

CK A + ID
COUPLAND KRAEMER ARCHITECTURE + INTERIOR DESIGN Inc.
101, 4632 1ST SE, CALGARY, AB, CANADA, T2G 2L3
TEL. 403.289.7109
FAX. 403.289.7595

MPE Engineering Ltd.

NOTES:
1. ALL BOLD ITEMS INDICATE WORK TO BE DONE AND ALL LIGHT ITEMS INDICATE EXISTING CONDITIONS.
2. ALL DIMENSIONS ARE SHOWN IN MILLIMETRES UNLESS OTHERWISE INDICATED.

DO NOT SCALE DRAWINGS

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

Client/client
PWGSC A AFC

Project title/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/Concept par
A.J.H.
Drawn by/Dessiné par
D.J.F.
PWGSC Project Manager/Administrateur de Projets TPSGC
BB
PWGSC, Architectural and Engineering Resources Manager/
Ressources Architecturales et de Directeur d'Ingénierie, TPSGC

Client/client
AGRICULTURE AND AGRI-FOOD CANADA

Drawing title/Titre du dessin
**MECHANICAL
LEGEND**

Project No./No. du projet	Sheet/Feuille	Revision no./La Révision no.
R.071094.001	M0.1	A
MPE No. 1651-004-00	OF -	

GENERAL EQUIPMENT	GENERAL PIPING	HEATING EQUIPMENT	FIRE PROTECTION	VENTILATION FIXTURE
<p>— PROPOSED</p> <p>- - - EQUIPMENT TO BE REMOVED</p> <p>— EXISTING</p> <p>▲ MARKER DENOTING EXTENT OF WORK TO EXISTING SYSTEMS</p>	<p>— PIPE DROP</p> <p>— PIPE RISE</p> <p>— OFFSET DOWN</p> <p>— BOTTOM TAKE-OFF</p> <p>— TOP TAKE-OFF</p> <p>— TEE CONNECTION</p> <p>— CAP</p> <p>— BLOW OFF STRAINER</p> <p>— CONCENTRIC REDUCER</p> <p>— ECCENTRIC REDUCER</p> <p>— FLANGED SPOOL PIECE</p> <p>— UNION/FLANGED CONNECTION</p> <p>EJ-1 — EXPANSION JOINT</p> <p>— PUMP</p> <p>— PRESSURE GAUGE AND COCK</p> <p>— STRAINER</p> <p>— PIPE SIZE 25φ</p> <p>— DIRECTION OF FLOW</p> <p>— TEMPERATURE SENSOR SINGLE POINT PROBE</p> <p>— SENSOR AVERAGING PROBE</p> <p>— AIR SEPARATOR</p> <p>— AIR SCOOP</p> <p>— CHEMICAL POT FEEDER</p> <p>— AIR VENT AAV</p>	<p>— 2 WAY CONTROL VALVE</p> <p>— 3 WAY CONTROL VALVE</p> <p>— BALANCE VALVE</p> <p>— ISOLATION VALVE</p> <p>— PRESSURE REDUCING VALVE</p> <p>— RELIEF OR SAFETY VALVE</p> <p>— AUTOMATIC FILL VALVE</p> <p>— SOLENOID VALVE</p> <p>— DIFFERENTIAL PRESSURE VALVE</p> <p>— STEAM TRAPS</p> <p>— SUPERVISED VALVE</p> <p>— SWING GATE CHECK VALVE</p> <p>— BACK FLOW PREVENTER</p> <p>— SIGHT GLASS</p> <p>— MICRON FILTER</p> <p>— RADIATION TAG TYPE SIZE KW</p>	<p>— FIRE EXTINGUISHER</p> <p>— FIRE EXTINGUISHER C/W SEMI RECESSED CABINET</p> <p>FHC — FIRE HOSE STATION</p> <p>— FIRE DEPARTMENT SIAMESE CONNECTION</p> <p>— UPRIGHT SPRINKLER</p> <p>— PENDANT SPRINKLER</p> <p>— CONCEALED SPRINKLER</p> <p>— DRY PENDANT SPRINKLER</p> <p>— SIDEWALL HEAD SPRINKLER</p> <p>— SIDEWALL HEAD DRY SPRINKLER</p>	<p>— CEILING FAN</p> <p>— FAN</p> <p>— SIDE WALL FAN</p> <p>F — FREEZE-STAT</p> <p>DP — DIFFERENTIAL PRESSURE SENSOR</p> <p>T — THERMOSTAT</p> <p>T — THERMOSTAT C/W LOCKABLE COVER</p> <p>T S — THERMOSTAT C/W REMOTE TEMPERATURE SENSOR</p> <p>— SUPPLY AIR DUCT</p> <p>— RETURN AIR DUCT</p> <p>— EXHAUST AIR DUCT</p> <p>— OUTSIDE OR COMBUSTION AIR</p> <p>— RETURN/EXHAUST GRILLE</p> <p>— SUPPLY DIFFUSER</p> <p>— AIR GRILL TAG S - SUPPLY R - RETURN E - EXHAUST T - TRANSFER</p> <p>— BALANCE DAMPER</p> <p>FD — FIRE DAMPER</p> <p>M — MOTORIZED DAMPER</p>
PLUMBING		PLUMBING FIXTURE	VENTILATION DUCT WORK	TAGS
<p>— G — NATURAL GAS</p> <p>— DCW — DOMESTIC COLD WATER</p> <p>— DHW — DOMESTIC HOT WATER</p> <p>— DHWR — DOMESTIC HOT WATER RETURN</p> <p>— W — WATER SERVICE</p> <p>— SAN — BELOW GRADE SANITARY</p> <p>— SAN — ABOVE GRADE SANITARY</p> <p>— STM — BELOW GRADE STORM</p> <p>— STM — ABOVE GRADE STORM</p> <p>— F — FIRE PROTECTION</p> <p>— DR — DRAIN LINE</p> <p>— CA — COMPRESSED AIR</p> <p>— V — V — SANITARY VENT</p> <p>— WEEPING TILE</p>		<p>— DRINKING FOUNTAIN</p> <p>— THERMOMETER</p> <p>— METER</p> <p>FD — FLOOR DRAIN</p> <p>FFD — FUNNEL FLOOR DRAIN</p> <p>HD — HUB DRAIN</p> <p>RD — ROOF DRAIN</p> <p>— RUNNING TRAP</p> <p>— FIXTURE TRAP</p> <p>— CLEAN-OUT</p> <p>— IN FLOOR CLEANOUT</p> <p>NFHB — NON FREEZE HOSE BIBB</p> <p>— SANITARY VENT</p>	<p>— ACOUSTICAL LINING (INSULATION)</p> <p>— RECTANGULAR DUCT</p> <p>— ROUND DUCT 300φ</p> <p>— FLAT OVAL DUCT 300/200</p> <p>— FLEXIBLE DUCT CONNECTION</p> <p>— BRAIDED FLEXIBLE PIPE CONNECTOR</p> <p>— DOUBLE SPHERE RUBBER PIPE CONNECTOR</p> <p>— VARIABLE VOLUME TERMINAL UNIT</p> <p>— TRANSITION 100x75 75x50</p> <p>— RECTANGULAR TO ROUND TRANSITION 100x75 75φ</p> <p>— TURNING VANES</p> <p>— SMOKE DETECTORS</p> <p>— DUCT REHEAT COIL</p> <p>— RELIEF VENT</p> <p>— CHIMNEY</p> <p>— INDICATES DIRECTION OF AIR FLOW</p> <p>— AIR FLOW MEASURING STATION</p>	<p>— FIXTURE AND EQUIPMENT TAG</p> <p>— FLOW SWITCH FS</p> <p>— EMCS POINT IDENTIFICATION TAG</p> <p>— VAV BOX IDENTIFICATION TAG</p> <p>— VOLTAGE/CURRENT PRESSURE TRANSDUCER E P</p> <p>— KEY NOTES</p>

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

