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**WYANDOTTE HIGH SCHOOL
ELECTRICAL IMPROVEMENTS**
2501 MINNESOTA AVE
KANSAS CITY, KS 66102

TWO-SECTION PANELBOARD SCHEDULE														
PANEL DESIGNATION: HPW1				CIRCUIT #										
MOUNTING: SURFACE LOCATION: WOODSHOP				MAIN LUG AMPS: 225 MAIN BREAKER: 200 VOLTAGE: 480/277 PHASEWIRE: 3Ø, 4W										
DESCRIPTION	PHASE			TRIP	POLE	C/B			TRIP	POLE	PHASE			DESCRIPTION
	A	B	C			A	B	C			A	B	C	
DUST COLLECTION	19500	19500	19500	100	3	1	2	3	4	1	2	3	4	TRANSFORMER T-1
SPARE				20	1	7	8	9	10	1	20			SPARE
SPARE				20	1	11	12	1	20					SPARE
SPARE				20	1	13	14	1	20					SPARE
				20	1	15	16	1	20					SPARE
				20	1	17	18	1	20					SPARE
				20	1	19	20	1	20					SPARE
				20	1	21	22	1	20					SPARE
				20	1	23	24	1	20					SPARE
				20	1	25	26	1	20					SPARE
				20	1	27	28	1	20					SPARE
				20	1	29	30	1	20					SPARE
				20	1	31	32	1	20					SPARE
				20	1	33	34	1	20					SPARE
				20	1	35	36	1	20					SPARE
				20	1	37	38	1	20					SPARE
				20	1	39	40	1	20					SPARE
				20	1	41	42	1	20					SPARE
TOTALS	19500	19500	19500			2520	3240	3240						TOTALS

PANELBOARD SIZING LOAD			
LOAD DESCRIPTION	CONNECTED	DEMAND	CODE MIN. (VA)
LIGHTS	0	1.25	79.5
RECEPTACLES	12,780	10KVA + 50% REST	11,390
MOTORS	68,490	1.25 x LARGEST + SUM OF REST	83,115
AIR CONDITIONING	0	1.00	0
SPACE HEATING	0	0.00	0
CONTINUOUS	0	1.25	0
NON-CONTINUOUS	0	1.00	0
MISC. LOADS 1	0	0.60	0
MISC. LOADS 2	0	1.00	0
SIZING LOAD:			94,505
SIZING LOAD (AMPS):			114

CONNECTED PHASE LOADS		
PHASE	VA	AMPS
A	22,020	79.5
B	22,740	82.1
C	22,740	82.1
TOTALS	67,500	81.2

REMARKS:
1. CUTLER HAMMER POW-R-LINE 2A OR EQUAL.

SINGLE-SECTION PANELBOARD SCHEDULE														
PANEL DESIGNATION: PW1				CIRCUIT #										
MOUNTING: RECESSED LOCATION: SHOP				MAIN LUG AMPS: 225 MAIN BREAKER: 150 VOLTAGE: 208/120 PHASEWIRE: 3Ø, 4W										
DESCRIPTION	PHASE			TRIP	POLE	C/B			TRIP	POLE	PHASE			DESCRIPTION
	A	B	C			A	B	C			A	B	C	
GENERAL RECEPTACLES	720			20	1	1	2	1	20					GENERAL RECEPTACLES
GENERAL RECEPTACLES		1080		20	1	3	4	1	20		1080			GENERAL RECEPTACLES
GENERAL RECEPTACLES			1080	20	1	5	6	1	20			1080		GENERAL RECEPTACLES
GENERAL RECEPTACLES	360			20	1	7	8	1	20		360			PORTABLE SAW STOP
GENERAL RECEPTACLES		1080		20	1	9	10	1	20					SPARE
GENERAL RECEPTACLES			1080	20	1	11	12	1	20					SPARE
AIR DRYER	360			20	1	13	14	1	20					SPARE
SPARE				20	1	15	16	1	20					SPARE
SPARE				20	1	17	18	1	20					SPARE
SPARE				20	1	19	20	1	20					SPARE
SPARE				20	1	21	22	1	20					SPARE
SPARE				20	1	23	24	1	20					SPARE
SPACE				20	1	25	26	1	20					SPACE
SPACE				20	1	27	28	1	20					SPACE
SPACE				20	1	29	30	1	20					SPACE
SPACE				20	1	31	32	1	20					SPACE
SPACE				20	1	33	34	1	20					SPACE
SPACE				20	1	35	36	1	20					SPACE
SPACE				20	1	37	38	1	20					SPACE
SPACE				20	1	39	40	1	20					SPACE
SPACE				20	1	41	42	1	20					SPACE
TOTALS	1440	2160	2160			1080	1080	1080						TOTALS

PANELBOARD SIZING LOAD			
LOAD DESCRIPTION	CONNECTED	DEMAND	CODE MIN. (VA)
LIGHTS	0	1.25	0
RECEPTACLES	12,780	10KVA + 50% REST	11,390
MOTORS	9,990	1.25 x LARGEST + SUM OF REST	11,550
AIR CONDITIONING	0	1.00	0
SPACE HEATING	0	0.00	0
CONTINUOUS	0	1.25	0
NON-CONTINUOUS	0	1.00	0
KITCHEN EQUIPMENT	0	1.00	0
SIZING LOAD:			22,940
SIZING LOAD (AMPS):			64

CONNECTED PHASE LOADS		
PHASE	VA	AMPS
A	2,520	21.0
B	3,240	27.0
C	3,240	27.0
TOTALS	9,000	25.0

REMARKS:
1. CUTLER HAMMER POW-R-LINE 1A OR EQUAL.

SINGLE-SECTION PANELBOARD SCHEDULE														
PANEL DESIGNATION: PW2				CIRCUIT #										
MOUNTING: SURFACE LOCATION: SHOP				MAIN LUG AMPS: 225 MAIN BREAKER: M.L.O. VOLTAGE: 208/120 PHASEWIRE: 3Ø, 4W										
DESCRIPTION	PHASE			TRIP	POLE	C/B			TRIP	POLE	PHASE			DESCRIPTION
	A	B	C			A	B	C			A	B	C	
RADIAL ARM SAW	2080			20	3	1	2	1	20		360			GENERAL RECEPTACLES
		2080		20	3	3	4	1	20		720			GENERAL RECEPTACLES
			2080	20	3	5	6	1	20			720		GENERAL RECEPTACLES
HANGING AIR CLEANING UNIT	1500			20	1	7	8	1	20		720			GENERAL RECEPTACLES
HANGING AIR CLEANING UNIT		1500		20	1	9	10	1	20			360		SAFETY GLASSES CABINET
FINISH ROOM EXHAUST FAN			750	15	1	11	12	1	20				360	CNC RECEPTACLE
SPARE				20	1	13	14	1	20		540			WORK BENCH CEILING RECEPT.
SPARE				20	1	15	16	1	20					SPARE
SPARE				20	1	17	18	1	20					SPARE
SPARE				20	1	19	20	1	20					SPARE
SPARE				20	1	21	22	1	20					SPARE
SPACE				20	1	23	24	1	20					SPACE
SPACE				20	1	25	26	1	20					SPACE
SPACE				20	1	27	28	1	20					SPACE
SPACE				20	1	29	30	1	20					SPACE
SPACE				20	1	31	32	1	20					SPACE
SPACE				20	1	33	34	1	20					SPACE
SPACE				20	1	35	36	1	20					SPACE
SPACE				20	1	37	38	1	20					SPACE
SPACE				20	1	39	40	1	20					SPACE
SPACE				20	1	41	42	1	20					SPACE
TOTALS	3580	3580	2830			1620	1080	1080						TOTALS

PANELBOARD SIZING LOAD			
LOAD DESCRIPTION	CONNECTED	DEMAND	CODE MIN. (VA)
LIGHTS	0	1.25	0
RECEPTACLES	3,780	10KVA + 50% REST	3,780
MOTORS	9,990	1.25 x LARGEST + SUM OF REST	11,550
AIR CONDITIONING	0	1.00	0
SPACE HEATING	0	0.00	0
CONTINUOUS	0	1.25	0
NON-CONTINUOUS	0	1.00	0
MISC. LOADS 1	0	0.50	0
MISC. LOADS 2	0	1.00	0
SIZING LOAD:			15,330
SIZING LOAD (AMPS):			43

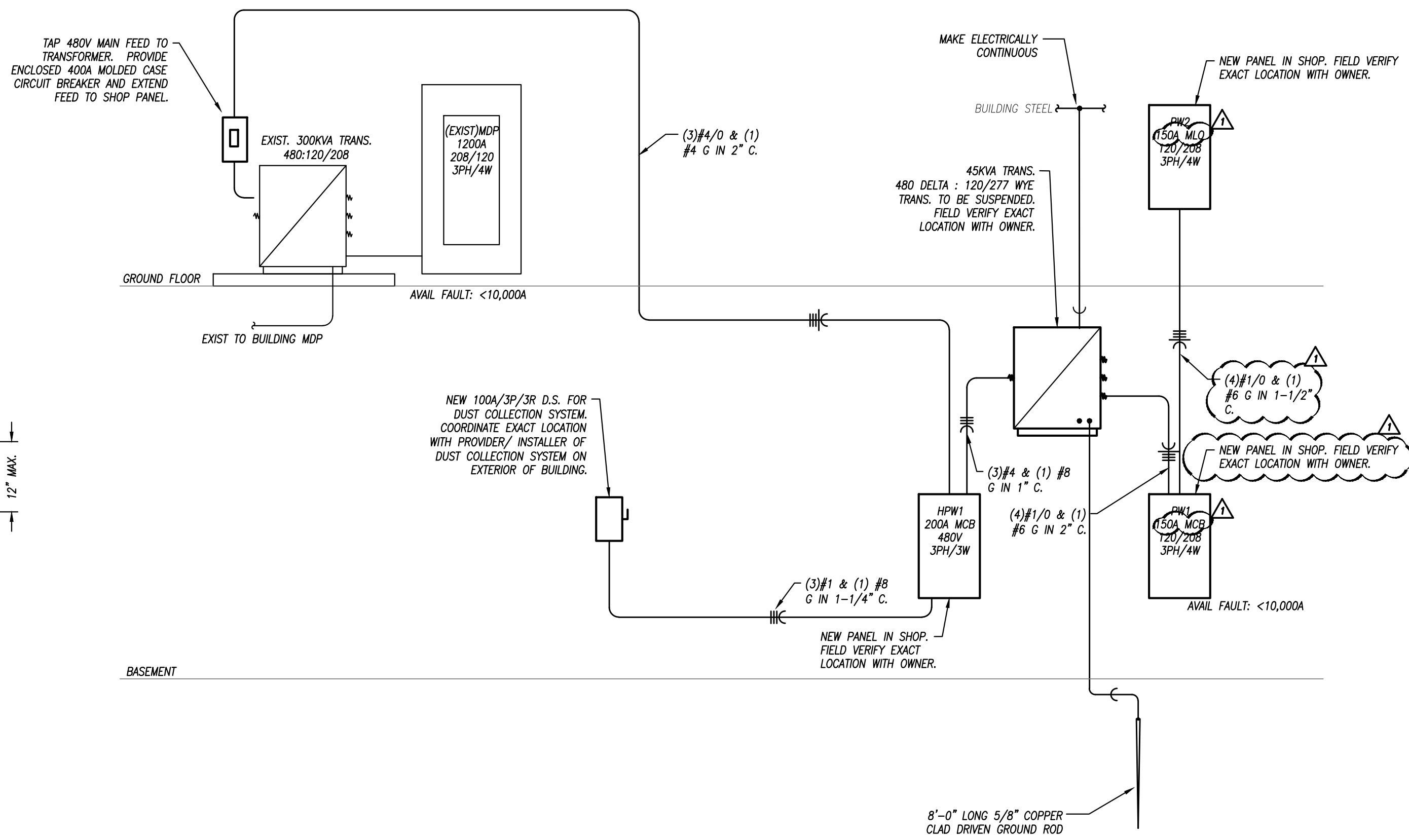
CONNECTED PHASE LOADS		
PHASE	VA	AMPS
A	5,200	43.3
B	4,660	38.8
C	3,910	32.6
TOTALS	13,770	38.2

REMARKS:
1. CUTLER HAMMER POW-R-LINE 1A OR EQUAL.

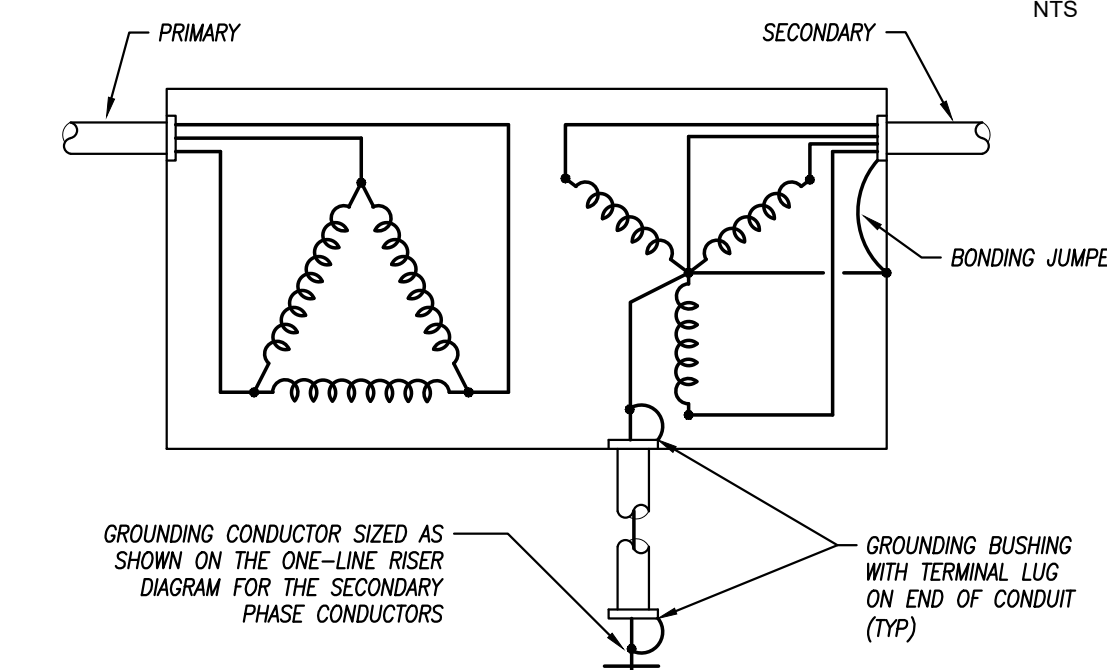
LIGHT FIXTURE SCHEDULE						
FIXTURE TYPE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LAMP NUMBER / DESCRIPTION	VOLTAGE	REMARKS
A	WILLIAMS	SERIES 76	4'-0" LONG COMMERCIAL-GRADE STRIP FIXTURE. UNISTRUT MOUNT FROM CEILING. WHITE FINISH. INTEGRAL LED DRIVER PRE-WIRED FOR NON-DIMMING APPLICATIONS.	ONE (1) 44 WATT, 5500 LUMEN, L50 LED MODULE. 3500K CCT.	277/120	1,2
B	WILLIAMS	SERIES 76	4'-0" LONG COMMERCIAL-GRADE STRIP FIXTURE. SURFACE MOUNT. WHITE FINISH. INTEGRAL LED DRIVER PRE-WIRED FOR NON-DIMMING APPLICATIONS.	ONE (1) 44 WATT, 5500 LUMEN, L50 LED MODULE. 3500K CCT.	277/120	1,2
C	LDPI	SERIES 380	4'-0" LONG INDUSTRIAL-GRADE STRIP FIXTURE WITH ROUND LENS. SURFACE MOUNT. EXPLOSION PROOF. CLASS I DIVISION 1 CERTIFICATION. INTEGRAL LED DRIVER PRE-WIRED FOR NON-DIMMING APPLICATIONS.	ONE (1) 70 WATT, 5500 LUMEN, 4L STANDARD LED MODULE. 4000K CCT.	277/120	1,2

REMARKS:
1. FURNISH WITH AND INSTALL ALL NECESSARY HARDWARE AND MOUNTING BRACKETS.
2. FIXTURE HAS BEEN SELECTED BY OWNER. IN GENERAL, NO SUBSTITUTIONS WILL BE ALLOWED.

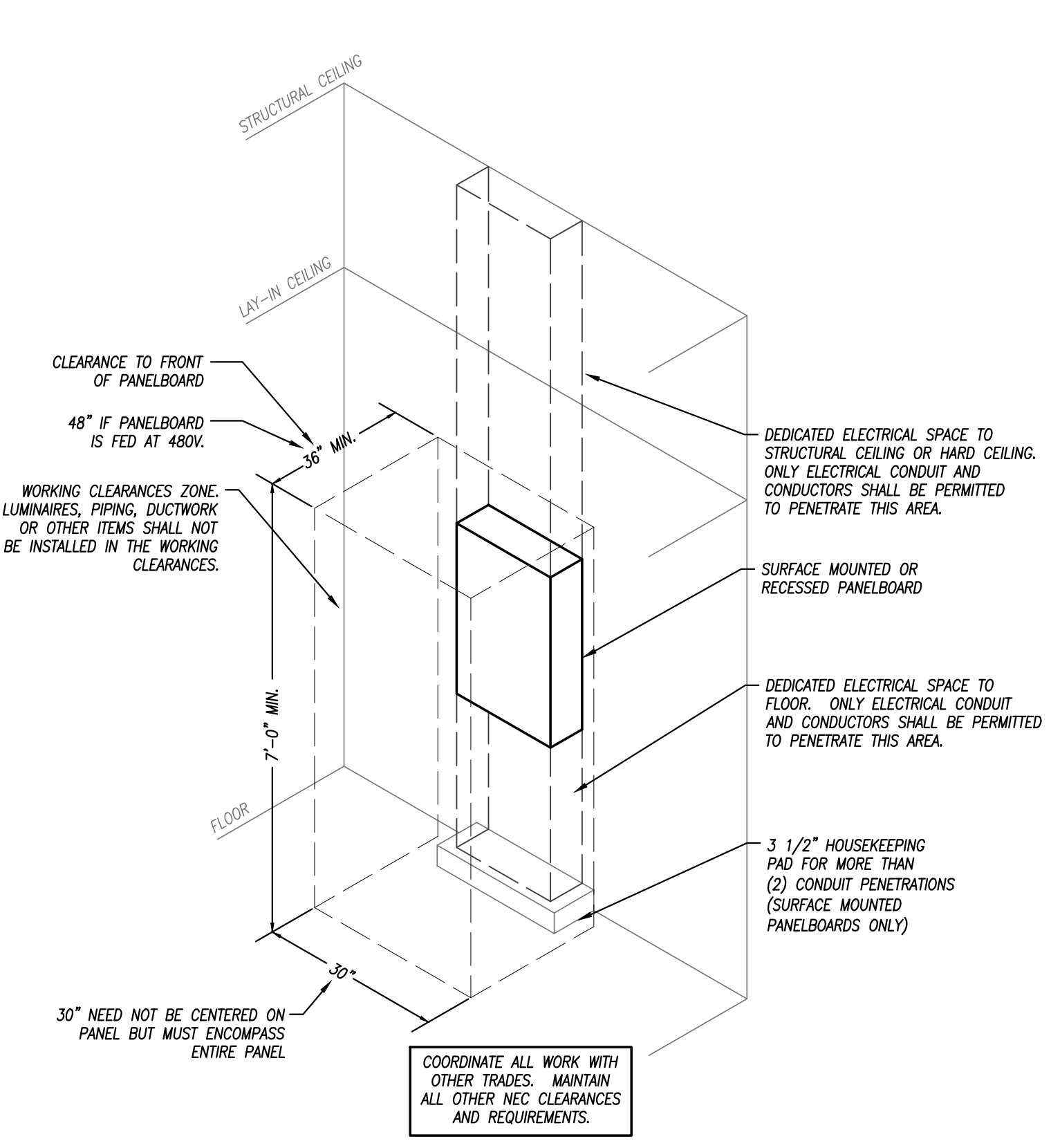
GENERAL NOTES (APPLICABLE TO ALL FIXTURES):
1) LUMENS LISTED FOR LED FIXTURES ARE GENERALLY DELIVERED LUMENS UNLESS NOTED OTHERWISE.
2) FOR ALL FIXTURES INSTALLED IN RATED ASSEMBLIES, FURNISH AND INSTALL APPROVED FIRE BARRIER (E.Z. BARRIER OR TENMAT FF109 SERIES) OVER FIXTURE TO MAINTAIN 1 HOUR CEILING ASSEMBLY RATING.



ELECTRICAL RISER DIAGRAM
NTS



DRY TYPE TRANSFORMER GROUNDING
NOT TO SCALE



TYPICAL PANELBOARD INSTALLATION DETAIL
NOT TO SCALE

