ULTRAVIOLET (UV) DISINFECTION SYSTEM REPLACEMENT PROJECT

GENERAL

OWNER NOTES, CONTACT INFORMATION, AND PERMITS

1. Owner Notes:

2. Contact Information:

3. Permits Required to Be Obtained by the City of Ann Arbor Prior to the Beginning of Construction:

   - Public Utilities
   - Private Utilities

4. Permit Issuing Authority:

   - General
   - Other

5. Construction Notes:

   - General
   - Other
GENERAL SHEET NOTES
1. REFER SHEET A-102 FOR ARCHITECTURAL ABBREVIATIONS/LEGENDS.
2. DIMENSIONS INDICATED ARE MEASURED FROM THE OUTSIDE FACE OF THE CONCRETE CURB, UNLESS OTHERWISE SPECIFIED. USE SCALE SHEET A-601 TO DETERMINE DIMENSIONS OF ANY EXISTING CONCRETE CURBS.
3. ALL EXISTING SPACES TO BE FILLED UPON COMPLETION OF CONSTRUCTION.

Sheet Notes:

1. EXTERIOR WALL ASSEMBLY: 2" X 6" 2X6 STUDS, DOUBLE 1/2 IN. SHEET ROCK, 1/2 IN. ASS. FOAM BOARD, 1/2" X 1" AUTHENTIC BROWN ALUMINUM Furring Strips @ 24" O.C.
2. EPOXY CONCRETE SLAB.
3. EXISTING CONCRETE CURB.
4. PREPAINTED METAL DOWNSPOUTS.
5. PREGROUT CONCRETE SPACIALIZED.
6. WALL DECORATION, LAMINATED REAL WOOD, SEE DETAIL A-601.
7. ALUMINUM SELF-CLOSING GATE, SEE DETAIL A-601.
8. STEEL COLUMN, SEE STRUCTURAL DRAWINGS.
9. DRAFTING, SEE STRUCTURAL DRAWINGS.
10. INSULABLE DISCHARGE PLANS, SEE STRUCTURAL DRAWINGS.
11. ALUMINUM EXTERIOR Stairs and Landings. Refer to Sheet A-102 for more information.
12. TOP-REINFORCED ALUMINUM CORRUGATED WITH 20 KSI, SEE DETAIL A-601.
13. PANELS ATTACHED TO WALL AND IN CHANNEL, OPENINGS ON OPERATING LEVELS, SEE DETAIL A-601.
14. TOP-REINFORCED ALUMINUM CORRUGATED WITH 20 KSI, SEE DETAIL A-601.
15. ELEVATED EQUIPMENT PLATFORMS, SEE STRUCTURAL DRAWINGS.
16. CONCRETE CURB, SEE STRUCTURAL DRAWINGS.
17. CONCRETE CURB ON CONCRETE shear coat, SEE STRUCTURAL DRAWINGS.
18. CONCRETE STOOP, SEE STRUCTURAL DRAWINGS.
19. CONCRETE STOOP, SEE STRUCTURAL DRAWINGS.
20. IMPREGNATED COATINGS ON CONCRETE STOOP.

ARCHITECTURAL SYMBOL LEGEND
- DOOR
- WINDOW
- ROOM NAME & NUMBER
- WINDOW

UV Disinfection Room Access Ramp

ULTRAVIOLET (UV) DISINFECTION SYSTEM REPLACEMENT PROJECT

FLOOR PLAN ARCHITECTURAL
1/4" = 1' - 0"
MAIN FLOOR - FLOOR PLAN

UV Disinfection Room
ULTRAVIOLET (UV) DISINFECTION SYSTEM REPLACEMENT PROJECT

WALL SECTIONS SHEET 1 OF 2

1. PREFINISHED METAL WALL PANEL - VERTICAL RIBBED PATTERN, COLOR 1.
2. PREFINISHED METAL WALL PANEL - HORIZONTAL RIBBED PATTERN, COLOR 2.
3. PREFINISHED METAL SKIPPER PANEL - VERTICAL RIBBED, COLOR 1.
4. 1 1/2" CONTINUOUS RIGID INSULATION, R=7.5, BETWEEN 1 1/2" CHANNELS.
5. FLOOR APPLIED VAPOR BARRIER.
6. SIP EXTERIOR COATING SKIRTINGS, ALIGN WITH EXTERIOR FACE OF CONCRETE CURB.
7. 6" MIXED LAYERS, SPANDED 10" O.C. WITH 3/4" GALV. TRIM EXTERIOR.
8. SIP TYPE 3 EXTERIOR WALL BOARD WITH ANISE, MOISTURE, AND WALK RESISTANCE.
9. SINGLE PLY ROOFING MEMBRANE.
10. 1" CONCRETE SWEEP/STEP, 4" AT EDGE OF ROOF.
11. VAPOR REFERENCE.
12. METAL GUTTER, SBS STRUCTURAL DRAWINGS.
13. PREFINISHED METAL GUTTER.
14. PREFINISHED METAL DOWNSPOUT.
15. PRECAST CONCRETE SPLASH BLOCK.
16. BOX drain/HEADER.
17. ALUMINUM GUTTER, SURFACE MOUNTED, 4" THE ROI.
18. METAL BUILDING PANEL, SBS STRUCTURAL DRAWINGS.
19. EXISTING CONCRETE SLAB ON FOUNDATION.
20. EXISTING CONCRETE ACCESS RAMP.
21. EXISTING PLY 4" CONCRETE CURB.
22. NEW 6" CONCRETE WALL, SBS STRUCTURAL DRAWINGS.
23. SBS PLY 4" CONCRETE CURB, SBS STRUCTURAL DRAWINGS.
24. BASE FLASHING X GRIP ROOF.
25. FINISH GRIND.
WITH BATT INSULATION
FLOORING AND WALL BACKER ROD
NEW CONCRETE SHEATHING
WALL PANEL
1/2" CONT RIGID INSULATION (R-7.5)
1-1/2" CONT RIGID-
STEEL FRAMING, SEE STRUCTURAL DRAWINGS
PANEL OVER CONT RIGID
5/8" TYPE "X" GYP BD GRID
6" - A
DRIP EDGE TO ELEVATION FOR INSULATION (R-7.5)
1-1/2" CONT RIGID
501 DRIP METAL DRIP EDGE W/ RIGID INSULATION SLAB (VERTICAL RIBBED)
PREFINISHED SLAB 2'-0"
PREFINISHED METAL SILL FLASHING
4. RIPRAP SHALL BE PLACED AT ALL SPLASH BLOCKS.

FABRIC TYPE "A" SHALL BE AS INDICATED
Fabric Weight: ASTM D3776 - 5.7 oz/yd2
Continuous chains of polymeric filaments or yarns of polyester
Mullin Burst Strength: ASTM D3786 - 190 psi
ULTRAVIOLET (UV) DISINFECTION

A. FILTER FABRIC TYPE "A" SHALL BE
B. RIPRAP SHALL BE A MINIMUM OF 6 INCHES DEEP.
C. RIPRAP SHALL BE 2'-0" IF UNCENTERED.
D. RIPRAP SHALL BE CENTERED.
E. RIPRAP SHALL BE PLACED BETWEEN THE RIPRAP ARCHITECTURAL SOIL.
RIPRAP SUPPORT PLATE.
METAL SUPPORT PLATE.
METAL SUPPORT PLATE TO ATTACH Z-CHANNEL SUPPORT PLATE.
METAL CORNER SUPPORT PLATE.
METAL CORNER SUPPORT PLATE, SEE STRUCTURAL DRAWINGS.
CITY OF ANN ARBOR PUBLIC SERVICES
1 1/2" = 1'

PREPARED METAL WALL PANEL (VERTICAL RIBBED)
METAL Z-CHANNEL (VERTICAL RIBBED)
PREPARED METAL WALL PANEL (VERTICAL RIBBED)
PREPARED METAL WALL PANEL (VERTICAL RIBBED)
PREPARED METAL WALL PANEL (VERTICAL RIBBED)
PREPARED METAL WALL PANEL (VERTICAL RIBBED)
METAL SUPPORT PLATE.

NOTES:
- FILTER FABRIC TYPE "A" SHALL BE
- RIPRAP SUPPORT PLATE.
- METAL SUPPORT PLATE.
- METAL SUPPORT PLATE TO ATTACH Z-CHANNEL SUPPORT PLATE.
- METAL CORNER SUPPORT PLATE.
- METAL CORNER SUPPORT PLATE, SEE STRUCTURAL DRAWINGS.
- FILTER FABRIC TYPE "A" SHALL BE
- RIPRAP SUPPORT PLATE.
- METAL SUPPORT PLATE.
- METAL SUPPORT PLATE TO ATTACH Z-CHANNEL SUPPORT PLATE.
- METAL CORNER SUPPORT PLATE.
- FILTER FABRIC TYPE "A" SHALL BE
- RIPRAP SUPPORT PLATE.
- METAL SUPPORT PLATE.
- METAL SUPPORT PLATE TO ATTACH Z-CHANNEL SUPPORT PLATE.
- METAL CORNER SUPPORT PLATE.
1. Railing material and fabrication shall be as indicated on the design drawings and in the project specifications for handrailings and guardrails.

2. A removable guardrail and handrail shall be detailed and fabricated in accordance with the project specifications for removable guardrail and handrail details. This sheet includes the general coordinates for removable guardrail and handrail details. This sheet includes the general coordinates for removable guardrail and handrail details.

3. Guardrail and handrail shall be designed and fabricated in configurations required to fit the indicated locations, otherwise consult the design drawings. Contractor shall verify final dimensions before fabrication.

4. Guardrail and handrail shall be designed and fabricated in configurations required to fit the indicated locations, otherwise consult the design drawings. Contractor shall verify final dimensions before fabrication.

5. General sheet notes:

   a. Unless otherwise noted, all dimensions are in inches. 1/8" = 1' 0"

   b. All dimensions are given to the nearest 3/8".

   c. All dimensions are given to the nearest 1/2".

   d. All dimensions are given to the nearest 1/2".

   e. All dimensions are given to the nearest 1/2".

   f. All dimensions are given to the nearest 1/2".

   g. All dimensions are given to the nearest 1/2".

   h. All dimensions are given to the nearest 1/2".

   i. All dimensions are given to the nearest 1/2".

   j. All dimensions are given to the nearest 1/2".

   k. All dimensions are given to the nearest 1/2".

   l. All dimensions are given to the nearest 1/2".

   m. All dimensions are given to the nearest 1/2".

   n. All dimensions are given to the nearest 1/2".

   o. All dimensions are given to the nearest 1/2".

   p. All dimensions are given to the nearest 1/2".

   q. All dimensions are given to the nearest 1/2".

   r. All dimensions are given to the nearest 1/2".

   s. All dimensions are given to the nearest 1/2".

   t. All dimensions are given to the nearest 1/2".

   u. All dimensions are given to the nearest 1/2".

   v. All dimensions are given to the nearest 1/2".

   w. All dimensions are given to the nearest 1/2".

   x. All dimensions are given to the nearest 1/2".

   y. All dimensions are given to the nearest 1/2".

   z. All dimensions are given to the nearest 1/2".

4. Guardrail shall be designed and fabricated in configurations required to fit the indicated locations, otherwise consult the design drawings. Contractor shall verify final dimensions before fabrication.

5. Guardrail shall be designed and fabricated in configurations required to fit the indicated locations, otherwise consult the design drawings. Contractor shall verify final dimensions before fabrication.

6. Guardrail may be replaced with wall mounted handrail at stair edges and locations adjacent to stair edges where the wall face guardrail may be used.

7. The guardrail and handrail shall be designed and fabricated in configurations required to fit the indicated locations, otherwise consult the design drawings. Contractor shall verify final dimensions before fabrication.

8. Guardrail shall be designed and fabricated in configurations required to fit the indicated locations, otherwise consult the design drawings. Contractor shall verify final dimensions before fabrication.

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1. All ladders and fall protection safety systems shall be designed and fabricated by the ladder supplier in accordance with the latest issue of the American National Standard for Fixed Access Ladders ANSI A14.3-2004. All materials shall be specified in the drawings. Drawings and specifications shall be submitted for review and approval of the City of Ann Arbor Public Services. As applicable, aluminum shall be specified with any finish unless noted otherwise.

2. Ladder and all appurtenances to be material as noted on drawings, fabrication with the specifications for metal fabrications and fiberglass as applicable.

3. Ladder rails to be min. 1-3/4 in. thick with min. 1-3/4 in. top rail surface, spliced at 0". Ladder sides shall be flat and parallel to the nearest 1/2".

4. Ladder shall be designed and fabricated in accordance with the latest edition of the American National Standard for Fixed Access Ladders ANSI A14.3-2004. All materials shall be specified in the drawings. Drawings and specifications shall be submitted for review and approval of the City of Ann Arbor Public Services. As applicable, aluminum shall be specified with any finish unless noted otherwise.

5. Ladder shall be designed and fabricated in accordance with the latest edition of the American National Standard for Fixed Access Ladders ANSI A14.3-2004. All materials shall be specified in the drawings. Drawings and specifications shall be submitted for review and approval of the City of Ann Arbor Public Services. As applicable, aluminum shall be specified with any finish unless noted otherwise.

6. Ladder shall be designed and fabricated in accordance with the latest edition of the American National Standard for Fixed Access Ladders ANSI A14.3-2004. All materials shall be specified in the drawings. Drawings and specifications shall be submitted for review and approval of the City of Ann Arbor Public Services. As applicable, aluminum shall be specified with any finish unless noted otherwise.

7. Ladder shall be designed and fabricated in accordance with the latest edition of the American National Standard for Fixed Access Ladders ANSI A14.3-2004. All materials shall be specified in the drawings. Drawings and specifications shall be submitted for review and approval of the City of Ann Arbor Public Services. As applicable, aluminum shall be specified with any finish unless noted otherwise.

8. Ladder shall be designed and fabricated in accordance with the latest edition of the American National Standard for Fixed Access Ladders ANSI A14.3-2004. All materials shall be specified in the drawings. Drawings and specifications shall be submitted for review and approval of the City of Ann Arbor Public Services. As applicable, aluminum shall be specified with any finish unless noted otherwise.

9. Ladder shall be designed and fabricated in accordance with the latest edition of the American National Standard for Fixed Access Ladders ANSI A14.3-2004. All materials shall be specified in the drawings. Drawings and specifications shall be submitted for review and approval of the City of Ann Arbor Public Services. As applicable, aluminum shall be specified with any finish unless noted otherwise.

10. Ladder shall be designed and fabricated in accordance with the latest edition of the American National Standard for Fixed Access Ladders ANSI A14.3-2004. All materials shall be specified in the drawings. Drawings and specifications shall be submitted for review and approval of the City of Ann Arbor Public Services. As applicable, aluminum shall be specified with any finish unless noted otherwise.
GENERAL SHEET NOTES

1. PERSPECTIVE VIEWS ARE FOR GENERAL REFERENCE ONLY AND MAY NOT INCLUDE ALL NECESSARY BUILDING COMPONENTS OR EQUIPMENT REQUIRED. REFER TO OTHER DISCIPLINE SHEETS FOR MORE INFORMATION.
EXISTING WALKWAY/RAMP

REMOVE CANTILEVERED WALKWAY AND WALL DOWN TO ELEVATION OF 737.00' FOR PLACEMENT OF NEW STAIRS AND FOOTING

GENERAL NOTES:

1. EXISTING INFRASTRUCTURE IS AT APPROXIMATE LOCATIONS/ELEVATIONS. CONTRACTOR SHALL FIELD VERIFY EXISTING ITEMS.
2. REFER TO SECTION 02 41 00
3. PROTECT LAMPS FROM THE IN-SERVICE CHANNEL FROM DEBRIS DURING DEMOLITION.
4. EXISTING UV INFLECT CHANNELS SURROUNDING UV AREA ARE EXTENTS OF CHANNELS AND NO HEAVY MACHINERY SHOULD BE OPERATED OVER THESE EXISTING CHANNELS

REMOVAL NOTES:

1. REMOVE EXISTING GATE PLATES, SEALS, STEM, ACTUATORS, AND TRIM THE FRAME BELOW THE GRATING LEVEL (4 LOCATIONS)
2. REMOVE EXISTING CANOPY/SUPERSTRUCTURE AND SUPPORTING COLUMNS (8 LOCATIONS)
3. REMOVE CONCRETE OR CORE HOLE FOR NEW GATE STEM AND STAND ACTUATOR

REMOVE (SAWCUT) CENTER WALL DOWN TO ELEVATION OF 735.83' (IF POSSIBLE REMOVE HALF OF CENTER WALL AS WORK IS BEING DONE TO EACH CHANNEL)

REMOVE EXISTS CONCRETE STAIRS

REMOVE S.S. WEB PLATES (TYP)

REMOVE EXISTING TROJAN UNITS INCLUDING SUPERSTRUDURE, FLOW BOX, LAMPS, AND CONTROLS. (TYP. 2 CHANNELS)

REMOVE GROUTING AROUND UNITS AND GRIND FLUSH THE WALLS FOR INSTALLATION OF THE NEW EQUIPMENT (TYP 2 CHANNELS)

SAWCUT AND REMOVE EXCESS CONCRETE AS NEEDED TO INSTALL FINGER WEIRS (TYP)

REMOVE ALL EXISTING GUARDRAILS FROM RAMP AND PLATFORM

REMOVE CEMENT CURB AND WALL DOWN TO ELEVATION OF 737.00' FOR PLACEMENT OF NEW STAIRS AND FOOTING

REMOVE EXISTING GUARDRAILS AND STEPS

REMOVE EXISTING GUARDRAILS AND STEPS LEAVING THE PROJECT PRICE IN PLACE FOR THE INSTALLATION OF THE NEW EQUIPMENT (TYP. 2 CHANNELS)

REMOVE EXISTING RAMP OR STAIRS

REMOVE EXISTING TROJAN UNITS INCLUDING SUPERSTRUCTURE, FLOW BOX, LAMPS, AND CONTROLS. (TYP. 2 CHANNELS)

% ACCOUTMENT OF TEMPORARY SUPERSTRUCTURES AS NEEDED

PLACEMENT OF TEMPORARY BULKHEADS AS NEEDED

REMOVE ALL EXISTING GUARDRAILS FROM RAMP AND PLATFORM

% ACCOUTMENT OF TEMPORARY SUPERSTRUCTURES AS NEEDED

PLACEMENT OF TEMPORARY BULKHEADS AS NEEDED
General Notes:
1. Existing infrastructure is at approximate locations/elevations. Contractor shall field verify existing items.
2. Refer to Section 02 42 00
3. Do not show for clarity: Remove existing system including superstructure, flow box, lamps, and controls (means and methods may dictate removal of half of center wall as work is being done to each channel).

Removal Notes:
1. Remove existing gates and actuators (4 locations)
2. Remove existing canopy/superstructure and supporting columns (8 locations)
3. Rough up surface for bonding agent and grout application

SECTION A

Bottom of Wall Removal

EL. 735.83

CORE HOLE IN BOTH CHANNELS FOR PLACEMENT OF NEW GATES

FLOW

ROUGH UP SURFACE FOR BONDING AGENT AND GROUT APPLICATION

SECTION B

T.O.C. ELEVATION

EL. 723.75

B.O.C. ELEVATION

EL. 729.83

T.O.C. ELEVATION

EL. 722.75
**GENERAL NOTES:**

1. Existing infrastructure at approximate locations/elevations. Contractor shall verify before excavation.

**PLAN NOTES:**

1. Cable trays to be installed per manufacturer requirements. Cable tray is to be installed on top of concrete, along with 12" false floor to cover cables and to avoid tripping hazards. Grating to be placed over cable trays.

2. UV system controls and electrical equipment. See electrical sheets and manufacturer for details.

3. Removable aluminum plating shall be placed on lower access level (EL. 737.00) of UV channels.

4. Installation of UV modules is typical for each channel. See manufacturer for installation details.

5. New gates with electric actuators. See manufacturer for installation details.

**PLACE:**

- New equipment pads and raised grating for wiring (see S-201)

- Level sensor (typical 2 channels)

- Aluminum grating on top of wireways for heat dissipation

- Fingertip weirs (provided by UV manufacturer)

- New UV sensor

**UV BUILDING - PLAN VIEW**
GENERAL NOTES:
1. EXISTING INFRASTRUCTURE IS AT APPROXIMATE LOCATIONS/ELEVATIONS. CONTRACTOR SHALL FIELD VERIFY EXISTENCE.
2. UPPER LEVEL OF REMOVABLE PLATES AND ROOF ARE NOT SHOWN FOR CLARITY.

PLAN NOTES:
1. UV ELECTRICAL EQUIPMENT/CONTROLS. SEE ELECTRICAL DRAWINGS FOR MORE DETAILS.
2. ELEVATED CABLE TRAYS. INSTALL PER MANUFACTURER.
3. LOWER LEVEL ACCESS LADDER AND SWING GATE. INSTALL PER ARCHITECTURAL DRAWINGS.
4. INSTALL ALUMINUM HANDRAIL ON LOWER LEVEL (EL. 737.00) ON BOTH ENDS OF CHANNEL, PER ARCHITECTURAL DRAWINGS.

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
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734-794-6410
www.a2gov.org
GENERAL STRUCTURAL NOTES


2. POST INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE CONSTRUCTION DRAWINGS. THESE ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER’S INSTRUCTIONS AND SHALL BE PROVIDED IN ACCORDANCE WITH THE MANUFACTURER’S REQUIREMENTS.

3. ALL DRILLING, COUNTERBORE, AND TAPPING OF HOLES FOR THE INSTALLATION OF ALL ANCHORS SHALL BE PERFORMED IN ACCORDANCE WITH THE MANUFACTURER’S INSTRUCTIONS.

4. ALL ANCHORS SHALL BE INSPECTED AS DESCRIBED IN SPECIFICATIONS.

5. COORDINATE AND DETAIL CONNECTIONS TO THE PRIMARY STRUCTURE.

6. PROVIDE SPECIAL INSPECTION, ACCORDING TO CHAPTER 20 OF THE INTERNATIONAL BUILDING CODE, FOR ALL STRUCTURAL STEEL CONNECTIONS.

7. PROVIDE SPECIAL INSPECTION, ACCORDING TO CHAPTER 20 OF THE INTERNATIONAL BUILDING CODE, FOR ALL LIGHT GAUGE METAL STUD CONNECTIONS.

8. PROVIDE SPECIAL INSPECTION, ACCORDING TO CHAPTER 20 OF THE INTERNATIONAL BUILDING CODE, FOR ALL METAL DECK CONNECTIONS.

9. PROVIDE SPECIAL INSPECTION, ACCORDING TO CHAPTER 20 OF THE INTERNATIONAL BUILDING CODE, FOR ALL ROOF MOUNTED SYSTEMS.

10. PROVIDE SPECIAL INSPECTION, ACCORDING TO CHAPTER 20 OF THE INTERNATIONAL BUILDING CODE, FOR ALL VERTICAL WALLS.

11. PROVIDE SPECIAL INSPECTION, ACCORDING TO CHAPTER 20 OF THE INTERNATIONAL BUILDING CODE, FOR ALL HORIZONTAL WALLS.

12. PROVIDE SPECIAL INSPECTION, ACCORDING TO CHAPTER 20 OF THE INTERNATIONAL BUILDING CODE, FOR ALL COLUMN BASES.

13. PROVIDE SPECIAL INSPECTION, ACCORDING TO CHAPTER 20 OF THE INTERNATIONAL BUILDING CODE, FOR ALL ROOF DECKS.

14. PROVIDE SPECIAL INSPECTION, ACCORDING TO CHAPTER 20 OF THE INTERNATIONAL BUILDING CODE, FOR ALL WALL DECKS.

15. PROVIDE SPECIAL INSPECTION, ACCORDING TO CHAPTER 20 OF THE INTERNATIONAL BUILDING CODE, FOR ALL CEILING DECKS.

16. PROVIDE SPECIAL INSPECTION, ACCORDING TO CHAPTER 20 OF THE INTERNATIONAL BUILDING CODE, FOR ALL LANDING PLATFORMS.

17. PROVIDE SPECIAL INSPECTION, ACCORDING TO CHAPTER 20 OF THE INTERNATIONAL BUILDING CODE, FOR ALL FIREPROOFING.

18. PROVIDE SPECIAL INSPECTION, ACCORDING TO CHAPTER 20 OF THE INTERNATIONAL BUILDING CODE, FOR ALL SPECIALTY MATERIALS.

19. PROVIDE SPECIAL INSPECTION, ACCORDING TO CHAPTER 20 OF THE INTERNATIONAL BUILDING CODE, FOR ALL SPECIALTY EQUIPMENT.

20. PROVIDE SPECIAL INSPECTION, ACCORDING TO CHAPTER 20 OF THE INTERNATIONAL BUILDING CODE, FOR ALL SPECIALTY SYSTEMS.

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43. PROVIDE SPECIAL INSPECTION, ACCORDING TO CHAPTER 20 OF THE INTERNATIONAL BUILDING CODE, FOR ALL SPECIALTY EQUIPMENT.

44. PROVIDE SPECIAL INSPECTION, ACCORDING TO CHAPTER 20 OF THE INTERNATIONAL BUILDING CODE, FOR ALL SPECIALTY SYSTEMS.
4. Have a minimum SMACNA pressure classification of one inch. Pressures indicated in the schedules for the equipment it serves. All ductwork shall control damper sizes shall match dimensions of associated louver unless equipment, piping, or ductwork.

5. Openings in walls, doors, or windows shall be provided for the purpose of access for maintenance, repair, and inspection.

6. All equipment, piping, and ductwork final locations shall be coordinated to avoid interferences with structure, other piping, equipment, ductwork, and conduit.

7. All equipment shall be installed under a拥抱 sheet of 1/4 inch. Interferences with structure, other piping, equipment, ductwork, and conduit shall be avoided.

8. All duct connections to equipment. Piping used to equipment. Equipment shall be properly adjusted to match actual equipment furnished.

9. Control damper sizes shall match dimensions of associated louver unless otherwise indicated.

10. All duct connections shall be routed as high as possible with a minimum height of 6" above the walking surface unless otherwise required by a centerline or bottom of duct.

11. Ductwork shall be fabricated, reinforced, supported, and sealed as required. Piping connections shall be made to equipment. All ductwork shall have a minimum branch pressure classification of one inch.
GENERAL SHEET NOTES

1. SEE DRAWINGS H-001 FOR HVAC LEGENDS AND GENERAL NOTES.

2. ALL THERMOSTATS SHALL BE CORROSION RESISTANT TYPE. ALL OTHER INSTRUMENTS SHOWN ON PLAN SHALL BE HOUSED IN NEMA 4X ENCLOSURES.

100% ISSUE FOR BID/PERMITTING

SEPT 2023
RWC
JTW
### ELECTRICAL SPECIFICATIONS

#### AREA DESIGNATIONS

The special area designations below are defined in the plan drawings to define electrical, instrumentation, and control systems. All areas are defined by NEC equipment and control systems and shall be used on the plan drawings to define all equipment and associated fittings in the specified area.

#### GENERAL REQUIREMENTS

1. The contractor shall be responsible for routing all Conduit not shown on the plans. This includes all Conduits shown on the floor plans and all Conduits shown on the plans drawings. Conduits shall be routed as specified.

2. In general, all Conduit and cable shall be installed underground. The conductor shall be run underground wherever possible.

3. If equipment supplied by manufacturer is a larger size than shown, the Conduit and electrical Conduit shall be increased to accommodate the higher voltage.

4. The contractor shall be responsible for routing all Conduit not shown on the plans. The Conduit shall be routed underground wherever possible.

5. The Conduit shall be installed underground. In general, the Conduit shall be run underground. Conduit for lighting, receptacles, and miscellaneous circuits shall be underground.

6. All Conduit shall be run underground. Conduit for lighting, receptacles, and miscellaneous circuits shall be underground.

7. All Conduit shall be run underground. Conduit for lighting, receptacles, and miscellaneous circuits shall be underground.

#### GENERAL NOTES

1. The Conduit shall be run underground. Conduit for lighting, receptacles, and miscellaneous circuits shall be underground.

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#### REVIEWS

- **AREA DESIGNATIONS**: The special area designations below are defined in the plan drawings to define electrical, instrumentation, and control systems. All areas are defined by NEC equipment and control systems and shall be used on the plan drawings to define all equipment and associated fittings in the specified area.

#### GENERAL REQUIREMENTS

1. The Conduit shall be run underground. Conduit for lighting, receptacles, and miscellaneous circuits shall be underground. Conduit shall be run underground wherever possible.

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NOTES:

1. USE DRAWINGS E-001 AND E-002 FOR ELECTRICAL LEGENDS, ABBREVIATIONS AND NOTES.

2. EXISTING UNIT SUBSTATION NO. 4 AND CP-70 ARE LOCATED ON THE SECOND FLOOR ABOVE GRADE AT THE TERTIARY FILTER BUILDING. UNIT UV-2A, UNIT UV-2B ON THE FIRST FLOOR ABOVE GRADE. INCOMING DUCTBANK ENTERS THROUGH THE BASEMENT.

3. EXISTING XFMR UV-2B SHALL BE RELOCATED HERE. EXISTING TRANSFORMERS UV-1A AND UV-1B AT THIS LOCATION SHALL BE DISCONNECTED AND PROVIDED TO THE OWNER AS SPARE.

4. CONTRACTOR SHALL DEMOLISH EXISTING TEMPORARY CONDUIT AT THIS LOCATION. CONTRACTOR SHALL PURCHASE AND INSTALL JUNCTION BOXES EXTERIOR TO THE CENTRAL ELECTRICAL BUILDING (CEB) AND WITHIN THE UV BUILDING AS REQUIRED TO TRANSITION FROM EXPOSED CONDUIT TO DIRECT BURIED CONDUIT BETWEEN THE NEW SCC-001 WITHIN THE UV BUILDING.

5. CONTRACTOR SHALL PURCHASE AND INSTALL NEMA 4X TYPE 316 SS JUNCTION BOX AT THE LOCATION OF REMOVED XFMR UV-1B TO FACILITATE SPLICE TO EXISTING CONDUCTORS AS INDICATED ON THE DRAWINGS.

6. EXISTING LOCATION OF XFMR UV-2B, TO BE RELOCATED AS NOTED HEREIN.
ULTRAVIOLET (UV) DISINFECTION SYSTEM REPLACEMENT PROJECT

GENERAL SHEET NOTES

1. SEE DRAWINGS E-001 AND E-002 FOR ELECTRICAL LEGENDS, ABBREVIATIONS AND NOTES.
2. EXISTING XFMR UV-2B SHALL BE RELOCATED HERE.
3. EXISTING CONDUIT PATTERN OF THE LOCATION SHALL BE RECONNECTED AND CONNECTED TO THE EXISTING P11.251.4" (NO TAP OR ELL) AND P11.151.4" (NO TAP OR ELL). THE EXISTING P11.251.4" (NO TAP OR ELL) AND P11.151.4" (NO TAP OR ELL) PIPES SHALL BE CONNECTED TO THE EXISTING XFMR UV-2A DSW. THE EXISTING P11.251.4" (NO TAP OR ELL) AND P11.151.4" (NO TAP OR ELL) PIPES SHALL BE CONNECTED TO THE EXISTING XFMR UV-2B DSW.
4. CONTRACTOR SHALL NOTIFY EXISTING BEFORE CONCRETE POUR AT THE LOCATION WHERE THE PIPES WILL BE INSTALLED. A MINIMUM TYPE 1 D 610-Junction Box is to be installed where the pipes will be exposed to the load as required.

3/16" = 1'−0"

UV BUILDING POWER AND GROUNDING PLAN
MAIN FLOOR - LIGHTING & RECEPTACLE PLAN
ULTRAVIOLET (UV) DISINFECTION SYSTEM REPLACEMENT PROJECT

DEVICE LOCATION LEGEND

1. SEE DRAWINGS E-001 AND E-002 FOR ELECTRICAL LEGENDS, ABBREVIATIONS & NOTES.

GSD-101, -102, -201 & -202

NO SCALE

NOTES:
UNIT SUBSTATION NO. 7
(CENTRAL ELECTRICAL BUILDING)

UNIT SUBSTATION NO. 4 (BUS B)

(TERTIARY FILTER BUILDING)

(MCC-CEB-A/B)

SVB-UV-PA: 3-250KCMIL, 4#G, 4"

P11.151A - 6-250KCMIL, 4#G, 4"

P11.151B - 4-250KCMIL, #4G, 4"

P11.251A, B: 6-250KCMIL, 2#1G, 2(3)"

P11.201A, B: 6-350KCMIL, 2#1G, 2(3)"

MCC-CEB-A/B

(CENTRAL ELECTRICAL BUILDING)

NOTES:
1. SEE DRAWINGS E-001 AND E-002 FOR ELECTRICAL LEGENDS, ABBREVIATIONS AND NOTES.
2. EXISTING EQUIPMENT TO BE RELOCATED WITHIN NEW UV BUILDING.
EXISTING INTERCONNECTING WIRING TO BE DEMOLISHED AS INDICATED.
3. TO BE REMOVED AND PROVIDED TO THE OWNER AS SPARE.
4. EXISTING TRANSFORMER TO BE DISCONNECTED AND RELOCATED WEST OF THE NEW UV BUILDING AS INDICATED ON THE DRAWINGS.
NOTES:

1. **SEE DRAWINGS E-001 AND E-002 FOR ELECTRICAL LEGENDS, ABBREVIATIONS AND NOTES.**

2. **CONTRACTOR SHALL COORDINATE WITH UV SYSTEM SUPPLIER AND SHALL FURNISH AND INSTALL CABLE TRAY SYSTEMS IN COMPLIANCE WITH NEC REQUIREMENTS TO FACILITATE HYDRAULIC AND BALLAST LINE TRANSITION INTO TREATMENT CHANNELS.**

3. **CONTRACTOR SHALL COORDINATE WITH HVAC EQUIPMENT SUPPLIER AND PROCURE AND INSTALL ALL EQUIPMENT REQUIRED FOR PROPER OPERATION. CONTRACTOR SHALL REFER TO HVAC DRAWINGS AND SPECIFICATIONS.**
<table>
<thead>
<tr>
<th>FIGURE 1</th>
<th>LAMP</th>
<th>INPUT VOLTAGE</th>
<th>DESCRIPTION</th>
<th>MANUFACTURER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>120 W</td>
<td>120 V @ 60 Hz</td>
<td>LED NOTED ON PLAN</td>
<td>Lumina Linear LED, 120V, 50/60 Hz, Housing: Clear, Color: White, Temperature: 80°C</td>
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**NOTES:**

1. AS NOTED ON PLAN. FOR ELECTRICAL LEGENDS, INVENTORIES, AND NOTES.