

| PLUMBING SYMBOL LEGEND |   |
|------------------------|---|
|                        | ELBOW DOWN                                      |
|                        | WALL CLEANOUT                                   |
|                        | PIPE CAP  |
|                        | ELBOW UP  |
|                        | TEE, OUTLET UP                                  |
|                        | TEE, OUTLET DOWN                                |
|                        | CHECK VALVE                                     |
|                        | SHUTOFF VALVE                                   |
|                        | PRESSURE REDUCING VALVE (SETTING AS NOTED, PSI) |
|                        | BALL VALVE                                      |
|                        | BUTTERFLY VALVE                                 |
|                        | REDUCED PRESSURE ZONE BACKFLOW PREVENTER        |
|                        | SOLENOID VALVE                                  |
|                        | GAS PRESSURE REGULATOR VALVE                    |
|                        | PIPE UNION                                      |
|                        | SHOCK ABSORBER                                  |
| ELBOW                  |   |
|                        | FLOOR DRAIN                                     |
|                        | TRENCH DRAIN                                    |
|                        | FLOOR SINK                                      |
|                        | WH WALL HYDRANT                                 |
|                        | HB HOSE BIBB                                    |
|                        | FLOOR CLEANOUT                                  |
|                        | GAS COCK VALVE                                  |
|                        | POINT OF CONNECTION, NEW TO EXISTING            |
|                        | POINT OF DISCONNECTION                          |

| PLUMBING LINETYPE LEGEND |                        |
|--------------------------|------------------------|
|                          | NEW GREASE WASTE       |
|                          | NEW SANITARY WASTE     |
|                          | NEW STORM              |
|                          | NEW VENT               |
|                          | NEW HVAC CONDENSATE    |
|                          | COLD WATER PIPING (CW) |
|                          | HOT WATER PIPING (HW)  |
|                          | GAS                    |

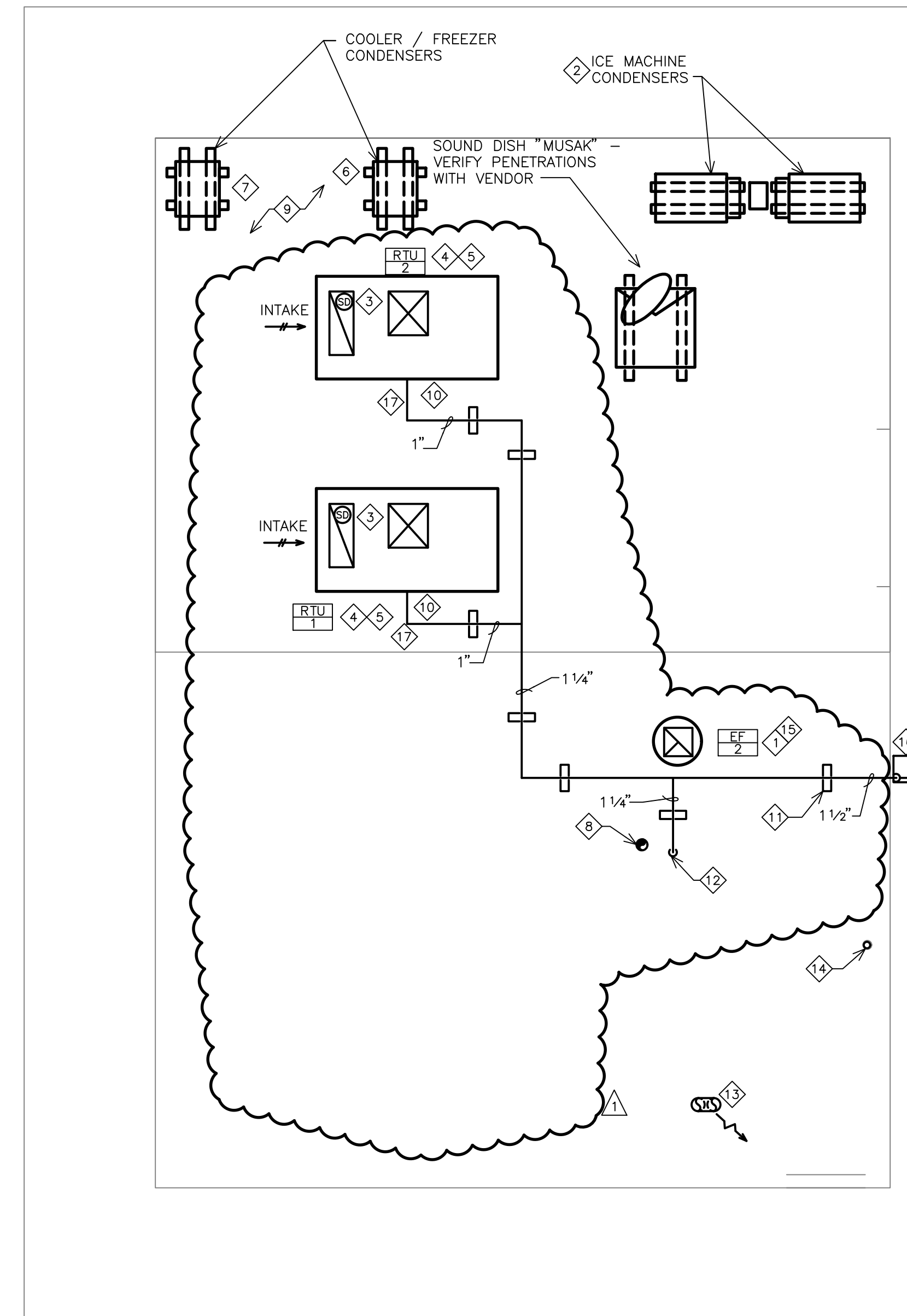
PRIOR TO BID, THE CONTRACTOR SHALL REVIEW THE MECHANICAL, ELECTRICAL AND KITCHEN EQUIPMENT DRAWINGS. THE CONTRACTOR SHALL INCLUDE IN HIS BID ALL RELEVANT WORK IN THE ENTIRE SET OF DOCUMENTS AND REPORT ALL DISCREPANCIES BETWEEN THESE DRAWINGS TO THE ENGINEER PRIOR TO BIDDING FOR CLARIFICATION. IF DISCREPANCIES REMAIN UNRESOLVED DUE TO A SHORT TIME FRAME, THE CONTRACTOR SHALL INCLUDE THE MOST WORK AND THE HIGHER COSTS IN THE BID. SOLUTIONS TO UNREPORTED DISCREPANCIES WILL BE DETERMINED BY THE ARCHITECT/ENGINEER, WITH NO ADDITIONAL COMPENSATION DUE TO THE CONTRACTOR.

### GENERAL NOTES:

- ALL CONTRACTORS SHALL COORDINATE THEIR RESPECTIVE SCOPES OF WORK WITH OTHER TRADES FOR THE COMPLETION OF THE PROJECT.
- PROVIDE PIPE SUPPORTS FOR ROOF MOUNTED GAS AND CONDENSATE PIPING. SUPPORTS SHALL BE INSTALLED AT 8'-0" O.C. AND AT EVERY CHANGE OF DIRECTION.
- THE INSTALLATION OF THE PLUMBING SYSTEMS SHALL BE COORDINATED WITH ALL ELECTRICAL AND MECHANICAL EQUIPMENT, AND STRUCTURAL SLAB AND FRAMING.
- REFER TO PLUMBING SHEET P1.01 FOR PLUMBING FIXTURE AND EQUIPMENT SCHEDULES INCLUDING SPECIFICATIONS AND ROUGH-IN SIZES.
- EXTERIOR CONDENSATE PIPING SHALL BE PVC AND PITCHED A MINIMUM OF 1/4" PER 1'-0" IN THE DIRECTION OF FLOW.
- ALL EXHAUST FAN AND PLUMBING VENT TERMINATIONS SHALL BE A MINIMUM OF 10'-0" HORIZONTAL FROM ALL OUTDOOR AIR INTAKES OF MECHANICAL EQUIPMENT.
- THE PLUMBING CONTRACTOR SHALL FIELD PAINT THE ROOF MOUNTED GAS PIPING WITH ZINC RICH GALVANIZING PAINT FOR CORROSION PROTECTION.

### KEY NOTES:

- PROVIDE 1P/30 AMP NEMA 3R DISCONNECT ON ROOF FOR EXHAUST FAN. EXHAUST FAN CONTROLLED BY TIME CLOCK.
- POWER TO REMOTE CONDENSING UNITS ARE FED FROM ICE MACHINE BELOW. CONTRACTOR MUST COORDINATE THIS IN FIELD. PROVIDE 240V .2P/30 AMP NEMA 3R DISCONNECT AT EACH CONDENSING UNIT.
- SMOKE DETECTORS FOR AUTOMATIC FAN SHUTDOWN MOUNTED IN RETURN AIR DUCT (AND/OR SUPPLY AIR DUCT WHERE REQUIRED) TO BE FURNISHED & INSTALLED BY M.C. - WIRING & CONNECTIONS BY E.C.
- DISCONNECT ON ROOF FOR RTU CONNECTION. SEE DETAIL 2/E3.01 AND EQUIPMENT SCHEDULE ON E2.02 FOR ADDITIONAL INFORMATION.
- PROVIDE 120V, 1P/20 AMP GFI RECEPTACLE IN WEATHER PROOF ENCLOSURE FOR EQUIPMENT MAINTENANCE. SEE DETAIL 02 ON DRAWING SHEET E3.01.
- PROVIDE 240V, 2P/30 AMP NEMA 3R NON FUSED DISCONNECT ON ROOF FOR FREEZER CONDENSING UNIT CONNECTION.
- PROVIDE 240V .2P/30 AMP NEMA 3R NON FUSED DISCONNECT ON ROOF FOR COOLER CONDENSING UNIT CONNECTION.
- WATER HEATER CONCENTRIC VENT UP THROUGH ROOF. VERIFY ROUTING IN FIELD - MAINTAIN MIN. 10'-0" FROM ALL FRESH AIR INTAKES. INSTALL PER MANUFACTURERS RECOMMENDATIONS. SEE DETAIL ON P1.02.
- ALL PENETRATIONS INTO COOLER/FREEZER BOXES TO BE WEATHER TIGHT (FOAM, SILICONE CAULK). INSURE DOOR SEALS ARE TIGHT TO THRESHOLD. CHECK FOR LEAKS AROUND SUCTION LINES ONCE INSTALLED. INSURE DEFROST CYCLE IS SET FOR 4 TO 6 PER DAY FOR A MIN. OF 30 MINUTES.
- PROVIDE P-TRAP FOR CONDENSATE LINE AT EACH RTU - TERMINATE AT SPLASH BLOCK ON ROOF.
- 4"x4"x6" REDWOOD PIPE SUPPORTS, 8'-0" O.C., PIPE LOOSELY SECURED TO BLOCK PLACE DOUBLE LAYER ROOFING UNDER BLOCKS (TYPICAL).
- GAS DOWN TO WATER HEATER.
- GOOSENECK WITH BIRDSCREEN FOR TOILET EXHAUST FANS - MAINTAIN MIN. DISTANCE OF 10'-0" FROM ALL FRESH AIR INTAKES.
- ASSUMED LOCATION OF EXITING VTR - ENSURE MIN. DISTANCE OF 10'-0" FROM ALL FRESH AIR INTAKES.
- GENERAL EXHAUST FAN - MAINTAIN MIN. DISTANCE OF 10'-0" FROM ALL FRESH AIR INTAKES.
- NEW GAS METER AND REGULATOR BY GAS SERVICE COMPANY - SEE 3/P2.01 FOR CONNECTED LOAD. COORDINATE WITH UTILITY FOR NEW METER.
- PROVIDE SHUT-OFF VALVE, DIRT LEG AND UNION FOR EACH PIECE OF EQUIPMENT. PROVIDE PRESSURE REGULATOR IF NECESSARY PER CONDITIONS, AND MANUFACTURER REQUIREMENTS.



1 MECHANICAL, PLUMBING AND ELECTRICAL ROOF PLAN  
SCALE: 1/4" = 1'-0"

| MECHANICAL SYMBOL LEGEND |   |
|--------------------------|---|
|                          | SUPPLY AIR  |
|                          | RETURN AIR  |
|                          | EXHAUST AIR   |
|                          | STANDARD BRANCH, NO SPLITTER - SUPPLY FLOW TO RIGHT - RETURN/EXHAUST FLOW TO LEFT |
|                          | BELLMOUTH WITH BALANCING DAMPER   |
|                          | FLEXIBLE DUCT   |
|                          | TURNING VANES   |
|                          | MANUAL VOLUME DAMPER  |
|                          | MOTORIZED DAMPER  |
|                          | FIRE DAMPER & ACCESS PANEL  |
|                          | SUPPLY DUCT UP, POSITIVE PRESSURE   |
|                          | RETURN DUCT UP, NEGATIVE PRESSURE   |
|                          | EXHAUST DUCT UP, NEGATIVE PRESSURE  |
|                          | SUPPLY DUCT DOWN, POSITIVE PRESSURE   |
|                          | RETURN DUCT DOWN, NEGATIVE PRESSURE   |
|                          | EXHAUST DUCT DOWN, NEGATIVE PRESSURE  |
|                          | FLEXIBLE DUCTWORK CONNECTION TO UNIT  |
|                          | SUPPLY DIFFUSER/REGISTER<br>BLANKOFF INDICATED SHADED                             |
|                          | SUPPLY DIFFUSER TYPE - NECK SIZE<br>DIFFUSER AIRFLOW (CFM)                        |
|                          | RETURN GRILLE/REGISTER TYPE - NECK SIZE<br>RETURN AIRFLOW (CFM)                   |
|                          | EXHAUST GRILLE/REGISTER TYPE - NECK SIZE<br>EXHAUST AIRFLOW (CFM)                 |
|                          | CONCENTRIC DUCT TRANSITION  |
|                          | ECCENTRIC DUCT TRANSITION   |
|                          | SMOKE DETECTOR  |
|                          | THERMOSTAT  |
|                          | EXISTING DUCT TO REMAIN   |
|                          | EXISTING DUCT TO BE REMOVED   |
|                          | POINT OF CONNECTION, NEW TO EXISTING  |
|                          | POINT OF DISCONNECTION  |

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PROJECT INFORMATION:

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LAYTON, UT 84041  
STORE #6697

SEAL:  
4/11/2018  
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MATTHEW JENSEN  
STATE OF UTAH  
7881317-2202  
CURT BARLAGE  
REGISTERED PROFESSIONAL ENGINEER  
STATE OF UTAH  
4/11/2018

PROJECT NO.: 0418739-017  
DRAWN BY: TAB  
CHECKED BY: GS

ISSUE: DATE:  
BIDDING SET 03-19-18  
PERMIT SET 03-22-18

REVISION: DATE:  
BIDDING CHANGES 04-11-18

PROJECT LOCATION:  
LAYTON, UT  
(3D CONCEPT)

SHEET NUMBER / TITLE:  
**MEP1.01**  
ROOF PLAN