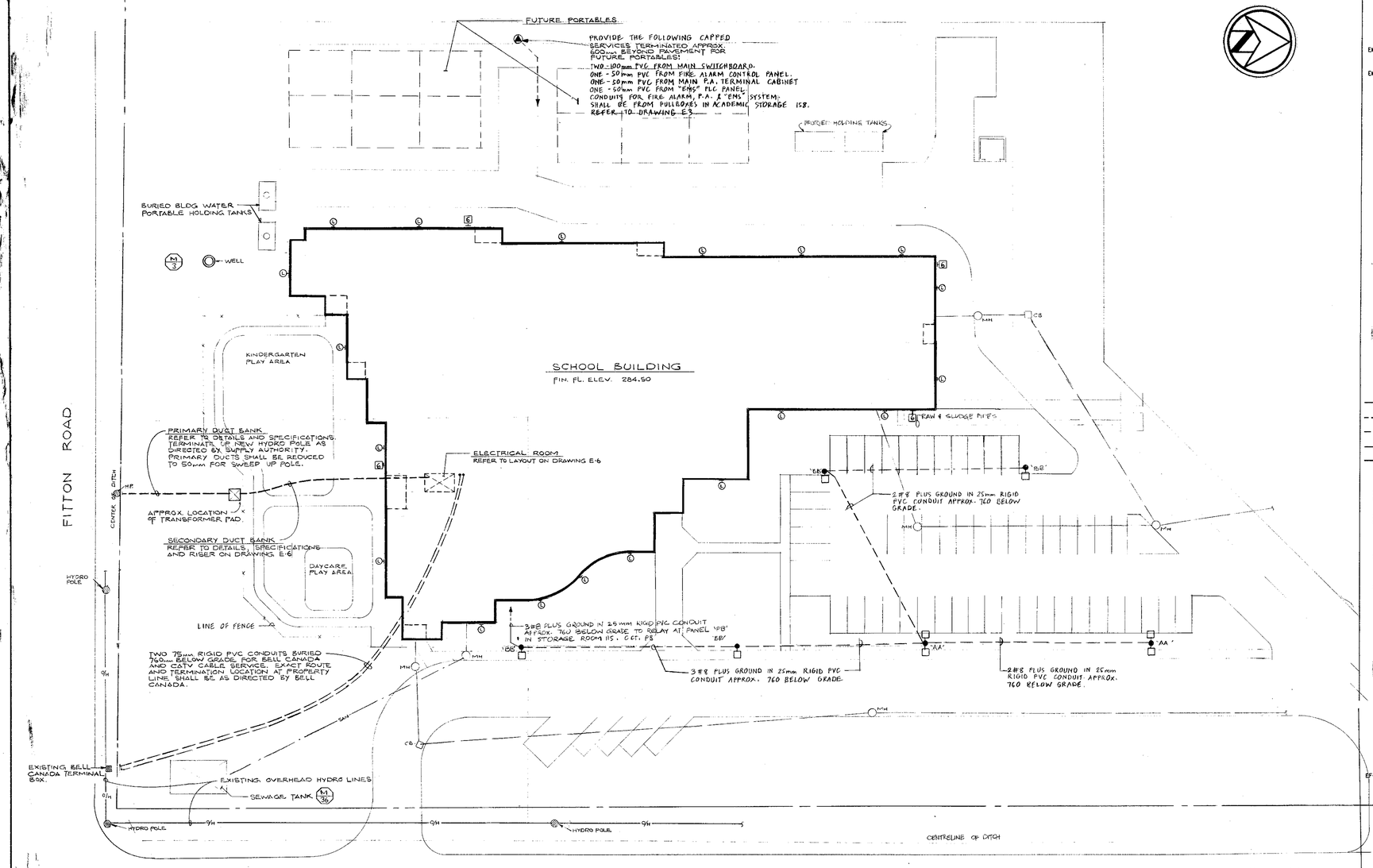


SITE PLAN

SCALE ~ 1:300

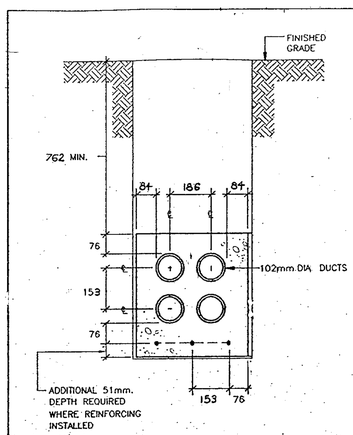
NOTES:

1 - CO-ORDINATE ROUTES OF BURIED DUCTS AND CONDUITS WITH MECHANICAL AND STRUCTURAL SECTIONS OF WORK TO AVOID CONFLICTIONS WITH FOOTINGS, STORM DRAINS, ETC.

2 - EXACT LOCATIONS OF POST-TOP LUMINAIRES SHALL BE AS DIRECTED ON SITE. GENERALLY, POSTS SHALL BE LOCATED 915mm AWAY FROM CURBS.

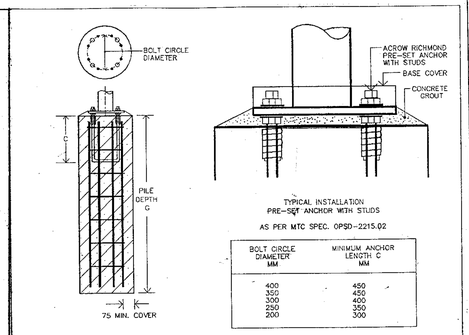
3 - REFER TO ARCHITECTURAL FLOOR PLANS FOR EXACT LOCATION AND MOUNTING HEIGHTS OF TYPE 'L' LIGHTING BRACKETS.

4 - LOCATION OF TRANSFORMER PAD AND ROUTE OF PRIMARY DUCT BANK SHALL BE VERIFIED WITH SUPPLY AUTHORITY PRIOR TO CONSTRUCTION OR EXCAVATION.



PRIMARY & SECONDARY DUCT BANK DETAIL. N.T.S.

REFER TO SPECIFICATIONS FOR DESCRIPTION.



BOLT CIRCLE DIAMETER MM	MINIMUM ANCHOR LENGTH C MM
400	450
350	450
300	400
250	350
200	300

BORED CONCRETE PILE

VERTICAL REINFORCING: 6-20 M BARS 10M TIES AT 400mm

MATERIALS: CONC. $f'c$ = 20 MPa REINF. f_y = 400MPa

MINIMUM PILE DIAMETER = 600 mm
MINIMUM BOLT SIZE = 25 mm
MINIMUM PILE DEPTH BELOW GRADE =1500 mm TO UNDISTURBED BED LEVEL

PILE DEPTH G BELOW FINISHED GRADE

1. TO BE SELECTED BASED ON CALCULATED BASE SHEAR AND BASE MOMENT IN ACCORDANCE WITH NBC 1985 TABLE 4.1.9.A & FIGURE B-16 OF NBC 1985 SUPPLEMENT FOR WIND PRESSURE, 13 mm RADIAL ICE, & EFFECTIVE PROJECTED AREA OF LUMINAIRES.

SUBMIT CALCULATIONS FOR APPROVED LUMINAIRES & POLES BEFORE INSTALLING

2. TO BE NOT LESS THAN 1500MM BELOW FINISHED GRADE.

3. TOP OF BASE ABOVE FINISHED GRADE AS SPECIFIED. IN EXCESS OF 150MM, INCREASE TO 8 VERTICAL REINFORCING BARS, AND INCREASE ANCHOR LENGTH BY 100MM.

TYPICAL BASE FOR LIGHTING POLES N.T.S

SYMBOLS

- A — FLUORESCENT FIXTURE – LETTER DENOTES TYPE
- B — INCANDESCENT OR HID CEILING FIXTURE – LETTER DENOTES TYPE
- HC — INCANDESCENT OR HID WALL FIXTURE – LETTER DENOTES TYPE
- NL — INDICATES NIGHT LIGHT CIRCUIT
- EMA X1 — EXIT LIGHT FIXTURE – NUMBER DENOTES TYPE – ADJACENT LETTERS DENOTE ASSOCIATED BATTERY
- EMA 1 — EMERGENCY LIGHTING FIXTURE – NUMBER DENOTES TYPE – ADJACENT LETTERS DENOTE ASSOCIATED BATTERY
- G — STANDARD DUPLEX RECEPTACLE – DIAGONAL STROKE DENOTES MOUNTED ABOVE COUNTER – LETTER 'G' DENOTES SPECIAL GUARD TYPE AS SPECIFIED.
- DUPLEX GROUND FAULT INTERRUPTER RECEPTACLE – DIAGONAL STROKE DENOTES MOUNTED ABOVE COUNTER.
- 20 AMP SINGLE RECEPTACLE
- STANDARD DUPLEX RECEPTACLE (SPLIT FEED) – DIAGONAL STROKE DENOTES MOUNTED ABOVE COUNTER
- WP — STANDARD DUPLEX RECEPTACLE WITH WEATHERPROOF ENCLOSURE
- SWITCH AND STANDARD DUPLEX RECEPTACLE MTD. IN TWO GANG BOX
- SPECIAL OUTLET AS NOTED
- HD — HAND DRYER
- DR — ELECTRO-MAGNETIC DOOR RELEASE CONNECTED TO SWITCHING RELAY AT FIRE ALARM CONTROL PANEL.
- A — HEAT PUMP CONNECTION – REFER TO SCHEDULE
- OUTLET BOX WITH BLANK METAL COVER
- PANELBOARD
- $ — SINGLE POLE LIGHT SWITCH
- $2 — TWO POLE LIGHT SWITCH
- $3 — THREE WAY LIGHT SWITCH
- $K — KEY OPERATED SWITCH
- B4 — ADJACENT CODE LETTERS AND NUMBERS INDICATE OUTLET WIRED TO CIRCUIT NO.4 OF PANEL B
- CONDUIT RUN CONCEALED IN WALLS OF CEILING UNLESS NOTED OTHERWISE
- CONDUIT CONCEALED IN OR BELOW FLOOR
- P.A. CONDUIT 13MM UNLESS NOTED OTHERWISE
- TV — TELEVISION CONDUIT 19MM UNLESS NOTED OTHERWISE
- C — COMPUTER CONDUIT SYSTEM – 25mmC UNLESS NOTED OTHERWISE
- 1 — FIRE ALARM SIGNAL WALL MOUNTED – NUMBER DENOTES SIGNAL CIRCUIT
- 2 G — FIRE ALARM MANUAL STATION – LETTER G DENOTES GUARD, NUMBER DENOTES ZONE
- 2 G — AUTOMATIC FIRE DETECTOR RATE OF RISE 135 DEG. F. UNLESS NOTED OTHERWISE – NUMBER DENOTES ZONE, LETTER G DENOTES GUARD
- 2 — PHOTO ELECTRIC SMOKE DETECTOR – NUMBER DENOTES ZONE
- 120V. SELF-CONTAINED IONIZATION TYPE SMOKE DETECTOR C/W BUILT-IN ALARM
- 2 — DUCT TYPE SMOKE DETECTOR – NUMBER DENOTES ZONE
- CLOCK HANGER RECEPTACLE C/W CLOCK
- A — P.A. ADMINISTRATIVE STATION
- 2H — P.A. SPEAKER WALL MOUNTED – NUMBER DENOTES TYPE
- 1 — P.A. SPEAKER CEILING MOUNTED – NUMBER DENOTES TYPE
- C — P.A. SPEAKER CONTROL SWITCH
- V — P.A. SPEAKER VOLUME CONTROL
- M — MICROPHONE OUTLET
- P — PROJECTOR JACK
- TELEPHONE WALL OUTLET
- COMPUTER WALL OUTLET.
- F / S — MOTOR STARTER. LETTER F DENOTES FLUSH MTD, P= PILOT LIGHT. S=SURFACE MTD. EF-3 = EQUIPMENT CONTROLLED BY STARTER (EF-3)
- WP — DISCONNECT SWITCH – WP DENOTES WEATHERPROOF
- THERMOSTAT
- COMBINATION MOTOR STARTER AND DISCONNECT
- TIME SWITCH
- ELECTRIC HEATING UNIT – LETTER DENOTES TYPE
- TELEVISION WALL OUTLET – TERMINATE 19MM CONDUIT IN SPLITTER JUNCTION BOX IN ACCESSIBLE CORRIDOR CEILING SPACE FROM EACH OUTLET
- TV — SUITABLE SIZE JUNCTION BOXES CONCEALED IN CORRIDOR CEILING SPACES FOR TELEVISION SPLITTERS AND MULTI-TAP UNITS
- M.H. — LETTERS DENOTE MOUNTING HEIGHT ABOVE FINISHED GROUND FLOOR SLAB
- C.P. — CLASSROOM CONTROL PANEL BY ARCHITECTURAL DIVISION, FOR ELECTRICAL DEVICES PROVIDED BY ELECTRICAL DIVISION 16. REFER TO TYPICAL CONTROL PANEL DETAIL ON ARCHITECTURAL DRAWINGS.
- AA — LIGHTING STANDARD/FLOODLIGHTING. LETTER DENOTES TYPE
- EM / EMA — EMERGENCY LIGHTING BATTERY UNIT C/W RECEPTACLE ADJACENT – 1980MM MH ADJACENT LETTERS IDENTIFY BATTERY
- MD — MOTORIZED DAMPER
- PIR — WALL MOUNTED SECURITY ALARM SYSTEM INFRARED SENSOR –NUMBER DENOTES ZONE
- RA — SECURITY ALARM SYSTEM REMOTE KEYPAD SWITCH
- D — SECURITY ALARM SYSTEM DOOR CONTACT SWITCH
- S — SECURITY ALARM SYSTEM LOCAL SIREN.
- UH / FF — 'UH' DENOTES UNIT HEATER OUTLET; 'FF' DENOTES FORCE FLOW HEATER OUTLET.

DRAWING REFERENCES

- M 1 — REFERS TO ITEM IN MECHANICAL EQUIPMENT SCHEDULE
- 1 / E2 — NOTE No. / NOTE LOCATION

R.J.BLACK & ASSOCIATES LTD.
CONSULTING ENGINEERS
5745 COOPERS AVENUE
MISSISSAUGA, ONTARIO L4Z 1R9
TELEPHONE: (416)507-4100 FAX: (416)507-4107

No.	Date	Description
1	FEB. 07, 1994	ISSUED FOR TENDER

Revisions

Dimensions are to be checked and verified by the Contractor on the site

NOTRE DAME CATHOLIC SCHOOL

FITTONS RD. ORILLIA
SIMCOE COUNTY SEPARATE SCHOOL BOARD

SITE PLAN
ELECTRICAL

R.H. CARTER ARCHITECTS INC.
SUITE 200 197 KIPLING AVENUE
ETOBICOKE ONTARIO M8Z 5H3
TEL 416-233-5583 FAX 416-233-5585

REGISTERED PROFESSIONAL ENGINEER D.JAIN PROVINCE OF ONTARIO

93-121

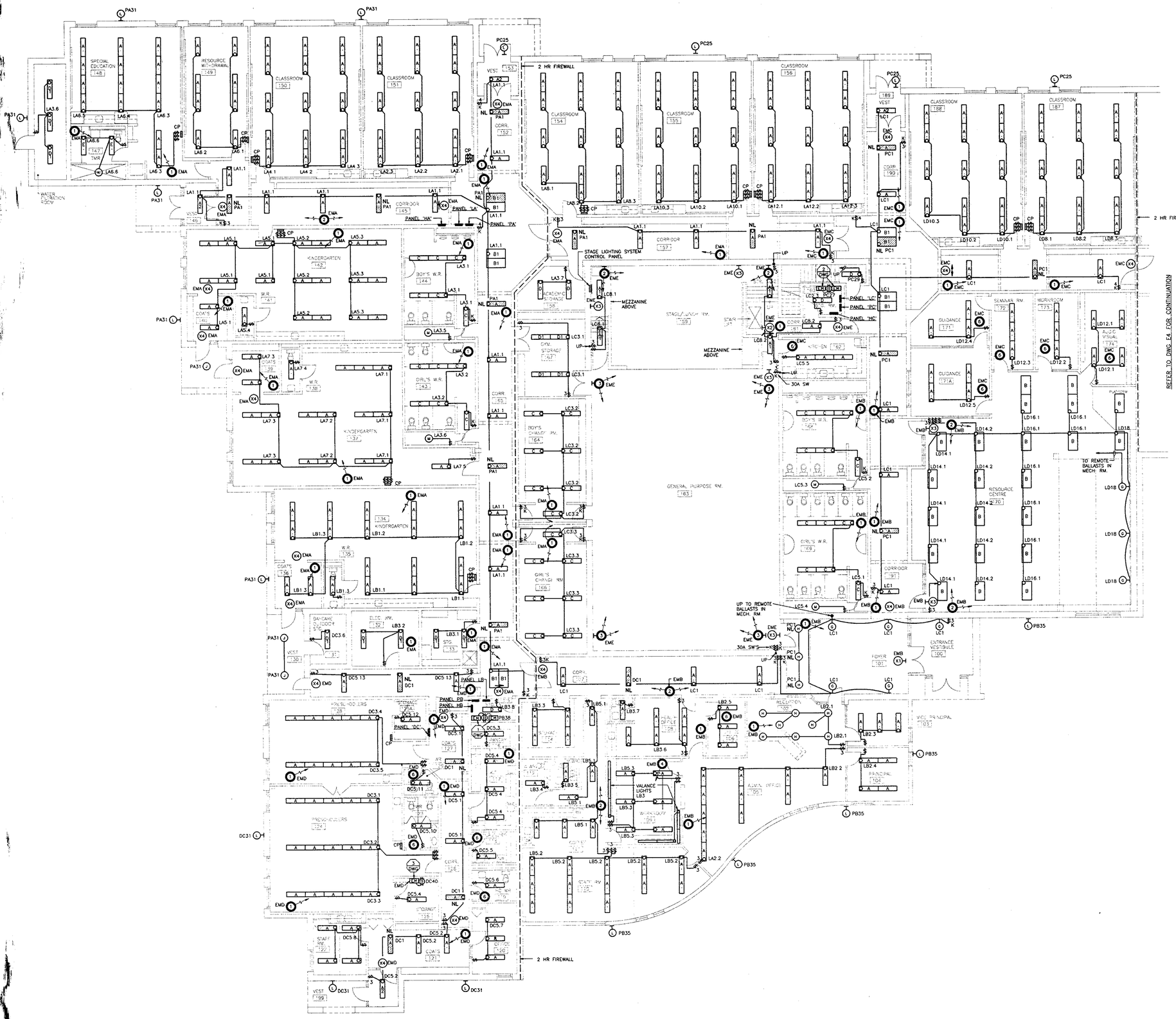
Project No.	Dwg. No.
92 - 56	E-1

True North	Dwg. North
Scale	AS SHOWN
Date	FEB. 4, 1994
Printed	FEB. 4, 1994

DRAWING NOTES

1. EMERGENCY LIGHTING BATTERY UNITS 'EMA' AND 'EMB', 1980 MH CCT. PB38
2. EMERGENCY LIGHTING BATTERY UNIT 'EMC' AND 'EME', 1980 MH CCT. PC27
3. EMERGENCY LIGHTING BATTERY UNIT 'EMD', 1980 MH CCT DC40

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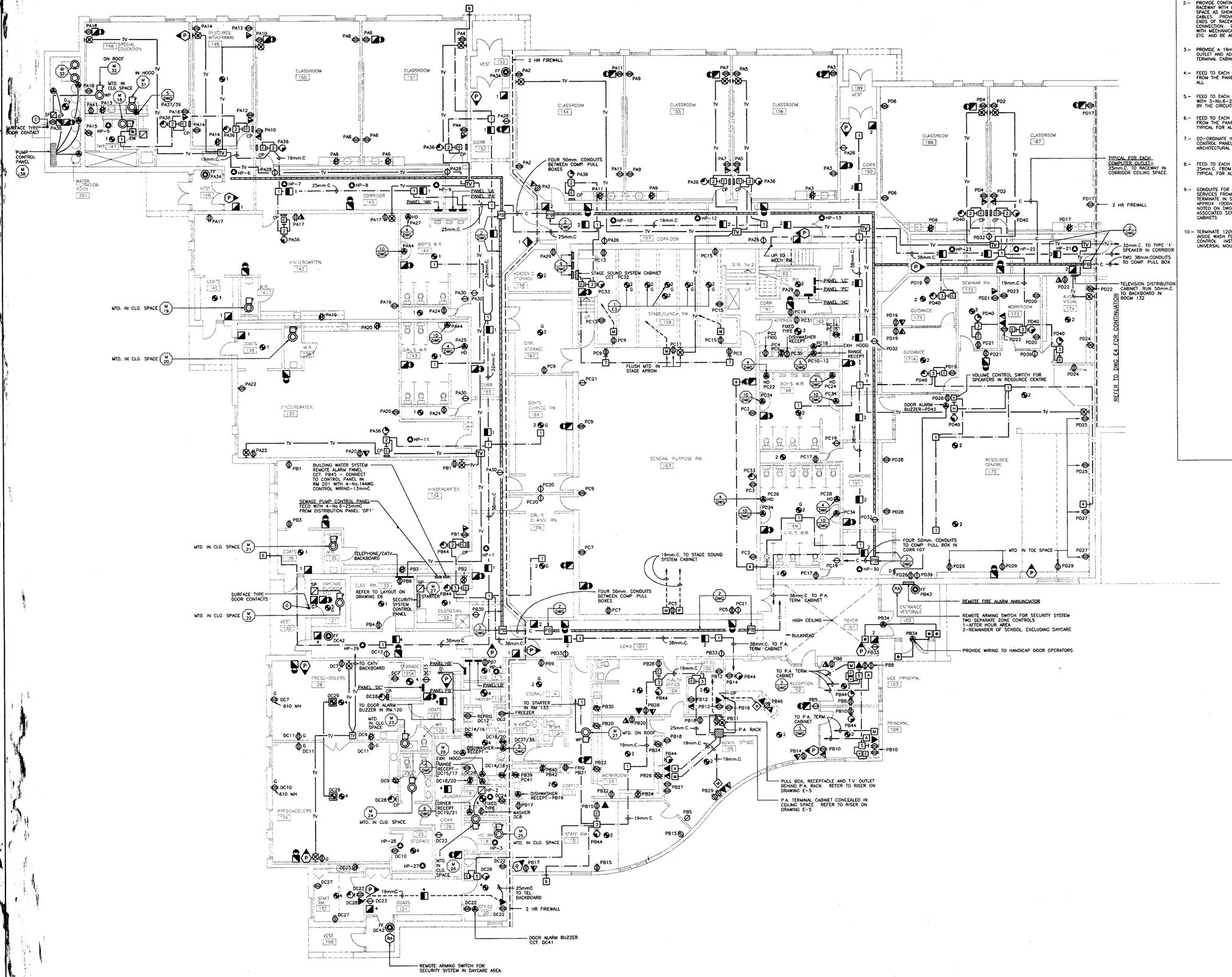
FITTONS RD. ORILLIA
SIMCOE COUNTY SEPARATE SCHOOL BOARD

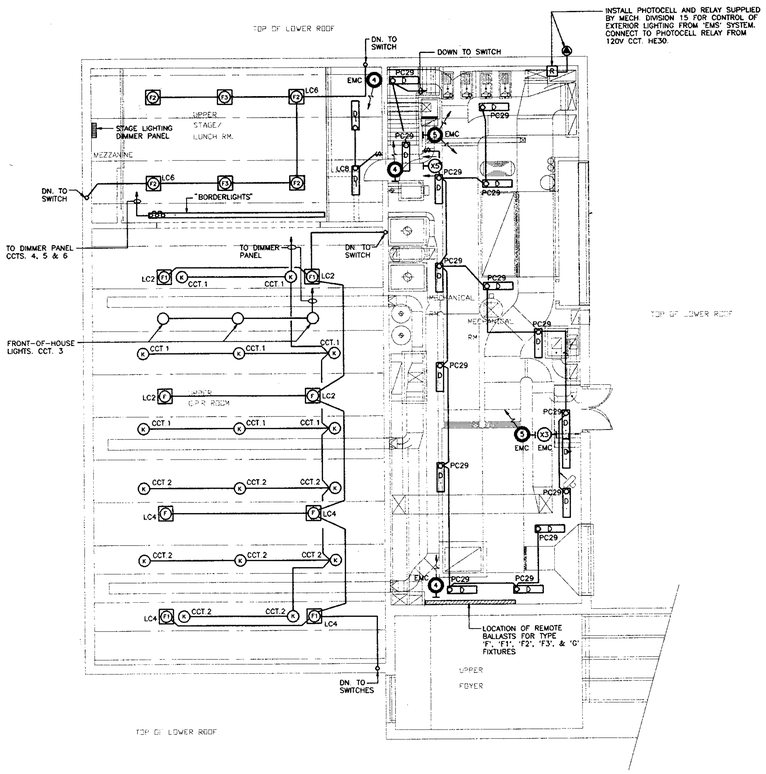
FLOOR PLAN LIGHTING ELECTRICAL

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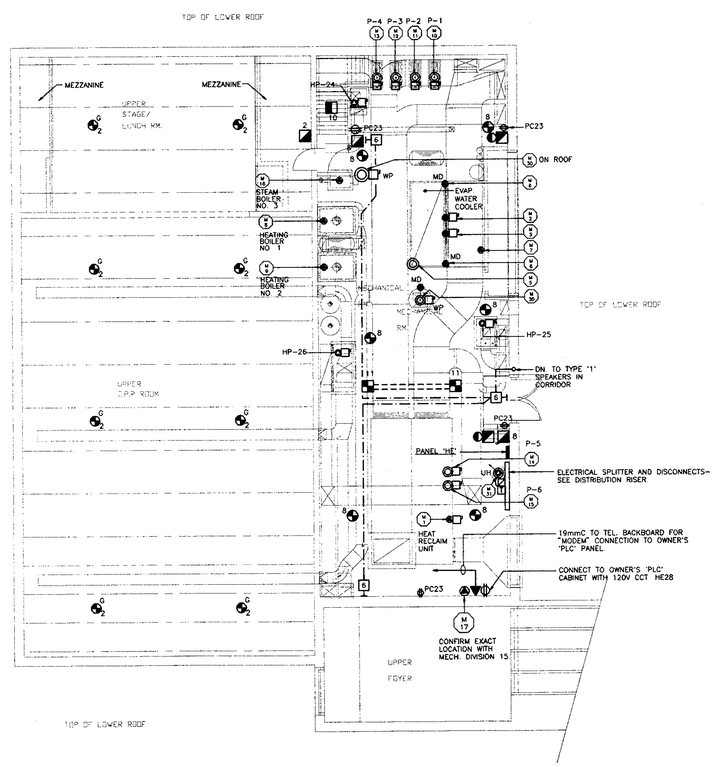
REGISTERED PROFESSIONAL ENGINEER
D. JAIN
PROVINCE OF ONTARIO
93 - 121

True North	Dwg. North
Scale	1:100
Date	FEB 4, 1994
Printed	FEB. 4, 1994
Project No.	92-56
Dwg. No.	E-2

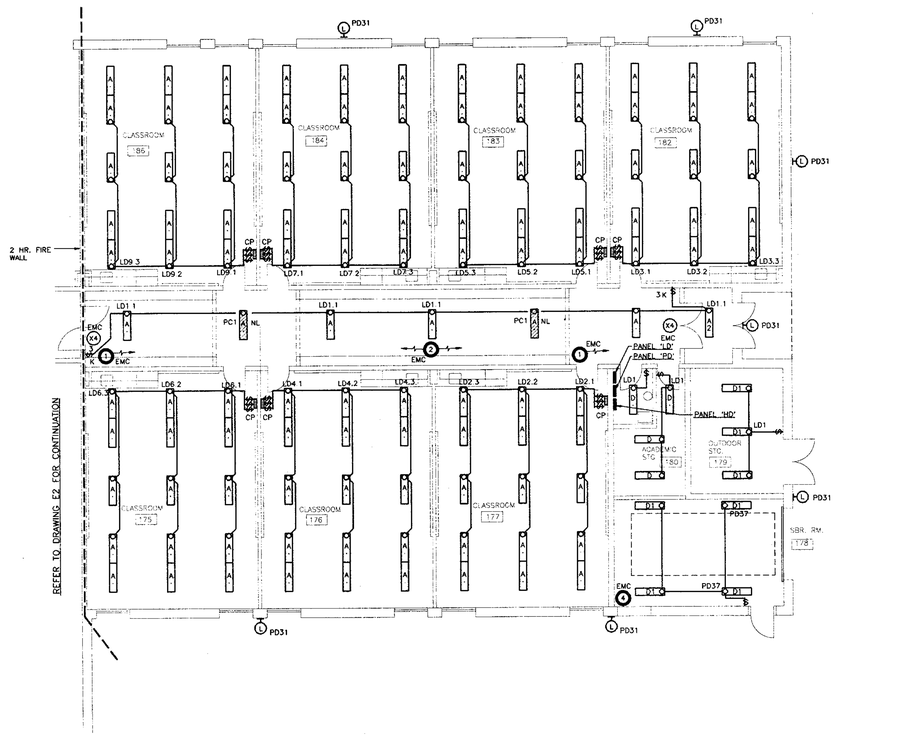

2 HR FIREWALL
FOUR 50mm. CONDUITS BETWEEN COMP. PULL BOXES
PANEL 'HA'
PANEL 'DA'
PANEL 'PA'
STAGE SOUND SYSTEM CABINET CCT PC32
UP TO MECH. RM.
PANEL 'LC'
PANEL 'PC'
PANEL 'HC'
FLUSH MTD IN STAGE APRON
19mm.C. TO STAGE SOUND SYSTEM CABINET
FOUR 50mm. CONDUITS TO COMP. PULL BOX IN CORR. 107
TYPICAL FOR EACH COMPUTER OUTLET - 25mm.C. TO RACEWAY IN CORRIDOR CEILING SPACE.
32mm.C. TO TYPE '1' SPEAKER IN CORRIDOR
TWO 35mm.CONDUITS TO COMP. PULL BOX
TELEVISION DISTRIBUTION CABINET RUN 50mm.C. TO BACKBOARD IN ROOM 132
REFER TO DWG. E4 FOR CONTINUATION
VOLUME CONTROL SWITCH FOR SPEAKERS IN RESOURCE CENTRE
DOOR ALARM BUZZER - PD42
BUILDING WATER SYSTEM REMOTE ALARM PANEL CCT. PB45 - CONNECT TO CONTROL PANEL IN RM. 201 WITH 4-No.14AWG CONTROL WIRING-13mmC
SEWAGE PUMP CONTROL PANEL FEED WITH 4-No.6-25mmC FROM DISTRIBUTION PANEL 'DP1'
TELEPHONE/CATV BACKBOARD
REFER TO LAYOUT ON DRAWING E6
SECURITY SYSTEM CONTROL PANEL
SURFACE TYPE DOOR CONTACTS
PUMP CONTROL PANEL
WATER FILTRATION ROOM 201
FOUR 50mm. CONDUITS BETWEEN COMP PULL BOXES
38mm.C. TO P.A. TERM. CABINET
HIGH CEILING
BULKHEAD
REMOTE FIRE ALARM ANNUNCIATOR
REMOTE ARMING SWITCH FOR SECURITY SYSTEM TWO SEPARATE ZONE CONTROLS 1-AFTER HOUR AREA 2-REMAINDER OF SCHOOL, EXCLUDING DAYCARE
PROVIDE WIRING TO HANDICAP DOOR OPERATORS
TO P.A. TERM CABINET
P.A. RACK
PULL BOX, RECEPTACLE AND T.V. OUTLET BEHIND P.A. RACK - REFER TO RISER ON DRAWING E-5
P.A. TERMINAL CABINET CONCEALED IN CEILING SPACE - REFER TO RISER ON DRAWING E-5
TO CATV BACKBOARD
TO DOOR ALARM BUZZER IN RM.120
TO STARTER IN RM 133
REFRIG DC12
FREEZER
DISHWASHER RECEPT.
EXH. HOOD RANGE RECEPT - DC15/17
DRYER RECEPT DC19/21
FIXED TYPE DISHWASHER RECEPT - PB19
WASHER DC8
25mmC TO TEL BACKBOARD
2 HR FIREWALL
DOOR ALARM BUZZER CCT DC41
REMOTE ARMING SWITCH FOR SECURITY SYSTEM IN DAYCARE AREA.
DAYCARE OUTDOOR STG.
MTD. IN CLG. SPACE
SURFACE TYPE DOOR CONTACTS
MTD. ON ROOF
MTD. IN TOE SPACE
CLASSROOM 150
CLASSROOM 151
CLASSROOM 154
CLASSROOM 155
CLASSROOM 156
CLASSROOM 188
CLASSROOM 187
CORRIDOR 157
CORRIDOR 190
CORRIDOR 191
CORRIDOR 107
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W.R. 109
W.R. 117
W.R. 111
W.R. 9
W.R. 20
W.R. 60
W.R. 68
W.R. 69
W.R. 122
W.R. 123
COFFEE 119

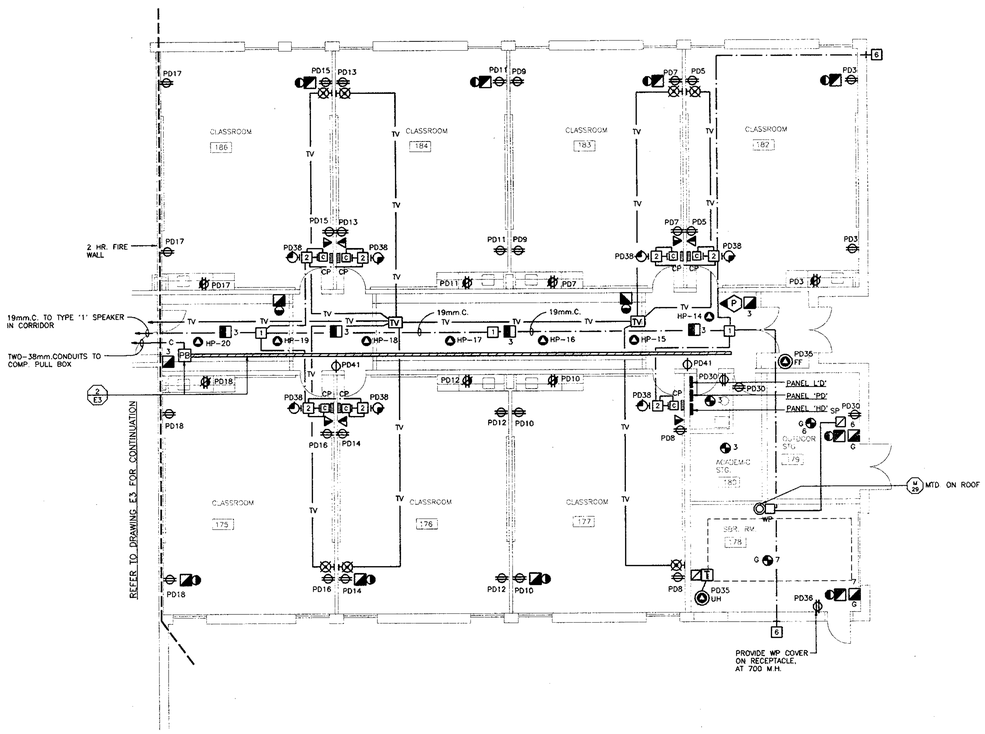


UPPER LEVEL – LIGHTING



UPPER LEVEL – POWER AND SYSTEMS





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Revisions

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NOTRE DAME CATHOLIC SCHOOL

FITTONS RD. ORILLIA
SIMCOE COUNTY SEPARATE SCHOOL BOARD

FLOOR PLANS

ELECTRICAL

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REGISTERED PROFESSIONAL ENGINEER D. JAIN PROVINCE OF ONTARIO
93 - 121

True North	Dwg. North
Scale	1:100
Date	FEB. 4, 1994
Printed	FEB. 4, 1994
Project No.	92-56
Dwg. No.	E-4

HEAT PUMP WIRING SCHEDULE

NOTE: CONNECT TO UNIT TERMINALS ONLY

HP NO.	MCA	VOLTS/PHASE	BREAKER SIZE	FEEDER SIZE	PANEL & CCT. NOS.
HP- 1	17.7	208/3	30A, 3P	3#10-13C	HB.1/3/5
HP- 2	16.5	208/3	30A, 3P	3#12-13C	HB.7/9/11
HP- 3	12.5	208/1	20A, 2P	2#12-13C	HB 2/4
HP- 4	11.3	208/1	20A, 2P	2#12-13C	HB.6/8
HP- 5	12.5	208/3	20A, 3P	3#12-13C	HA 1/3/5
HP- 6	11.3	208/1	20A, 2P	2#12-13C	HA 2/4
HP- 7	16.5	208/3	30A, 3P	3#12-13C	HA.7/9/11
HP- 8	22.7	208/3	40A, 3P	3#10-13C	HA.6/8/10
HP- 9	16.5	208/3	30A, 3P	3#12-13C	HA.13/15/17
HP- 10	16.5	208/3	30A, 3P	3#12-13C	HA.12/14/16
HP- 11	17.7	208/3	30A, 3P	3#10-13C	HB.13/15/17
HP- 12	16.5	208/3	30A, 3P	3#12-13C	HC.1/3/5
HP- 13	16.5	208/3	30A, 3P	3#12-13C	HC.2/4/6
HP- 14	16.5	208/3	30A, 3P	3#12-13C	HD.1/3/5
HP- 15	16.5	208/3	30A, 3P	3#12-13C	HD.2/4/6
HP- 16	16.5	208/3	30A, 3P	3#12-13C	HD.7/9/11
HP- 17	16.5	208/3	30A, 3P	3#12-13C	HD.8/10/12
HP- 18	16.5	208/3	30A, 3P	3#12-13C	HD.13/15/17
HP- 19	16.5	208/3	30A, 3P	3#12-13C	HD.14/16/18
HP- 20	16.5	208/3	30A, 3P	3#12-13C	HD.19/21/23
HP- 21	16.5	208/3	30A, 3P	3#12-13C	HC.17/19/21
HP- 22	16.5	208/3	30A, 3P	3#12-13C	HC.23/25/27
HP- 23	16.5	208/3	30A, 3P	3#12-13C	HC.20/22/24
HP- 24	10	208/3	20A, 3P	3#12-13C	HC.8/10/12
HP- 25	33.7	208/3	70A, 3P	3#8-25C	HC.11/13/15
HP- 26	75.3	208/3	125A, 3P	3#4-32C	HC.14/16/18
HP- 27	11.3	208/1	20A, 2P	2#12-13C	DC49/51
HP- 28	17.7	208/3	30A, 3P	3#10-13C	DC44/46/48
HP- 29	10	208/3	20A, 3P	3#12-13C	DC43/45/47
HP- 30	11.3	208/1	20A, 2P	2#12-13C	HC.7/9

MECHANICAL EQUIPMENT SCHEDULE

ITEM NO.	EQUIPMENT	STARTER LOCATION	SIZE KW	PHASE	VOLT	WIRING/AWG	BREAKER SIZE	PANEL & CCT. NO.	CONNECTION PROVISION	CONNECTION NOTES
M 1	HEAT RECOVERY UNIT	MECH. ROOM	KW 14.9 / 11.2 MCA 230	3	208	3#8-19C 3#6-19C		SPLITTER	C	5
M 2	EVAP. WATER COOLER FAN	-	KW 14.9	3	208	3#4-25C		SPLITTER	B	
M 3	WELL PUMP	WATER FILTRATION ROOM	373KW	1	120	3#10-19C		CONTROL PANEL		8
M 4	EVAP. WATER COOLER CAPACITY CONTROL DAMPER	MECH. ROOM	AMP. 5	1	120	2#12-13C	15A,1P	HE-2	C	
M 5	EVAP. WATER COOLER SPRAY WATER PUMP	-	KW. 1.1	3	208	3#12-13C		SPLITTER	B	
M 6	EVAP. WATER COOLER INLET & OUTLET DAMPER	-	AMP. 15	1	120	2#12-13C	15A,1P	HE-10		2
M 7	EVAP. WATER COOLER CHEMICAL FEED SYSTEM	-	AMP. 15	1	120	2#12-13C	15A,1P	HE-12		
M 8	HEATING BOILER #1	-	AMP. 15	1	120	2#12-13C	15A,1P	HE-7		1
M 9	HEATING BOILER #2	-	AMP. 15	1	120	2#12-13C	15A,1P	HE-9		1
M 10	HEATING PUMP P-1	-	KW 7.46	3	208	3#8-19C		SPLITTER	B	
M 11	HEATING PUMP P-2	-	KW 7.46	3	208	3#8-19C		SPLITTER	B	
M 12	HEATING PUMP P-3	-	KW. 2.24	3	208	3#12-13C		SPLITTER	B	
M 13	HEATING PUMP P-4	-	KW. 2.24	3	208	3#12-13C		SPLITTER	B	
M 14	HEATING PUMP P-5	-	WATT 560	3	208	3#12-13C		SPLITTER	B	
M 15	HEATING PUMP P-6	-	WATT 560	3	208	3#12-13C		SPLITTER	B	
M 16	NOT USED									
M 17	EMS SYSTEM	MECH. ROOM	AMP. 20	1	120	2#12-13C	20A,1P	HE-22		2
M 18	EXH. FAN EF-1	SPECIAL EDUCATION	AMP. 1.0	1	120	2#12-13C	15A,1P	PA.32	B	
M 19	EXH. FAN EF-2		AMP .35	1	120	2#12-13C	15A,1P	PA.33		3
M 20	EXH. FAN EF-3		AMP. .35	1	120	2#12-13C	15A,1P	PA.35		3
M 21	EXH. FAN EF-4		AMP. .35	1	120	2#12-13C	15A,1P	PB.37		3
M 22	EXH. FAN EF-5	DAY CARE STORAGE	AMP. 1.0	1	120	2#12-13C	15A,1P	DC.30	B	
M 23	EXH. FAN EF-6		AMP. .35	1	120	2#12-13C	15A,1P	DC.32		3
M 24	EXH. FAN EF-7		AMP. 1.0	1	120	2#12-13C	15A,1P	DC.34		3
M 25	EXH. FAN EF-8		AMP. 1.0	1	120	2#12-13C	15A,1P	DC.36		3
M 26	NOT USED									
M 27	EXH. FAN EF-10	CUSTODIAN 133	WATT 29.8	1	120	2#12-13C	15A,1P	PB.36	B	
M 28	EXH. FAN EF-11	RM 117 KITCHEN HOOD	WATT 120	1	120	2#12-13C	15A,1P	DC.33		4
M 29	EXH. FAN EF-12	STORAGE #179	WATT 74.6	1	120	2#12-13C	15A,1P	PD.33	B	
M 30	EXH. FAN EF-13	RM 162 KITCHEN HOOD	WATT 62	1	120	2#12-13C	15A,1P	PC18		6
M 31	EXH. FAN EF-14	RM 148 KITCHEN HOOD	WATT 62	1	120	2#12-13C	15A,1P	PA32		4
M 32	EXH. FAN EF-9	WATER FILTRATION ROOM	WATT 29.8	1	120	2#12-13C	15A,1P	PA32	B	
M 34	SUPPLY AIR FAN SF-1	MECH. ROOM	WATT 186.5	1	120	2#12-13C	15A,1P	HE-24	B	7
M 35	UNIT HEATER	MECH. ROOM	WATT 94	1	120	2#12-13C	15A,1P	HE-26	B	
M 36	DOM H.W. RECIRC. PUMP	MECH. ROOM	WATT 62	1	120	2#12-13C	15A,1P	HE-1	B	
M 37	SEWAGE PUMPS	CUSTODIAN 133	2 AT 3.73KW	3	208	3#8 TO EACH-38C.			CONTROL PANEL	9
M 38	BUILDING WATER PUMPS	WATER FILTRATION ROOM	2 AT 1.49KW	3	208	3#12 TO EACH-32C.			CONTROL PANEL	10
M 39	CONTROL PANEL FOR WELL PUMP & BUILDING WATER PUMPS	DITTO		3	208	4#6-25C.	50A,3P		DIST'R PANEL 1	11

ELECTRICAL PROVISIONS FOR TYPE SCHEDULE:

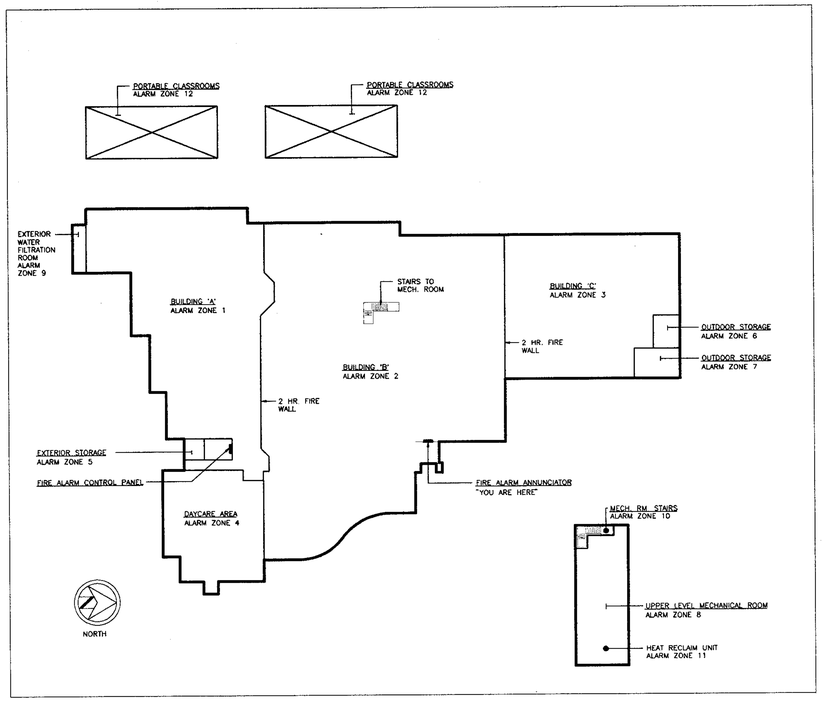
TYPE 'A' - PROVIDE NON-FUSIBLE SAFETY DISCONNECT SWITCH, WIRE AND CONNECT TO UNIT LINE TERMINALS. SWITCH IS TO BE WEATHERPROOF TYPE IF FOR EQUIPMENT MOUNTED OUTDOOR.

TYPE 'B' - MOUNT AND CONNECT STARTER SUPPLIED BY MECH. DIV. 15. WIRE AND CONNECT TO UNIT MOTORS. PROVIDE DISCONNECT SWITCH AS REQUIRED.

TYPE 'C' - PROVIDE AND CONNECT ELECTRICAL SUPPLY NOTED TO LINE SIDE OF EQUIPMENT PANEL.

MECHANICAL EQUIPMENT NOTES:

1. PROVIDE AND CONNECT 120 VOLT DISCONNECT SWITCH AT DOOR.
2. PROVIDE 120 VOLT OUTLET ADJACENT TO EQUIPMENT
3. WIRE TO START FROM LIGHT SWITCH.
4. WIRE AND CONNECT TO KITCHEN HOOD FAN AND HOOD LIGHTS.
5. THERMISTOR LOCATED AT MOTOR. WIRE TO STARTER FOR SHUTDOWN
6. WIRE AND CONNECT TO KITCHEN HOODLIGHTS AND REMOTE FAN ON ROOF.
7. CONNECT FAN MOTOR & STARTER TO OPERATE FROM REVERSE ACTING THERMOSTAT AND TO OPERATE ASSOCIATED MOTORIZED DAMPERS.
8. PROVIDE 3#10 AWG AND 6#12 AWG CONTROLS TERMINATED IN EXPLOSION PROOF WEATHERPROOF JUNCTION BOXES IN WELL FROM CONTROL PANEL LOCATED IN FILTRATION ROOM 201. CONNECT TO WELL PUMP AND CONTROLS IN ACCORDANCE WITH MANUFACTURERS WIRING DIAGRAMS.
9. PROVIDE 6#8 AWG AND 8#14 AWG CONTROLS TERMINATED IN EXPLOSION PROOF WEATHERPROOF JUNCTION BOXES IN SEWAGE TANK, FROM CONTROL PANEL LOCATED IN CUSTODIAN ROOM 133. CONNECT TO SEWAGE PUMPS AND CONTROLS IN ACCORDANCE WITH MANUFACTURERS WIRING DIAGRAMS.
10. PROVIDE 6#12 AWG AND 14#14 AWG CONTROLS TO BUILDING WATER PUMPS, FROM CONTROL PANEL LOCATED IN FILTRATION ROOM 201. CONNECT TO WATER PUMPS AND CONTROLS IN ACCORDANCE WITH MANUFACTURERS WIRING DIAGRAMS.
11. MOUNT CONTROL PANEL (WELL & BUILDING WATER) SUPPLIED BY DIVISION 15. PROVIDE 60A, 3PSN (50AF) FUSED DISCONNECT. FEED WITH 4#6-32C. TO DISC. SWITCH AND CONTROL PANEL. WIRE FROM CONTROL PANEL TO WELL AND PUMPS AND CONTROLS ACCORDING TO MANUFACTURERS WIRING DIAGRAM.

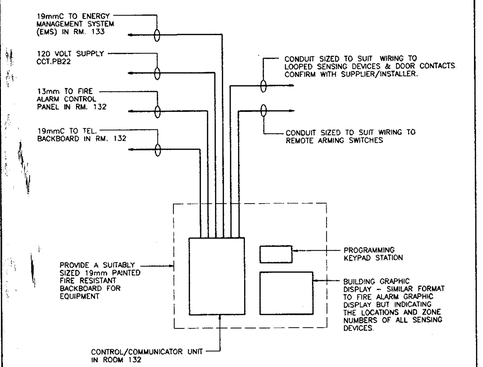


FIRE ALARM GRAPHIC DISPLAY

N.T.S.

FIRE ALARM ZONE SCHEDULE

No.	AREA SERVED	DETAILS	ACTIVATED FUNCTION
1	BUILDING 'A'	MANUAL, S.D., H.D.	GENERAL ALARM - SOUND ALL ALARM SIGNALS AND SHUT DOWN AIR HANDLING SYSTEMS
2	BUILDING 'B'	MANUAL, S.D., H.D.	DITTO
3	BUILDING 'C'	MANUAL, S.D., H.D.	DITTO
4	DAYCARE AREA	MANUAL, S.D., H.D.	DITTO
5	DAYCARE OUTDOOR STORAGE	MANUAL, H.D.	DITTO
6	OUTDOOR STORAGE	MANUAL, H.D.	DITTO
7	OUTDOOR STORAGE	MANUAL, H.D.	DITTO
8	UPPER LEVEL MECH. ROOM	MANUAL, H.D.	DITTO
9	WATER FILTRATION ROOMS	MANUAL, H.D.	DITTO
10	FUTURE PORTABLES	MANUAL, H.D.	DITTO
11	SPARE		
12	SPARE		
13	SPARE		

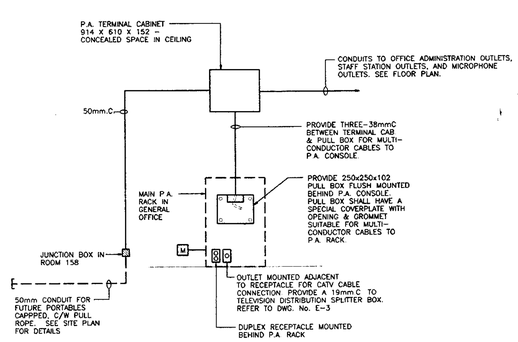


SECURITY ALARM SYSTEM DETAIL

N.T.S.

NOTES:

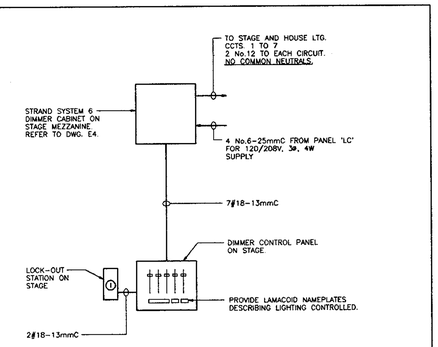
1. REFER TO SPECIFICATIONS FOR CABLE SIZES AND DESCRIPTION OF WORK TO BE PERFORMED.
2. REFER TO FLOOR PLAN FOR QUANTITY AND LOCATION OF SENSING DEVICES AND DOOR CONTACTS. EXACT LOCATIONS SHALL BE VERIFIED WITH SUPPLIER/INSTALLER PRIOR TO INSTALLATION.
3. ALL CONDUITS SHALL TERMINATE AT EQUIPMENT AS DIRECTED BY SYSTEM SUPPLIER/INSTALLER.



P.A. DISTRIBUTION RISER

N.T.S.

REFER TO DRAWINGS FOR QUANTITY OF SPEAKERS TO BE INSTALLED AND CONDUIT SIZES.



STAGE & HOUSE LIGHTING SYSTEM

N.T.S.

LIGHTING SCHEDULE:

ZONE 1	- HOUSE LIGHTS	- CCT. 1 - (1200 WATTS)
	- HOUSE LIGHTS	- CCT. 2 - (1200 WATTS)
ZONE 2	- FRONT-OF-HOUSE LIGHTS	- CCT. 3 - (1500 WATTS)
ZONE 3	- BORDERLIGHTS	- CCT. 4 - (800 WATTS)
ZONE 4	- BORDERLIGHTS	- CCT. 5 - (800 WATTS)
ZONE 5	- BORDERLIGHTS	- CCT. 6 - (800 WATTS)

R.J.BLACK & ASSOCIATES LTD.
CONSULTING ENGINEERS
5745 COOPERS AVENUE
MISSISSAUGA, ONTARIO L4Z 1R9
TELEPHONE: (905)507-4100 FAX: (905)507-4107

No.	Date	Description
1	FEB. 07 1994	ISSUED FOR TENDER

Revisions

Dimensions are to be checked and verified by the Contractor on the site

NOTRE DAME CATHOLIC SCHOOL

FITTONS RD. ORILLIA
SIMCOE COUNTY SEPARATE SCHOOL BOARD

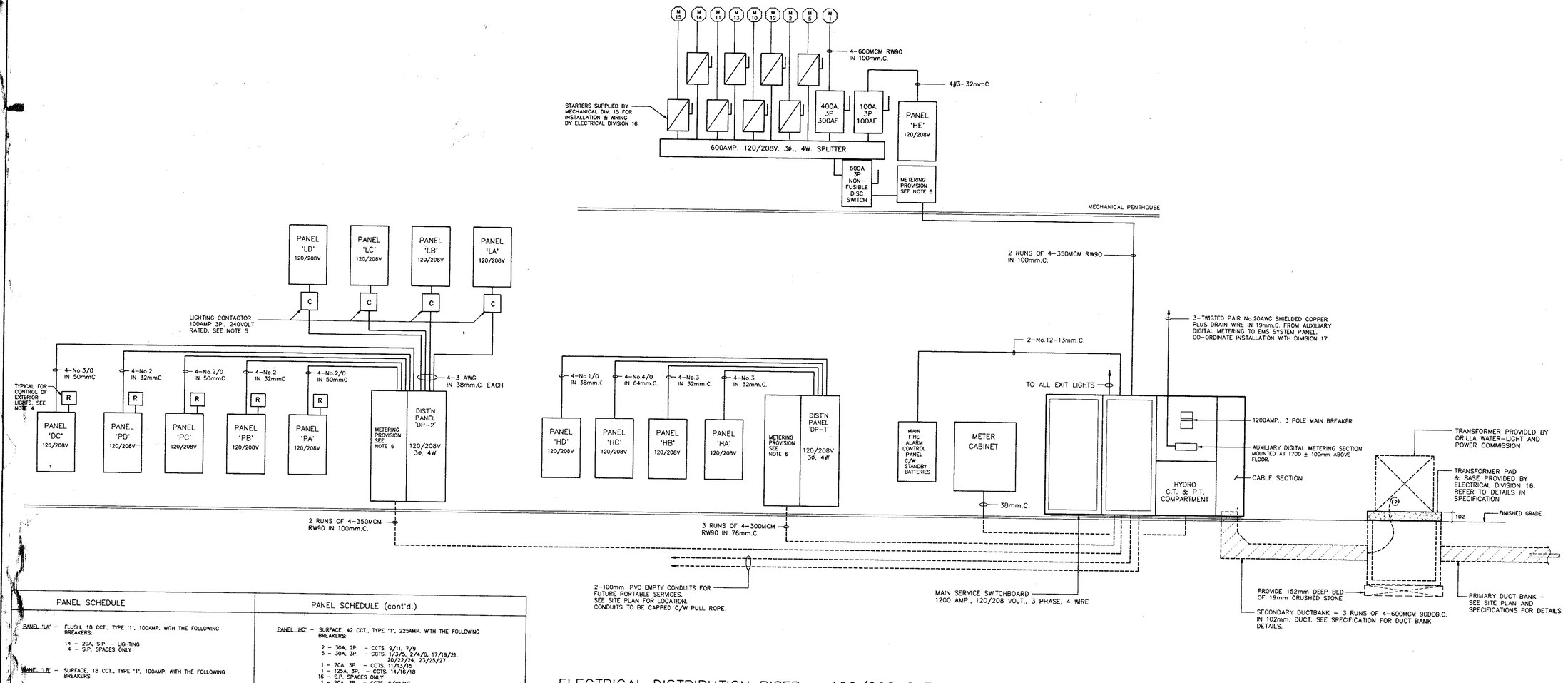
SCHEDULES, RISERS AND DETAILS ELECTRICAL

R.H. CARTER-ARCHITECTS INC.
SUITE 200 897 KIPLING AVENUE
ETOBICOKE ONTARIO M8Z 5H3
TEL 416-233-5583 FAX 416-233-5585

REGISTERED PROFESSIONAL ENGINEER D.JAIN PROVINCE OF ONTARIO
93 - 121

True North	Dwg. North
Scale	N.T.S.
Date	FEB 4, 1994
Printed	FEB 4, 1994
Project No.	92-56
Dwg. No.	E-5

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PANEL SCHEDULE

PANEL 'LA' - FLUSH, 18 CCT., TYPE '1', 100AMP. WITH THE FOLLOWING BREAKERS:

14 - 20A, S.P. - LIGHTING
4 - S.P. SPACES ONLY

PANEL 'LB' - SURFACE, 18 CCT., TYPE '1', 100AMP. WITH THE FOLLOWING BREAKERS:

8 - 20A, S.P.
10 - S.P. SPACES ONLY

PANEL 'LC' - SURFACE, 18 CCT., TYPE '1', 100AMP. WITH THE FOLLOWING BREAKERS:

11 - 20A, S.P.
1 - 40A, 3P - STAGE & HOUSE LTG. DIMMER
4 - S.P. SPACES ONLY

PANEL 'LD' - SURFACE, 24 CCT., TYPE '1', 100AMP. WITH THE FOLLOWING BREAKERS:

18 - 20A, S.P.
6 - S.P. SPACES ONLY

PANEL 'PA' - FLUSH, 60 CCT., TYPE '1', 225AMP. WITH THE FOLLOWING BREAKERS:

34 - 15A, S.P. - (3 ARE SPARES) LOCK-ON CCTS. 36,38,41
5 - 20A, S.P. - CCTS. 1,26,28,30,31 (LOCK-ON CCTS. 1, 31)
2 - 30A, S.P. - CCTS. 25, 27, 29
1 - 50A, 2P - CCTS. 37, 39
5 - S.P. SPACES ONLY
1 - 15A, S.P. - WASH FOUNTAINS

PANEL 'PB' - SURFACE, 60 CCT., TYPE '1', 225AMP. WITH THE FOLLOWING BREAKERS:

44 - 15A, S.P. - (3 ARE SPARES) LOCK-ON CCTS. 6,11,21,31,38,44
3 - 20A, S.P. - CCTS. 5, 32, 35 (LOCK-ON CCT. 35)
3 - 15A, 2P. - CCTS 23/25, 39/41, 40/42
7 - S.P. SPACES ONLY

PANEL 'PC' - SURFACE, 42 CCT., TYPE '1', 225AMP. WITH THE FOLLOWING BREAKERS:

20 - 15A, S.P. - (3 ARE SPARES) LOCK-ON CCTS. 2,27,32,33
6 - 20A, S.P. - CCTS. 1,19,20,21,25 (LOCK-ON CCTS. 1, 25)
4 - 30A, S.P. - CCTS. 22, 24, 26, 28
2 - 15A, 2P. - CCTS. 4/6, 14/16
1 - 50A, 2P. - CCTS. 10/12
6 - S.P. SPACES ONLY
1 - 15A, S.P. - WASH FOUNTAINS

PANEL 'PD' - SURFACE, 60 CCT., TYPE '1', 225AMP. WITH THE FOLLOWING BREAKERS:

38 - 15A, S.P. - (2 ARE SPARES) LOCK-ON CCTS. 34,38,40,42
6 - 20A, S.P. - CCTS. 1,31,32,37 (LOCK-ON CCTS. 1,31,39,41)
6 - S.P. SPACES ONLY

PANEL 'HA' - FLUSH, 30 CCT., TYPE '1', 225AMP. WITH THE FOLLOWING BREAKERS:

1 - 20A, 3P. - CCTS. 1,3,5
1 - 30A, 2P. - CCTS. 2/4
3 - 30A, 3P. - CCTS. 7/9/11, 13/15/17, 12/14/16
13 - S.P. SPACES ONLY
1 - 40A, 3P. - CCTS. 6/8/10

PANEL 'HB' - SURFACE, 24 CCT., TYPE '1', 225AMP. WITH THE FOLLOWING BREAKERS:

2 - 20A, 2P. BRKRS. - CCTS. 2/4, 6/8
3 - 30A, 3P. BRKRS. - CCTS. 1/3/5, 7/9/11, 13/15/17
11 - S.P. SPACES ONLY

PANEL SCHEDULE (cont'd.)

PANEL 'HC' - SURFACE, 42 CCT., TYPE '1', 225AMP. WITH THE FOLLOWING BREAKERS:

2 - 30A, 2P. - CCTS. 9/11, 7/9
5 - 30A, 3P. - CCTS. 1/3/5, 2/4/6, 17/19/21, 20/22/24, 23/25/27
1 - 70A, 3P. - CCTS. 11/13/15
1 - 125A, 3P. - CCTS. 14/16/18
16 - S.P. SPACES ONLY
1 - 20A, 3P. - CCTS. 8/10/12

PANEL 'HD' - SURFACE, 30 CCT., TYPE '1', 225AMP. WITH THE FOLLOWING BREAKERS:

7 - 30A, 3P. - CCTS. 1/3/5, 7/9/11, 8/10/12, 13/15/17, 14/16/18, 19/21/23
9 - S.P. SPACES ONLY

PANEL 'HE' - SURFACE, 18 CCT., TYPE '1', 100AMP. WITH THE FOLLOWING BREAKERS:

12 - 15A, S.P. - (2 ARE SPARES) LOCK-ON ALL CCTS.
1 - 20A, S.P. - EMS PANEL - CCT. 22
8 - S.P. SPACES ONLY

PANEL 'SR' - SURFACE 24 CCT., TYPE 3, 150AMP MAIN BREAKER.

24 - S.P. SPACES ONLY

NOTE. BREAKERS SHALL BE PROVIDED BY DIVISION 19.

PANEL 'DC' - FLUSH, 60 CCT., TYPE '1', 225AMP. WITH THE FOLLOWING BREAKERS:

24 - 15A, S.P. - (2 ARE SPARES) LOCK-ON CCTS. 2,12,28,29,40,41
7 - 20A, S.P. - CCTS. 1,3,5,13,23,31,33 (LOCK-ON CCTS. 1, 31)
2 - 15A, 2P. - CCTS. 14/16, 18/20
2 - 30A, 2P. - CCTS. 19/21, 49/51
2 - 50A, 2P. - CCTS. 15/17, 37/39
2 - 30A, 3P. - CCTS. 43,45/47, 44/46/48
11 - S.P. SPACES ONLY
1 - 20A, 2P. - CCTS. 49/51

MAIN SWITCHBOARD

POWER DISTRIBUTION PANELBOARD, TYPE 2, 1600A MAINS AND THE FOLLOWING BRANCHES:

1 - 15A, 3P. - EXIT LIGHTS
1 - 15A, 2P. - FIRE ALARM CONTROL PANEL
1 - 800A, 3P. - DISTRIBUTION PANEL 'DP-1'
2 - 600A, 3P. - DISTRIBUTION PANEL 'DP-2' & MECH SPLITTER
3 - 200A, 3P SPACES - FUTURE

DISTRIBUTION PANEL 'DP-2'

SURFACE, TYPE '2' 600A. WITH THE FOLLOWING BRANCHES

4 - 100A, 3P. - PANEL 'LA', 'LB', 'LC', 'LD'
2 - 100A, 3P. - PANEL 'PB', 'PD'
2 - 150A, 3P. - PANEL 'PA', 'PC'
2 - 200A, 3P SPACES
1 - 200A, 3P. - PANEL 'DC'

DISTRIBUTION PANEL 'DP-1'

SURFACE, TYPE '2' 800A. WITH THE FOLLOWING BRANCHES

1 - 100A, 3P. - PANEL 'HA'
1 - 100A, 3P. - PANEL 'HB'
1 - 200A, 3P. - PANEL 'HC'
1 - 150A, 3P - PANEL 'HD'
2 - 100A, 3P SPACES
1 - 40A, 3P. - BUILDING WATER SYSTEM
1 - 60A, 3P - SEWAGE PUMPS

ELECTRICAL DISTRIBUTION RISER - 120/208VOLT., 3 PHASE, 4 WIRE

N.T.S.

NOTES:

1.- RISER DETAILS ARE DIAGRAMATIC ONLY. CONTRACTOR SHALL DETERMINE EXACT ROUTING AND LOCATION OF PANEL FEEDERS ON SITE.

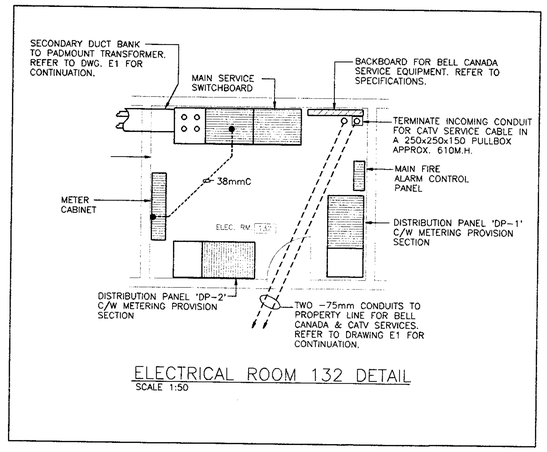
2.- REFER TO SPECIFICATIONS FOR DUCT BANK DESCRIPTIONS.

3.- FEEDER CABLE SIZES ARE BASED ON 75° AMPACITY RATINGS UNLESS NOTED OTHERWISE. SMALLER CONDUSTORS OF EQUIVALENT AMPACITYS SHALL NOT BE USED UNLESS APPROVED.

4.- INSTALL EMS RELAYS SUPPLIED BY DIVISION 17 IN CEILING SPACES ABOVE PANELS. WIRE THROUGH RELAYS TO EXTERIOR LIGHTS FROM CIRCUITS NOTED ON DRAWINGS.

5.- PROVIDE CONTACTORS NOTED IN ACCESSIBLE CEILING SPACES FOR FLUSH PANELS AND ABOVE PANELS FOR SURFACE PANELS. FOR WIRING TO EMS CONTROL UNIT BY DIVISION 17.

6.- FEEDER CABLES SHALL BE RUN THROUGH SUITABLE SIZE PULLBOX TO ALLOW SUFFICIENT SPACE FOR INSTALLATION OF CLAMP-ON TYPE DEMAND METER AS REQUIRED BY ASHRAE 90.1 STANDARDS.



ELECTRICAL ROOM 132 DETAIL

SCALE 1:50

No.	Date	Description
1	FEB. 07 1994	ISSUED FOR TENDER

Revisions

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NOTRE DAME CATHOLIC SCHOOL

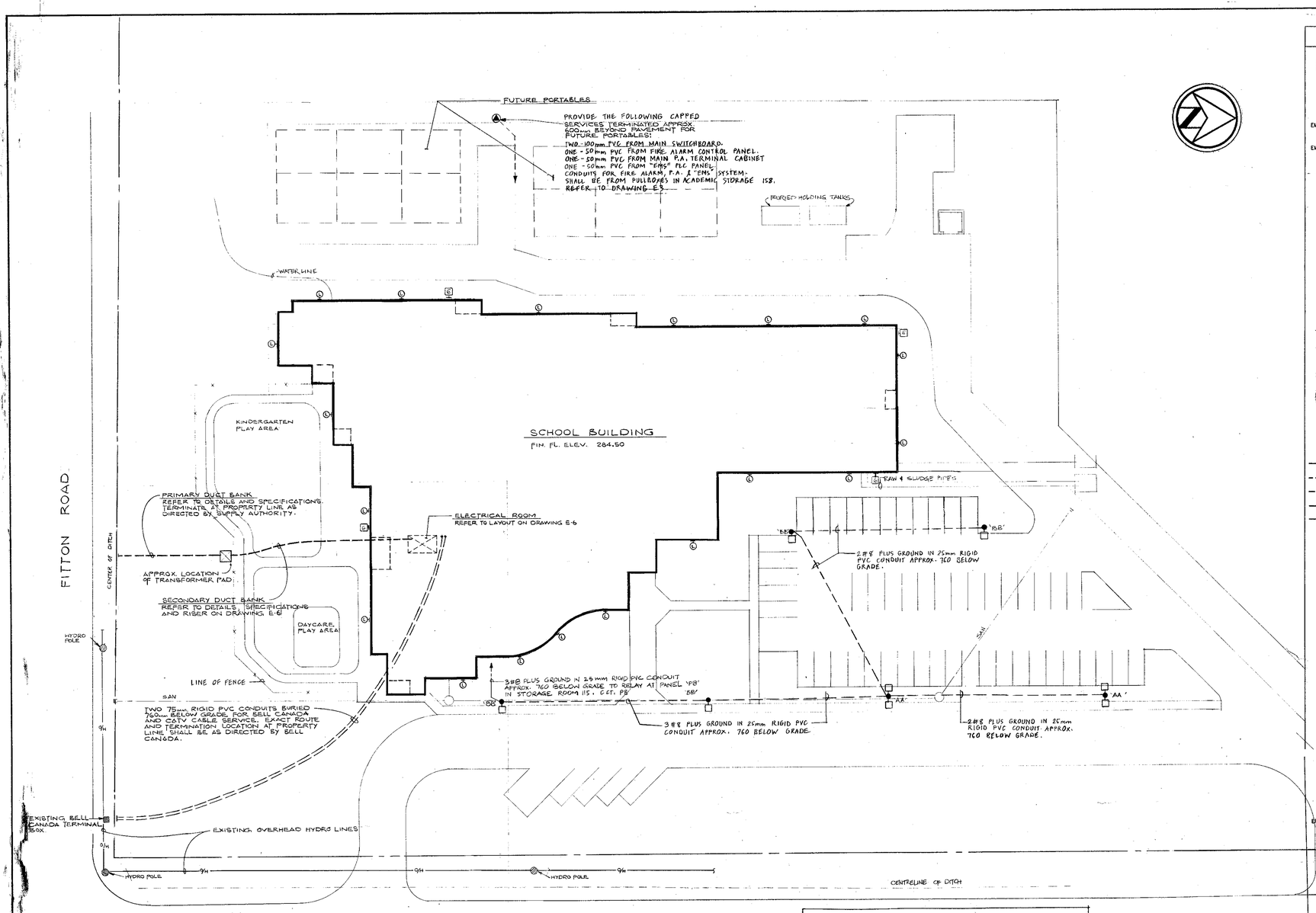
FITTONS RD. ORILLIA
SIMCOE COUNTY SEPARATE SCHOOL BOARD

DISTRIBUTION RISER AND SCHEDULES ELECTRICAL

R.H. CARTER ARCHITECTS INC.
SUITE 200 897 KIPLING AVENUE ETOBICOKE ONTARIO M8Z 5H3
TEL 416-233-5583 FAX 416-233-5585

REGISTERED PROFESSIONAL ENGINEER D.JAIN PROVINCE OF ONTARIO
93 - 121

True North	Dwg. North
Scale	N.T.S.
Date	FEB. 4, 1994
Printed	FEB. 4, 1994
Project No.	92-56
Dwg. No.	E-6



SITE PLAN

SCALE ~ 1:300

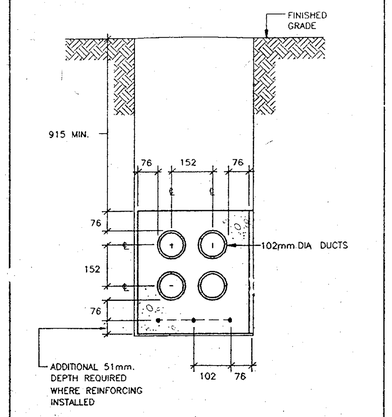
NOTES:

1 - CO-ORDINATE ROUTES OF BURIED DUCTS AND CONDUITS WITH MECHANICAL AND STRUCTURAL SECTIONS OF WORK TO AVOID CONFLICTIONS WITH FOOTINGS, STORM DRAINS, ETC.

2 - EXACT LOCATIONS OF POST-TOP LUMINAIRES SHALL BE AS DIRECTED ON SITE. GENERALLY, POSTS SHALL BE LOCATED 915mm AWAY FROM CURBS.

3 - REFER TO ARCHITECTURAL FLOOR PLANS FOR EXACT LOCATION AND MOUNTING HEIGHTS OF TYPE 'L' LIGHTING BRACKETS.

4 - LOCATION OF TRANSFORMER PAD AND ROUTE OF PRIMARY DUCT BANK SHALL BE VERIFIED WITH SUPPLY AUTHORITY PRIOR TO AND CONSTRUCTION OR EXCAVATION.



PRIMARY & SECONDARY DUCT BANK DETAIL. N.T.S.

REFER TO SPECIFICATIONS FOR DESCRIPTION.

SYMBOLS

- A — FLUORESCENT FIXTURE – LETTER DENOTES TYPE
- (B) — INCANDESCENT OR HID CEILING FIXTURE – LETTER DENOTES TYPE
- (C) — INCANDESCENT OR HID WALL FIXTURE – LETTER DENOTES TYPE
- NL — INDICATES NIGHT LIGHT CIRCUIT
- EMA (X1) — EXIT LIGHT FIXTURE – NUMBER DENOTES TYPE – ADJACENT LETTERS DENOTE ASSOCIATED BATTERY
- EMA (1) — EMERGENCY LIGHTING FIXTURE – NUMBER DENOTES TYPE – ADJACENT LETTERS DENOTE ASSOCIATED BATTERY
- $_G — STANDARD DUPLEX RECEPTACLE – DIAGONAL STROKE DENOTES MOUNTED ABOVE COUNTER – LETTER 'G' DENOTES SPECIAL GUARD TYPE AS SPECIFIED.
- DUPLEX GROUND FAULT INTERRUPTER RECEPTACLE – DIAGONAL STROKE DENOTES MOUNTED ABOVE COUNTER.
- 20 AMP SINGLE RECEPTACLE
- STANDARD DUPLEX RECEPTACLE (SPLIT FEED) – DIAGONAL STROKE DENOTES MOUNTED ABOVE COUNTER
- WP — STANDARD DUPLEX RECEPTACLE WITH WEATHERPROOF ENCLOSURE
- SWITCH AND STANDARD DUPLEX RECEPTACLE MTD. IN TWO GANG BOX
- SPECIAL OUTLET AS NOTED
- HD — HAND DRYER
- DR — ELECTRO-MAGNETIC DOOR RELEASE CONNECTED TO SWITCHING RELAY AT FIRE ALARM CONTROL PANEL.
- HEAT PUMP CONNECTION – REFER TO SCHEDULE
- OUTLET BOX WITH BLANK METAL COVER
- PANELBOARD
- $ — SINGLE POLE LIGHT SWITCH
- $2 — TWO POLE LIGHT SWITCH
- $3 — THREE WAY LIGHT SWITCH
- $K — KEY OPERATED SWITCH
- B4 — ADJACENT CODE LETTERS AND NUMBERS INDICATE OUTLET WIRED TO CIRCUIT NO.4 OF PANEL B
- CONDUIT RUN CONCEALED IN WALLS OF CEILING UNLESS NOTED OTHERWISE
- CONDUIT CONCEALED IN OR BELOW FLOOR
- P.A. CONDUIT 13MM UNLESS NOTED OTHERWISE
- TV — TELEVISION CONDUIT 19MM UNLESS NOTED OTHERWISE
- C — COMPUTER CONDUIT SYSTEM – 25mmC UNLESS NOTED OTHERWISE
- 1 — FIRE ALARM SIGNAL WALL MOUNTED – NUMBER DENOTES SIGNAL CIRCUIT
- 2 G — FIRE ALARM MANUAL STATION – LETTER G DENOTES GUARD, NUMBER DENOTES ZONE
- 2 G — AUTOMATIC FIRE DETECTOR RATE OF RISE 135 DEG. F. UNLESS NOTED OTHERWISE – NUMBER DENOTES ZONE, LETTER G DENOTES GUARD
- 2 — PHOTO ELECTRIC SMOKE DETECTOR – NUMBER DENOTES ZONE
- 120V. SELF-CONTAINED IONIZATION TYPE SMOKE DETECTOR C/W BUILT-IN ALARM
- 2 — DUCT TYPE SMOKE DETECTOR – NUMBER DENOTES ZONE
- CLOCK HANGER RECEPTACLE C/W CLOCK
- A — P.A. ADMINISTRATIVE STATION
- 2H — P.A. SPEAKER WALL MOUNTED – NUMBER DENOTES TYPE
- 1 — P.A. SPEAKER CEILING MOUNTED – NUMBER DENOTES TYPE
- C — P.A. SPEAKER CONTROL SWITCH
- V — P.A. SPEAKER VOLUME CONTROL
- M — MICROPHONE OUTLET
- P — PROJECTOR JACK
- TELEPHONE WALL OUTLET
- COMPUTER WALL OUTLET.
- EF-3 — F, P, S — MOTOR STARTER. LETTER F DENOTES FLUSH MTD, P= PILOT LIGHT, S=SURFACE MTD. EF-3 = EQUIPMENT CONTROLLED BY STARTER
- WP — DISCONNECT SWITCH – WP DENOTES WEATHERPROOF
- T — THERMOSTAT -
- COMBINATION MOTOR STARTER AND DISCONNECT
- TS — TIME SWITCH
- ELECTRIC HEATING UNIT – LETTER DENOTES TYPE
- TELEVISION WALL OUTLET – TERMINATE 19MM CONDUIT IN SPLITTER JUNCTION BOX IN ACCESSIBLE CORRIDOR CEILING SPACE FROM EACH OUTLET
- TV — SUITABLE SIZE JUNCTION BOXES CONCEALED IN CORRIDOR CEILING SPACES FOR TELEVISION SPLITTERS AND MULTI-TAP UNITS
- M.H. — LETTERS DENOTE MOUNTING HEIGHT ABOVE FINISHED GROUND FLOOR SLAB
- C.P. — CLASSROOM CONTROL PANEL BY ARCHITECTURAL DIVISION, FOR ELECTRICAL DEVICES PROVIDED BY ELECTRICAL DIVISION 16. REFER TO TYPICAL CONTROL PANEL DETAIL ON ARCHITECTURAL DRAWINGS.
- AA — LIGHTING STANDARD/FLOODLIGHTING. LETTER DENOTES TYPE
- EM EMA — EMERGENCY LIGHTING BATTERY UNIT C/W RECEPTACLE ADJACENT – 1980MM MH ADJACENT LETTERS IDENTIFY BATTERY
- MD — MOTORIZED DAMPER
- P1 — WALL MOUNTED SECURITY ALARM SYSTEM INFRARED SENSOR –NUMBER DENOTES ZONE
- RA — SECURITY ALARM SYSTEM REMOTE KEYPAD SWITCH
- D — SECURITY ALARM SYSTEM DOOR CONTACT SWITCH
- S — SECURITY ALARM SYSTEM LOCAL SIREN.
- UH FF — 'UH' DENOTES UNIT HEATER OUTLET; 'FF' DENOTES FORCE FLOW HEATER OUTLET.

DRAWING REFERENCES

- M — REFERS TO ITEM IN MECHANICAL EQUIPMENT SCHEDULE
- T — NOTE No.
- ES — NOTE LOCATION

R.J. BLACK & ASSOCIATES LIMITED

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5745 COOPERS AVENUE
MISSISSAUGA, ONTARIO L4Z 1R9
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FAX: (416)507-4107

No.	Date	Description
1	AUG. 18 1993	ISSUED FOR TENDER

Revisions

Dimensions are to be checked and verified by the Contractor on the site

ORILLIA WEST SCHOOL

FITTONS RD. ORILLIA
SIMCOE COUNTY SEPARATE SCHOOL BOARD

SITE PLAN

R.H. CARTER ARCHITECTS INC.
SUITE 200 897 KIPLING AVENUE
ETOBICOKE ONTARIO M8Z 5H3
TEL 416-233-5583 FAX 416-233-5585

REGISTERED PROFESSIONAL ENGINEER D.JAIN PROVINCE OF ONTARIO

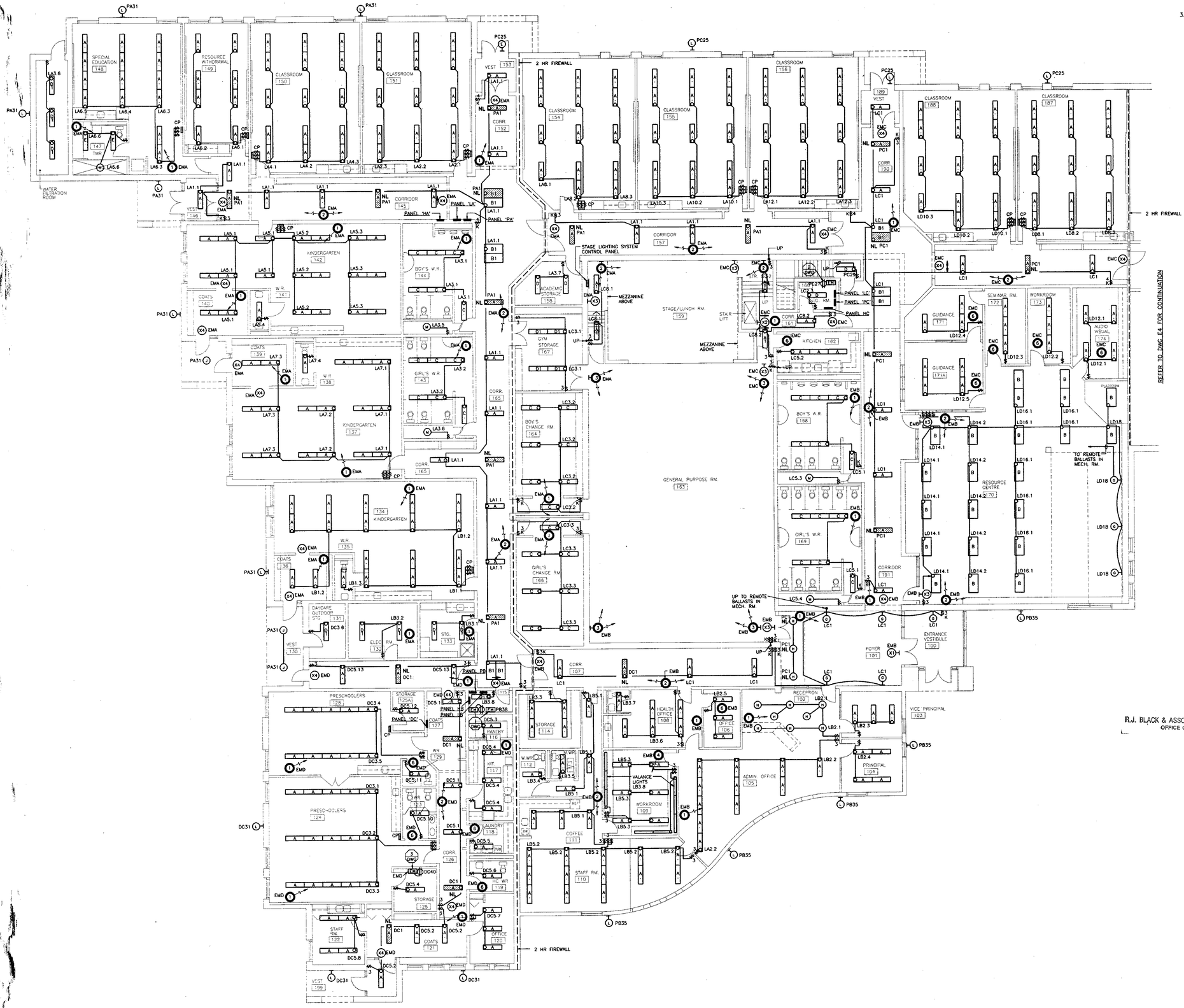
93-121

True North	Dwg. North
Scale: AS SHOWN	
Date: JULY 6, 1993	
Printed: AUG. 18, 1993	
Project No. 92-56	Dwg. No. E-1

DRAWING NOTES

1. EMERGENCY LIGHTING BATTERY UNITS 'EMA' AND 'EMB', 1980 MH CCT. PB38
2. EMERGENCY LIGHTING BATTERY UNIT 'EMC', 1980 MH CCT PC27
3. EMERGENCY LIGHTING BATTERY UNIT 'EMD', 1980 MH CCT DC40

R.J.BLACK & ASSOCIATES LTD.
CONSULTING ENGINEERS
5745 COOPERS AVENUE
MISSISSAUGA, ONTARIO L4Z 1R9
TELEPHONE: (416)507-4100 FAX: (416)507-4107



No.	Date	Description
1	AUG. 18 1993	ISSUED FOR TENDER
Revisions		

Dimensions are to be checked and verified by the Contractor on the site

R.J. BLACK & ASSOCIATES
OFFICE COPY

ORILLIA WEST SCHOOL

FITTONS RD. ORILLIA
SIMCOE COUNTY SEPARATE SCHOOL BOARD

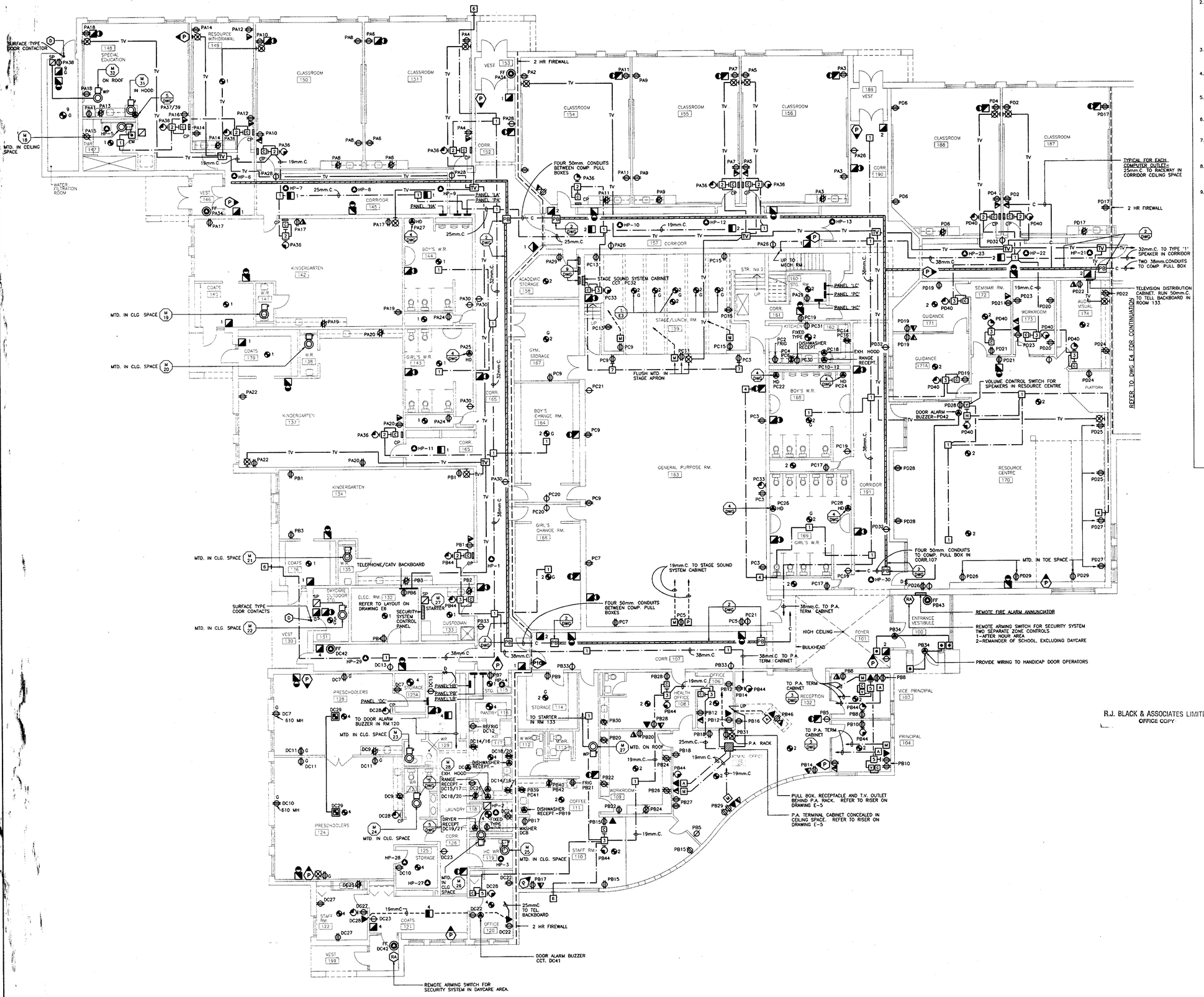
FLOOR PLAN LIGHTING ELECTRICAL

R.H. CARTER ARCHITECTS INC.
SUITE 200 897 KIPLING AVENUE
ETOBICOKE, ONTARIO M8Z 5H3
TEL 416-233-5583 FAX 416-233-5583

REGISTERED PROFESSIONAL ENGINEER
D. JAIN
PROVINCE OF ONTARIO

93 - 121

True North / Dwg. North	
Scale	1:100
Date	JULY 19, 1993
Printed	AUG. 18, 1993
Project No.	92-56
Dwg. No.	E-2



DRAWING NOTES

1.– HEAT DETECTORS LOCATED IN CHAIR STORAGE UNDER STAGE

2.– PROVIDE CONTINUOUS LENGTH OF 100mm. SQUARE RACEWAY WITH HINGED COVER IN CONCEALED CEILING SPACE AS SHOWN FOR FUTURE COMPUTER NETWORK CABLES. PROVIDE 600x600x150mm. PULL BOXES ON ENDS OF RACEWAY WHERE SHOWN FOR CONDUIT CONNECTION. CO-ORDINATE INSTALLATION OF RACEWAY WITH MECHANICAL CONTRACTOR TO CLEAR ALL DUCTWORK ETC. AND BE ACCESSIBLE TO THE OWNER.

3.– PROVIDE A 19mm. CONDUIT FROM EACH MICROPHONE OUTLET AND ADMINISTRATION OUTLET TO THE P.A. TERMINAL CABINET.

4.– FEED TO EACH HAND DRYER WITH 2–No.10–19mm.C. FROM THE PANEL INDICATED BY CIRCUIT – TYPICAL FOR ALL

5.– FEED TO EACH RANGE RECEPTACLE WITH 3–No.6–25mm.C. FROM THE PANEL INDICATED BY THE CIRCUIT – TYPICAL FOR ALL.

6.– FEED TO EACH DRYER OUTLET WITH 3–No.10–19mm.C. FROM THE PANEL INDICATED BY THE CIRCUIT – TYPICAL FOR ALL.

7.– CO-ORDINATE INSTALLATION OF DEVICES IN CLASSROOM CONTROL PANELS WITH DETAILS WITH DETAILS ON THE ARCHITECTURAL DETAILS – TYPICAL FOR ALL

8.– FEED TO EACH DISHWASHER RECEPTACLE WITH 3–No.6–25mm.C. FROM THE PANEL INDICATED BY THE CIRCUIT – TYPICAL FOR ALL.

9.– CONDUITS FOR FIRE ALARM P.A. INTERCOM AND 'EMS' SERVICES FROM AREA OF FUTURE PORTABLES SHALL TERMINATE IN SUITABLE SIZE FLUSH JUNCTION BOXES APPROX. 1000mm ABOVE FLOOR. EXTEND CONDUITS NOTED ON DWG E1 FROM JUNCTION BOXES TO ASSOCIATED SERVICES, PANELS AND/OR TERMINAL CABINETS.

R.J.BLACK & ASSOCIATES LTD.
CONSULTING ENGINEERS
5745 COOPERS AVENUE
MISSISSAUGA, ONTARIO L4Z 1R9
TELEPHONE: (416)507–4100
FAX: (416)507–4107

No.	Date	Description
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ORILLIA WEST SCHOOL

FITTONS RD. ORILLIA
SIMCOE COUNTY SEPARATE SCHOOL BOARD

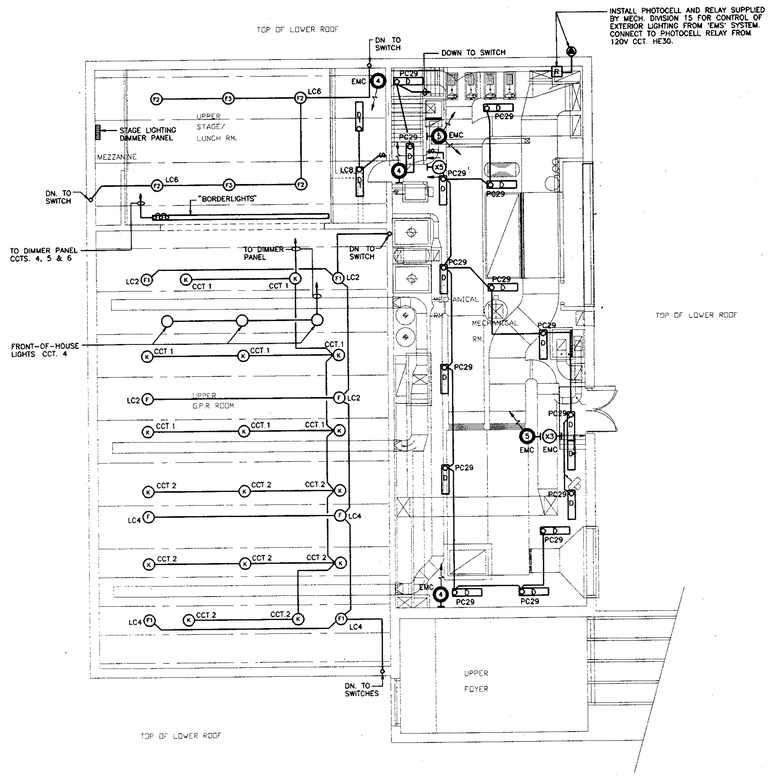
FLOOR PLAN POWER AND SYSTEMS ELECTRICAL

R.H. CARTER ARCHITECTS INC.
SUITE 200 897 KIPLING AVENUE
ETOBICOKE ONTARIO M8Z 5H3
TEL 416-233-5583 FAX 416-233-5585

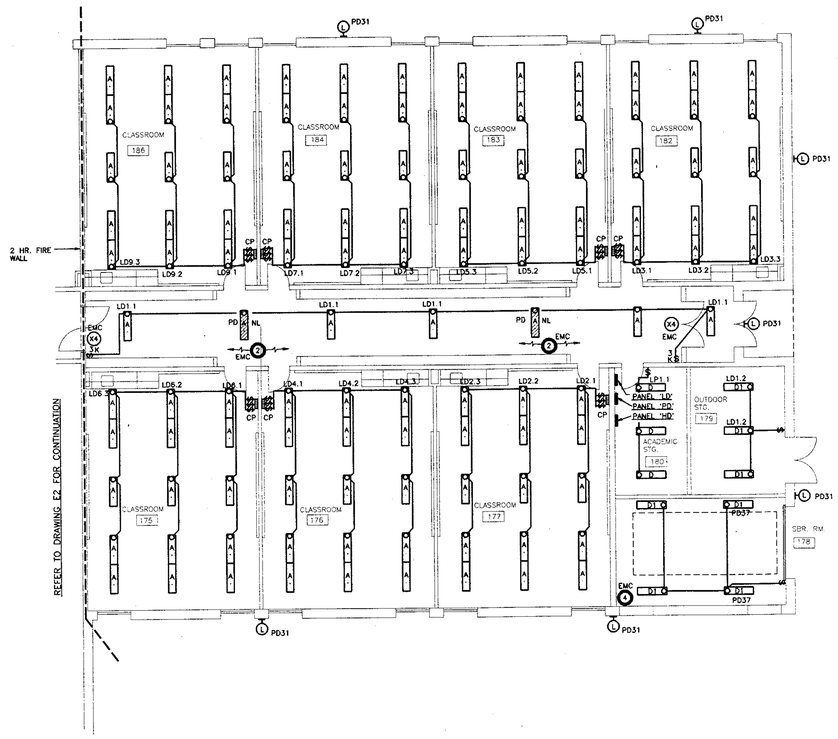
REGISTERED PROFESSIONAL ENGINEER D.JAIN PROVINCE OF ONTARIO
93 – 121

True North	Dwg. North
Scale	1:100
Date	JULY 19, 1993
Printed	AUG. 18, 1993
Project No.	92–56
Dwg. No.	E–3

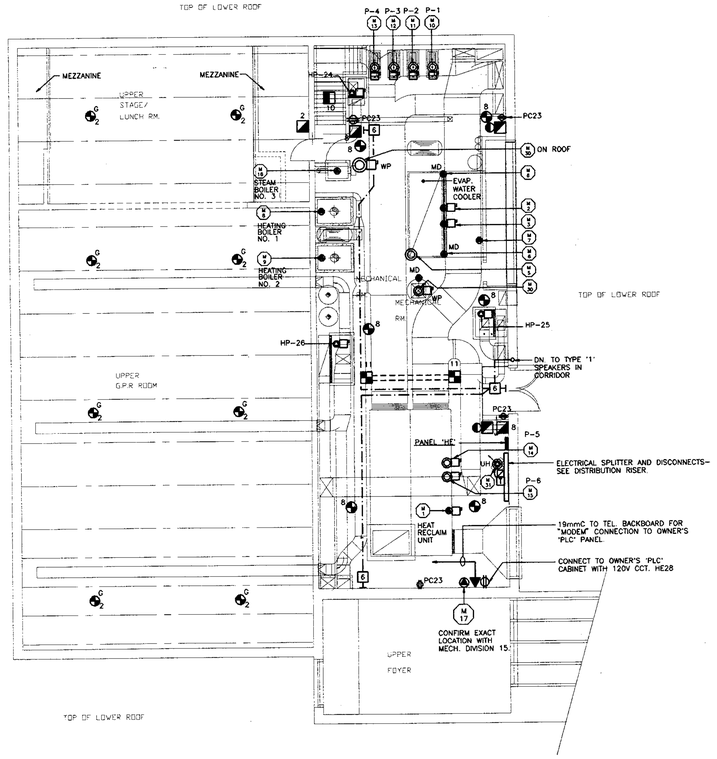
R.J.BLACK & ASSOCIATES LTD.
CONSULTING ENGINEERS
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MISSISSAUGA, ONTARIO L4Z 1R9
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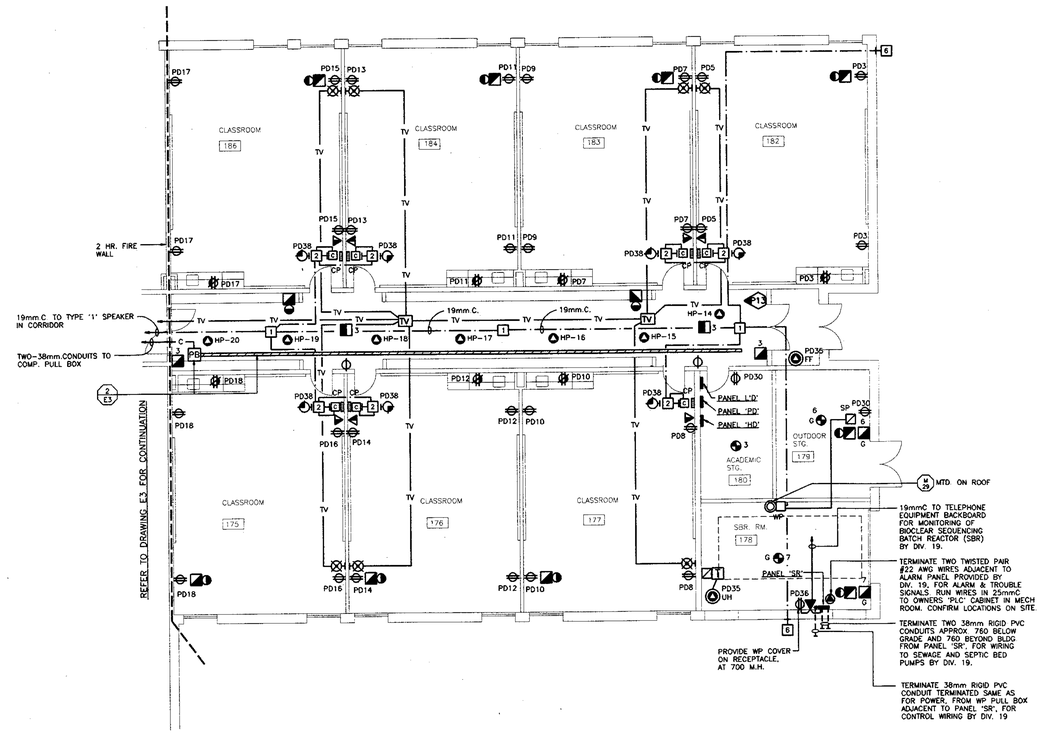
UPPER LEVEL – LIGHTING



R.J. BLACK & ASSOCIATES LIMITED
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UPPER LEVEL – POWER AND SYSTEMS



No	Date	Description
1	AUG. 18 1993	ISSUED FOR TENDER

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ORILLIA WEST SCHOOL

FITTONS RD. ORILLIA
SIMCOE COUNTY SEPARATE SCHOOL BOARD

FLOOR PLANS
ELECTRICAL

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REGISTERED PROFESSIONAL ENGINEER
D. JAIN
PROVINCE OF ONTARIO
93 – 121

True North	Dwg. North
Scale	1:100
Date	JULY 19, 1993
Printed	AUG. 18, 1993
Project No.	92-56
Dwg. No	E-4

HEAT PUMP WIRING SCHEDULE

NOTE: PROVIDE FUSED SWITCH AT EACH UNIT. FUSE TO MANUFACTURER'S SPECIFICATIONS AND CONNECT TO UNIT TERMINALS

HP NO.	MCA	VOLTS/PHASE	BREAKER SIZE	FEEDER SIZE	PANEL & CCT. NOS
HP- 1	18	208/3	30A, 3P	3#10-13C	HB.1/3/5
HP- 2	13.2	208/3	20A, 3P	3#12-13C	HB.7/9/11
HP- 3	14	208/1	20A, 2P	2#12-13C	HB.2/4
HP- 4	14	208/1	20A, 2P	2#12-13C	HB.6/8
HP- 5	13.2	208/3	20A, 3P	3#12-13C	HA.1/3/5
HP- 6	12.6	208/1	20A, 2P	2#12-13C	HA.2/4
HP- 7	15.6	208/3	30A, 3P	3#12-13C	HA.7/9/11
HP- 8	18	208/3	30A, 3P	3#10-13C	HA.6/8/10
HP- 9	15.6	208/3	30A, 3P	3#12-13C	HA.13/15/17
HP- 10	15.6	208/3	30A, 3P	3#12-13C	HA.12/14/16
HP- 11	18	208/3	30A, 3P	3#10-13C	HB.13/15/17
HP- 12	15.6	208/3	30A, 3P	3#12-13C	HC.1/3/5
HP- 13	15.6	208/3	30A, 3P	3#12-13C	HC.2/4/6
HP- 14	15.6	208/3	30A, 3P	3#12-13C	HD.1/3/5
HP- 15	15.6	208/3	30A, 3P	3#12-13C	HD.2/4/6
HP- 16	15.6	208/3	30A, 3P	3#12-13C	HD.7/9/11
HP- 17	15.6	208/3	30A, 3P	3#12-13C	HD.8/10/12
HP- 18	15.6	208/3	30A, 3P	3#12-13C	HD.13/15/17
HP- 19	15.6	208/3	30A, 3P	3#12-13C	HD.14/16/18
HP- 20	15.6	208/3	30A, 3P	3#12-13C	HD.19/21/23
HP- 21	15.6	208/3	30A, 3P	3#12-13C	HC.17/19/21
HP- 22	15.6	208/3	30A, 3P	3#12-13C	HC.23/25/27
HP- 23	15.6	208/3	30A, 3P	3#12-13C	HC.20/22/24
HP- 24	13.2	208/3	30A, 3P	3#12-13C	HC.8/10/12
HP- 25	37.0	208/3	70A, 3P	3#8-25C	HC.11/13/15
HP- 26	64.7	208/3	125A, 3P	3#4-32C	HC.14/16/18
HP- 27	12.6	208/1	30A, 2P	2#12-13C	DC49/51
HP- 28	18	208/3	30A, 3P	3#10-13C	DC44/46/48
HP- 29	13.2	208/3	30A, 3P	3#12-13C	DC43/45/47
HP- 30	12.6	208/1	30A, 2P	2#12-13C	HC.7/9

MECHANICAL EQUIPMENT SCHEDULE

ITEM NO.	EQUIPMENT	STARTER LOCATION	SIZE KW	PHASE	VOLT	WIRING/AWG	BREAKER SIZE	PANEL & CCT. NO.	CONNECTION PROVISION	CONNECTION NOTES
M 1	HEAT RECOVERY UNIT	MECH. ROOM	KW 14.9 230 / 11.2 MCA	3	208	3#8-19C 3#8-19C	300 AF	SPLITTER	C	5
M 2	EVAP. WATER COOLER FAN	-	KW. 14.9	3	208	3#4-25C		SPLITTER	B	
M 3	NOT USED									
M 4	EVAP. WATER COOLER CAPACITY CONTROL DAMPER.	MECH. ROOM	AMP. 5	1	120	2#12-13C	15A,1P	HE-2	C	
M 5	EVAP. WATER COOLER SPRAY WATER PUMP	-	KW 1.1	3	208	3#12-13C		SPLITTER	B	
M 6	EVAP. WATER COOLER INLET & OUTLET DAMPER	-	AMP. 15	1	120	2#12-13C	15A,1P	HE-10		2
M 7	EVAP. WATER COOLER CHEMICAL FEED SYSTEM	-	AMP. 15	1	120	2#12-13C	15A,1P	HE-12		
M 8	HEATING BOILER #1	-	AMP. 15	1	120	2#12-13C	15A,1P	HE-7		1
M 9	HEATING BOILER #2	-	AMP. 15	1	120	2#12-13C	15A,1P	HE-9		1
M 10	HEATING PUMP P-1	-	KW. 7.46	3	208	3#8-19C		SPLITTER	B	
M 11	HEATING PUMP P-2	-	KW. 7.46	3	208	3#8-19C		SPLITTER	B	
M 12	HEATING PUMP P-3	-	KW. 2.24	3	208	3#12-13C		SPLITTER	B	
M 13	HEATING PUMP P-4	-	KW. 2.24	3	208	3#12-13C		SPLITTER	B	
M 14	HEATING PUMP P-5	-	WATT 560	3	208	3#12-13C		SPLITTER	B	
M 15	HEATING PUMP P-6	-	WATT 560	3	208	3#12-13C		SPLITTER	B	
M 16	NOT USED									
M 17	EMS SYSTEM	MECH. ROOM	AMP. 20	1	120	2#12-13C	20A,1P	HE-22		2
M 18	EXH. FAN EF-1	SPECIAL EDUCATION	AMP. 1.0	1	120	2#12-13C	15A,1P	PA.32	B	
M 19	EXH. FAN EF-2		AMP. 35	1	120	2#12-13C	15A,1P	PA.33		3
M 20	EXH. FAN EF-3		AMP. 35	1	120	2#12-13C	15A,1P	PA.35		3
M 21	EXH. FAN EF-4		AMP. 35	1	120	2#12-13C	15A,1P	PB.37		3
M 22	EXH. FAN EF-5	DAY CARE STORAGE	AMP. 1.0	1	120	2#12-13C	15A,1P	DC.30	B	
M 23	EXH. FAN EF-6		AMP. 35	1	120	2#12-13C	15A,1P	DC.32		3
M 24	EXH. FAN EF-7		AMP. 1.0	1	120	2#12-13C	15A,1P	DC.34		3
M 25	EXH. FAN EF-8		AMP. 1.0	1	120	2#12-13C	15A,1P	DC.36		3
M 26	NOT USED									
M 27	EXH. FAN EF-10	CUSTODIAN 133	WATT 29.8	1	120	2#12-13C	15A,1P	PB.36	B	
M 28	EXH. FAN EF-11	RM 117 KITCHEN HOOD	WATT 120	1	120	2#12-13C	15A,1P	DC.33		4
M 29	EXH. FAN EF-12	STORAGE #179	WATT 74.6	1	120	2#12-13C	15A,1P	PD.33	B	
M 30	EXH. FAN EF-13	RM 162 KITCHEN HOOD	WATT 62	1	120	2#12-13C	15A,1P	PC18		6
M 31	EXH. FAN EF-14	RM 148 KITCHEN HOOD	WATT 62	1	120	2#12-13C	15A,1P	PA32		4
M 32	EXH. FAN EF-9	WATER FILTRATION ROOM	WATT 29.8	1	120	2#12-13C	15A,1P	PA32	B	
M 33	SUPPLY AIR FAN SF-1	MECH. ROOM	WATT 186.5	1	120	2#12-13C	15A,1P	HE-24	B	7
M 34	UNIT HEATER	MECH. ROOM	WATT 94	1	120	2#12-13C	15A,1P	HE-26	B	
M 35	DOM. H.W. RECIRC. PUMP	MECH. ROOM	WATT 62	1	120	2#12-13C	15A,1P	HE-1	B	

ELECTRICAL PROVISIONS FOR TYPE SCHEDULE

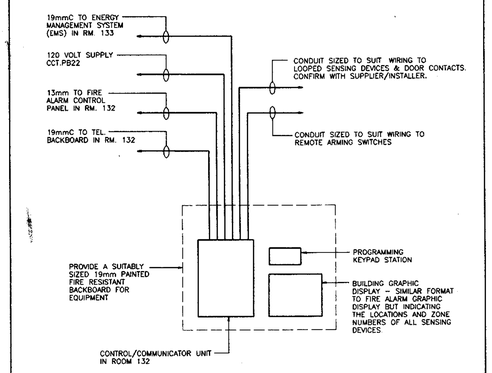
TYPE 'A' – PROVIDE NON-FUSIBLE SAFETY DISCONNECT SWITCH, WIRE AND CONNECT TO UNIT LINE TERMINALS. SWITCH IS TO BE WEATHERPROOF TYPE IF FOR EQUIPMENT MOUNTED OUTDOOR.

TYPE 'B' – MOUNT AND CONNECT STARTER SUPPLIED BY MECH. DIV. 15. WIRE AND CONNECT TO UNIT MOTORS. PROVIDE DISCONNECT SWITCH AS REQUIRED

TYPE 'C' – PROVIDE AND CONNECT ELECTRICAL SUPPLY NOTED TO LINE SIDE OF EQUIPMENT PANEL.

MECHANICAL EQUIPMENT NOTES:

1. PROVIDE AND CONNECT 120 VOLT DISCONNECT SWITCH AT DOOR.
2. PROVIDE 120 VOLT OUTLET ADJACENT TO EQUIPMENT.
3. WIRE TO START FROM LIGHT SWITCH.
4. WIRE AND CONNECT TO KITCHEN HOOD FAN AND HOOD LIGHTS.
5. THERMISTOR LOCATED AT MOTOR. WIRE TO STARTER FOR SHUTDOWN.
6. WIRE AND CONNECT TO KITCHEN HOODLIGHTS AND REMOTE FAN ON ROOF.
7. CONNECT FAN MOTOR & STARTER TO OPERATE FROM REVERSE ACTING THERMOSTAT AND TO OPERATE ASSOCIATED MOTORIZED DAMPERS.

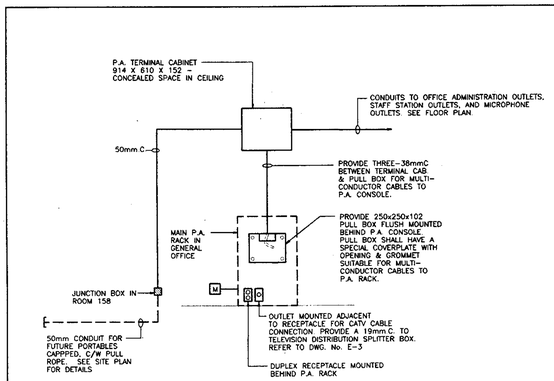


SECURITY ALARM SYSTEM DETAIL

N.T.S.

NOTES:

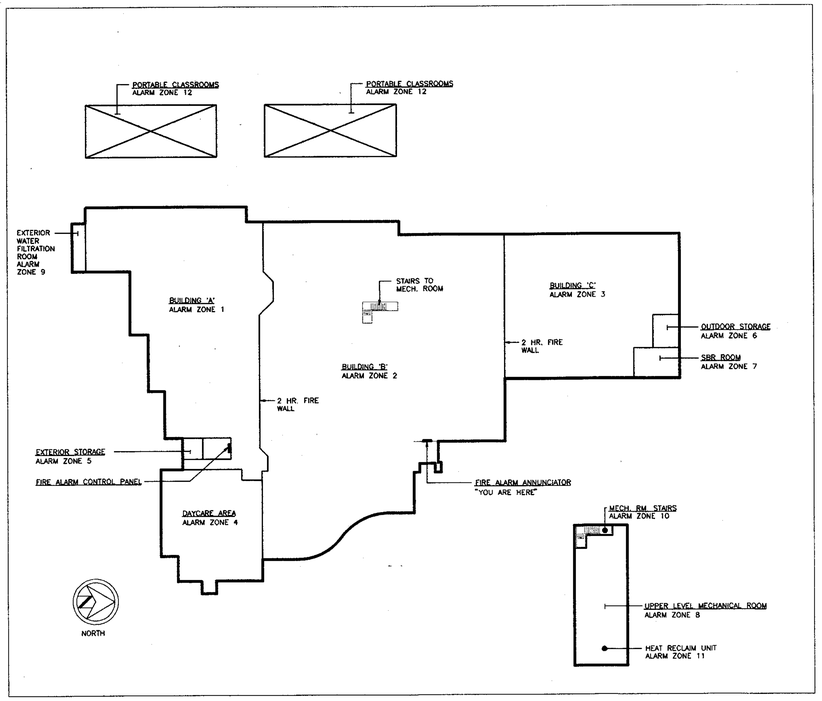
1. REFER TO SPECIFICATIONS FOR CABLE SIZES AND DESCRIPTION OF WORK TO BE PERFORMED.
2. REFER TO FLOOR PLAN FOR QUANTITY AND LOCATION OF SENSING DEVICES AND DOOR CONTACTS. EXACT LOCATIONS SHALL BE VERIFIED WITH SUPPLIER/INSTALLER PRIOR TO INSTALLATION.
3. ALL CONDUITS SHALL TERMINATE AT EQUIPMENT AS DIRECTED BY SYSTEM SUPPLIER/INSTALLER.



P.A. DISTRIBUTION RISER

N.T.S.

REFER TO DRAWINGS FOR QUANTITY OF SPEAKERS TO BE INSTALLED AND CONDUIT SIZES



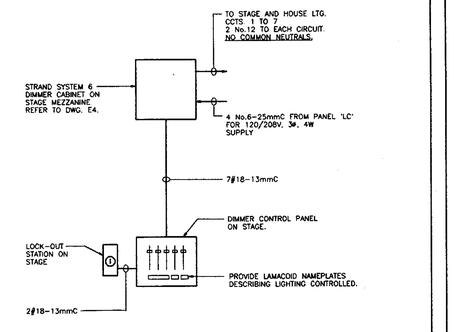
FIRE ALARM GRAPHIC DISPLAY

N.T.S.

FIRE ALARM ZONE SCHEDULE

No.	AREA SERVED	DETAILS	ACTIVATED FUNCTION
1	BUILDING 'A'	MANUAL, S.D., H.D.	GENERAL ALARM – SOUND ALL ALARM SIGNALS AND SHUT DOWN AIR HANDLING SYSTEMS
2	BUILDING 'B'	MANUAL, S.D., H.D.	DITTO
3	BUILDING 'C'	MANUAL, S.D., H.D.	DITTO
4	DAYCARE AREA	MANUAL, S.D., H.D.	DITTO
5	DAYCARE OUTDOOR STORAGE	MANUAL, H.D.	DITTO
6	OUTDOOR STORAGE	MANUAL, H.D.	DITTO
7	SBR ROOM	MANUAL, H.D.	DITTO
8	UPPER LEVEL MECH. ROOM	MANUAL, H.D.	DITTO
9	WATER FILTRATION ROOMS	MANUAL, H.D.	DITTO
10	FUTURE PORTABLES	MANUAL, H.D.	DITTO
11	SPARE		
12	SPARE		
13	SPARE		

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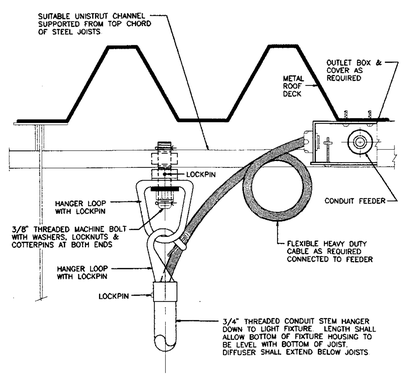


STAGE & HOUSE LIGHTING SYSTEM

N.T.S.

LIGHTING SCHEDULE:

ZONE 1 – HOUSE LIGHTS – CCT. 1 – (1600 WATTS)
– HOUSE LIGHTS – CCT. 2 – (1600 WATTS)
ZONE 2 – FRONT-OF-HOUSE LIGHTS – CCT. 3 – (1500 WATTS)
ZONE 3 – BORDERLIGHTS – CCT. 4 – (800 WATTS)
ZONE 4 – BORDERLIGHTS – CCT. 5 – (800 WATTS)
ZONE 5 – BORDERLIGHTS – CCT. 6 – (800 WATTS)



MOUNTING DETAIL OF SUSPENDED TYPE 'F', 'F1', 'F2', 'F3' FIXTURES

N.T.S.

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SCHEDULES, RISERS AND DETAILS ELECTRICAL

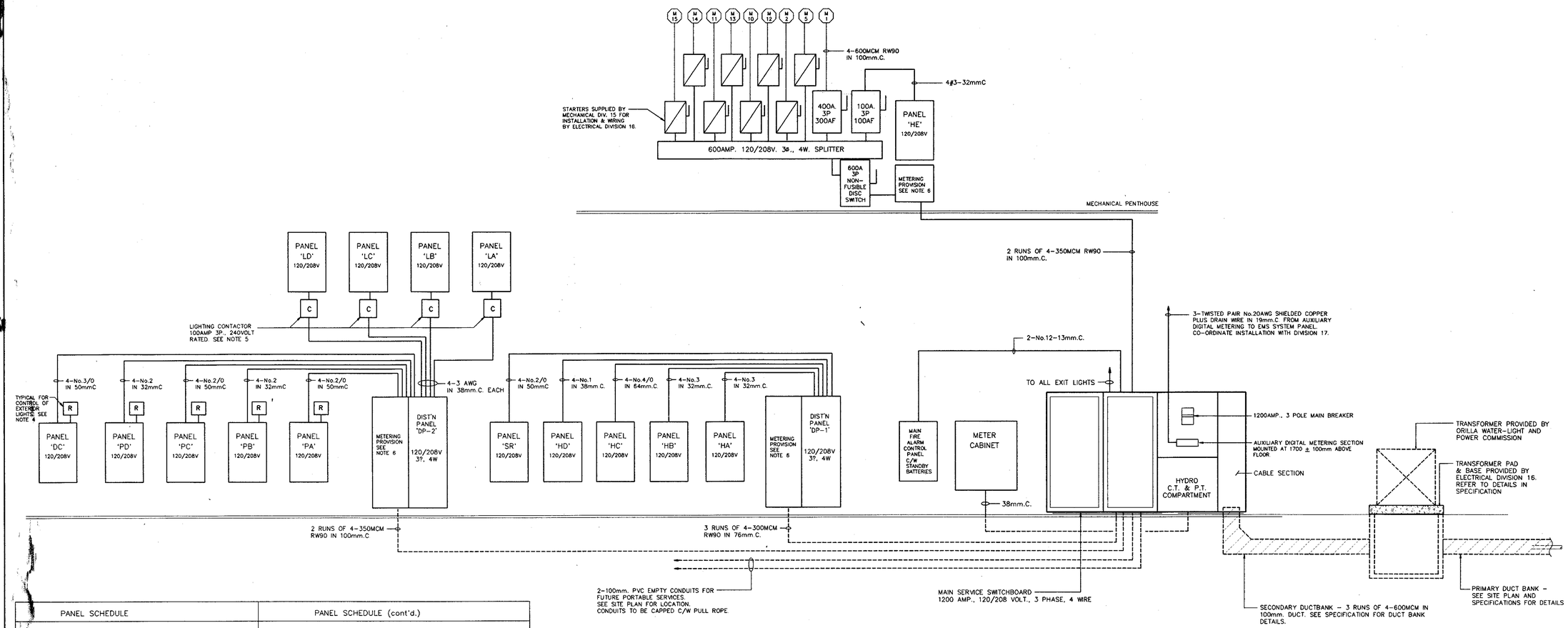
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REGISTERED PROFESSIONAL ENGINEER D. JAIN PROVINCE OF ONTARIO

93 – 121

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Dwg. No.	E-5

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PANEL SCHEDULE

PANEL 'LA' - FLUSH, 18 CCT., TYPE '1', 100AMP. WITH THE FOLLOWING BREAKERS:
10 - 20A, S.P. - LIGHTING
8 - S.P. SPACES ONLY

PANEL 'LB' - SURFACE, 18 CCT., TYPE '1', 100AMP. WITH THE FOLLOWING BREAKERS.
4 - 20A, S.P.
12 - S.P. SPACES ONLY

PANEL 'LC' - SURFACE, 18 CCT., TYPE '1', 100AMP. WITH THE FOLLOWING BREAKERS:
7 - 20A, S.P.
1 - 40A, 3P - STAGE & HOUSE LTG. DIMMER
8 - S.P. SPACES ONLY

PANEL 'LD' - SURFACE, 24 CCT., TYPE '1', 100AMP. WITH THE FOLLOWING BREAKERS
14 - 20A, S.P.
10 - S.P. SPACES ONLY

PANEL 'HA' - FLUSH, 48 CCT., TYPE '1', 225AMP. WITH THE FOLLOWING BREAKERS:
34 - 15A, S.P. - (3 ARE SPARES) LOCK-ON CCTS. 36,38,41
5 - 20A, S.P. - CCTS. 1,26,28,30,31 (LOCK-ON CCTS. 1, 31)
2 - 30A, S.P. - CCTS. 25, 27, 29
1 - 50A, 2P - CCTS. 37, 39
5 - S.P. SPACES ONLY

PANEL 'PB' - SURFACE, 60 CCT., TYPE '1', 225AMP. WITH THE FOLLOWING BREAKERS.
38 - 15A, S.P. - (3 ARE SPARES) LOCK-ON CCTS. 6,11,21,31,38,44
3 - 20A, S.P. - CCTS. 5, 32, 35 (LOCK-ON CCT. 35)
3 - 15A, 2P. - CCTS. 23/25, 39/41, 40/42
13 - S.P. SPACES ONLY

PANEL 'PC' - SURFACE, 42 CCT., TYPE '1', 225AMP. WITH THE FOLLOWING BREAKERS:
20 - 15A, S.P. - (3 ARE SPARES) LOCK-ON CCTS. 2,27,32,33
6 - 20A, S.P. - CCTS. 1,19,20,21,23 (LOCK-ON CCTS. 1, 25)
4 - 30A, S.P. - CCTS. 22, 24, 26, 28
2 - 15A, 2P. - CCTS. 4/6, 14/16
1 - 50A, 2P. - CCTS. 10/12
6 - S.P. SPACES ONLY

PANEL 'PD' - SURFACE, 48 CCT., TYPE '1', 225AMP. WITH THE FOLLOWING BREAKERS:
38 - 15A, S.P. - (2 ARE SPARES) LOCK-ON CCTS. 34,38,40,42
4 - 20A, S.P. - CCTS. 1,31,32,37 (LOCK-ON CCTS. 1, 31)
6 - S.P. SPACES ONLY

PANEL 'HA' - FLUSH, 30 CCT., TYPE '1', 225AMP. WITH THE FOLLOWING BREAKERS:
1 - 30A, 2P. - CCTS. 2/4
5 - 30A, 3P. - CCTS. 1/3/5, 7/9/11, 6/8/10 13/15/17, 12/14/16
13 - S.P. SPACES ONLY

PANEL 'HB' - SURFACE, 24 CCT., TYPE '1', 225AMP. WITH THE FOLLOWING BREAKERS:
2 - 30A, 2P. BRKRS. - CCTS. 2/4, 6/8
3 - 30A, 3P. BRKRS. - CCTS. 1/3/5, 7/9/11, 13/15/17
11 - S.P. SPACES ONLY

PANEL SCHEDULE (cont'd.)

PANEL 'HC' - SURFACE, 42 CCT., TYPE '1', 225AMP. WITH THE FOLLOWING BREAKERS:
1 - 30A, 2P. - CCTS. 9/11
6 - 30A, 3P. - CCTS. 1/3/5, 2/4/6, 8/10/12, 17/19/21, 20/22/24, 23/25/27
1 - 70A, 3P. - CCTS. 11/13/15
1 - 125A, 3P. - CCTS. 14/16/18
16 - S.P. SPACES ONLY

PANEL 'HD' - SURFACE, 30 CCT., TYPE '1', 225AMP. WITH THE FOLLOWING BREAKERS:
7 - 30A, 3P. - CCTS. 1/3/5, 7/9/11, 8/10/12, 13/15/17, 14/16/18, 19/21/23
9 - S.P. SPACES ONLY

PANEL 'HE' - SURFACE, 18 CCT., TYPE '1', 100AMP. WITH THE FOLLOWING BREAKERS:
12 - 15A, S.P. - (2 ARE SPARES) LOCK-ON ALL CCTS.
1 - 20A, S.P. - EMS PANEL - CCT. 22
8 - S.P. SPACES ONLY

PANEL 'SR' - SURFACE 24 CCT., TYPE 3, 150AMP MAIN BREAKER
24 - S.P. SPACES ONLY
NOTE BREAKERS SHALL BE PROVIDED BY DIVISION 19.

PANEL 'DC' - FLUSH, 60 CCT., TYPE '1', 225AMP. WITH THE FOLLOWING BREAKERS:
24 - 15A, S.P. - (3 ARE SPARES) LOCK-ON CCTS. 12,28,29,40,41
7 - 20A, S.P. - CCTS. 1,3,5,13,23,31,33 (LOCK-ON CCTS. 1, 31)
2 - 15A, 2P. - CCTS. 14/16, 18/20
2 - 30A, 2P. - CCTS. 19/21, 49/51
2 - 50A, 2P. - CCTS. 15/17, 37/39
2 - 30A, 3P. - CCTS. 43,45/47, 44/46/48
11 - S.P. SPACES ONLY

MAIN SWITCHBOARD
POWER DISTRIBUTION PANELBOARD, TYPE 2, 1600A MAINS AND THE FOLLOWING BRANCHES:
1 - 15A, 3P. - EXIT LIGHTS
1 - 15A, 2P. - FIRE ALARM CONTROL PANEL
1 - 800A, 3P. - DISTRIBUTION PANEL 'DP-1'
1 - 600A, 3P. - DISTRIBUTION PANEL 'DP-2'
3 - 200A, 3P SPACES - FUTURE

DISTRIBUTION PANEL 'DP-2'
SURFACE, TYPE '1' 600A. WITH THE FOLLOWING BRANCHES.
4 - 100A, 3P. - PANEL 'LA', 'LB', 'LC', 'LD'
2 - 100A, 3P. - PANEL 'PB', 'PD'
2 - 150A, 3P. - PANEL 'PA', 'PC'
2 - 200A, 3P SPACES

DISTRIBUTION PANEL 'DP-2'
SURFACE, TYPE '1' 800A. WITH THE FOLLOWING BRANCHES:
1 - 100A, 3P. - PANEL 'HA'
1 - 100A, 3P. - PANEL 'HB'
1 - 200A, 3P. - PANEL 'HC'
1 - 225A, 3P. - PANEL 'HD'
1 - 150A, 3P. - PANEL 'SR'
2 - 100A, 3P SPACES

ELECTRICAL DISTRIBUTION RISER - 120/208VOLT., 3 PHASE, 4 WIRE

N.T.S

NOTES:

1.- RISER DETAILS ARE DIAGRAMATIC ONLY. CONTRACTOR SHALL DETERMINE EXACT ROUTING AND LOCATION OF PANEL FEEDERS ON SITE.

2.- REFER TO SPECIFICATIONS FOR DUCT BANK DESCRIPTIONS

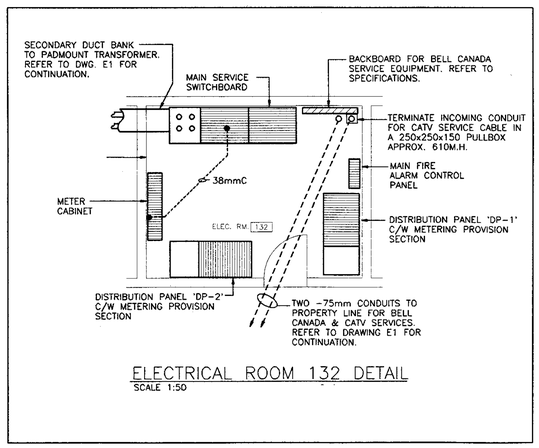
3.- FEEDER CABLE SIZES ARE BASED ON 75? AMPACITY RATINGS UNLESS NOTED OTHERWISE. SMALLER CONDUSTORS OF EQUIVALENT AMPACITYS SHALL NOT BE USED UNLESS APPROVED.

4.- INSTALL EMS RELAYS SUPPLIED BY DIVISION 17 IN CEILING SPACES ABOVE PANELS. WIRE THROUGH RELAYS TO EXTERIOR LIGHTS FROM CIRCUITS NOTED ON DRAWINGS.

5.- PROVIDE CONTACTORS NOTED IN ACCESSIBLE CEILING SPACES FOR FLUSH PANELS AND ABOVE PANELS FOR SURFACE PANELS. FOR WIRING TO EMS CONTROL UNIT BY DIVISION 17.

6.- FEEDER CABLES SHALL BE RUN THROUGH SUITABLE SIZE PULLBOX TO ALLOW SUFFICIENT SPACE FOR INSTALLATION OF CLAMP-ON TYPE DEMAND METER AS REQUIRED BY ASHRAE 90.1 STANDARDS.

R.J. BLACK & ASSOCIATES LIMITED
OFFICE COPY



ELECTRICAL ROOM 132 DETAIL
SCALE 1:50

No	Date	Description
1	AUG. 18 1993	ISSUED FOR TENDER

Revisions

Dimensions are to be checked and verified by the Contractor on the site

ORILLIA WEST SCHOOL
FITTONS RD. ORILLIA
SIMCOE COUNTY SEPARATE SCHOOL BOARD

DISTRIBUTION RISER AND SCHEDULES ELECTRICAL

R.H. CARTER ARCHITECTS INC.
SUITE 200 897 KIPLING AVENUE
ETOBICOKE ONTARIO M8Z 5H3
TEL 416-233-5583 FAX 416-233-5585

REGISTERED PROFESSIONAL ENGINEER D.JAIN PROVINCE OF ONTARIO

93 - 121

True North	Dwg. North
Scale	N.T.S.
Date	JULY 19, 1993
Printed	AUG. 18, 1993
Project No. 92-56	Dwg. No. E-6