NOTES:

1. NOTE ABOUT EFFECTS OF AN EQUIPOTENTIAL PLANE: IF THE FLOOR IS AT THE SAME POTENTIAL AS THE CONNECTING EQUIPMENT AND ANY STRUCTURES ACCESSIBLE TO THE ANIMAL, SHOCK VOLTAGE PROBLEMS CANNOT EXIST. THIS CAN BE ACCOMPLISHED BY PLACING A GRID OF WIRE MESH IN CONCRETE FLOOR. ANY ANIMAL STANDING ON A FLOOR CONTAINING A PROPERLY INSTALLED EQUIPOTENTIAL PLANE WILL HAVE ALL POSSIBLE CONTACT POINTS AT OR VERY NEAR THE SAME POTENTIAL.

2. BOND NO.4 COPPER WIRE TO 6" x 6" (UP TO 12" x 12" IS OK) WIRE MESH IN CONCRETE FLOOR, 2 OR 3 TIMES PER EACH CONT. SECTION OF MESH.

3. IF THERE IS A POSSIBILITY FOR ENGAGING DUE TO A LOCAL ELECTRICAL FAULT SUCH AS ELECTRIC EQUIPMENT NOT BEING PROPERLY GROUNDED, THEN STEEL POSTS, GATE POSTS, SUPPORT POSTS, FEEDER RAILS, ETC. SHOULD BE GROUNDED ACCORDING TO THE NATIONAL ELECTRICAL CODE.

4. ANGLE IRON RAILS SUPPORTS FOR FEEDERS SHOULD BE GROUNDED BY RESISTANCE WELDING AT 2 OR MORE POINTS FOR EACH CONT. SECTION.

5. 6" x 6" WIRE MESH ON FLOOR OF MILK CONNECTED AT 2 POINTS TO MESH IN CONCRETE FLOOR.

6. WIRE MESH TO HAVE A PROTECTIVE CONCRETE COVER TO PROTECT MESH FROM CORROSION OR DAMAGE. 1/2" IS SUFFICIENT, BUT 1/2" IS BETTER.

7. 1/4" ROD STEEL MOLDED (RESISTANCE OR CROSSMERIC) TO FEEDER, EXTENDING DOWN TO WIRE MESH. 1/8" x 1/8" MESH, AND NO.4 COPPER WIRE TOGETHER. INSTALL 2 MESH PER SIDE OF BARREL PROVIDED THAT ALL FEEDERS ARE SIMULTANEOUSLY BOUND TO METAL PARTS. NOTE: CONDUCTORS AND CONNECTIONS SHOULD BE LOCATED WHERE THEY CANNOT BE EASILY DAMAGED OR DISTURBED.

8. UNDER SERIOUS CONDITIONS AN AREA MAY BE TOUCHED WHEN IT STEPS INTO THE EQUIPOTENTIAL PLANE FROM AN AREA BEYOND THE PERIMETER. TO PROVIDE A MORE UNIFORM CHANGE IN VOLTAGE, A VOLTAGE RAMP SHOULD BE INSTALLED AT THE ENTRANCE OR EXIT OF THE EQUIPOTENTIAL PLANE. SEE VOLTAGE RAMP DETAIL.

This drawing is not intended to show structural, mechanical, or architectural details. It should only be used for milking parlor grounding details.

Drawing not to scale.

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