CHATHAM HIGH SCHOOL
PERFORMING ARTS CENTER CHILLER REPLACEMENT
1400 MELBOURNE RD.
CHARLOTTESVILLE, VA 22901

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REFERENCE CODES AND INFORMATION

2015 Virginia Uniform Statewide Building Code
2015 Virginia Plumbing Code
2015 Virginia Mechanical Code
2011 NFPA 70 National Electrical Code
2010 NFPA 72 National Fire Alarm and Signaling Code

GENERAL NOTES:

1. THE PROJECT IS THE DEMOLITION/REMOVAL AND REPLACEMENT OF THE EXISTING PACKAGED CHILLER AND CHILLED WATER PUMP, ELECTRICAL AND CONTROLS WORK RELATED TO THE MECHANICAL WORK.
PLAN NOTES - DEMOLITION:

1. REMOVE EXISTING PACKAGED CHILLER, ASSOCIATED CONTROLS, CHILLED WATER PIPING, CONDUIT, SUPPORTS, AND ASSOCIATED ACCESSORIES TO THE EXTENT SHOWN. CLEAN AND PERMANENTLY CAP EXISTING CONNECTIONS TO THE EXTENT SHOWN.

2. REMOVE EXISTING REMOTE MOUNTED CHILLER ELECTRICAL/DISCONNECT PANEL AND SUPPORTS. REFER TO ELECTRICAL PLANS.

3. REMOVE EXISTING JACKETING, INSULATION, AND HEAT TRACE FROM EXISTING OUTDOOR CHILLED WATER PIPING. CLEAN PIPING AND PREPARE FOR NEW HEAT TRACE, INSULATION, AND JACKETING.

4. REMOVE EXISTING CHILLED WATER PUMP, ASSOCIATED PIPING, VALVES, CONTROLS, ACCESSORIES, SUPPORTS, WIRING, AND DISCONNECTS.

5. REMOVE EXISTING PIPING, SUPPORTS AND INSULATION TO THE EXTENT SHOWN. CLEAN, CAP AND PREPARE FOR CONNECTION TO NEW WORK. CLEAN EXISTING CONCRETE SUPPORTS PRIOR TO ACCEPTING PUMP.

6. REMOVE EXISTING ONE-SHOT CHEMICAL FEEDER AND ACCESSORIES. CLEAN AND PERMANENTLY CAP EXISTING CONNECTIONS TO THE EXTENT SHOWN.

7. REMOVE EXISTING EXPANSION TANK.

8. MAINTAIN MINIMUM 3' CLEARANCE FOR EXISTING ELECTRICAL EQUIPMENT.

9. PROVIDE PRE-MANUFACTURED BASE AND CHANNEL PIPING SUPPORTS. ANCHOR PIPING AND ELECTRICAL CONDUIT IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

10. TO EXISTING EXPANSION TANK.

PLAN NOTES:

1. INSTALL NEW PACKAGED, AIR COOLED CHILLER IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. SET UNIT ON EXISTING CONCRETE HOUSEKEEPING PAD WITH SMOOTH, LEVEL FINISH.

2. INSTALL NEW CONCRETE HOUSEKEEPING PAD TO THE EXTENT SHOWN FOR THE NEW EQUIPMENT. NEW CONCRETE HEIGHT SHALL MATCH EXISTING CONCRETE PIERS.

3. INSTALL NEW HEAT TRACE, INSULATION AND JACKETING FOR OUTDOOR CHILLED WATER PIPING.ythe MANUFACTURER'S RECOMMENDATIONS. REFER TO SPECIFICATION SHEET M-4 FOR ONE-SHOT FEEDER MODEL.

4. INSTALL NEW BASE MOUNTED PUMP AS SHOWN. REFER TO BASE MOUNTED PUMP CONNECTIONS DETAIL, SHEET M-1.

5. INSTALL NEW ONE-SHOT FEEDER, ASSOCIATED PIPING, AND ACCESSORIES AS REQUIRED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. REFER TO SPECIFICATION SHEET M-4 FOR ONE-SHOT FEEDER MODEL.

6. INSTALL NEW CONCRETE HOUSEKEEPING PAD TO THE EXTENT SHOWN FOR THE NEW EQUIPMENT. NEW CONCRETE HEIGHT SHALL MATCH EXISTING CONCRETE PIERS.

7. INSTALL NEW ONE-SHOT CHEMICAL FEEDER AND ACCESSORIES TO THE EXTENT SHOWN. CLEAN AND PERMANENTLY CAP EXISTING CONNECTIONS TO THE EXTENT SHOWN.

8. MAINTAIN MINIMUM 3' CLEARANCE FOR EXISTING ELECTRICAL EQUIPMENT.

9. PROVIDE PRE-MANUFACTURED BASE AND CHANNEL PIPING SUPPORTS. ANCHOR PIPING AND ELECTRICAL CONDUIT IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

10. TO EXISTING EXPANSION TANK.
SPECIFICATIONS FOR GENERAL REQUIREMENTS:

1. SPECIFICATIONS FOR GENERAL REQUIREMENTS:
   a. The indications of General Requirements are applicable to all changes and/or additions to existing facilities.
   b. The contract documents include drawings, specifications and general conditions of Contract. Only those items in the contract documents are required to be performed. Any drawings and specifications in the contract documents are a part of this contract and any addition to the drawing and/or specification is subject to approval by the Owner and Architect.
   c. The construction shall be performed in accordance with the drawings and specifications as a part of the contract documents. Any deviation from the drawings and specifications is subject to the Owner's and Architect's approval.
   d. The cost for change orders shall be determined by the Owner and Architect. Change orders shall be issued by the Owner and Architect.
   e. The Owner reserves the right to reject any change orders.
   f. The Owner and Architect reserves the right to approve or reject all claims.
   g. The Owner and Architect reserves the right to amend or modify the contract documents at any time without notice.
   h. The Owner and Architect reserves the right to terminate the contract documents at any time without notice.
   i. The Owner and Architect reserves the right to suspend the contract documents at any time without notice.
   j. The Owner and Architect reserves the right to terminate the contract documents at any time without notice.

2. SPECIFIED MATERIALS:
   a. The Owner reserves the right to approve or reject all materials.
   b. The Owner reserves the right to change the specifications at any time without notice.
   c. The Owner reserves the right to terminate the contract documents at any time without notice.
   d. The Owner reserves the right to suspend the contract documents at any time without notice.
   e. The Owner reserves the right to terminate the contract documents at any time without notice.
   f. The Owner reserves the right to amend or modify the contract documents at any time without notice.
   g. The Owner reserves the right to reject any change orders.
   h. The Owner reserves the right to approve or reject all claims.
   i. The Owner reserves the right to amend or modify the contract documents at any time without notice.
   j. The Owner reserves the right to terminate the contract documents at any time without notice.

3. CONTRACTOR'S RESPONSIBILITY:
   a. The Contractor is responsible for the proper execution of the work.
   b. The Contractor is responsible for the proper execution of the work.
   c. The Contractor is responsible for the proper execution of the work.
   d. The Contractor is responsible for the proper execution of the work.
   e. The Contractor is responsible for the proper execution of the work.
   f. The Contractor is responsible for the proper execution of the work.
   g. The Contractor is responsible for the proper execution of the work.
   h. The Contractor is responsible for the proper execution of the work.
   i. The Contractor is responsible for the proper execution of the work.
   j. The Contractor is responsible for the proper execution of the work.

4. PERFORMANCE:
   a. The Contractor is responsible for the proper execution of the work.
   b. The Contractor is responsible for the proper execution of the work.
   c. The Contractor is responsible for the proper execution of the work.
   d. The Contractor is responsible for the proper execution of the work.
   e. The Contractor is responsible for the proper execution of the work.
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   h. The Contractor is responsible for the proper execution of the work.
   i. The Contractor is responsible for the proper execution of the work.
   j. The Contractor is responsible for the proper execution of the work.

5. MATERIALS:
   a. The Contractor is responsible for the proper execution of the work.
   b. The Contractor is responsible for the proper execution of the work.
   c. The Contractor is responsible for the proper execution of the work.
   d. The Contractor is responsible for the proper execution of the work.
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   h. The Contractor is responsible for the proper execution of the work.
   i. The Contractor is responsible for the proper execution of the work.
   j. The Contractor is responsible for the proper execution of the work.

6. ASBESTOS:
   a. The Contractor is responsible for the proper execution of the work.
   b. The Contractor is responsible for the proper execution of the work.
   c. The Contractor is responsible for the proper execution of the work.
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   h. The Contractor is responsible for the proper execution of the work.
   i. The Contractor is responsible for the proper execution of the work.
   j. The Contractor is responsible for the proper execution of the work.

7. PATCHING:
   a. The Contractor is responsible for the proper execution of the work.
   b. The Contractor is responsible for the proper execution of the work.
   c. The Contractor is responsible for the proper execution of the work.
   d. The Contractor is responsible for the proper execution of the work.
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   h. The Contractor is responsible for the proper execution of the work.
   i. The Contractor is responsible for the proper execution of the work.
   j. The Contractor is responsible for the proper execution of the work.

8. QUALITY ASSURANCE:
   a. The Contractor is responsible for the proper execution of the work.
   b. The Contractor is responsible for the proper execution of the work.
   c. The Contractor is responsible for the proper execution of the work.
   d. The Contractor is responsible for the proper execution of the work.
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   h. The Contractor is responsible for the proper execution of the work.
   i. The Contractor is responsible for the proper execution of the work.
   j. The Contractor is responsible for the proper execution of the work.

9. PERFORMANCE OF THE WORK:
   a. The Contractor is responsible for the proper execution of the work.
   b. The Contractor is responsible for the proper execution of the work.
   c. The Contractor is responsible for the proper execution of the work.
   d. The Contractor is responsible for the proper execution of the work.
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   g. The Contractor is responsible for the proper execution of the work.
   h. The Contractor is responsible for the proper execution of the work.
   i. The Contractor is responsible for the proper execution of the work.
   j. The Contractor is responsible for the proper execution of the work.

10. CONSTRUCTION PERIOD:
    a. The Contractor is responsible for the proper execution of the work.
    b. The Contractor is responsible for the proper execution of the work.
    c. The Contractor is responsible for the proper execution of the work.
    d. The Contractor is responsible for the proper execution of the work.
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    h. The Contractor is responsible for the proper execution of the work.
    i. The Contractor is responsible for the proper execution of the work.
    j. The Contractor is responsible for the proper execution of the work.

11. DEMO:
    a. The Contractor is responsible for the proper execution of the work.
    b. The Contractor is responsible for the proper execution of the work.
    c. The Contractor is responsible for the proper execution of the work.
    d. The Contractor is responsible for the proper execution of the work.
    e. The Contractor is responsible for the proper execution of the work.
    f. The Contractor is responsible for the proper execution of the work.
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    h. The Contractor is responsible for the proper execution of the work.
    i. The Contractor is responsible for the proper execution of the work.
    j. The Contractor is responsible for the proper execution of the work.

12. PROBATION PERIOD:
    a. The Contractor is responsible for the proper execution of the work.
    b. The Contractor is responsible for the proper execution of the work.
    c. The Contractor is responsible for the proper execution of the work.
    d. The Contractor is responsible for the proper execution of the work.
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    h. The Contractor is responsible for the proper execution of the work.
    i. The Contractor is responsible for the proper execution of the work.
    j. The Contractor is responsible for the proper execution of the work.

13. COMMISSIONING:
    a. The Contractor is responsible for the proper execution of the work.
    b. The Contractor is responsible for the proper execution of the work.
    c. The Contractor is responsible for the proper execution of the work.
    d. The Contractor is responsible for the proper execution of the work.
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    h. The Contractor is responsible for the proper execution of the work.
    i. The Contractor is responsible for the proper execution of the work.
    j. The Contractor is responsible for the proper execution of the work.

14. FINAL ACCEPTANCE:
    a. The Contractor is responsible for the proper execution of the work.
    b. The Contractor is responsible for the proper execution of the work.
    c. The Contractor is responsible for the proper execution of the work.
    d. The Contractor is responsible for the proper execution of the work.
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    h. The Contractor is responsible for the proper execution of the work.
    i. The Contractor is responsible for the proper execution of the work.
    j. The Contractor is responsible for the proper execution of the work.

15. MAINTENANCE:
    a. The Contractor is responsible for the proper execution of the work.
    b. The Contractor is responsible for the proper execution of the work.
    c. The Contractor is responsible for the proper execution of the work.
    d. The Contractor is responsible for the proper execution of the work.
    e. The Contractor is responsible for the proper execution of the work.
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    g. The Contractor is responsible for the proper execution of the work.
    h. The Contractor is responsible for the proper execution of the work.
    i. The Contractor is responsible for the proper execution of the work.
    j. The Contractor is responsible for the proper execution of the work.
### SPECIFICATIONS FOR HVAC WORK

1. **Free from Defective Materials or Workmanship for One (1) Year After Final Acceptance of the Project Unless**: Loaded over the Corrected Full Load Ampere Rating of the Motor Involved.

2. **Rough-in Openings** shall align vertically and horizontally with building structure. Wall-mounted thermostats possible. Otherwise, furnish access panels of sufficient size and located so that the concealed equipment can be guaranteed: Equipment, materials, and labor required by these contract drawings shall be guaranteed to be free from defects in material or workmanship for one (1) year after final acceptance of the project unless the equipment is loaded over the corrected full load ampere rating of the motor involved.

3. **Guarantee**: Every item of concealed equipment listed in the plans and specifications shall be installed by the contractor and shall be guaranteed to be free from defects in material or workmanship for one (1) year after final acceptance of the project unless the equipment is loaded over the corrected full load ampere rating of the motor involved.

4. **Equipment, Materials, and Labor** required by these contract drawings shall be guaranteed to be free from defects in material or workmanship for one (1) year after final acceptance of the project unless the equipment is loaded over the corrected full load ampere rating of the motor involved.

5. **Quiet Operation**: Systems shall operate under conditions of load without unusual or excessive noise or vibration.

6. **Control Interlock Wiring** for mechanical equipment shall be furnished by the mechanical contractor. Control interlock wiring shall be factory-matched, and shall be realigned by the contractor.

7. **Control of Air Flow** shall be provided by variable-speed drives where specified. Where variable-speed drives are not specified, air flow control shall be provided by adjustable dampers where specified.

8. **Airflow Measurements** shall be made in accordance with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers' (ASHRAE) Recommended Practice for Testing Airflow, Air Pressure Differentials, and Air Leakage Measurements for Air-Conditioning and Ventilation Systems (AHRI 305). All tests shall be conducted to confirm that the airflow and pressure differentials meet the design specifications as stated in the plans and specifications.

9. **Electrical and Control Systems** shall be designed and installed in accordance with the National Electrical Code (NEC) and the National Fire Protection Association (NFPA) 70E. All electrical systems shall be designed and installed in accordance with the American National Standards Institute (ANSI) C2-2021. All control systems shall be designed and installed in accordance with the American Society for Testing and Materials (ASTM) E529-94. All systems shall be designed and installed in accordance with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) 90.1-2016.

10. **Load Calculations** shall be performed in accordance with the ASHRAE 90.1-2016 and the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) 90.1-2016. All systems shall be designed and installed in accordance with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) 90.1-2016.

11. **Motor Capacities** shall be selected in accordance with the National Electrical Code (NEC) and the National Fire Protection Association (NFPA) 70E. All motors shall be designed and installed in accordance with the American National Standards Institute (ANSI) C2-2021. All systems shall be designed and installed in accordance with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) 90.1-2016.

12. **System Pressures** shall be determined in accordance with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) 90.1-2016. All systems shall be designed and installed in accordance with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) 90.1-2016.

13. **Airflow Measurements** shall be made in accordance with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers' (ASHRAE) Recommended Practice for Testing Airflow, Air Pressure Differentials, and Air Leakage Measurements for Air-Conditioning and Ventilation Systems (AHRI 305). All tests shall be conducted to confirm that the airflow and pressure differentials meet the design specifications as stated in the plans and specifications.

14. **System Pressures** shall be determined in accordance with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) 90.1-2016. All systems shall be designed and installed in accordance with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) 90.1-2016.

15. **Load Calculations** shall be performed in accordance with the ASHRAE 90.1-2016 and the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) 90.1-2016. All systems shall be designed and installed in accordance with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) 90.1-2016.

16. **Motor Capacities** shall be selected in accordance with the National Electrical Code (NEC) and the National Fire Protection Association (NFPA) 70E. All motors shall be designed and installed in accordance with the American National Standards Institute (ANSI) C2-2021. All systems shall be designed and installed in accordance with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) 90.1-2016.
SPECIFICATIONS FOR HVAC WORK (CONTINUED):

F. PROVIDE THE OWNER'S PERSONNEL DIRECT ACCESS TO TECHNICAL SUPPORT INFORMATION, INCLUDING, BUT NOT LIMITED TO,

K. SYSTEM SECURITY: USER ACCESS SHALL BE SECURED USING INDIVIDUAL SECURITY PASSWORDS FOR A MINIMUM OF 500 USERS.

B. THE SYSTEM SHALL BE SUPPLIED AND INSTALLED COMPLETELY UNDER THIS CONTRACT. CONTROL COMPONENTS SHALL BE

M. ENERGY MANAGEMENT SOFTWARE: THE FOLLOWING ENERGY MANAGEMENT CAPABILITIES SHALL BE FURNISHED STANDARD AS

E. PROVIDE THE OWNER'S PERSONNEL DIRECT ACCESS TO ALL SOFTWARE COMPONENTS NECESSARY FOR THE OWNER'S PERSONNEL

D. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PROPER CONTROL FOR ALL AREAS THAT ARE TO BE OCCUPIED DURING

R. OWNER TRAINING:

O. AUXILIARY CONTROL DEVICES:

Q. INSTALLATION REQUIREMENTS:

S. SERVICE AND GUARANTEE - THE CONTROL SYSTEM UPGRADES SHALL BE SERVICED AND MAINTAINED IN FIRST-CLASS CONDITION BY

A. THE CONTROLS SYSTEM SPECIFIED HERE-IN IS INTENDED TO INTERFACE WITH THE OWNER'S EXISTING NOVAR SYSTEM AND THE

IN NO CASES SHALL FIELD INSTALLED CONDUIT SMALLER THAN 1/2" TRADE SIZE BE ALLOWED. WHERE CONDUCTORS ARE

FULLY INTEGRATED WITH THE OTHER SYSTEM COMPONENTS.

EQUIPMENT RUN TIME, NUMBER OF START/STOPS, PROGRAM FAILURE, CARD FAILURE, AND SENSOR FAILURE. WHEN AN ALARM

ELEMENT SHALL RESPOND TO THE LOWEST TEMPERATURE SENSED BY ANY ONE FOOT SECTION. LOW LIMIT SHALL BE MANUAL

DICTATED BY THE REQUIREMENTS OF THIS SPECIFICATION. ACCURACIES SHALL BE +/- 1 DEG. F. FOR STANDARD APPLICATIONS.

LED FOR INDICATION OF TRIP CONDITION AND A CURRENT LEVEL BELOW TRIP SET POINT. WHEN THE INTERNAL CURRENT TRANSFORMER)

CURRENT SWITCH TO INCLUDE AN INTEGRAL LOW LIMIT THERMOSTATS: SAFETY LOW LIMIT THERMOSTATS SHALL BE VAPOR PRESSURE TYPE WITH A 20 FOOT MINIMUM ELEMENT.

SHALL HAVE A MINIMUM OF EIGHT DAYS SCHEDULES (SEVEN PLUS HOLIDAYS).

SCHEDULING: THE SCHEDULING PROGRAM SHALL HAVE A MINIMUM OF 32 NAMED MASTER SCHEDULES. EACH MASTER SCHEDULE

SHALL BE USED WHERE ACCESSIBLE.

SHALL BE THE LATEST GENERATION PRODUCT LINE PROVIDED BY THE CONTRACTOR.

WHERE FACTORY MOUNTED CONTROLLERS ARE PROVIDED BY EQUIPMENT MANUFACTURERS, THE CONTROLS CONTRACTOR SHALL

ASSOCIATED ACCESSORIES IN THE SEQUENCE OF OPERATION SHOWN ON SHEET M-1. EXISTING CONTROL WIRING DETERMINED TO

APPLYING INSIDE/OUTSIDE TEMPERATURE INFORMATION TO THE USER'S TIME OF DAY SCHEDULE.

APPROVED CHECKED

PERFORMING ARTS CENTER - CHILLER REPLACEMENT

APPROVED

PROJECT NAME: PERFORMING ARTS CENTER - CHILLER REPLACEMENT

DATE: 01/01/16
GENERAL NOTES:

1. MAKE SURE ALL ELECTRICAL EQUIPMENT IS DISCONNECTED FROM THE POWER SOURCE PRIOR TO WORK COMMENCING ON THE DEVICE.
2. MAKE SURE ALL TERMINATIONS ARE FIRMLY CONNECTED.
3. MAKE SURE ALL TERMINATIONS ARE PROPERLY Labeled.
4. MAKE SURE ALL TERMINATIONS ARE PROPERLY WELDED.
5. MAKE SURE ALL TERMINATIONS ARE PROPERLY TIGHTENED.
6. MAKE SURE ALL TERMINATIONS ARE PROPERLY MARKED.
7. MAKE SURE ALL TERMINATIONS ARE PROPERLY PROTECTED.
8. MAKE SURE ALL TERMINATIONS ARE PROPERLY MAINTAINED.
9. MAKE SURE ALL TERMINATIONS ARE PROPERLY ENSURED.
10. MAKE SURE ALL TERMINATIONS ARE PROPERLY EMBOSSED.

GENERAL DEMOLITION NOTES:

1. MAKE SURE ALL ELECTRICAL EQUIPMENT IS DISCONNECTED FROM THE POWER SOURCE PRIOR TO WORK COMMENCING ON THE DEVICE.
2. MAKE SURE ALL TERMINATIONS ARE FIRMLY CONNECTED.
3. MAKE SURE ALL TERMINATIONS ARE PROPERLY Labeled.
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6. MAKE SURE ALL TERMINATIONS ARE PROPERLY MARKED.
7. MAKE SURE ALL TERMINATIONS ARE PROPERLY PROTECTED.
8. MAKE SURE ALL TERMINATIONS ARE PROPERLY MAINTAINED.
9. MAKE SURE ALL TERMINATIONS ARE PROPERLY ENSURED.
10. MAKE SURE ALL TERMINATIONS ARE PROPERLY EMBOSSED.
DEMO Devices Notes:

1. DISCONNECT AND REMOVE EXISTING 400 AMP CHILLER DISCONNECT SWITCH.
2. REMOVE 2 EXPOSED CHILLER COMPRESSOR FEEDERS.
3. (2) 2" CONDUITS WITH (3) #4/0 AND (1) #4 GROUND IN EACH FEEDING EXISTING CHILLER TO REMAIN AND BE REUSED TO FEED NEW CHILLER.
4. VERTICAL CONDUIT AND CONDUCTOR DROPS SHALL REMAIN TO FEED NEW CHILLER.
5. EXISTING 600 AMP 480 VOLT BREAKER WITH 450 AMP RATING PLUG (1) THAT FEEDS THE EXISTING CHILLER SHALL REMAIN.
6. DISCONNECT ELECTRICAL CONNECTIONS TO PUMP P-1 FOR REMOVAL BY MECHANICAL. DEMOLISH THE EXISTING STARTER AND DEMOLISH THE EXISTING CONDUIT AND CONDUCTORS FROM THE STARTER TO THE PUMP. DISCONNECT THE CONDUIT AND CONDUCTORS FROM THE STARTER TO THE EXISTING PANEL, WHICH SHALL BE REUSED TO CONNECT TO NEW VFD. SEE NOTE 7.
7. THE STARTER FOR EXISTING PUMP P-1 IS FED FROM A 3 POLE 40 AMP BREAKER IN THE EXISTING 800 AMP SWITCHBOARD. THIS CIRCUIT WILL BE USED TO FEED THE NEW VFD.
8. CONTROL WIRING WILL BE REMOVED BY MECHANICAL. DISCONNECT CONDUITS FROM EXISTING CHILLER. PROVIDE NEW MATERIALS TO MATCH EXISTING AS REQUIRED.

Plan Notes:

1. EXISTING DISCONNECT FROM 40 AMP BREAKER IN EXISTING SWITCHBOARD TO DISCONNECT SWITCH TO CONNECT TO NEW CHILLER.
2. (3) #10 AND (1) #10 GROUND IN 3/4" CONDUIT.
3. (3) #12 AND (1) #12 GROUND IN 3/4" CONDUIT.
4. REROUTE EXISTING (2) 2" CONDUITS WITH (3) #4/0 AND (1) #4 GROUND) IN EACH FROM EXISTING DISCONNECT SWITCH TO POWER PANEL ON NEW CHILLER AND CONNECT. PROVIDE NEW MATERIALS TO MATCH EXISTING AS REQUIRED.
5. THE EXISTING HEAT TRACE ON THE CHILLED WATER PIPING IS BEING REPLACED BY THE MECHANICAL CONTRACTOR. DISCONNECT EXISTING HEAT TRACE AND CONNECT NEW TRACE TO EXISTING CIRCUIT.
1. THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE PROVISIONS OF THE VIRGINIA CONSTRUCTION CODE, 2015 EDITION.
2. THE CONTRACTOR SHALL PROVIDE TEMPORARY SHORING AND BRACING REQUIRED TO ERECT AND HOLD THE STRUCTURE IN PROPER ALIGNMENT UNTIL PERMANENT SUPPORTS AND LATERAL BRACING ARE IN PLACE.
3. PORTIONS OF THE STRUCTURE NOT ALTERED AND NOT AFFECTED BY THE ALTERATION HAVE NOT BEEN REVIEWED FOR COMPLIANCE WITH THE CODE REQUIREMENTS FOR A NEW STRUCTURE.
4. BEFORE PROCEEDING WITH WORK WITHIN THE EXISTING STRUCTURE, THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE EXISTING STRUCTURAL CONDITIONS.

6. DESIGN CRITERIA:

<table>
<thead>
<tr>
<th>Classifications of Building</th>
<th>Classification</th>
<th>Risk Category</th>
<th>Wind Speed</th>
<th>Exposure Category</th>
<th>Importance Factor</th>
<th>Thermal Factor</th>
<th>Ultimate Design Wind Speed</th>
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6.1. STRUCTURAL STEEL NOTES:

1. STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) 360.
2. STRUCTURAL STEEL SHALL COMPLY WITH THE FOLLOWING SPECIFICATIONS:
   A. STRUCTURAL STEEL SHAPES, PLATES AND BARS UNLESS OTHERWISE NOTED - ASTM A 36, Fy = 36 KSI
   B. STRUCTURAL STEEL SHAPES - ASTM A 690, Fy = 50 KSI
   C. ALL THREAD RODS - ASTM A 307
   D. NUTS - ASTM A 563
3. WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1, "STRUCTURAL WELDING CODE - STEEL." WELD ELECTRODES SHALL BE E70XX LOW HYDROGEN. Unless otherwise noted, provide continuous fillet welds with minimum size required by Table J2.4 AISC 360.
4. COORDINATE ALL MEMBER LOCATIONS, UNIT WEIGHTS, OPENING SIZES, AND CLEAT MEMBERS FOR MECHANICAL EQUIPMENT WITH THE ACTUAL EQUIPMENT FURNISHED.
5. HOT DIP GALVANIZE ALL STEEL AFTER FABRICATION.

6. CHILLER SUPPORT FRAMING PLAN

- DIMENSIONS AND ELEVATIONS
- BOLTS AND NUTS DETAILS
- SHIMS AND ADJUSTMENTS

CHILLER ABOVE - MAX WT = 11,000 LBS

WAX BETWEEN CL OF EXISTING FOUNDATION

4 - 3/4" BOLTS

SOLID STEEL SHIMS AS REQD

EXISTING FOUNDATIONS

7.4'