

**6F-04**

**ELECTRICAL DISTRIBUTION METHOD**

**LEGEND**

SYMBOL	MEANING	MOUNTING HEIGHT
○	LIGHT OUTLET, CEL.	SEE FIXTURE SCHEDULE
○	FLEXIFLOR FITTING CAT. NO. F-2212	FOR EXHAUST FAN ELECT. FEEDS
⊕	SWITCH, 3-WAY ETC.	4'-6"
⊕	DUPLEX RECEPTACLE	AS NOTED
⊕	PHOTOELECTRIC CELL	18" ABOVE ROOF
—	WORK CONCEALED IN CORE OF CEILING	HASH MARKS INDICATE NUMBER OF CONDUCTORS
—	WORK CONCEALED IN OR BELOW FLR. SLABS	
⊕	MOTOR OUTLET	AS REQUIRED
⊕	DISCONNECT SWITCH	8'-4" OR AS REQ'D
⊕	STARTER W/ DISC SWITCH BELOW	5'-4" OR AS REQ'D
⊕	F1330 FLUSH CEILING OUTLET R. WITH PLANK COVER	AS REQUIRED
⊕	WIRED JUNCTION	AS REQUIRED
⊕	POWER PANEL "P"	AS REQUIRED
⊕	LIGHTING PANEL "A"	AS REQUIRED

**FIXTURE SCHEDULE**

FIXT. NO.	MANUFACTURER	CATALOG NO.	LAMP SIZE	REMARKS:
CL-1	MILLER	CP-2192-08	4F40 TWT-12	RAPID START
CL-2	MILLER	CP-2192-04	2F40 TWT-12	"DITTO"
CL-3	HOLOPHANE	247-CE-120	S62ME-70	S62 BALLAST

NOTE: FIXTURE NUMBER LETTER PREFIX DENOTES TYPE OF MOUNTING AS FOLLOWS: CL= MOUNT ON CEILING SURFACE

NOTE: FIXTURES SHOWN ARE GIVEN FOR TYPE AND QUALITY ONLY, OTHER FIXTURE MANUFACTURERS SHALL BE: DEVINE, DAYRITE, MARCO, MAPHSEN, SUNSEAM, SMITHCRAFT & COLUMBIA.

(C-C) TWO (2) NEMA SIZE 2, NON-FUSED DISCONNECT TYPE, LOCKABLE, COMBINATION MOTOR STARTERS W/ 240 VOLT COILS, HAND-OFF-AUTO 3-POSITION SELECTOR SWITCHES W/ PROVISIONS FOR LOCKING THE DISCONNECT SWITCH IN THE OPEN POSITION, IN A NEMA 1 ENCLOSURE, FOR (2) 5-HP RESERVOIR PUMPS.

(1) 2" CONDUITS W/ NO. 12 PULL WIRE TO OHIO BELL TELEPHONE CO. SERVICE TERMINAL BOX. MOUNT ON EXTERIOR WALL, CONT. TO TEL. CABINET. (1) 2" COND. W/ NO. 12 PULL WIRE FROM TEL. CABINET TO CONC. TEL. PULL BOX (SPARE FOR FUTURE FEEDS)

(2) STANDARD WALL HUNG TELEPHONE, DIRECT DIAL, FOR CARETAKERS USE ONLY. PROVIDE W/ BLANK COVER IF TELEPHONE IS NOT TO BE INSTALLED.

(3) 1" COND. W/ 4-W SUSPENSION WIRES & GRD. WIRE TO RESERVOIR TANK. GROUND FAULT CIRCUIT A-12

THE ELECTRICAL CONTRACTOR SHALL FURNISH & INSTALL (1) SQUARE D CAT. NO. QOB 120 VHGF GROUND FAULT CIRCUIT BREAKER W/ GROUND FAULT INTERRUPTER FOR NQOB PANELBOARDS, U.L. LISTED, 20 AMP, 1-POLE, 120 VOLT AC, (22,000) AMPERE RMS RATING, IN PANEL "A". THIS BREAKER SHALL FEED CIRCUIT NO. A-12 TO TWO (2) HUBBELL CAT. NO. 5262, 15 AMP, 125 V A.C., 2-POLE, 3-WIRE GROUNDING STRAIGHT BLADE, DUPLEX RECEPTACLES, U.L. LISTED & MEETING N.E.C. ARTICLE 250-74, EXCEPTION NO. 2 & FED. SPEC. W-C 596. 2-NO. 12 THW GREEN GRD. IN 3/4" COND. TO I-P/20A GFCI CIRCUIT BKR.

NOTE: IF OVERHEAD DOOR IS RELOCATED TO THE OPPOSITE LOCATION SHOWN, SEE SITE PLAN, THE MAIN SWITCHGEAR SHALL REMAIN ON SAME WALL BUT SHALL BE REVERSED FROM THAT SHOWN IN DETAIL 6F-03 AND SHALL MOVE BACK, OPPOSITE OF DOOR OPENING.

GROUND FAULT CIRCUIT OUTLETS - CIRCUITS A-5 & A-6

THE ELECTRICAL CONTRACTOR SHALL FURNISH & INSTALL TWO (2) GROUND FAULT CIRCUIT OUTLETS IN LOCATIONS AS SHOWN ON DRAWING AND AS FOLLOWS: FURNISH AND INSTALL TWO (2) SQUARE D CAT. NO. QOB 120 VHGF GROUND FAULT CIRCUIT BREAKERS W/ GROUND FAULT INTERRUPTER FOR NQOB PANELBOARDS, U.L. LISTED, 20 AMP, 1-POLE, 120 VOLT AC, (22,000) AMPERE RMS RATING, IN PANEL "A". THESE GFCI BREAKERS SHALL FEED SEPARATELY TO A HUBBELL CAT. NO. 5262, U.L. LISTED, - 15 AMP., 125V A.C., 2-POLE, 3-WIRE GROUNDING STRAIGHT BLADE DUPLEX RECEPTACLE, MEETING N.E.C. ARTICLE 250-74, EXCEPTION NO. 2 & FED. SPEC. W-C 596. EACH RECEPTACLE SHALL BE FURNISHED W/ A HUBBELL CAT. NO. 5206 WEATHERPROOF, DOUBLE LIFT COVER, CAST ALUMINUM FOR FS BOX. RECEPTACLE SHALL BE MOUNTED IN A HORIZONTAL POSITION W/ LIFT COVER HINGES ON TOP. APPROVED EQUAL MANUFACTURERS COVERED UNDER LIKE ITEMS IN THE SPECIFICATIONS.

CIR. P-6

FOR TYPE OF CONDUCTORS, SIZE AND COND. SIZE, PANEL "P" SCHEDULE NO. 1 TO BE USED FOR REF. CIR. P-5

2-NO. 4 THW & 1-NO. 4 THW GREEN GRD. / IN 1" COND. FROM HOT WATER HEATERS LOCKABLE, SINGLE THROW, NON-FUSIBLE, 2-POLE, 60 AMP, HEAVY DUTY SAFETY SWITCH, VISIBLE BLADES, W/ NEMA 1 ENCLOSURE, SQUARE "D" CAT. NO. HU262 OR APPROVED EQUAL, TO 2-P/60A BKR, 10 KW WATER.

4-NO. 10 THW & 2-NO. 10 THW GREEN GRD. / IN 1" COND. TO (2) 2-P/30A BRK'S, (2) 4'-0", 2.5 KW B.B. HEATERS.

2-NO. 12 THW & 1-NO. 12 THW GREEN GRD. / IN 3/4" COND. TO 2-P/20A BRK., 2.4 KW HAND DRYER.

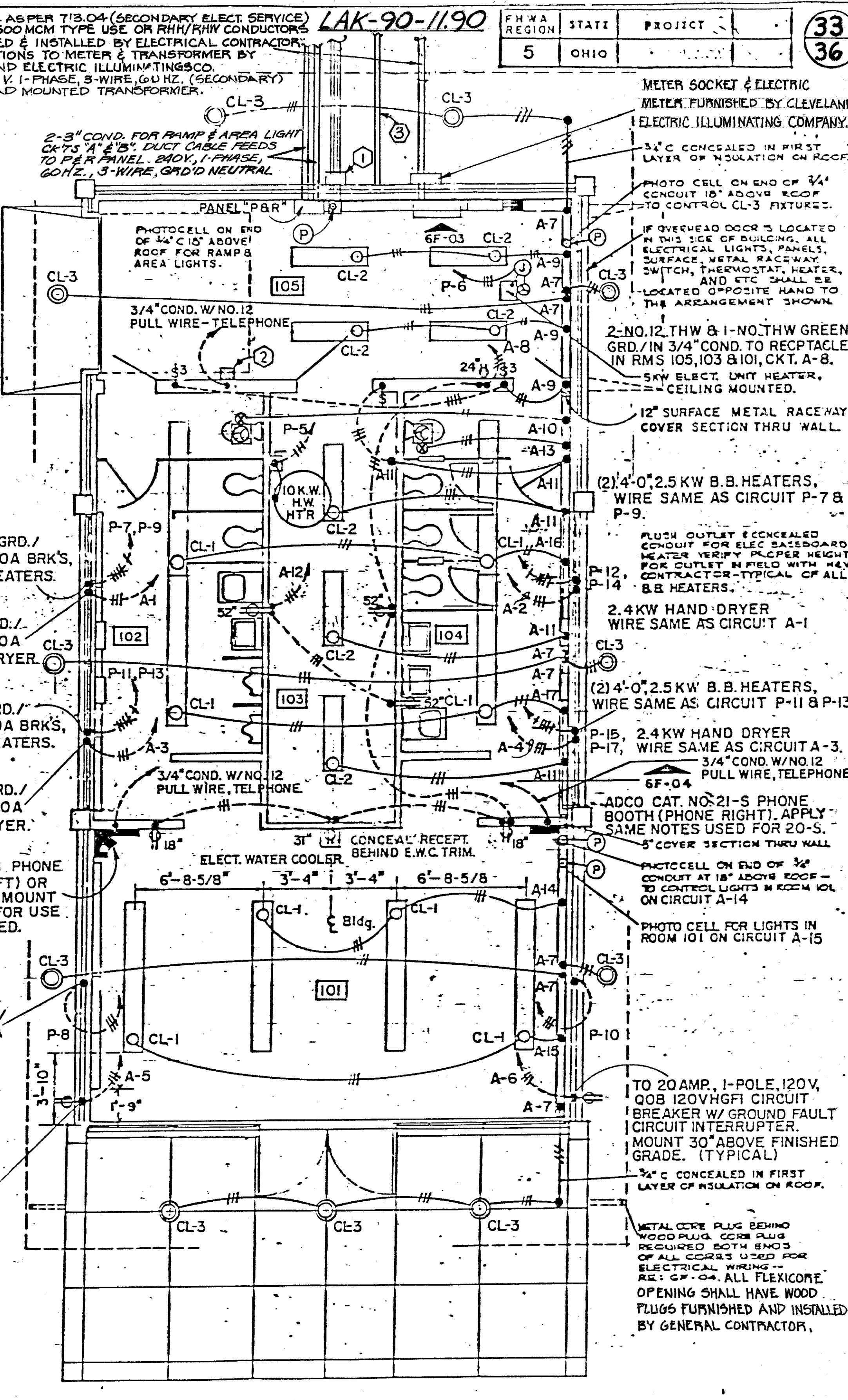
4-NO. 10 THW & 2-NO. 10 THW GREEN GRD. / IN 1" COND. TO (2) 2-P/30A BRK'S, (2) 4'-0", 2.5 KW B.B. HEATERS.

2-NO. 12 THW & 1-NO. 12 THW GREEN GRD. / IN 3/4" COND. TO 2-P/20A BRK., 2.4 KW HAND DRYER.

ADCO CAT. NO. 20-S PHONE BOOTH (PHONE LEFT) OR APPROVED EQUAL. MOUNT CONN. SLOT HEIGHT FOR USE OF THE HANDICAPPED.

2-NO. 10 THW & 1-NO. 10 THW GREEN GRD. / IN 3/4" COND. TO 2-P/30A BKR., (2) 6'-0", 2.25 KW B.B. HEATERS.

2-NO. 12 THW & 1-NO. 12 THW GREEN GRD. / IN 3/4" COND. TO I-P/20A GFCI CIRCUIT BKR.

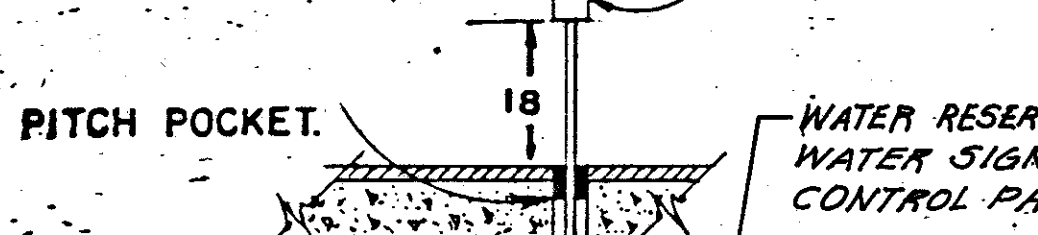


(A-A) PICNIC AREA & RAMP LIGHTING PANEL ("P" & "R" PANEL) 120/240 VOLTS/ 1-PHASE, 3-WIRE, 60 HZ, 100 AMPERE MAIN - LUGS W/S/N, 16-POLES BOLT-IN TYPE BREAKERS, SQUARE "D" NQOB-16-3L-100 OR APPROVED EQUAL AS PER SPECIFICATIONS.

(B-B) THE ELECTRICAL CONTRACTOR SHALL FURNISH & INSTALL ONE (1) NEMA TYPE 1, U.L. LISTED, 14GA. STEEL PANEL ENCLOSURE, HOFFMAN ENGINEERING CO. CAT. NO. A30N24B, SIZE 30" H x 24" W x 8 5/8" D, W/ 1/2 GA. STEEL REMOVABLE PANEL SIZE 22" H x 22 1/2" W, W/ BUTT HINGES, FLUSH HANDLE LATCH AND CYLINDER LOCK KIT A-112B, W/ GREY PRIME FINISH INSIDE & OUT OVER PHOSPHATIZED SURFACE. PANEL SHALL BE WHITE ENAMEL. APPROVED EQUALS SHALL BE AS MANUFACTURED BY E.M. WIEGMANN & CO., INC., PARK OHIO ELECTRIC, INC., SQUARE "D" OR KEYSTONE. THIS ENCLOSURE SHALL BE DESIGNATED AS THE "RESERVOIR PUMP CONTROL CABINET."

THE ELECTRICAL CONTRACTOR SHALL FURNISH & INSTALL WITHIN THE ABOVE ENCLOSURE ALL OF THE WATER SYSTEM CONTROL COMPONENTS, AS REQUIRED, INCLUDING THE FOLLOWING: (1) DUPLEX PUMP ALTERNATOR, B/W CONTROLS, INC. INDUCTION RELAYS CONSISTING OF (1) 2 LH RELAYS & (1) LEVEL CONTROL POWER RELAY; CONTACTS, THERMAL OVERLOADS, PILOT LIGHT DEVICES, TERMINAL BLOCKS, STARTERS, CONDUCTORS, B/W LEADS, AND ETC. AS REQUIRED. THESE ITEMS SHALL BE INSTALLED IN A FACTORY WIRE MANNER AND SHALL HAVE CIRCUIT IDENTIFICATION NUMBER LABELS AND IDENTIFICATION NAMEPLATES AS SPECIFIED IN THE ELECTRICAL SPECIFICATIONS.

FISHER PIERCE MODEL NO. 63300DE2 PHOTOELECTRIC CELL W/ MODEL NO. 2101AFA METER SOCKET ASSEMBLY. APPROVED EQUALS SHALL BE AS PER TORK, G.E., PARAGON, OR AMERICAN ELECTRIC.



3-NO. 12 THW IN 3/4" COND. TO PHOTO ELECT. CELL FOR RAMP & AREA LIGHT CKTS "A", "B", "C", "D"

NEMA 1 ENCLOSURE 3-POLE LOCKABLE, 60 AMP. COMBINATION ELECTROMAGNETICALLY HELD LIGHTING CONTACTOR 120/240, 3-WIRE, GRD. NEUTRAL SUPPLY W/ 120V. COIL, W/ H.O.A. SWITCH & RED PILOT LIGHT ON COVER, AS PER C.M.S. 625.19 & 713.20.

NEMA TYPE 1 ENCLOSURE TELEPHONE CABINET U.L. LISTED, SIZE 18" W x 24" H x 10" D, TYPE FLS SURFACE MOUNT W/ INTERIOR PLYWOOD MOUNTING PANEL. PLANO HINGE DOOR W/ KEY LOCK HANDLE. E.M. WIEGMANN OR APPROVED EQUAL.

2-NO. 4 AWG TYPE USE, RHH/RHW, 600 V. & 1-NO. 2 AWG TYPE USE, RHH/RHW, 600 V., GREEN EQUIPMENT GRD. IN 1-1/4" COND.

4-NO. 2 THW / IN 2" NIPPLE (1-NO. 2 IS EQUIPMENT GROUND, GREEN CONDUCTOR)

10" MASONRY WALL

3/4" A.D. PLYWOOD PANEL MOUNTING BOARD - PAINT W/ 3-COATS FLAT BLACK LATEX PAINT ON BOTH SIDES & MOUNT SECURELY TO WALL SIZE 14'-0" x 6'-0" H.

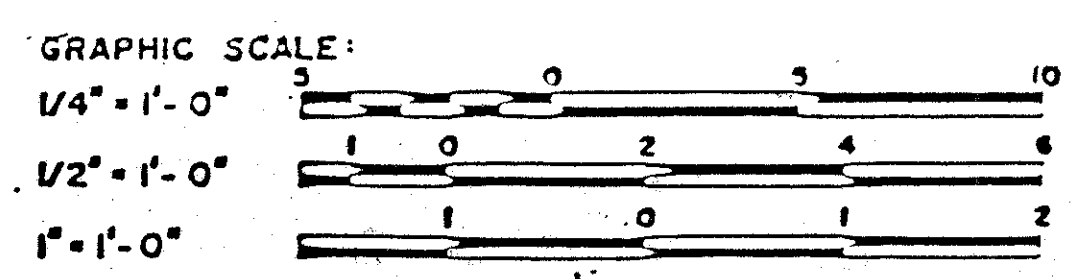
FOR ALPHABETICAL & NUMERICAL REFERENCES OF CONDUITS, CONDUCTORS & CIRCUITS REFER TO SHEET NO. 48A/52 (TYPICAL)

SECONDARY ELECTRICAL CONDUIT SHALL EXTEND OUTSIDE BLD'G & ENTER 9" THROUGH AN LB FITTING FEEDING FROM A GALV. LONG RADIUS 90° EL. BOW. (1) 4" COND. W/ 3-NO. 500 MCM. TYPE USE OR RHH/RHW, 600 V. CONDUCTORS, ELECTRICAL SERVICE SECONDARY TO PAD MOUNTED TRANSFORMER (120/240V, 1-PHASE, 3-WIRE, 60 HZ., 400 AMP. SERVICE, FOR EASE OF C.E.I. CO. INSTALLING THE CURRENT TRANSFORMERS, THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ONE (1) BURNDY ELECTRICAL CONNECTOR ON EACH HOT LINE OF THE 350 MCM SERVICE INSIDE THE C/T CABINET & ONE (1) 1" COND. THRU WALL TO METER FROM C/T CABINET

THE ELECTRICAL CONTRACTOR SHALL FURNISH & INSTALL ON THE INTERIOR, BACK WALL OF ROOM NO. 105, AS SHOWN, ONE (1) U.L. LISTED, NEMA 1, 14 GAUGE STEEL, DOUBLE DOOR, CONTINUOUS HINGE TRANSFORMER CABINET, TYPE CT-DD INDOOR W/ 3-POINT T-HANDLE LOCK PLUS HASP, E.M. WIEGMANN & CO. INC. MODEL NO. CT-DD322410, SIZE SHALL BE 32" W x 24" H x 10" D. REFER TO SPECIFICATIONS FOR APPROVED EQUAL MANUFACTURERS.

**6F-03**

MAIN SWITCHGEAR



(D-D) THE ELECTRICAL CONTRACTOR SHALL INSTALL METER SOCKET. THE CLEVELAND ELECTRIC ILLUMINATING CO SHALL FURNISH METER SOCKET & METER & INSTALL METER, MOUNT ON EXTERIOR WALL, 5'-0" ABOVE FIN. GRADE. SERVICE CONDUCTORS SHALL ENTER C/T CABINET, FURNISHED & INSTALLED BY THE ELECT CONTRACTOR, BY USING AN APPLETON CAT. NO. LB-400-M, 4" SIZE, OR APPROVED EQUAL AS PER SPECIFICATIONS.

**6F-01**

ELECTRICAL FLOOR PLAN

1/4" = 1'-0"

OHIO	BUREAU OF DESIGN SERVICES	DEPARTMENT OF TRANSPORTATION
REVISIONS 10-13-82	MOTORIST SERVICES BUILDING & STORAGE UNIT	SHEET NO. RRA 6F
PREPARED BY DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION ADAMS, HANCOCK, KINCHLO, MOYER, SWANSON		