

- NOTES:
- STRUCTURAL DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS.
  - ANY STRUCTURAL CHANGES AND/OR SITE CONDITIONS DIFFERENT FROM THAT SHOWN ON THE DRAWINGS SHALL BE NOTED IN WRITING AND DIRECTED TO ARCHITECTURAL/STRUCTURAL FOR WRITTEN CLARIFICATION AND/OR INSTRUCTION. NO CHANGES ARE TO BE MADE UNLESS APPROVED IN WRITING FROM THE ARCHITECT AND/OR STRUCTURAL ENGINEER.
  - GENERAL CONTRACTOR TO PROVIDE FALL ARREST SYSTEM AS SHOWN SHALL COMPRISE OF SUPPORT ANCHORS AND LIFELINE SYSTEM DESIGNED BY STRUCTURAL ENGINEER AND SUBSEQUENT SHOP DRAWINGS BE PROVIDED FOR REVIEW. DESIGN TO MEET AAFC'S SAFETY PROTOCOL AND OH & S CODE 2009, PART 9.
  - FALL ARREST SYSTEM SHALL BE A HORIZONTAL LIFE LINE SYSTEM, AS PER THALER METAL INDUSTRIES OR EQUAL.
  - EXISTING LADDER TO BE MODIFIED AND RELOCATED AS REQUIRED.

**DO NOT SCALE DRAWINGS**

Revision/Revision	Description/Description	Date/Date
A	ISSUED FOR TENDER	16/02/22

Client/client  
**PWGSC  
AAFC**

Project #/Titre du projet  
**LETHBRIDGE, ALBERTA  
86 RESEARCH CENTRE ROAD  
B86 DAIRY & METABOLISM UNIT**

**ROOF REPLACEMENT  
LETHBRIDGE RESEARCH  
CENTRE - DAIRY BARN**

Approved by/Approuvé par  
Designed by/Conçopt par  
NB

Drawn by/Dessiné par  
CGH

PWGSC Project Manager/Administrateur de Projets TPSGC  
BB

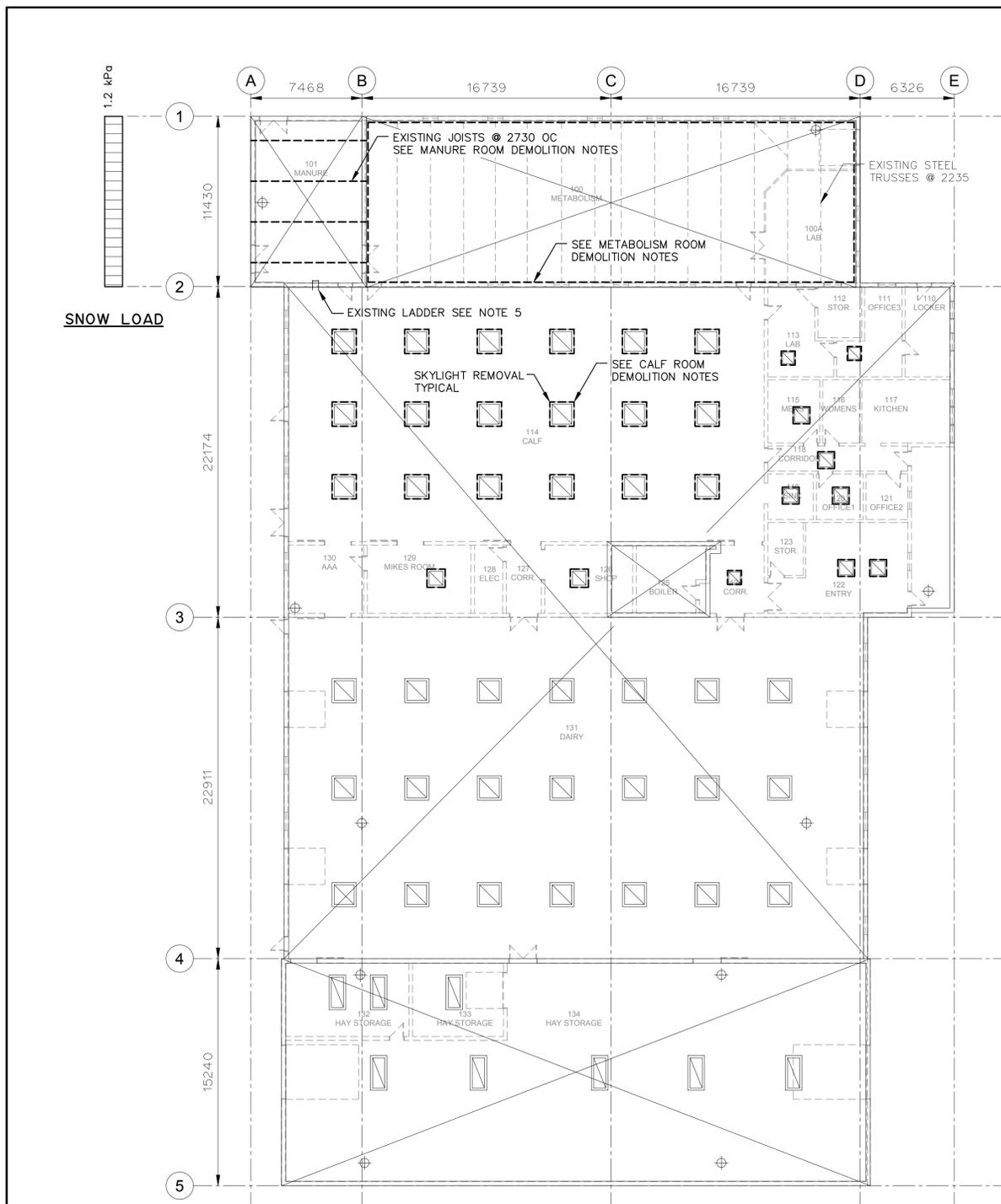
PWGSC Architectural and Engineering Resources Manager/  
Ressources Architectural et de Directeur d'ingénierie, TPSGC

Client/client  
AGRICULTURE AND AGRI-FOOD CANADA

Drawing title/Titre du dessin  
**STRUCTURAL  
DEMOLITION AND PROPOSED  
PLANS**

Project No./No. du projet <b>R.071094.001</b>	Sheet/Feuille <b>S1.1</b>	Revision no./ La Révision no. <b>A</b>
MPE No. 1651-004-00	OF -	

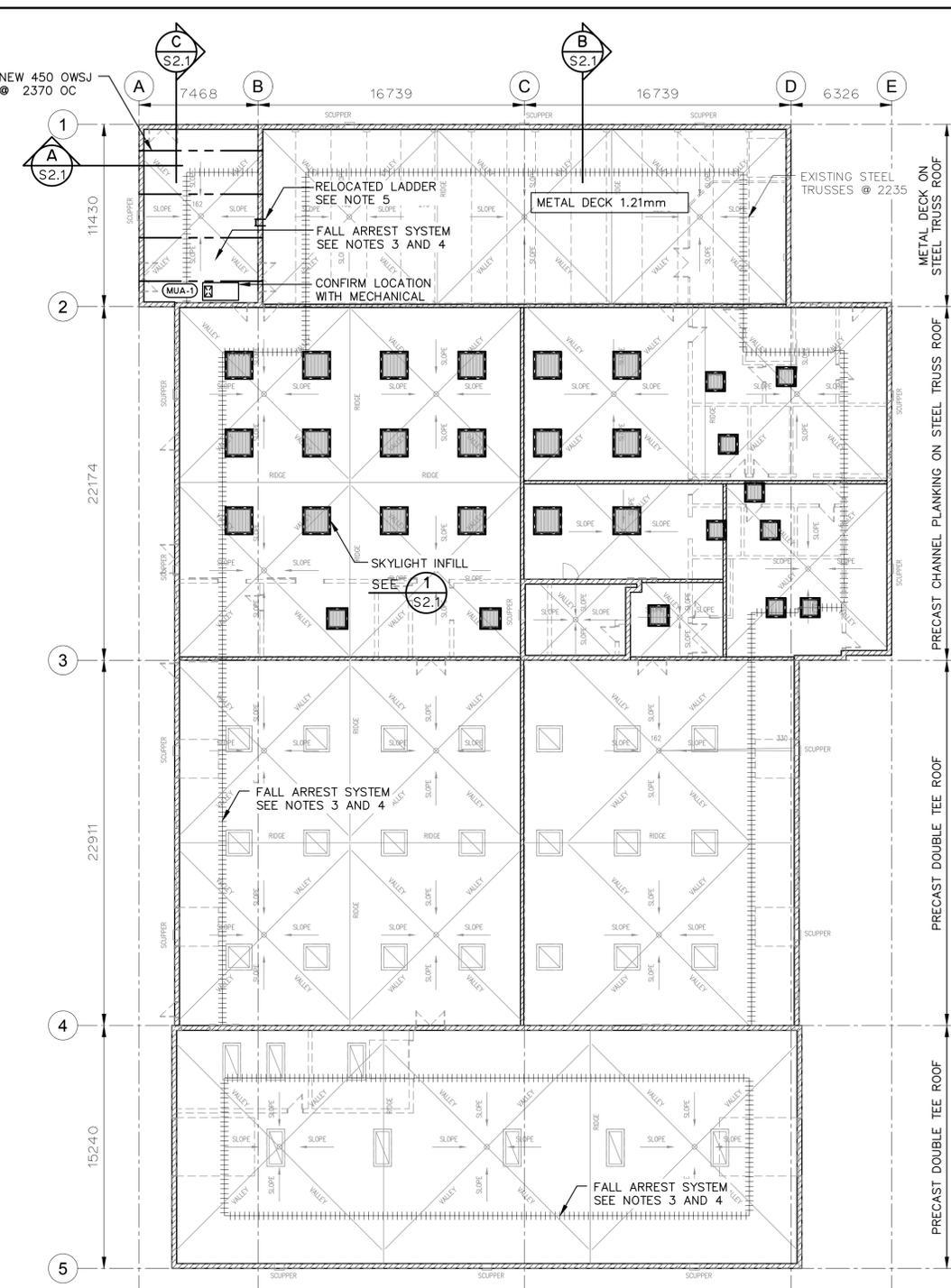
PERMIT TO PRACTICE  
MPE ENGINEERING LTD.  
PERMIT NUMBER: P 3680  
The Association of Professional  
Engineers and Geoscientists of Alberta



**ROOF DEMOLITION PLAN**  
1:200

**DEMOLITION NOTES:**

- METABOLISM ROOM 100:**
- REMOVE EXISTING BUILT UP ROOF ON WOOD DECK.
  - REMOVE WOOD DECKING (2x6) PLANKS FROM TOP OF EXISTING STEEL TRUSS-JOIST.
  - MAY HAVE TO REMOVE TOP WOOD PLATE BOLTED TO JOIST IF IN BAD CONDITION DUE TO ROTTING OCCURRING. A SITE REVIEW WILL BE PERFORMED TO ASSESS CONDITION OF TOP WOOD PLATES UPON DEMOLITION. DESIGN MUST BE IN ACCORDANCE WITH 2010 NATIONAL BUILDING CODE AND ALBERTA BUILDING CODE 2014.
  - REMOVE ALL EQUIPMENT CONDUIT, LIGHTING SUSPENDED FROM UNDERSIDE OF EXISTING WOOD DECKING.
- MANURE ROOM 101:**
- REMOVE EXISTING BUILT UP ROOF TO PRECAST DECK.
  - REMOVE ALL EQUIPMENT, CONDUITS, LIGHTING FROM UNDERSIDE OF PRECAST PLANKING AND STEEL JOIST.
  - CUT LOOSE ALL PRECAST PLANKING FROM EXISTING STEEL JOIST. REMOVE PLANKING.
  - CUT STEEL JOIST BEARING SHOES AT EACH END (CUT WELDS AS NECESSARY). REMOVE STRUCTURAL STEEL JOIST AND CLEAN UP/GRIND EXISTING CAST IN WELD PLATES IN LOAD BEARING MASONRY WALLS.
- CALF ROOM 114:**
- REMOVE EXISTING CEILING STRUCTURE AS DIRECTED BY ARCHITECTURAL AND HAZMAT DOCUMENTATION.



**PROPOSED ROOF PLAN**  
1:200

**DESIGN NOTES:**

- ENVIRONMENTAL LOADS**  
DESIGN TO BE IN ACCORDANCE TO THE 2010 NATIONAL BUILDING CODE AND 2014 ALBERTA BUILDING CODE. AS LISTED IN APPENDIX 'C' OF THE 2014 ABC FOR LETHBRIDGE, ALBERTA  
NO DRIFT LOADING ON MAJORITY OF ROOF EXCEPT FOR THE PENTHOUSE AREA
- ROOF LOADS**  
LIVE LOAD = 1.0 kPa  
LIVE LOAD = 1.20 kPa (SNOW LOAD) (ALBERTA BUILDING CODE 2014)  
DEAD LOAD = 1.0 kPa PLUS SUSPENDED CEILING WHERE APPLICABLE  
DEAD LOAD IS TO INCLUDE NEW SBS ROOFING SYSTEM AS PER ARCHITECT'S SPECIFICATIONS  
DEAD LOAD DOES NOT INCLUDE SELF WEIGHT OF STRUCTURE.
- SEISMIC**  
PEAK GROUND ACCELERATION: 0.09\  
SITE CLASS D  
SA(0.2) = 0.15      Ss = 1.2 kPa  
SA(0.5) = 0.09      Sr = 0.1 kPa  
SA(1.0) = 0.04      Rd = 1.5  
SA(2.0) = 0.03      Rd = 1.5
- WIND**  
Q(1/50) = 0.82 kPa  
CPCG FACTORS AS PER NATIONAL BUILDING CODE 2010
- UPLIFT**  
ROOF JOISTS TO RESIST 0.2 kPa UPLIFT NET
- BUILDING IMPORTANCE CATEGORY - NORMAL**

