

<u>Appendix H – RMLD</u>

Figures and Illustrations





Reading Municipal Light Department RELIABLE POWER FOR GENERATIONS

FIGURE 1 PAD MOUNT CLEARANCES

230 Ash St. Reading, MA 01867

SCALE: N.T.S

DATE: 9/24/2020

PARTIAL LOAD TRANSFER



















	LEGEND
Ø	EQUIPMENT, OIL INSULATED
B	DOOR
©	WINDOW, OPERABLE
D	HVAC DUCT

NOTES:

- 1. NONCOMBUSTIBLE MATERIAL IS DEFINED AS A MATERIAL THAT WILL NOT IGNITE, BURN, SUPPORT COMBUSTION, OR RELEASE FLAMMABLE VAPORS, WHEN SUJECTED TO FIRE OR HEAT (NFPA 220-1979)
- 2. BUILDING OR ANY ELEMENT OF A BUILDING STRUCTURE SHALL NOT OVERHANG ANY PART OF THE PAD-MOUNTED EQUIPMENT
- 3. WHEN MINIMUM REQUIRED DISTANCE CANNOT BE MET, A NONCOMBUSTIBLE BARRIER, OF MINIMUM 6' HEIGHT, SHALL BE CONSTRUCTED
- 4. THE MINIMUM CLEARANCE OF 10' SHALL BE INCREASED TO 25' FOR EXITS FROM PLACES OF PUBLIC ASSEMBLY, SUCH AS AN AUDITORIUM

230 Ash St. Reading, MA 01867	RMLD Reading Municipal Light Department	FIGURE 10		
SCALE: N.T.S DATE: 9/24/2020	RELIABLE POWER FOR GENERATIONS	LOCATION OF PAD MOUNTED EQUIPMENT		
	250 Asn St. Reading, MA 01807	SCALE: N.T.S	DATE: 9/24/2020	

























NOTES:

1. METER BRACKET ASSEMBLY SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION

RMLD Reading Municipal Light Department RELIABLE POWER FOR GENERATIONS	FIGURE 21 DETAIL OF METER SOCKET BRACKET		
220 Ach St. Roading MA 01967	ON WOO	DD POLE	
250 Asii St. Reading, MA 01007	SCALE: N.T.S	DATE: 9/24/2020	







- 1. <u>SPECIFICATIONS:</u> ALL WORK SHALL BE IN ACCORDANCE WITH THESE STANDARDS: THE NATIONAL ELECTRICAL SAFETY CODE, STATE AND LOCAL CODE REQUIREMENTS. ADDITIONAL SPECIFICATIONS, WHEN REQUIRED, TO BE APPROVED BY THE RMLD ENGINEERING DIVISION UPON REQUEST.
- 2. <u>OWNERSHIP:</u> CONTRACTOR SHALL FURNISH TRANSFORMER PAD (PROVIDED BY RMLD), CONDUITS AND GROUNDING PROVISIONS. RMLD TO TAKE OWNERSHIP OF FACILITIES POST ENERGIZATION.
- 3. <u>APPROVAL:</u> CUSTOMER SHALL OBTAIN APPROVAL OF PLANS BY THE TOWNS ENGINEERING DIVISION AND RMLD. PLANS SHALL INCLUDE ALL ELECTRIC FACILITIES IN THEIR INTENDED LOCATIONS.
- 4. <u>LOCATION/PROTECTION:</u> PAD LOCATION TO BE APPROVED BY RMLD ENGINEERING. THERE SHALL BE NO OBSTRUCTIONS WITHIN 3' OF THE REAR AND SIDES, AND 10' IN FRONT. IN AREA OF VEHICULAR ACTIVITY, APPROVED BARRIERS SHALL BE INSTALLED BY THE CUSTOMER, AROUND THE PAD FOR MECHANICAL PROTECTION OF THE TRANSFORMER
- 5. <u>CONDUIT:</u> INSTALL AS SHOWN. PRIMARY CONDUITS INTO TRANSFORMER PAD TO BE 4", SECONDARY CONDUITS TO BE 3"; UNLESS STATED OTHERWISE BY RMLD.

- 6. <u>GROUNDING:</u> CUSTOMER TO INSTALL A SINGLE GROUND ROD IN TRANSFORMER PAD, AS SHOWN.
- 7. <u>BACKFILL:</u> PROVIDE AS SHOWN; ALL FILL BEING THOROUGHLY COMPACTED
- 8. <u>CONDUCTORS:</u> PRIMARY AND SECONDARY CABLES TO BE PULLED, TERMINATED AND LANDED ON THE TRANSFORMER IN THEIR PROPER LOCATIONS. PRIMARY CABLE TEST REPORT MUST BE PROVIDED TO RMLD ENGINEERING BEFORE TRANSFORMER CAN BE ENERGIZED.

NOTES:

ANY VARIATION IN DESIGN TO ELECTRIC FACILITIES MUST HAVE PRIOR APPROVAL OF RMLD ENGINEERING DIVISION.

ALL REQUIRED EASEMENTS SHALL BE SECURED BY THE CONTRACTOR/OWNER

"DIG SAFE" NOTIFICATION IS THE RESPONSIBILITY OF THE CONTRACTOR

RMLD Reading Municipal Light Department RELIABLE POWER FOR GENERATIONS	FIGURE 23 SPECIFICATIONS FOR FIBERGLASS TRANSFORMER PAD		
230 Ash St. Reading, MA 01867	SCALE: N.T.S	DATE: 9/24/2020	









- SPECIFICATIONS: ALL WORK SHALL BE IN ACCORDANCE WITH THESE STANDARDS. THE NATIONAL ELECTRICAL SAFETY CODE, STATE AND LOCAL CODE REQUIREMENTS. ADDITIONAL SPECIFICATIONS, WHEN REQUIRED, TO BE FURNISHED BY THE RMLD ENGINEERING DIVISION UPON REQUEST
- OWNERSHIP: CONTRACTOR SHALL FURNISH AND OWN CONCRETE PAD, GROUND GRID, CONDUITS AND GROUND WIRES
- APPROVAL: CUSTOMER SHALL OBTAIN APPROVAL OF PLANS BY THE WIRE INSPECTOR AND RMLD . PLANS SHALL SHOW CONCRETE PAD, ALSO CONDUITS, LOCATION, TYPE, SIZE AND NUMBER
- LOCATION / PROTECTION: PAD LOCATION TO BE APPROVED BY RMLD. THERE SHALL BE NO OBSTRUCTIONS WITHIN 4' OF THE REAR. OF THE SIDES. AND 12' OF THE FRONT. IN AREAS OF VEHICULAR ACTIVITY APPROVED BARRIERS SHALL BE INSTALLED, BY THE CUSTOMER, AROUND THE PAD FOR MECHANICAL PROTECTION OF THE TRANSFORMER.
- CONDUIT: INSTALL AS SHOWN. CONDUIT TO BE 4" IN DIAMETER FOR PRIMARY AND 3" FOR SECONDARY, USE 36" RADIUS BENDS. TERMINATIONS OF CONDUITS FOR PRIMARY AND SECONDARY SHALL BE INSTALLED IN THEIR RESPECTIVE ZONES; PRIMARY ON LEFT, SECONDARY ON RIGHT (WHEN FACING THE FRONT DOORS OF TRANSFORMER).
- GROUND GRID: CONTRACTOR TO INSTALL, 1/0 STR (7 STRANDS) BARE COPPER WIRE LOOP 12" BELOW PAD GRADE. LEAVE 36" WIRE ABOVE PAD AT TWO OPPPOSITE POINTS IN THE CONDUIT OPENINGS, FOR GROUNDING OF THE TRANSFORMER. DRIVE FOUR (4) 3/4" BY 8' COPPERWELD GROUND RODS IN EACH CORNER OF PAD AND BOND TO GROUND WIRE
- 7. BACKFILL: ALL FILL BEING THOROUGHLY COMPACTED
- CONCRETE PAD: CONCRETE MINIMUM STRENGTH 5,000 PSI AFTER 28 DAYS, ALL REINFORCEMENT PER ASTM A-615, ALL MATERIAL CONFORM TO ACI-318
- CONDUCTORS: PRIMARY AND SECONDARY CONDUCTORS AND TERMINATIONS TO BE INSTALL BY CUSTOMER. PRIMARY CONNECTION AT RISER POLE TO BE DONE BY RMLD. CABLE TEST REPORT REQUIRED BEFORE CABLE CAN BE ENERGIZED.

RMLD Reading Municipal Light Department RELIABLE POWER FOR GENERATIONS 230 Ash St. Reading, MA 01867		FIGURE 27 CONCRETE PAD (84x84) UP TO 500KVA			
		N.T.S	DATE:	9/24/2020	