CITY OF ANN ARBOR

OUTDOOR POOL
ULTRAVIOLET DISINFECTION IMPROVEMENTS

ITB NO. 4652
BID SET
NOVEMBER, 2020
PROJECT NUMBER: 2075153700
**DEMOLITION NOTES**

1. All work shall meet and be performed in accordance with all applicable City, State and Federal Codes.
2. Contractor is responsible for verifying all foundations, footings, walls, utility connections, and all steel and concrete structures, prior to commencing work.
3. Inspect all temporary connections as required to maintain operation of the facility during construction and equipment replacement or modification. Schedule work for shutdowns as required to reduce the disruption to the extent of the facility.
4. Provide temporary connections where needed and connect any equipment as required for the construction of new piping and systems being modified as part of this project.
5. Contractor is responsible for any damage resulting from connecting power and other utility control to temporary connections.任者, the responsibility begins at the disconnect point and continues to the satisfaction of the owner and/or user. Any damage to the satisfaction of the owner and/or user.
6. Refer to the specifications for submerged and extra low areas.
7. All interconnected systems shall be isolated before work and during work. Ongoing work is to be completed as required.
8. Drawings repair general location and routing of conduits, pipes, electrical and mechanical equipment arrangements. They do not show all.
9. Coordinate the work to be performed of all divisions removing equipment to ensure that there are no conflicts or delays. No compensation.
10. The contractor shall record on As-Built Drawings all sizes, materials, elevations and locations of all electrical equipment that deviate from these design requirements. The contractor shall coordinate all work with the owner and with all
11. All work shall be performed in accordance with the latest edition of the National Electrical Code and all other authorities having jurisdiction.
12. Electrical and mechanical equipment arrangements. They do not show all.
13. The Contractor shall be responsible for repairing any damage that may occur.

**ELECTRICAL NOTES**

1. All work shall meet and be performed in accordance with all applicable City, State and Federal Codes.
2. All new material shall be furnished, hardware, straps, supports, etc. shall be finished steel.
3. All new equipment shall be installed in new, and approved as required by the City, State and Federal authorities.
4. The new equipment shall be weatherproof and located in an approved position.
5. The contractor shall be responsible for repairing any damage that may occur.

**NEW WORK GENERAL NOTES**

1. All new work shall meet and be performed in accordance with all applicable City, State and Federal Codes.
2. All new material shall be furnished, hardware, straps, etc. shall be finished steel.
3. All new equipment shall be installed in new, and approved as required by the City, State and Federal authorities.
4. The new equipment shall be weatherproof and located in an approved position.
5. The contractor shall be responsible for repairing any damage that may occur.

**GENERAL NOTES**

1. All work shall be performed in accordance with the latest edition of the National Electrical Code and all other authorities having jurisdiction.
2. All new equipment shall be installed in new and approved as required by the City, State and Federal authorities.
3. All new equipment shall be installed in new, and approved as required by the City, State and Federal authorities.
4. The new equipment shall be weatherproof and located in an approved position.
5. The contractor shall be responsible for repairing any damage that may occur.
GENERAL NOTES:

1. CONTRACTOR IS RESPONSIBLE TO INSTALL NEW PIPING AS NECESSARY TO ACCOMMODATE THE PROPOSED UV DISINFECTING UNIT AND SHALL INSTALL SUPPORTS FOR THE PIPING AND EQUIPMENT.

2. EXISTING PIPING LAYOUT IS SCHEMATIC AND NOT ALL PIPES, FITTINGS, AND VALVES ARE SHOWN FOR CLARITY. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL FIELD DIMENSIONS PRIOR TO ORDERING EQUIPMENT.

3. ALL PIPING MATERIAL, VALVE MATERIALS, AND OTHER MANUFACTURER REQUIRED EQUIPMENT SHALL BE SUPPLIED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

4. CONTRACTOR SHALL FOLIATE EXISTING PIPING FOR POSITIVE DRAINAGE.

5. CONTRACTOR SHALL INSTALL ALL EXISTING UPSTREAM OF THE PROPOSED UV CHAMBER LOCATION. FINAL LOCATION SHALL BE APPROVED BY THE OWNER.

6. CONTRACTOR IS RESPONSIBLE TO PERFORM ALL NECESSARY ELECTRICAL WORK FOR THE INSTALLATION OF THE UV DISINFECTING SYSTEM. INSTALLATION MUS NOT VIOLATE THE SPECIFICATIONS.

7. CONTRACTOR SHALL BOND THE UV DISINFECTING UNIT PER NATIONAL, STATE AND LOCAL ELECTRICAL CODE REQUIREMENTS.

UV DISINFECTING UNIT NOTES:

1. ALL VALVES UPSTREAM AND DOWNSTREAM OF THE UV CHAMBER SHALL HAVE A STAINLESS STEEL DISC AND NOT BE COATED IN A POLYMER MATERIAL.

2. ANY ELBOWS WITHIN 20" OF THE UV CHAMBER SHALL BE STAINLESS STEEL.

3. ALL PIPEWORK WITHIN 40" OF THE UV CHAMBER ON 6" OR LARGER PIPING AND WITHIN 20" OF THE UV CHAMBER ON 4" PIPING SHALL BE UNPLASTICIZED PVC.

UV CONTROL PANEL NOTES:

1. REMOVE AND REPLACE EXISTING BULBS AND OUTLETS AS NECESSARY TO ACCOMMODATE PANEL.

2. INSTALL UV CONTROL PANEL, RELOCATE EXISTING SWITCHES AND OUTLETS AS NECESSARY TO ACCOMMODATE PANEL.

3. UV DISINFECTING SYSTEM SHALL BE FED FROM THE EXISTING 120/208V PANEL, SERIES. PROVIDE ONE NEW 30A, 1P BREAKER IN CIRCUIT 50. RE-BALANCE ELECTRICAL LOAD BETWEEN PHASES AS NEEDED.

4. RUN 3 #10 WIRE IN 3/4" CONDUIT FOR POWER TO UV CONTROL PANEL. ROUTING OF CONDUIT IS SHOWN DIAGRAMMATICALLY. INSTALL TO SUIT EXISTING CONDITIONS.

5. UV CONTROL PANEL, RELOCATE EXISTING SWITCHES AND OUTLETS AS NECESSARY TO ACCOMMODATE PANEL.

6. UV DISINFECTING SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

7. UV DISINFECTING SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

8. UV DISINFECTING SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
**EXISTING SHALLOW POOL DISCHARGE PIPING**

**EXISTING MAIN POOL DISCHARGE PIPING**

**PROPOSED UV DISINFECTION BYPASS DETAIL**

**TEMPERATURE PROBE AND AIR VENT UNIT**

**PROPOSED WAFER UV DISINFECTION BYPASS DETAIL**

**EVOQUA WF-125-6-N PROPOSED WAFER UV DISINFECTION BYPASS DETAIL**

**STAINLESS STEEL BALL VALVE AND STAINLESS STEEL DISC**

**NOTES:**

1.ovan to connect to UV control panel. Run new conduit and conductors from the control panel to the UV disinfection unit.
2. New conduit and conductors from the control panel to the UV disinfection unit.
3. Remove and replace existing panel LP-A.
4. Install new conduit and conductors from the control panel to the UV disinfection unit.
5. Run new conduit from UV control panel to UV disinfection unit.
6. Install necessary conduit and conductors from the equipment panel to the UV disinfection unit.
7. Contacting Miss Dig prior to construction.

**GENERAL NOTES:**

- The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.
- The Contractor is responsible to verify all field dimensions prior to ordering equipment.
- The Contractor shall be responsible for the completeness or accuracy thereof.
- The Owner shall be responsible to verify all field dimensions prior to ordering equipment.
- The Contractor shall bond the UV disinfection unit per the UV disinfection system, including but not limited to:
  - Electrical work for the installation of the new UV disinfection system, including but not limited to:
  - New conduit and conductors from the existing lighting panel to the UV control panel.
  - Conduit and conductors from the control panel to the UV disinfection unit.
  - New conduit and conductors from the existing panel to the UV disinfection unit.
- The Contractor is responsible to install new piping as necessary to accommodate the proposed UV chamber location.
- The Contractor shall install an EZ Strainer downstream of the UV chamber.
- All pipe materials, valve materials, air release valves, and other manufacturer required equipment shall be stainless steel and not be coated in a polymer material.
- The Contractor is responsible for verifying all field dimensions prior to ordering equipment.
- All pipe material, valve material, and other manufacturer required equipment shall be stainless steel and not be coated in a polymer material.
- The Contractor shall install supports for the piping and equipment.
- The Contractor shall bond the UV disinfection unit per the UV disinfection system, including but not limited to:
  - Electrical work for the installation of the new UV disinfection system, including but not limited to:
  - New conduit and conductors from the existing lighting panel to the UV control panel.
  - Conduit and conductors from the control panel to the UV disinfection unit.
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  - New conduit and conductors from the existing lighting panel to the UV control panel.
  - Conduit and conductors from the control panel to the UV disinfection unit.
  - New conduit and conductors from the existing panel to the UV disinfection unit.
**NOTE:**

THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING MISS DIG PRIOR TO CONSTRUCTION.

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**2. PROPOSED PIPING LAYOUT IS SCHEMATIC AND NOT ALL PIPES, FITTINGS AND VALVES ARE SHOWN FOR CLARITY. CONTRACTOR IS RESPONSIBLE FOR VERIFY ALL FIELD DIMENSIONS PRIOR TO INSTALLATION.**

**3. ALL PIPE MATERIALS, VALVE MATERIALS, AIR RELEASE VALVES, AND OTHER MANUFACTURER REQUIRED EQUIPMENT SHALL BE SUPPLIED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.**

**4. CONTRACTOR SHALL PERFORM ALL NECESSARY ELECTRICAL WORK FOR THE INSTALLATION OF THE NEW UV DISINFECTION SYSTEM, INCLUDING BUT NOT LIMITED TO: INSTALL NEW BREAKER IN LIGHTING PANEL LP-A IN ACCORDANCE WITH THE SPECIFICATIONS. INSTALL NEW CONDUIT AND CONDUCTORS FROM THE BREAKER PANEL TO THE CONTROL PANEL. INSTALL CONDUIT AND CONDUCTORS FROM THE CONTROL PANEL TO THE UV DISINFECTION UNIT.**

**5. CONTRACTOR SHALL BOND UV DISINFECTION UNIT PER NATIONAL, STATE, AND LOCAL ELECTRICAL CODE REQUIREMENTS.**

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