

DO NOT SCALE DRAWINGS

Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR CONSTRUCTION	2016/11/02

Client/client

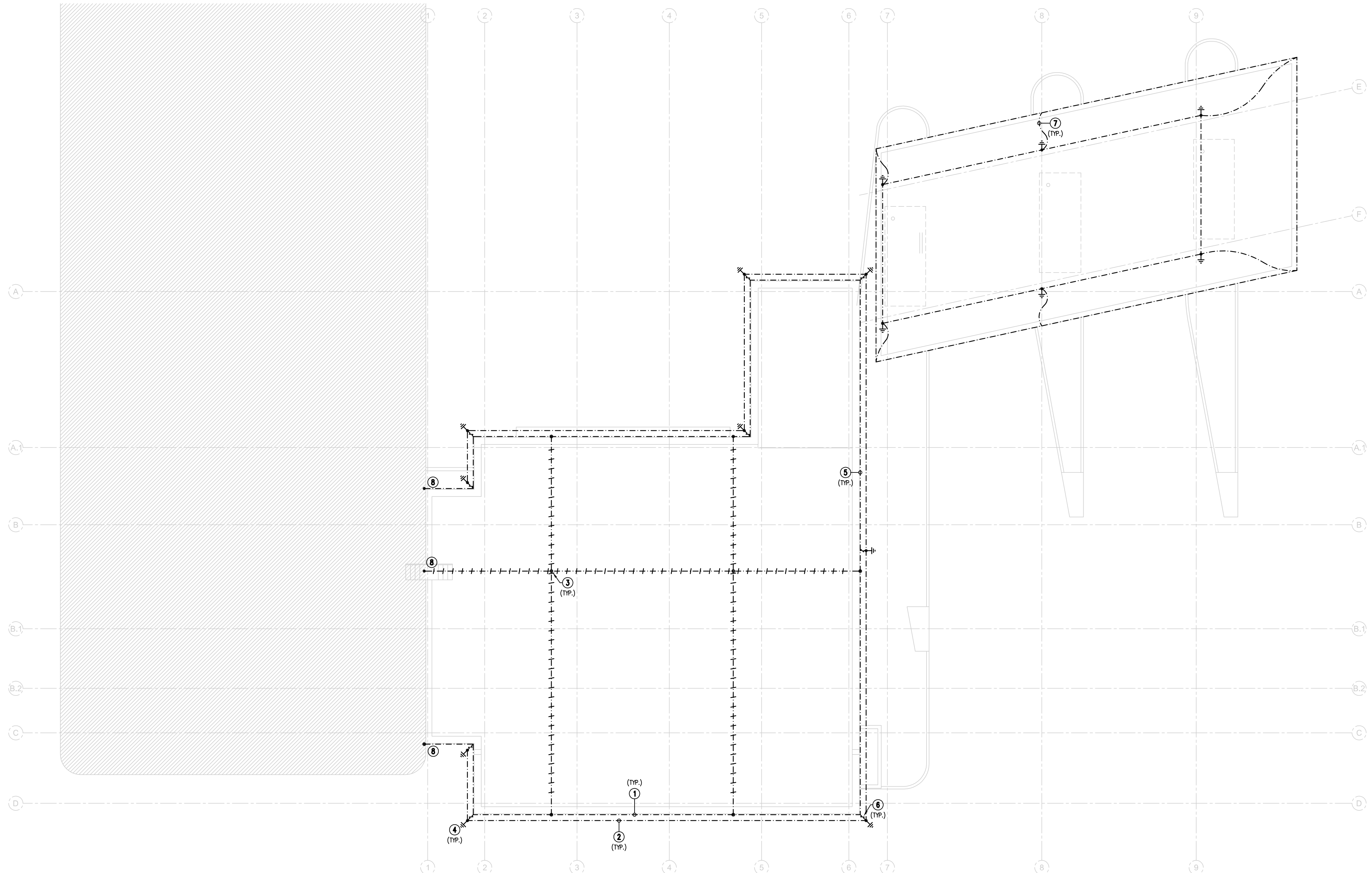
PUBLIC WORKS  
AND GOVERNMENT  
SERVICES AGENCY

Project title/Titre du projet  
**EMERSON, MANITOBA  
HIGHWAY 75, UNITED STATES BORDER**  
**EXPANSION AND  
REDEVELOPMENT OF THE  
EMERSON PORT OF ENTRY**

Approved by/Approuvé par  
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Designed by/Concept par  
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Client/client

Drawing title/Titre du dessin  
**WAREHOUSE AREA ADDITION -  
LIGHTNING PROTECTION LAYOUT**

Project No./No. du projet <b>R.068431.001</b>	Sheet/Feuille <b>E3.1</b> of 26	Revision no./ La Révision no. <b>0</b>
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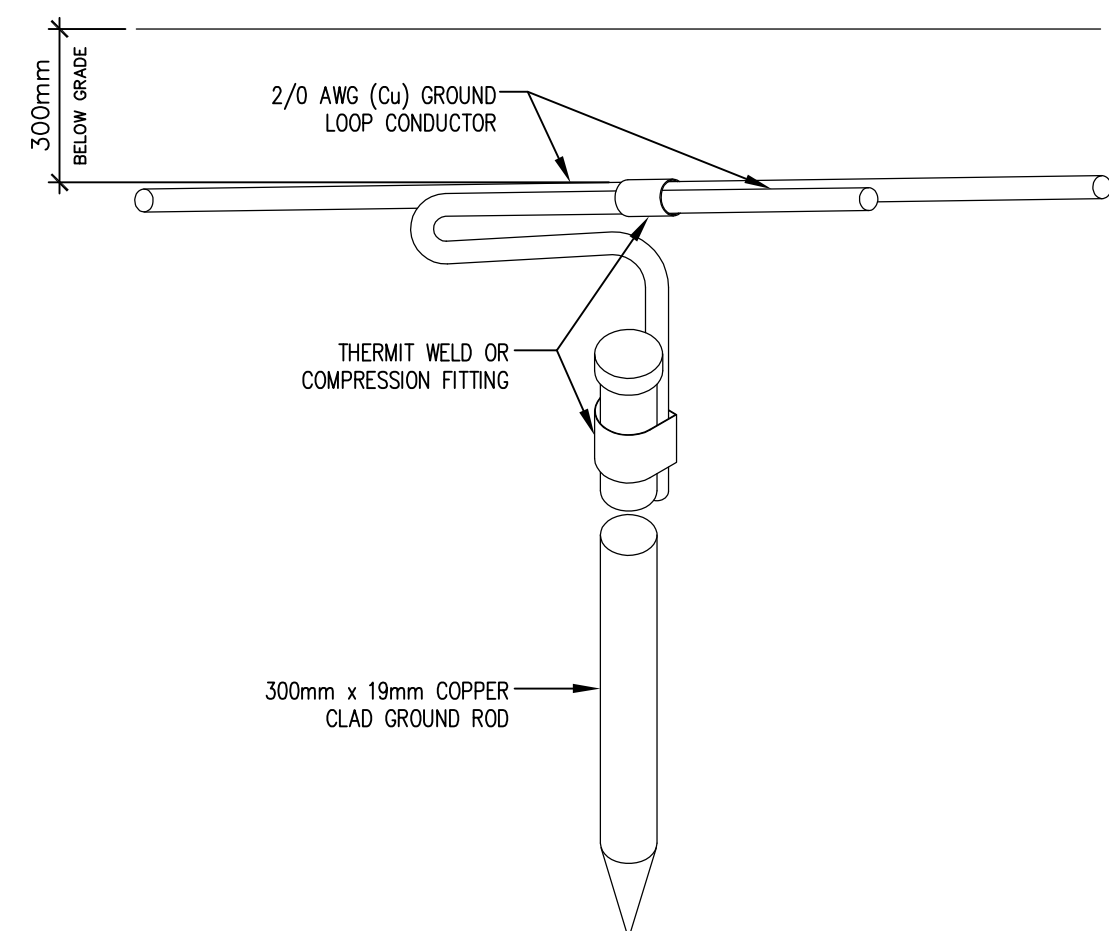
NOTES:

1. MOUNT HORIZONTAL INTERCEPTING CONDUCTOR ON TOP OF PARAPET WALL AT HIGHEST POINT ON ENTIRE ROOF PERIMETER AS CLOSE TO OUTSIDE EDGE AS POSSIBLE (NO MORE THAN 0.5M FROM EDGE OF ROOF. BOND TO ANY METAL STRUCTURES ON ROOF INCLUDING BUT NOT LIMITED TO: VENTS, FAN CASING, AIR HANDLING UNITS, ANTENNA TOWERS ETC.).
2. RUN GROUND LOOP CONDUCTOR MINIMUM OF 600mm FROM FOUNDATION WALL.
3. BOND LIGHTNING PROTECTION CONDUCTORS TOGETHER AT T'S & CROSSOVERS.
4. 3000mm x 19mm (Cu) CLAD GROUND ROD.
5. FASTEN CONDUCTORS TO STRUCTURES AT (1000mm) MAXIMUM INTERVALS. MATERIAL USED AS FASTENER SHALL BE SAME MATERIAL AS CONDUCTOR. UTILIZE (Cu) CLIPS & ADHESIVE CABLE ANCHORS.
6. DOWN CONDUCTORS SHALL BE ROUTED WITHIN EXTERIOR WALL OF BUILDING FOLLOWING MOST DIRECT COURSE TO GROUND GRID AT FOUNDATION WALL.
7. DOWN CONDUCTOR INSIDE COLUMN.
8. BOND NEW ADDITION LIGHTNING PROTECTION CONDUCTORS TO EXISTING BUILDING LIGHTNING PROTECTION CONDUCTORS.

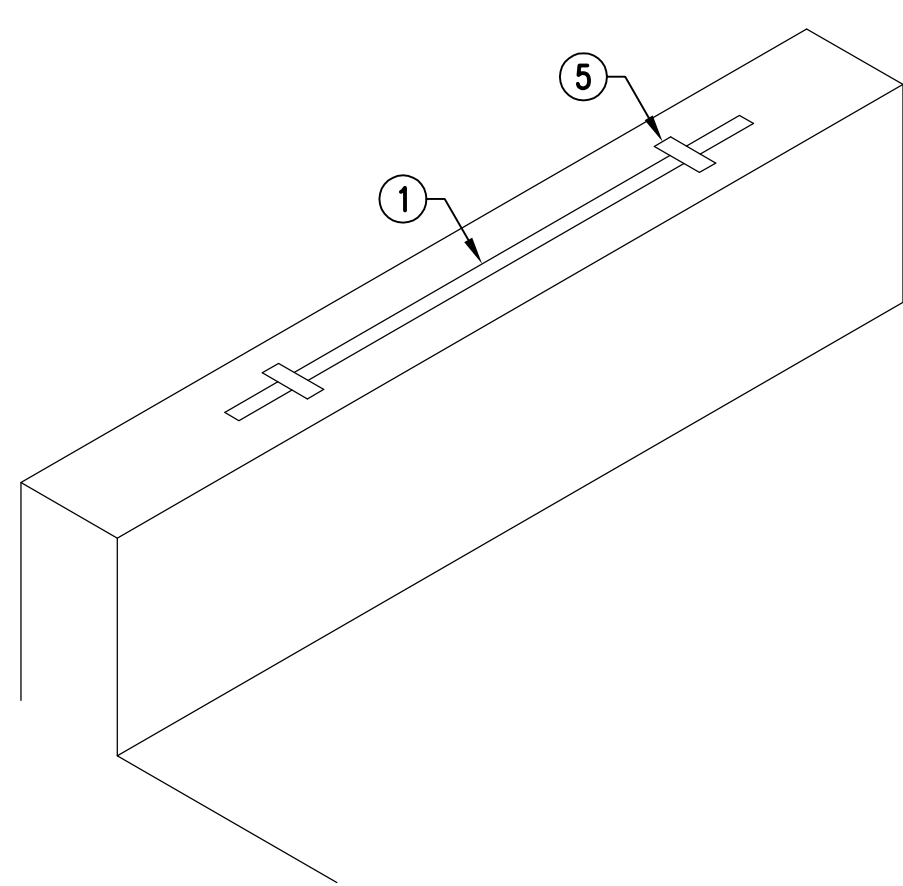
GENERAL NOTES:

1. MINIMUM RADIUS OF CABLE BENDS SHALL BE 200mm.
2. LIGHTNING PROTECTION SYSTEM SHALL CONFORM TO CLASS 1 INSTALLATION AS PER CAN/CSA-B72-M87, INSTALLATION CODE FOR LIGHTNING PROTECTION SYSTEM. DIV. 16 CONTRACTOR IS RESPONSIBLE TO SUPPLY & INSTALL COMPLETE LIGHTNING PROTECTION SYSTEM FOR ALL BUILDINGS & STRUCTURES INCLUDED IN EMERSON LAND BORDER CROSSING FACILITY. FINAL LAYOUT SHALL BE DETERMINED FROM REVIEW OF ARCHITECTURAL & ELECTRICAL TENDER DRAWINGS & REVIEW OF SITE CONDITIONS.
3. ALL MATERIAL & CONDUCTORS SHALL CONFORM TO TABLE 3.1-CSA-B72-M87.

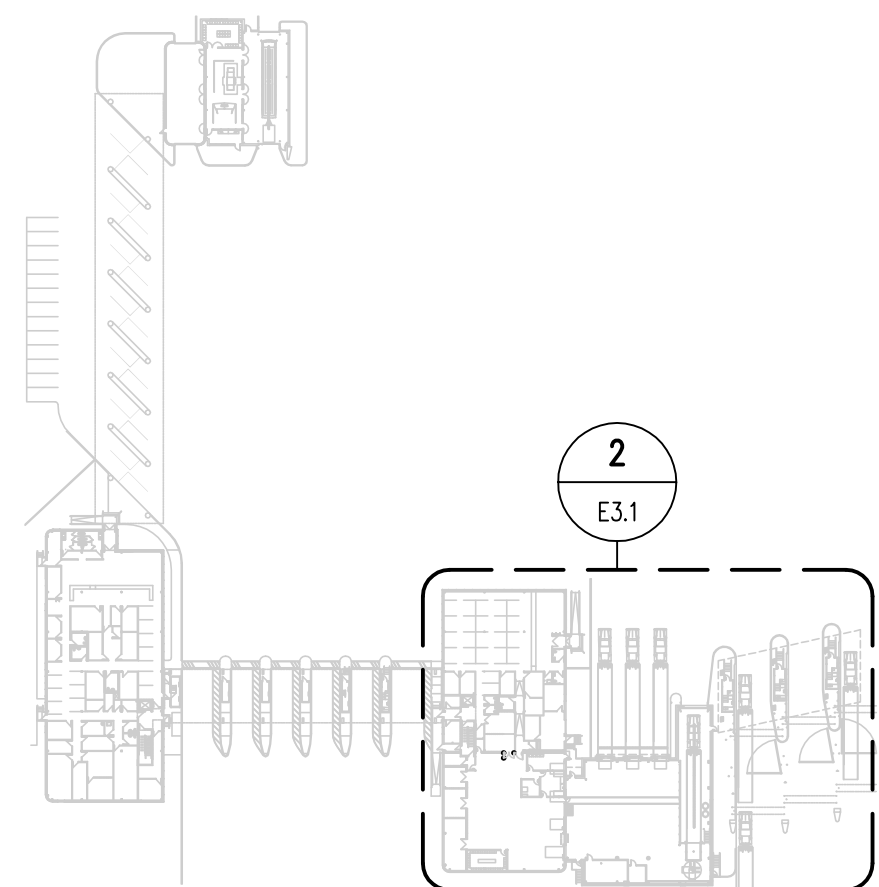
2 WAREHOUSE AREA ADDITION – LIGHTNING PROTECTION LAYOUT  
E3.1 SCALE: 1:150



3 TYPICAL GROUND ROD DETAIL  
E3.1 SCALE: N.T.S.



4 CONDUCTOR INSTALLED ON ROOF PERIMETER (PARAPET WALL)  
E3.1 SCALE: N.T.S.



1 KEY PLAN  
E3.1 SCALE: N.T.S.