Protecting Our Water Environment

Metropolitan Water Reclamation District of Greater Chicago

100 EAST ERIE STREET CHICAGO, ILLINOIS 60611-3154 312.751.5600

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President
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Sharon Waller

Darlene A. LoCascio
Director of Procurement and Materials Management

312.751.6600 f: 312.894.2011
darlene.locascio@mwrd.org

October 21, 2025

Dear Bidder:

Enclosed herewith is "Notice of Revision and Addendum in Contract Documents," Addendum 3, consisting of nine (9) pages and other attachments as referenced in the addendum. This addendum is dated October 21, 2025, and pertains to Contract 21-092-3P, "Battery E Activated Sludge Facility, O'Brien Water Reclamation Plant."

Proposers must download Addendum 3 and the attachments in their entirety from the District's Portal at www.mwrd.org. The path is as follows: **Doing Business→Procurement and Materials Management→Contract Announcements**. Scroll to Contract 21-092-3P and click "Addenda" to obtain this and all other addenda. If you are unable to download this addendum or any other contract documents, please email the Contract Desk at contractdesk@mwrd.org or call (312) 751-6629 for assistance.

The Notice must also be signed, dated, inserted in the Contract Documents, and submitted with the Proposal, OR the Bidder may identify the addendum number in the space provided on the Proposal signature page.

Very truly yours,

Darlene A. LoCascio
Director of Procurement and
Materials Management

Attachment

Acknowledgment of receipt of the above-cited Notice:

DATE _____

NAME _____

FIRM _____

SIGNED _____

Protecting Our Water Environment

Metropolitan Water Reclamation District of Greater Chicago
100 EAST ERIE STREET CHICAGO, ILLINOIS 60611-3154 312.751.5600

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NOTICE OF REVISION AND ADDENDUM IN CONTRACT DOCUMENTS

ADDENDUM 3

OCTOBER 21, 2025

CONTRACT 21-092-3P
BATTERY E ACTIVATED SLUDGE FACILITY
O'BRIEN WATER RECLAMATION PLANT

All bidders are hereby notified of the following revisions:

Volume 1 of 4 – Signature Book for Submission of Bid

1. SECTION PROPOSAL – PAGE P-2

   Refer to Paragraph 6.

   Revise Paragraph 6 as follows:

   "MWRD is a local government entity with Illinois Tax Exemption ID #E9997-9578. The prices quoted herein by the Bidder conclusively include all costs and fees and comply with all Federal and State laws and regulations."

2. AGREEMENT – PAGE A-7

   Delete the row for SECTION 06517 – FIBERGLASS REINFORCED PLANK PANEL

3. AGREEMENT – PAGE A-7

   Insert the following after the heading DIVISION 7 – THERMAL AND MOISTURE PROTECTION:

   SECTION 07140 FLUID APPLIED WATERPROOFING 07140-1 TO 07140-6

4. AGREEMENT – PAGE A-10

   Refer to the row for APPENDIX G – DBS COST PROPOSAL.

   Insert the following after the referenced row:

   APPENDIX H – SAMPLE PERMIT AGREEMENT

Volume 2 & 3 of 4 – Specifications

5. VOLUME 2, TABLE OF CONTENTS – PAGE TOC-3

   Delete the row for SECTION 06517 – FIBERGLASS REINFORCED PLANK PANEL

6. VOLUME 2, TABLE OF CONTENTS – PAGE TOC-3

   Insert the following after the heading DIVISION 7 – THERMAL AND MOISTURE PROTECTION:

SECTION 07140	FLUID APPLIED WATERPROOFING	07140-1 TO 07140-6

7. VOLUME 2, TABLE OF CONTENTS – PAGE TOC-6

   Refer to the row for APPENDIX G – DBS COST PROPOSAL.

   Insert the following after the referenced row:

   APPENDIX H – SAMPLE PERMIT AGREEMENT

8. VOLUME 3, TABLE OF CONTENTS – PAGE TOC-3

   Delete the row for SECTION 06517 – FIBERGLASS REINFORCED PLANK PANEL

9. VOLUME 3, TABLE OF CONTENTS – PAGE TOC-3

   Insert the following after the heading DIVISION 7 – THERMAL AND MOISTURE PROTECTION:

SECTION 07140	FLUID APPLIED WATERPROOFING	07140-1 TO 07140-6

10. VOLUME 3, TABLE OF CONTENTS – PAGE TOC-6

    Refer to the row for APPENDIX G – DBS COST PROPOSAL.

Insert the following after the referenced row:

APPENDIX H – SAMPLE PERMIT AGREEMENT

11. SECTION 01130 – PAGE 5

Refer to Paragraph 3.02 E.1.

Add the following after the referenced paragraph:

"2. The Contractor is advised that, during the plant shutdown, the existing plant effluent conduit may not fully dewater and the Contractor may need to seek remedies per the approved detailed construction sequence submitted by the Contractor necessary to maintain his progress of the work. The intent is to have the conduit dewatered sufficiently for Contractor access at normal workday start time. The Contractor can expedite conduit final dewatering by using its own pumping equipment. Dewatering time is included in the shutdown duration."

12. SECTION 01130 – PAGE 7

Refer to Paragraph 3.02 G.2.

Add the following after the referenced paragraph:

"3. The Contractor is advised that, during the plant shutdown, the existing plant effluent conduit may not fully dewater and the Contractor may need to seek remedies per the approved detailed construction sequence submitted by the Contractor necessary to maintain his progress of the work. The intent is to have the conduit dewatered sufficiently for Contractor access at normal workday start time. The Contractor can expedite conduit final dewatering by using its own pumping equipment. Dewatering time is included in the shutdown duration."

13. SECTION 01131 – PAGE 8

Refer to Paragraph 1.12

Add the following after the referenced paragraph:

"1.13 OFFSITE STAGING AREA

A. North Shore Channel Parcel 6.11 is available for staging purposes related to this project, subject to the Contractor entering into a Permit Agreement with the District. The annual permit fee will be $72,862.00, and the fee will be prorated based on the term requested and approved by the District. The Contractor is not required to utilize

this parcel. A sample permit agreement and aerial photo of the parcel can be found in Appendix H.

B. Contractor has the option to use the offsite staging area shown on drawing LP-003. Contractor can only access this staging area from the north from Oakton St. Traffic and storage of equipment and materials underneath the Yellow Line bridge is prohibited."

14. SECTION 02068 – PAGE 1

Refer to Paragraph 1.01 A.3.

After the second sentence of the referenced paragraph, insert the following:

" The District has encountered boulders and other obstructions, such as gravel and concrete, during other construction projects at this facility in various locations. Such obstructions can have varying effects on installation depending on the type of ERS selected as part of the Contractor's means and methods. At the Contractor's discretion, additional borings shall be performed as necessary to verify underground obstructions and complete the design for the particular type of ERS selected. No additional compensation shall be granted to the Contractor for ERS modifications required for obstructions."

Insert a paragraph break following the text inserted above and renumber the subsequent paragraphs.

15. SECTION 02068 – PAGE 5

Refer to Paragraph 1.02 K.

Add the following paragraphs after the referenced paragraph.

"L. Submit plans and details of existing utilities outside the OWRP fence line if any components of the ERS system, such as tiebacks, extend beyond the OWRP fence line.

M. Submit agreement between the Contractor and adjacent property owner stating that the tiebacks are acceptable within their property."

16. SECTION 02068 – PAGE 8

Refer to Paragraph 3.01 I.

Add the following after the referenced paragraph:

"J. If the Contractor chooses to use tiebacks that extend past the District's property lines, the Contractor is responsible for coordinating with the respective property owners and

any applicable governing authorities. Prior to the design and submittal of the ERS and tieback details, the Contractor must obtain a formal written agreement from the respective property owner stating that the tiebacks are acceptable within their property. The Contractor will also be responsible for identifying and avoiding all buried utilities outside the District property line."

17. SECTION 02317 – PAGE 4

    Refer to Part 1.08 SITE CONDITIONS.

    Delete this subsection in its entirety.

18. SECTION 02850 – PAGE 4

    Refer to Paragraph 2.01 C.2.b.

    Delete the word "20-foot" and replace with "10-foot".

19. SECTION 03300 – PAGE 8

    Refer to Paragraph 2.03 A.9.

    Delete "5,000" under the 28-Day Test for Class R in the compressive strength table and replace it with "4,000".

20. SECTION 06517 – PAGE 1 TO 4

    Delete this specification section in its entirety.

21. SECTION 11850 – PAGE 7

    Refer to Paragraph 2.02 B.2.d.1).

    Delete the wording "L/360" and replace it with "L/240".

    Refer to Paragraph 2.02 B.2.d.2).

    Delete the wording "L/360" and replace it with "L/240".

22. SECTION 13200 – PAGE 7

    Refer to Paragraph 2.04 C.2.a.

    Delete the wording "0.24 to 140 gpm" and replace it with "0.24 to 5 gpm".

23. SECTION 13200 – PAGE 8

Refer to Paragraph 2.04 C 4.a.

Add the following after the referenced paragraph:

"b. Provide a dielectric fitting between the stainless steel end fittings of the rotameter and the galvanized steel WNP piping."

Refer to Paragraph 2.04 C.5.a.

Delete this sentence and replace it with "King Instrument Company or cleanwater1".

24. SECTION 14300 – PAGE 4

Refer to the row in the equipment performance table for the Maximum Elevation of bottom of monorail beam.

Delete the wording "+37.60 CCD" for Unit "B" and replace it with "+37.00 CCD".

Refer to the row in the equipment performance table for the Elevation of hook in highest position – not lower than.

Delete the wording "+35.00 CCD" for Unit "B" and replace it with "+34.30 CCD".

25. SECTION 14650 – PAGE 1

Refer to Paragraph 2.04 B.

Delete the wording "Davit flush base (total of 68)" and replace it with "Davit flush bases (total of 68) and davit wall-mount bases (total of 8)".

26. SECTION 15051 – PAGE 4

Refer to Paragraph 2.01 B.2

Delete this paragraph in its entirety and renumber subsequent paragraphs.

27. The following specification section (attached) are hereby added to the contract documents:

SECTION 07140	FLUID APPLIED WATERPROOFING	07140-1 TO 01740-6
APPENDIX H	SAMPLE PERMIT AGREEMENT	

28. PLANS

The following revised plans are included in this Addendum. The revised plans replace previously issued plans having corresponding sheet numbers:

PAGE NO.	SHEET NO.	REV#	TITLE OF SHEET
15	LP-003	1	CONTRACTOR STAGING AREAS
22	C-006	1	SOIL BORINGS LOCATION PLAN
23	C-007	1	SOIL BORING LOGS – 1
24	C-008	1	SOIL BORING LOGS – 2
25	C-009	1	SOIL BORING LOGS – 3
26	C-010	1	SOIL BORING LOGS – 4
27	C-011	1	SOIL BORING LOGS – 5
44	C-028	1	SITE DEMOLITION PLAN – 5
48	C-032	1	SITE FACILITY PLAN – 3
55	C-039	1	SITE GRADING PLAN – 3
119	S-314	1	PARTIAL TOP PLAN – ZONE 1
121	S-316	1	PARTIAL TOP PLAN – ZONE 3
122	S-317	1	PARTIAL TOP PLAN – ZONE 4
124	S-319	1	PARTIAL TOP PLAN – ZONE 6
125	S-320	1	PARTIAL TOP PLAN – ZONE 7
127	S-322	1	PARTIAL TOP PLAN – ZONE 9
128	S-323	1	PARTIAL TOP PLAN – ZONE 10
129	S-324	1	PARTIAL TOP PLAN – ZONE 11
130	S-325	1	PARTIAL TOP PLAN – ZONE 12
145	S-406	1	LARGE SCALE PLANS
146	S-407	1	LARGE SCALE PLANS
148	S-409	1	SECTIONS
159	S-420	1	MONORAIL DETAILS
161	S-422	1	CMU DETAILS
221	A-001	1	ARCHITECTURAL NOTES, SYMBOLS, ABBREVIATIONS AND GENERAL NOTES
222	A-002	1	GENERAL LAYOUT, LIFE SAFETY PLAN, AND CODE MATRIX
227	A-403	1	ELEVATIONS
228	A-404	1	SECTIONS
233	A-409	1	LARGE SCALE PLANS

PAGE NO.	SHEET NO.	REV#	TITLE OF SHEET
235	A-411	1	DETAILS
260	P-101	1	METER BUILDING – DEMOLITION AND NEW WORK
331	M-001	1	MECHANICAL NOTES SYMBOLS AND ABBREVIATIONS
332	M-002	1	STANDARD DETAILS 1
333	M-003	1	MECHANICAL SCREENS
380	E-017	1	CONDUIT AND CABLE SCHEDULE 1 OF 25
381	E-018	1	CONDUIT AND CABLE SCHEDULE 2 OF 25
382	E-019	1	CONDUIT AND CABLE SCHEDULE 3 OF 25
383	E-020	1	CONDUIT AND CABLE SCHEDULE 4 OF 25
384	E-020A	1	CONDUIT AND CABLE SCHEDULE 5 OF 25
385	E-020B	1	CONDUIT AND CABLE SCHEDULE 6 OF 25
386	E-020C	1	CONDUIT AND CABLE SCHEDULE 7 OF 25
387	E-020D	1	CONDUIT AND CABLE SCHEDULE 8 OF 25
388	E-020E	1	CONDUIT AND CABLE SCHEDULE 9 OF 25
389	E-021	1	CONDUIT AND CABLE SCHEDULE 10 OF 25
390	E-022	1	CONDUIT AND CABLE SCHEDULE 11 OF 25
391	E-023	1	CONDUIT AND CABLE SCHEDULE 12 OF 25
392	E-024	1	CONDUIT AND CABLE SCHEDULE 13 OF 25
393	E-025	1	CONDUIT AND CABLE SCHEDULE 14 OF 25
394	E-025A	1	CONDUIT AND CABLE SCHEDULE 15 OF 25
395	E-025B	1	CONDUIT AND CABLE SCHEDULE 16 OF 25
396	E-025C	1	CONDUIT AND CABLE SCHEDULE 17 OF 25
397	E-025D	1	CONDUIT AND CABLE SCHEDULE 18 OF 25
398	E-025E	1	CONDUIT AND CABLE SCHEDULE 19 OF 25
399	E-025F	1	CONDUIT AND CABLE SCHEDULE 20 OF 25
400	E-025G	1	CONDUIT AND CABLE SCHEDULE 21 OF 25
401	E-025H	1	CONDUIT AND CABLE SCHEDULE 22 OF 25
402	E-025I	1	CONDUIT AND CABLE SCHEDULE 23 OF 25
403	E-025J	1	CONDUIT AND CABLE SCHEDULE 24 OF 25
404	E-025K	1	CONDUIT AND CABLE SCHEDULE 25 OF 25
407	E-028	1	IMLR PUMP SCHEMATIC

This Notice must also be signed, dated, inserted in the Contract Documents, and submitted with the Proposal, OR the Bidder may identify the addendum number in the space provided on the Proposal signature page.

Catherine A. O'Connor
Director of Engineering

Darlene A. LoCascio
Director of Procurement and
Materials Management

The bidder acknowledges that he/she has read this Notice of Revision, dated October 21, 2025, to the Contract Documents and that he/she has taken the provisions thereof into consideration when preparing and submitting this Proposal.

SECTION 07140

FLUID APPLIED WATERPROOFING

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:
   1. Fluid applied elastomeric membrane waterproofing.
   2. Surface dusting.
   3. Protective covering.

B. Related Sections:

   1. MWRDGC – General Specifications
   2. Division 01 - General Requirements
   3. Section 01300 - Administrative Requirements.
   4. Section 01330 - Submittals.
   5. Section 01400 - Quality Requirements.
   6. Section 01600 - Product Requirements.
   7. Section 01610 - Delivery, Storage and Handling.
   8. Section 01700 - Execution Requirements.
   9. Section 02320 - Backfill.
   10. Section 03300 - Cast-In-Place Concrete: Concrete substrate.
   11. Section 09300 - Tile

1.02 REFERENCES

A. Section 01400 - Quality Requirements: Requirements for references and standards.

B. American Society for Testing and Materials, (ASTM):
   1. ASTM C836 - Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use With Separate Wearing Course.
   2. ASTM D412 - Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers - Tension.
   3. ASTM D429 - Test Method for Rubber Property-Adhesion to Rigid Substrates.
   4. ASTM D471 - Test Method for Rubber Property-Effect of Liquids.
   5. ASTM D624 - Test Method For Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers.
   6. ASTM D746 - Test Method for Brittleness Temperature of Plastics and Elastomers by Impact.
   7. ASTM D822 - Practice for Conducting Tests on Paint and Related Coatings and Materials Using Filtered Open-Flame Carbon-Arc Light and Water Exposure Apparatus.
   8. ASTM D1004 - Test Method for Initial Tear Resistance of Plastic Film and Sheeting.

9. ASTM D2240 - Test Method for Rubber Property - Durometer Hardness.
10. ASTM D3468 - Standard Specification for Liquid-Applied Neoprene and Chlorosulfonated Polyethylene Used in Roofing and Waterproofing.
11. ASTM E96 - Test Methods for Water Vapor Transmission of Materials.

C. National Roofing Contractors Association, (NRCA):
1. NRCA - Waterproofing and Dampproofing Manual.

1.03 PERFORMANCE REQUIREMENTS

A. Waterproofing System: See Schedule in PART 3 for locations requiring waterproofing system to prevent moisture from migrating to the interior.

1.04 SUBMITTALS

A. Section 01330 - Submittal Procedures: Requirements for submittal.

B. Shop Drawings: Indicate special joint or termination conditions and conditions of interface with other materials.

C. Product Data: Submit data for surface conditioner, flexible flashings, joint cover sheet, and joint and crack sealants, with temperature range for application of waterproofing membrane.

D. Manufacturer's Installation Instructions: Submit special procedures and perimeter conditions requiring special attention.

E. Manufacturer's Certificate: Certify that Products meet or exceed specified requirements.

F. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.

1.05 SUBMITTAL REQUIREMENTS FOR COMPLIANCE WITH BUILD AMERICA, BUY AMERICA (BABA) FOR FEDERAL FINANCING

A. For District projects receiving federal funding, either through federal grants or SRF loans, the Contractor shall provide a certification letter from the manufacturer for all submittals related to BABA products as specified in Section 11 of Appendix I.

B. All equipment or material delivered to the project site shall be clearly marked and/or stamped as “Made in the USA.”

C. In order to demonstrate compliance with BABA, requirements detailed in Section 11 of Appendix I, the Contractor shall maintain the document described in the Mobilization section of the Proposal. The Contractor shall use the document to contemporaneously track the status of the certifications for the BABA products. The document, along with all material certifications, shall be saved electronically by the Contractor in the specified project management system. The Contractor shall include an updated document with each

monthly application for payment. If the Contractor is allowed to use de minimis waivers for any products required by the Contract, the Contractor shall likewise track the de minimis items in the document and maintain documentation of the waivers electronically in the specified project management system.

1.06 QUALITY ASSURANCE

A. Perform Work in accordance with NRCA Waterproofing Manual.

1.07 QUALIFICATIONS

A. Waterproofing Material Manufacturer: Company specializing in waterproofing membrane with experience.

B. Applicator: Company specializing in performing the work of this section with documented experience. approved by manufacturer.

1.08 PRE-INSTALLATION MEETING

A. Section 01300 - Administrative Requirements: Preinstallation meeting.

B. Convene minimum one week prior to commencing work of this section.

1.09 ENVIRONMENTAL REQUIREMENTS

A. Section 01600 - Product Requirements: Environmental conditions affecting products on site.

B. Maintain ambient temperatures above 40 degrees F (5 degrees C) for 24 hours before and during application and until liquid or mastic accessories are cured.

1.10 WARRANTY

A. Section 01700 - Execution Requirements: Product warranties and product bonds.

B. Provide manufacturer’s standard warranty for waterproofing failing to resist penetration of water.

C. For warranty repair work, be responsible for removal and replacement of materials concealing waterproofing.

PART 2 - PRODUCTS

2.01 FLUID APPLIED WATERPROOFING

A. Manufacturers
   1. Sika Corp. 'Sikalastic HLM-5000' System.
   2. Henry Company Product “Aqua-Bloc WB.

3. Karnak Corporation Product "#229 AR.
4. Substitutions: Section 01600 - Product Requirements.

2.02 COMPONENTS

A. Waterproofing Membrane: ASTM C836; one component elastomeric compound; cold applied, quick setting 60 mils (1.5 mm) minimum cured thickness.

B. Cured Membrane Characteristics

Properties	Test	Results
Tensile Strength	ASTM D412	150 psi
Elongation	ASTM D412	950%
Hardness - Shore A	ASTM D2240	25-40
Tear Strength	ASTM D624 D1004	
Water Absorption	ASTM D471	
Moisture Vapor (perms)	ASTM E96	0.15
Exposure at Low Temperature	ASTM D822	
Brittleness	ASTM D746	
Adhesion	ASTM D429	

2.03 ACCESSORIES

A. Surface Primer: Type compatible with membrane, as recommended by membrane manufacturer.

B. Elastic Flashings: As recommended by membrane manufacturer.

C. Joint Cover Sheet: Elastic sheet material designated for and compatible with membrane.

D. Joint and Crack Sealant: As recommended by membrane manufacturer.

E. Leveling Patcher: Substrate patching compound as recommended by membrane manufacturer.

F. Protection Board: Material as recommended by membrane manufacturer.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Section 01300 - Administrative Requirements: Coordination and project conditions.

B. Verify substrate surfaces are durable, free of frozen matter, dampness, loose particles, cracks, pits, projections, or foreign matter detrimental to adhesion or application of waterproofing system.

C. Verify that substrate surfaces are smooth, free of honeycomb or pitting, and not detrimental to full contact bond of waterproofing materials.

D. Verify items that penetrate surfaces to receive waterproofing are securely installed.

E. Verify substrate surface slopes to drain for horizontal waterproofing applications.

3.02 PREPARATION

A. Protect adjacent surfaces not designated to receive waterproofing.

B. Clean and prepare surfaces to receive waterproofing in accordance with manufacturer's instructions. Vacuum substrate clean.

C. Do not apply waterproofing to surfaces unacceptable to manufacturer or applicator.

D. Seal cracks and joints with sealant materials using depth to width ratio as recommended by sealant manufacturer.

E. Repair cracks in concrete substrate with leveling patcher as required by membrane manufacturer.

3.03 INSTALLATION

A. Apply surface primer at a rate recommended by manufacturer. Protect primer from rain or frost until dry.

B. At static joints or cracks less than 1/8 inch (3 mm): Prestripe with membrane material to a thickness of 60 mils (1.5 mm); fill and overlap edges of the joint to a width of 4 inch (100 mm) on both sides.

C. At joints and cracks 1/8 inch (3 mm) and larger: Fill joint with expansion joint filler, back-up material and joint and crack sealant. Prestripe with membrane material to a thickness of 60 mils (1.5 mm); overlap edges of the joint to a width of 4 inches (100 mm) on both sides. Imbed joint and crack reinforcing in prestripe material if required by membrane manufacturer.

D. Center cover sheet over crack or joints. Roll sheet into 1/8 inch (3.2 mm) coating of waterproofing material. Apply second coat over sheet extending minimum of 6 inches (150 mm) beyond sheet edges. Apply this procedure to expansion joints between horizontal and vertical surfaces.

E. Apply waterproofing material.

F. Apply and spread waterproofing material at the approximate coverage rate of 1 gallon per 25 sq ft (2.3 sq m) to achieve a dry cured film thickness of 60 mils (1.5 mm) over the substrate and prestriped joints; control application to avoid runs and sags of fresh material.

G. Extend membrane over cants and up intersecting surfaces at membrane perimeter minimum 6 inch (150 mm) above horizontal surface for first ply.

H. Install cant strips at internal corners in accordance with manufacturer's instructions.

I. Apply extra 60 mil (1.5 mm) thickness of waterproofing material at corners, intersections, angles, projections and over cant strip; the extra thickness shall extend 4 inch (100 mm) on each side.

J. Seal items protruding to or penetrating through membrane and install counter flashing membrane material.

K. Install membrane flashings and seal into waterproofing material.

L. Conform to NRCA - Waterproofing and Dampproofing Manual drawing details as noted:
   1. E - Foundation Wall with Hydrostatic Pressure relief System.
   2. H - Pipe Penetration Flashing.
   3. I - Typical Waterproofing Membrane Terminations.

M. Place protection board directly against membrane; butt joints.

N. Adhere protection board to substrate with mastic. Scribe and cut boards around projections, penetrations, and interruptions.

3.04 PROTECTION OF INSTALLED CONSTRUCTION

A. Section 01700 - Execution Requirements: Protecting installed construction.

B. Do not permit traffic over unprotected or uncovered membrane.

3.05 WATERPROOFING SCHEDULE

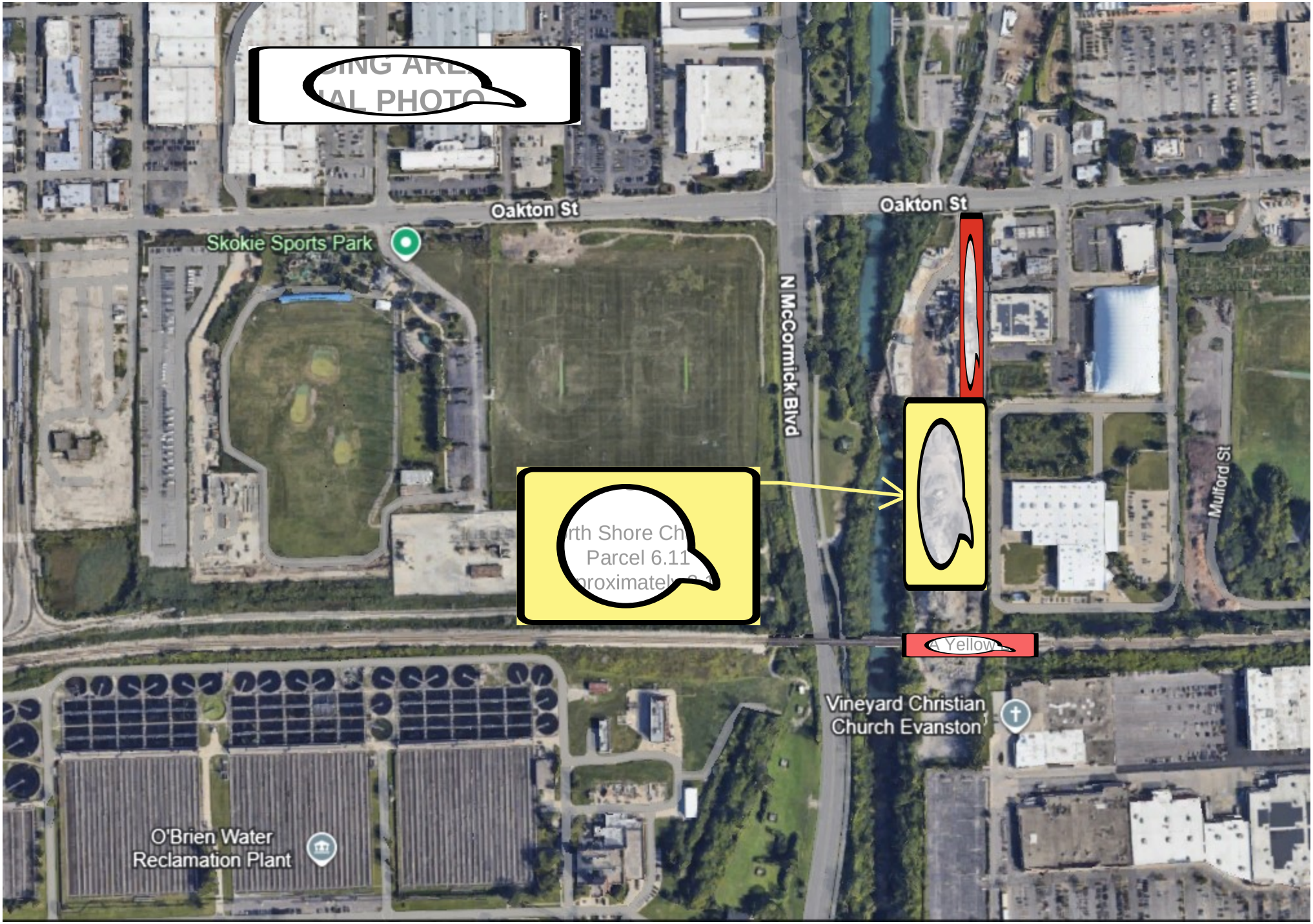
A. Exterior concrete surfaces, in contact with earth, including but not limited to galleries, dry wells, tunnels, basements, valve basins, dry manholes, distribution boxes, and meter/valve vaults. Manholes with open pipes and the underside of slabs are excluded.

B. Top side of channels above basements, tunnels, galleries, or other dry areas.

END OF SECTION

APPENDIX H – SAMPLE PERMIT AGREEMENT

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Oakton St
Oakton St
Skokie Sports Park
N McCormick Blvd
Mulford St
Parcel 6.11
Vineyard Christian
Church Evanston
O'Brien Water
Reclamation Plant

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Permit No. _____
Rev. 9-8-25
BJD:vp

GENERAL PERMIT
(Commercial Form)

This Permit is made and entered into as of _____, 20XX, by and between the Metropolitan Water Reclamation District of Greater Chicago ("District"), a body corporate and politic organized and existing under the laws of the State of Illinois, with principal offices located at 100 E. Erie Street, Chicago, Illinois 60611, and _____, a _____ corporation authorized to transact business in Illinois ("Permittee"), with principal offices located at _____.

WITNESSETH:

WHEREAS, this Permit has been negotiated, created, and executed pursuant to and in accordance with the Metropolitan Water Reclamation District Act (70 ILCS 2605/1 *et seq*.);

WHEREAS, this Permit has been entered into in accordance with the District's Comprehensive Land Use Policy, as adopted by the District's Board of Commissioners on December 18, 2014, as may be amended from time to time;

WHEREAS, the District's Board of Commissioners authorized this Permit on _____, 20XX;

NOW, THEREFORE, for and in consideration of the covenants and obligations contained herein and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the District and Permittee (the "Parties") agree as follows:

ARTICLE 1: PERMIT PREMISES

1.01. Premises. The District hereby issues to Permittee a non-exclusive permit and license to use the real property described below during the Permit term:

[DESCRIPTION OF PROPERTY (e.g., X acres located at [Common Address], known as the District's [Channel Parcel X.XX], [PIN X].) ("Premises") (For a pictorial representation of the Premises, see Exhibit A attached hereto and made a part hereof).

1.02. Term. The term of this Permit is [XX years], commencing on _____, 20XX ("Commencement Date"), and ending on _____, 20XX, unless sooner terminated under the provisions of this Permit.

1.03. Use. The Premises may only be used by Permittee for _____ and for no other purpose whatsoever. Permittee may not assign or transfer this Permit to any other person or entity.

SAMPLE

ARTICLE 2: PERMIT FEE

2.01. Permit Fee. Permittee covenants and agrees to pay the District an [annual or one-time] fee in the amount of $XX,XXX.00 in consideration of granting this Permit, payable in annual installments due on the _____ day of every _____, with the first installment paid on or before the Commencement Date.

a. Security Deposit. Before the commencement of the Permit term, Permittee must provide the sum of $X,XXX.00 to the District as a security deposit. The District will continue to hold the security deposit for the full and faithful performance by Permittee of all the covenants, terms and conditions of this Permit. The security deposit shall be returned to Permittee upon the expiration of the Permit term, provided that Permittee has fully performed under this Permit. Such sum is not a prepaid permit fee, and shall not be applied by Permittee to the fee for the last (or any) payment of this Permit. The District shall have the right to apply any part of the deposit to cure any default of Permittee, in which case Permittee shall deposit with the District that amount so applied so that the District shall have the full deposit on hand at all times during the Permit Term.

2.02. Interest on Fees Not Paid When Due. Fees and all other sums payable to the District shall bear interest at the rate of 2% per annum in excess of the prime rate charged by a principal bank in Chicago, Illinois, to its commercial borrowers, as determined on the first date of a delinquency until the same is paid by Permittee.

ARTICLE 3. INDEMNIFICATION AND INSURANCE

3.01. Indemnification. To the extent permitted by law, Permittee (including its executors, administrators, successors, and assigns), agrees to indemnify, defend, and hold harmless the District (including its Commissioners, officers, agents, and employees), from and against any and all claims, losses, damages, suits or actions, judgments, fines, penalties, or costs (including reasonable attorney's fees) arising out of the use or occupancy of the Premises by Permittee or by Permittee's employees, agents, invitees, and customers, during or after the Permit term, including but not limited to the following: any injury or death to any person; any damage to or loss of any property; violation of any laws, ordinances, or regulations; any construction, maintenance, or business activity performed on the Premises, including any mechanics liens; any other negligence, willful misconduct, or other acts or omissions of Permittee in connection with this Permit. If any such action or suit is brought against the District, the District may give written notice of same to Permittee, and thereafter Permittee shall, at its own cost and expense, defend such actions or suits with due diligence with counsel reasonably satisfactory to District. The indemnities contained herein shall survive the termination or expiration of this Permit. No Commissioner, officer, agent, or employee of the District shall have any direct or personal liability arising out of this Permit.

3.02. Insurance. Permittee, at its own expense, shall procure and maintain, for the duration of the Permit term, insurance against claims for injuries to persons or damage to property which may arise from, or in connection with, Permittee's operation and use of the Premises. The insurance requirements, including form, coverage limits, etc., are as follows:

SAMPLE

3.03. Coverage. Insurance coverage shall be at least as broad as the following:

a. Commercial General Liability (CGL): Insurance Services Office Form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal and advertising injury with limits no less than **$4,000,000 per occurrence**. If a general aggregate limit applies, either the general aggregate limit shall apply separately to the Premises (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.

b. Workers' Compensation Insurance as required by the State of Illinois, with Statutory Limits, and Employer's Liability Insurance with limits of no less than $1,000,000 per accident for bodily injury or disease. (This applies to Permittees with employees).

c. Property Insurance against all risks of loss to any improvements or betterments on the Premises, at full replacement cost with no coinsurance penalty provision.

d. Premises Pollution Legal Liability Insurance with limits no less than **$4,000,000 per occurrence**.

e. Marine General Liability Insurance covering products and completed operations, property damage, bodily injury, and other marine risks as may be applicable, including but not limited to charters liability and wharfingers liability, with limits no less than **$4,000,000 per occurrence**.

If the Permittee maintains broader coverage and/or higher limits than the minimums shown above, the District requires and shall be entitled to the broader coverage and/or the higher limits maintained by Permittee. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the District. The insurance provisions of this Permit shall not affect the indemnification of the District by Permittee, as set forth in the Permit.

3.04. Other Insurance Provisions. The insurance policies are to contain, or be endorsed to contain, the following provisions:

a. Additional Insured Status. The Metropolitan Water Reclamation District of Greater Chicago, its Commissioners, officers, agents, and employees are to be covered as additional insureds on the CGL policy.

b. Primary Coverage. For any claims related to this Permit and the Premises, the Permittee's insurance coverage shall be primary and non-contributory and at least as broad as ISO CG 20 01 04 13 as it respects the District, its Commissioners, officers, agents, and employees. Any insurance or self-insurance maintained by the District shall be excess of Permittee's insurance and shall not contribute with it. This requirement shall also apply to any Excess or Umbrella liability policies.

c. Umbrella or Excess Policy. The Permittee may use Umbrella or Excess Policies to provide the liability limits as required in this Permit agreement, provided that such policies shall

SAMPLE

provide all of the insurance coverages herein required, including, but not limited to, primary and non-contributory, additional insured, Self-Insured Retentions (SIRs), indemnity, and defense requirements. The Umbrella or Excess policies shall be provided on a true "following form" or broader coverage basis, with coverage at least as broad as provided on the underlying Commercial General Liability insurance.

d. Legal Liability Coverage. The property insurance is to be endorsed to include Legal Liability Coverage (ISO Form CP 00 40 04 02 or equivalent) with a limit equal to the replacement cost of the permitted property.

e. Notice of Cancellation. Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the District.

f. Waiver of Subrogation. Permittee hereby grants to the District a waiver of any right to subrogation which any insurer of said Permittee may acquire against the District by virtue of the payment of any loss under such insurance. Permittee agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation, but this provision applies regardless of whether or not the District has received a waiver of subrogation endorsement from the insurer.

g. Self-Insured Retentions. Self-insured retentions (SIR) must be declared to, and approved by, the District. As part of any approval, the District may require Permittee to purchase coverage with a lower retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention. Policies shall not contain any SIR provision that limits the satisfaction of the SIR to the Named Insured.

h. Acceptability of Insurers. Insurance is to be placed with insurers authorized to conduct business in the State of Illinois, with a current A.M. Best's rating of no less than A:VII.

i. Verification of Coverage. Permittee shall furnish the District with original certificates and amendatory endorsements or copies of the applicable policy language effecting coverage required by this agreement and a copy of the Declarations and Endorsements Pages of the CGL and any Excess policies listing all policy endorsements. All certificates and endorsements and copies of the Declarations & Endorsements pages are to be received and approved by the District before the Permit commences. However, failure to obtain the required documents prior to the Permit commencement date shall not waive the Permittee's obligation to provide them. The District reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.

j. Special Risks or Circumstances. The District reserves the right to modify these insurance requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

k. Disposition of Insurance Proceeds. As set forth in this Permit, Permittee has the duty to repair the Premises if the Premises (or any improvements thereon) are damaged or destroyed by any of the hazards or casualties against which Permittee is to insure the Premises. The rebuilding or restoration is to be accomplished within one year, or as otherwise approved by

SAMPLE

the District in writing. Permittee shall receive all insurance proceeds payable for the hazard or casualty loss to finance the reconstruction. However, if the Premises or improvements are not rebuilt or restored in the timeframe approved by the District, then all insurance money received or recoverable on the policies of insurance to be obtained by Permittee shall belong to, and be paid to, the District as liquidated damages by reason of the failure of Permittee to rebuild or restore the Premises. If this Permit is forfeited for any reason, then all policies of insurance and all insurance money due, or to become due, at the time of the forfeiture shall belong to the District, free and clear of any claim or interest on or to such money on the part of Permittee or anyone claiming through or under Permittee. Nothing in this paragraph shall be construed as in any manner releasing Permittee from any obligation to restore or construct the Premises or improvements as provided in this Permit, nor as a waiver of the rights of the District to insist on the full performance by Permittee of the terms and conditions in this Permit, even if the insurance proceeds are not sufficient to fully pay for the restoration or repair.

l. Failure of Permittee to Obtain Insurance. If Permittee at any time fails to insure or keep insured the Premises or its improvements as required herein, then the District may procure or renew such insurance policies, and the costs must be repaid by Permittee with the next rent payments under this Permit, with interest at the rate of 2% per annum in excess of the prime rate charged by a principal bank in Chicago, Illinois, to its commercial borrowers, as determined on the first date of a delinquency until the same is paid by Permittee.

m. Self-Insurance. If Permittee is a self-insurer, then Permittee, prior to entering upon the Premises, shall prepare and transmit to the District an acknowledged statement that Permittee is a self-insurer, and that it undertakes and promises to insure the District, its Commissioners, officers, agents, servants and employees, as an additional insured as required by the Permit. The statement must be signed by such officer or agent of Permittee having sufficient knowledge of the fiscal structure and financial status of Permittee to verify that Permittee has the funds available to meet the insurance requirements set forth herein. This statement is subject to the District's review and approval.

ARTICLE 4. PERMITTEE RIGHTS AND RESPONSIBILITIES

4.01. Permittee to Pay All Taxes, Assessments, and Fees. Permittee agrees to pay or cause to be paid, on or before the penalty date, all real estate taxes, any other taxes on tangible property assessments, water rates, utility charges, and any other governmental charges, general and special, ordinary and extraordinary, unforeseen as well as foreseen, of any kind and nature whatsoever, which may become assessed, levied, confirmed, imposed or become a lien upon the Premises or the improvements thereon, on account of the Permittee's use of the Premises.

4.02. Compliance with Laws. Permittee shall not use the Premises for any purpose in violation of any federal, state, or local law, or any regulation, order, or directive of a governmental agency, as such statutes, ordinances, regulations, orders, or directives that now exist or may in the future provide, concerning the use and safety of the Premises. Permittee shall obtain and maintain during the Permit term all licenses and permits required to conduct or operate its business on the premises which are required by any applicable governmental body or agency having jurisdiction over the Premises and shall pay the fee or charge imposed for issuance of any such license or permit.

SAMPLE

4.03. Prohibited Uses. Permittee agrees not to use the Premises for any unlawful business or activity. Gambling and/or video gaming is expressly prohibited. Permittee also agrees that no alcoholic beverages of any kind shall be sold, given away, or consumed on the Premises. Furthermore, the manufacture, sale, distribution, discharge, and unauthorized use of guns and firearms on the Premises is expressly prohibited, including any hunting activities.

4.04. Condition of Premises. Permittee shall not maintain, commit, or permit any nuisance on the Premises. Permittee agrees to keep the Premises (and any improvements thereon) in a clean and sanitary condition, in accordance with all applicable laws, ordinances, and regulations. Permittee will maintain any improvements in good order and repair (including all necessary replacement), and will not allow the improvements to become damaged or diminished in value, ordinary wear and tear excepted.

4.05. No Additional Expense to the District. Permittee agrees that if the District incurs any additional expense for additional work which the District would not have had to incur if this Permit had not been executed, then, in that event, Permittee agrees to pay to the District such additional expense as determined by the Executive Director of the District, promptly upon rendition of bills therefor to Permittee.

4.06. Mutual Cancelation. This General Permit shall be mutually cancelable by Permittee upon Permittee's giving ninety (90) days' notice in writing, of such cancellation to the District and thereupon Permittee shall vacate the Premises and remove its effects therefrom, and restore the Premises to the condition existing prior to Permittee's entry thereon, at Permittee's cost.

ARTICLE 5. DISTRICT RIGHTS AND RESPONSIBILITIES

5.01. No Representations or Warranties. The District executes and delivers this Permit without making any representations or warranties concerning: the District's title to the Premises; the suitability of the Premises for Permittee's use; the size of the Premises or useable areas; or the building and zoning laws that may affect the Premises or Permittee's use thereof. Permittee acknowledges and agrees that it has had the opportunity to examine title to the Premises and encumbrances (if any), the District's authority to execute this Permit, and all other matters relating to the size, useable areas, existing improvements, and any zoning or building laws that may pertain to Permittee's proposed use of the Premises (including any proposed construction or improvements) and finds such matters to be satisfactory. Permittee accepts the Premises and any improvements thereon "as-is" and "with all faults."

5.02. District's Right to Terminate. The District hereby reserves the right to terminate this Permit upon giving thirty (30) days' notice, in writing, of such termination to Permittee, and thereupon Permittee shall vacate the Premises and remove its effects therefrom and restore the Premises to the condition existing prior to Permittee's entry thereon, at Permittee's cost. The District shall not be liable to Permittee for any loss, cost or damage incurred by Permittee by reason of the exercise of the right of the District to terminate this Permit.

SAMPLE

5.03 Non-exclusive Privilege to use District Property. Permittee agrees and specifically understands that this Permit is confined solely to the non-exclusive privilege to Permittee to use the Premises set forth in Article One, and no other; that the authority and permission herein given does not thereby grant unto Permittee any interest or estate in the said lands of the District and that the District retains dominion, possession and control of said lands, including access thereto at all times.

5.04. District's Right of Entry. Permittee agrees and specifically understands that the District shall have the right to enter upon the Premises herein described for the purpose of making such surveys, soil borings or other purposes as may be deemed necessary by the District in the furtherance of its corporate purpose, and shall not be liable for any loss, cost or damage to Permittee by reason of the exercise of this right.

ARTICLE 6. ENGINEERING REQUIREMENTS AND RESERVATIONS

6.01. District Facilities and Infrastructure. Permittee agrees and acknowledges that the District may have installed various wastewater treatment or stormwater management facilities and related infrastructure (such as sewers, pipes, drains, dropshafts, parking areas, access drives, etc.) on, under, or through the Premises. The District will cooperate with Permittee to ascertain, identify, and locate the District's existing facilities and infrastructure on the Premises, if any. Permittee must not damage or interfere with District facilities or infrastructure at any time. Permittee is also responsible for taking any steps necessary to protect its own property, equipment, and employees in the vicinity of District infrastructure. The District shall not be responsible for any loss, cost, or expense that Permittee may incur arising out of the failure of any District facilities or infrastructure on the Premises. In addition, the District reserves the right to operate, maintain, repair, and reconstruct any such facilities or infrastructure, and to use, access, inspect, or survey any portion of the Premises for such purposes. Any such use or access shall be carried out, at the discretion of the District's Executive Director, in a manner that minimizes any interference with Permittee's use of the Premises.

6.02. Other Easements and Infrastructure. Permittee agrees and acknowledges that this Permit is subject to any and all other easements and infrastructure on, under, or through the Premises, which may be owned or operated by other governmental entities, public utility companies, corporations, or individuals. These easements and/or infrastructure may include pipelines, sewers, cables, electrical transmission lines, or other surface or subsurface structures. Permittee shall, at its own initiative, inquire and satisfy itself as to the presence or absence of all such easements or infrastructure on or impacting the Premises, and Permittee hereby waives all claims which it might otherwise have against the District due to the presence of any such easements or infrastructure insofar as it may affect Permittee's use and enjoyment of the Premises. The District may also renew existing easements during the Permit term.

6.03. District Review of Improvements. Permittee must submit detailed plans and specifications for any proposed improvements (including any modifications to existing improvements) to be made on the Premises before any construction commences. This includes the plans for handling the sewerage, grading, and drainage of the Premises; any roadways, water supply, telephone, and electric service; and the construction of any buildings. Any such plans and

SAMPLE

specifications will be submitted to the District's technical departments for review, and no work or construction may commence until approval is obtained from the District's Executive Director (or his designee). If any improvements are made without first obtaining District approval, the District may require Permittee to remove or alter the improvements at Permittee's expense. The District may require a performance bond in connection with construction or improvements on the Premises to ensure the project is completed.

6.04. Prohibited Construction/Improvements. The District reserves the right to prohibit any proposed improvements on the Premises that may impact or damage District infrastructure; that may impede reasonable access to, or operation and maintenance of, District infrastructure; or that may present potential impacts to the environment or public health and safety. If the Premises is adjacent to a waterway, any blockage or restriction of flow in the waterway is prohibited. No construction or improvements of any kind can project into the waterway, unless District approval (and any other required permits) is obtained. The installation of new artificial turf or synthetic grass on District real estate is prohibited. Commercial advertising signs/billboards are prohibited.

6.05. Tree Mitigation. Permittee may conduct routine trimming of trees, brush, or other overgrown vegetation or invasive species to the extent they interfere with safety or the proper functioning of any improvements. However, Permittee may not remove any trees on District property without the District's review and approval. If trees must be removed for the safe and effective operation, maintenance, or construction of facilities or improvements on the Premises, then Permittee must provide notice to the District at least 21 days before Permittee performs any such proposed tree removal work. The notice must include the number, location, and species of trees to be removed. The notice must also include a plan to replace any trees removed with the same or greater number and quality of trees on the Premises (or on other District property), subject to the District's written approval. Permittee is responsible for obtaining any local permits or approvals necessary for tree removal work.

ARTICLE 7. ENVIRONMENTAL REQUIREMENTS

7.01. Definitions.

a. **"Environmental Law or Laws"** shall mean any and all federal, state, or local laws, regulations, ordinances, rules, orders, directions, requirements, or court decrees pertaining to health, industrial hygiene, or the environmental conditions on, under, or about the Premises, including, without limitation, the Resource Conservation and Recovery Act (RCRA); the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); the Toxic Substances Control Act; the Federal Water Pollution Control Act (Clean Water Act); the Safe Drinking Water Act; the Clean Air Act; the Illinois Endangered Species Protection Act; and all parallel, similar, or relevant laws pertaining to the environmental condition of the Premises or activities conducted thereon, as those laws may be amended from time to time.

b. **"Hazardous Materials"** shall mean any substance (whether solid, liquid or gaseous in nature), the presence of which (without regard to action level, concentration, or quantity threshold) requires investigation or remediation under any Environmental Law, or which is toxic, explosive, corrosive, flammable, infectious, radioactive, carcinogenic, mutagenic, or

SAMPLE

otherwise hazardous or dangerous, or which could cause or threaten to cause a nuisance upon the Premises or to adjacent properties, or poses a hazardous threat to the health or safety of persons on or about such properties. "Hazardous Materials" includes, but is not limited to, "hazardous waste" as defined in RCRA; "hazardous substance" as defined in CERCLA; petroleum or petroleum wastes/byproducts; and any other toxic or hazardous substances that may be regulated from time to time by applicable Environmental Laws.

c. **"Environmental Conditions"** shall mean any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing of Hazardous Materials on, from, or about the Premises, other than in compliance with applicable Environmental Laws.

d. **"Environmental Costs"** shall mean any and all judgments, damages, penalties, fines, costs, liabilities, obligations, losses, or expenses of whatever kind and nature, including attorneys' fees, consultants' fees, and experts' fees, arising from or incurred in connection with Environmental Conditions, including but not limited to those relating to the presence, investigation, or remediation of Hazardous Materials.

7.02. Compliance with Environmental Laws. Permittee (including Permittee's employees, contractors, agents, successors, or assigns), at its sole expense, shall comply at all times with all Environmental Laws pertaining to the Premises or Permittee's use of the Premises, and with all directions of all public officers issued pursuant to any Environmental Law, which shall impose any duty on the Permittee with respect to the use or occupancy of the Premises. The District may request from Permittee at any time during the Permit term an operation and maintenance plan, monitoring plan, emergency spill plan, or any other similar plan to ensure that Permittee is reasonably prepared to respond to environmental issues that may occur on the Premises and to comply with all applicable Environmental Laws.

7.03. Notifications.

a. Environmental Conditions or Claims. Permittee shall give immediate written notice to the District of any Environmental Conditions or claims, including the following: (a) any proceeding or inquiry by any governmental authority with respect to the presence of any Hazardous Materials on the Premises or the migration thereof from or to other areas; (b) all claims and potential claims made, inquired about, or threatened by any third party against Permittee or the Premises relating to any loss or injury resulting from any Hazardous Materials or other Environmental Conditions; and (c) Permittee's discovery of any occurrence or Environmental Condition on any property adjoining or in the vicinity of the Premises that could cause the Premises (or any part thereof) to be subject to any restrictions on its ownership, occupancy, transferability, or use under any Environmental Law.

b. Release of Hazardous Materials. In the event of a release of Hazardous Materials or other Environmental Condition discovered on the Premises, Permittee must notify any required governmental agencies, as required by Environmental Laws. In addition, Permittee must notify the District by telephone immediately after the release or discovery of the Environmental Condition, to provide the following information, to the extent known: the identity of the

SAMPLE

Hazardous Materials, the quantity thereof, and the cause(s) of the release. Permittee must provide the District, within 72 hours of the event, copies of all written notices by Permittee, its parent and its subsidiaries that are reported to government regulators or received from government regulators.

7.04. Representations and Warranties. Permittee represents, warrants, and covenants to and with the District that: a) Permittee has the full right, power, and authority to carry out its environmental obligations hereunder; b) Permittee is financially capable of performing and satisfying its environmental obligations hereunder; c) Permittee is not now, and never has been, in violation of any applicable Environmental Law relating to the Premises or its activities on the Premises, including but not limited to any Environmental Law relating to the generation, handling, usage, transportation, treatment, storage, or disposal of Hazardous Materials, nor is it subject to any threatened, existing, or pending action by any governmental authority or any environmental liens; and d) Permittee's generation, handling, usage, transportation, treatment, storage, or disposal of Hazardous Materials at the Premises (if any) shall at all times comply with applicable Environmental Laws and will not cause or allow any Environmental Condition to occur or exist.

7.05. Prohibited Uses. Permittee shall only use the Premises for the uses authorized under this Permit. Permittee is prohibited from using the Premises in any way which would impair the environmental condition of the Premises, or that would cause or threaten to cause a public or private nuisance. In addition, Permittee shall not construct, reconstruct, use, or operate any underground storage tanks or related facilities without the express written permission of the District.

7.06. Inspections and Environmental Site Assessments.

a. Inspections. The District shall have the right, but not the duty, to inspect the Premises at any time to determine whether Permittee is complying with the terms of this Permit, including the right to perform any testing (surface, subsurface, groundwater, etc.) on the Premises that the District deems necessary.

b. Environmental Site Assessments. The District may require Permittee, at any time, to obtain a Phase I or Phase II Environmental Site Assessment ("ESA") (as defined by ASTM International), to ensure compliance with the environmental requirements of this Permit. If Permittee fails to provide any required Phase I or Phase II ESA to the District as provided for in this section, the District may obtain a Phase I or Phase II ESA, at its discretion, and Permittee must reimburse the District for any associated costs.

7.07. Environmental Remediation. In the event of any release, emission, discharge, or disposal of Hazardous Materials in, on, under, or about the Premises or improvements, or if any inspection or environmental site assessment finds an Environmental Condition, or a violation of an Environmental Law or this Permit, then Permittee must take remedial measures in accordance with the recommendations of Permittee's environmental engineers and/or consultants, and/or the requirements of any governmental authority having jurisdiction over such matters. The remedial measures taken must restore the Premises to a clean and sanitary condition that complies with all applicable Environmental Laws. If Permittee fails to comply with the environmental requirements

SAMPLE

of this Permit, then the District shall have the right, but not the duty, to enter upon the Premises to remedy, at Permittee's expense, any Environmental Conditions caused by Permittee's failure to comply. Permittee shall pay to the District all Environmental Costs incurred by the District in performing any such remedial measures within 30 days after the District's written request therefore. The District shall use reasonable efforts to minimize interference with Permittee's business operations, but the District shall not be liable for any interference caused thereby.

7.08. Indemnification. Permittee (including its executors, administrators, successors, and assigns), agrees to indemnify, defend, and hold harmless the District (including its Commissioners, officers, agents, and employees), from and against any and all claims, losses, damages, suits or actions, judgments, fines, penalties, or costs (including reasonable attorney's fees) arising out of any Environmental Conditions on the Premises caused by Permittee, or arising out of Permittee's violation of any Environmental Laws, and Permittee shall pay all Environmental Costs in connection therewith. Permittee's indemnification of the District shall extend to any migration of Hazardous Materials from the Premises to any other properties caused by Permittee. The foregoing indemnity shall also survive the end of the Permit term.

7.09. Survival. The environmental requirements set forth in this article shall survive the expiration or termination of the Permit.

7.10. Compliance with this Article. Permittee shall cause its parent company, subsidiaries, contractors, subcontractors, employees, and agents to comply with all applicable Environmental Laws and this Article 7 at all times, and to provide such information that the District may reasonably request from time to time to determine compliance.

ARTICLE 8. SITE VACATION AND RESTORATION

8.01. Permittee to Yield Premises Upon Permit Expiration. At the end of the Permit term, by expiration, termination, or otherwise, Permittee shall remove any and all debris on the Premises, and any and all equipment, facilities, or other things erected or placed upon the Premises by the Permittee. Permittee agrees to yield up the Premises, together with any buildings or improvements, to the District in as good condition as when the same was entered upon by Permittee, ordinary wear and tear excepted. Upon Permittee's failure to comply with this provision, the District may act to restore the Premises to the condition described herein, and Permittee will be liable for all costs associated with that restoration.

ARTICLE 9. MISCELLANEOUS

9.01. Notices. Any notice or demand to be given pursuant to this Permit must be in writing, and must be sent by registered or certified mail, postage prepaid, to the other party at the following address (or to other such address that either party may designate in writing):

The District: Metropolitan Water Reclamation District of Greater Chicago
100 E. Erie St.
Chicago, Illinois 60611
ATTN: Executive Director

SAMPLE

With a copy to: [MWRD Attorney Name/Phone/Email Address]

Permittee: [NAME]
[ADDRESS]
[CITY/STATE/ZIP]
ATTN:

With a copy to: [Other Name/Phone/Email Address]

The mailing of a notice in accordance with this section shall be deemed sufficient for purposes of this Permit and effective as of the date such notice is mailed.

9.02. Entire Agreement. No representations, statements, or warranties have induced the making, execution, and delivery of this Permit agreement by Permittee other than those expressed in this Permit agreement. This Permit agreement embodies the entire understanding of the parties, and there are no further or other agreements or understandings, written or oral, in effect between the parties, relating to the subject matter of this Permit agreement. This instrument may be amended or modified only by an instrument of equal formality signed by the respective parties. The Parties acknowledge that they have had an adequate opportunity to review every provision contained in this Permit and to submit the same to legal counsel for review. The Parties agree that the rule of construction that a contract be construed against the drafter, if any, shall not be applied in the interpretation and construction of this Permit. The headings used in this Permit are inserted for the convenience of the Parties and shall not affect the interpretation of the provisions contained herein.

9.03. Governing Law. This Permit is governed by, and must be interpreted under, the laws of the State of Illinois. This Permit shall be binding upon and inure to the benefit of the Parties' respective heirs, representatives, successors, and assigns.

ARTICLE 10. OTHER SITE-SPECIFIC TERMS AND CONDITIONS

10.0X. Insert site-specific terms and conditions (e.g., the comments from the technical departments.)

SAMPLE

IN WITNESS WHEREOF, the parties hereto have executed this Permit as of the day and year first above written.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

BY: _____
Marcelino Garcia, Chairman of Finance

ATTEST: _____
Jacqueline Torres, Clerk

SUBSCRIBED AND SWORN to before me this _____ day of _____, 20___.

_____
Notary Public

[PERMITTEE'S NAME]

BY: _____
Name: Title:

ATTEST: _____
Name: Title:

SUBSCRIBED AND SWORN to before me this _____ day of _____, 20___.

_____
Notary Public

APPROVED AS TO FORM AND LEGALITY:

_____
Head Assistant Attorney

_____
General Counsel

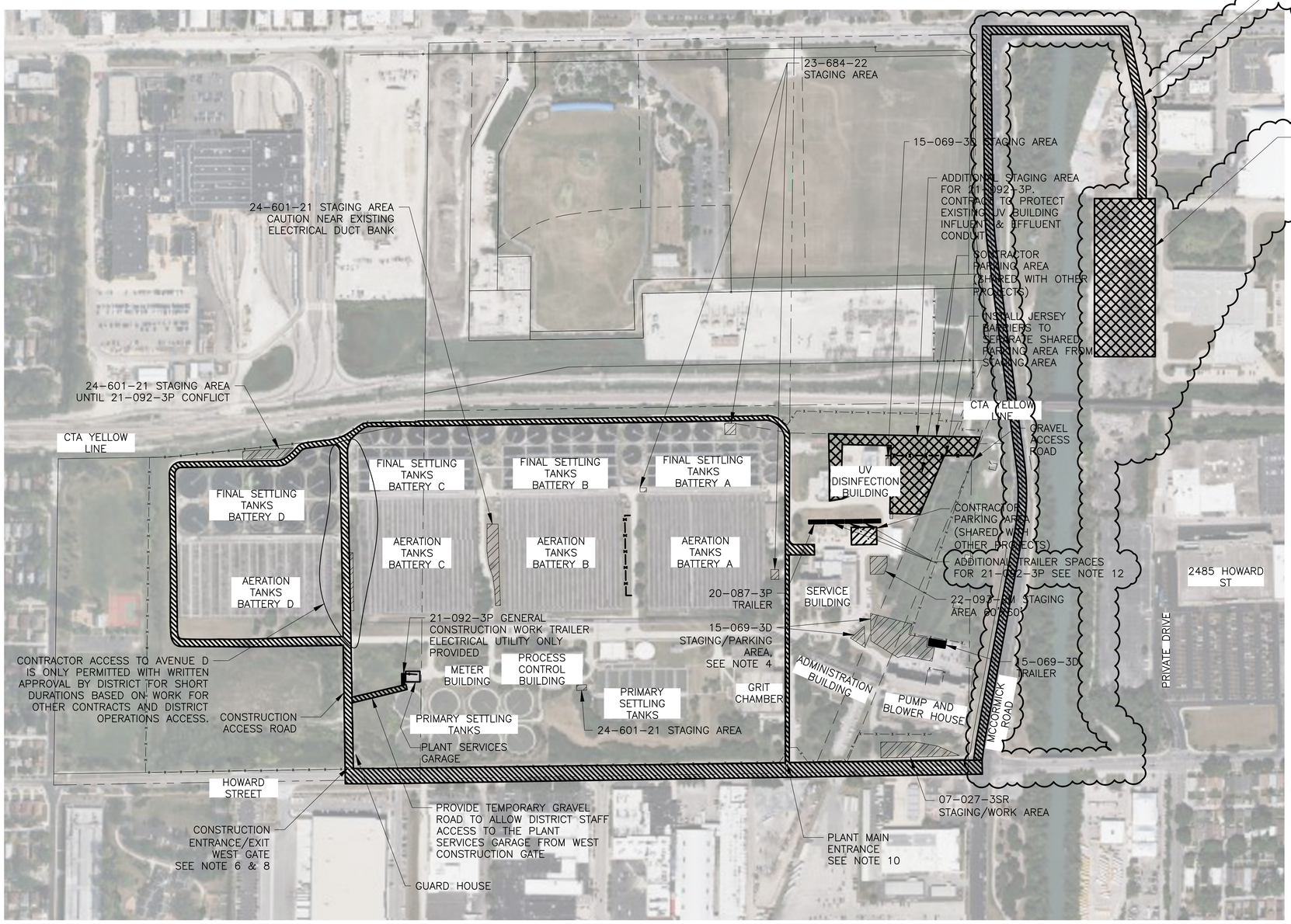
APPROVED:

_____
Executive Director

RECEIVED:
Fee _____
Insurance _____
Bond _____

SAMPLE

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CONTRACTOR WORK AREA

SCALE: 1"=200'-0"

LEGEND:

POTENTIAL AREAS FOR CONTRACTOR'S TRAILER AND MATERIAL STORAGE

CONTRACTOR'S ACCESS ROUTES

STAGING AREAS (OTHER CONTRACTS)

200 0 200 400

SCALE: 1" = 200'

NOTES:

1. AREAS FOR CONTRACTOR'S LAYDOWN ARE PRELIMINARY. FINAL AREAS TO BE COORDINATED WITH DISTRICT.
2. A MOVING STAGING AREA AS CONSTRUCTION PROGRESSES MAY BE REQUIRED DUE TO LIMITED SPACE ON SITE.
3. CONTRACTOR SHALL NOT STAGE ANY TRUCKS, EQUIPMENT, MATERIAL ABOVE EXISTING UTILITIES. HEAVY TRUCKS AND CONSTRUCTION EQUIPMENT SHALL NOT DRIVE OVER SHALLOW UTILITIES UNLESS A UTILITY PROTECTION PLAN IS SUBMITTED AND APPROVED BY THE ENGINEER. ANY EXISTING UTILITIES SHOWN ON THE DRAWINGS THAT ARE DAMAGED BY CONSTRUCTION TRAFFIC OR ACTIVITIES SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE DISTRICT.
4. PARALLEL PROJECTS REQUIRE CONTRACTOR TO SHARE AVAILABLE STAGING AND PARKING AREAS. CONTRACTOR TO COORDINATE WITH OTHER PROJECTS TO DETERMINE AVAILABLE SPACE.
5. CONTRACTOR TO COORDINATE ACCESS FOR PLANT OPERATIONS DURING CONSTRUCTION. SUBMIT WORK PLAN TO THE OWNER AND ENGINEER FOR APPROVAL BEFORE THE START OF EACH PHASE. ANY TEMPORARY USE OF ALTERNATE ROUTES PROPOSED BY CONTRACTOR SHALL BE APPROVED BY DISTRICT.
6. SEE G-101 FOR TRAFFIC CONTROL PLAN REQUIREMENTS.
7. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING CONSTRUCTION ACCESS ROAD FOR USE BY CONTRACTOR AND DISTRICT PERSONNEL.
8. WEST CONSTRUCTION GATE IS RESTRICTED FOR LARGE TRUCK TRAFFIC ONLY. SEE SPECIFICATION 01131 1.11 FOR RESTRICTIONS ON USE OF WEST CONSTRUCTION GATE.
9. CONTRACTOR STAFF WITH PERSONAL VEHICLES AND SMALL TRUCKS SHALL USE THE PLANT MAIN ENTRANCE. LARGE TRUCK TRAFFIC SHALL NOT GO THROUGH THE PLANT MAIN ENTRANCE. SEE SPECIFICATION 01131 1.11.
10. AREAS USED FOR CONTRACT 21-092-3P PARKING/STAGING TRAILERS SHALL BE GRADED AND STONED. PARKING AREAS SHALL HAVE A MIN. 6" LAYER OF CA-1 STONE AND STAGING/TRAILER AREAS SHALL HAVE A MIN. 6" LAYER OF CA-7 STONE. SITES THAT ARE GRADED/STONED WILL BE RESTORED UPON THE COMPLETION OF WORK.
11. NORTH SHORE CHANNEL PARCEL 6.11, APPROXIMATELY 3.18 ACRES, IS AVAILABLE FOR OFFSITE STAGING AREA. SEE APPENDIX H FOR MORE DETAIL ON PARCEL BOUNDARIES AND PERMIT AGREEMENT. SEE SPECIFICATION 01131 1.12 FOR DETAILS AND RESTRICTIONS ON THE OFFSITE STAGING AREA.
12. ELECTRICAL, POTABLE WATER, AND SEWER UTILITIES ARE AVAILABLE FOR THE ADDITIONAL TRAILER SPACES FOR 21-092-3P

1

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Designed by: HHC | Checked by: BP | AECOM | DB STERLIN CONSULTANTS
Drawn by: LK | Reviewed by: BP | 303 EAST WACKER DRIVE SUITE 1400 CHICAGO, IL 60601 | 123 N UPPER WACKER DR. SUITE 2000 CHICAGO, IL 60606
Date: JULY 2025 | Scale: AS SHOWN

CONTRACT 22-RFP-06
OBRIEN WATER RECLAMATION PLANT
NEW ACTIVATED SLUDGE BATTERY

CONTRACTOR STAGING AREAS

HSING HUA CHU
062-057110
LICENSED PROFESSIONAL ENGINEER OF
ILLINOIS

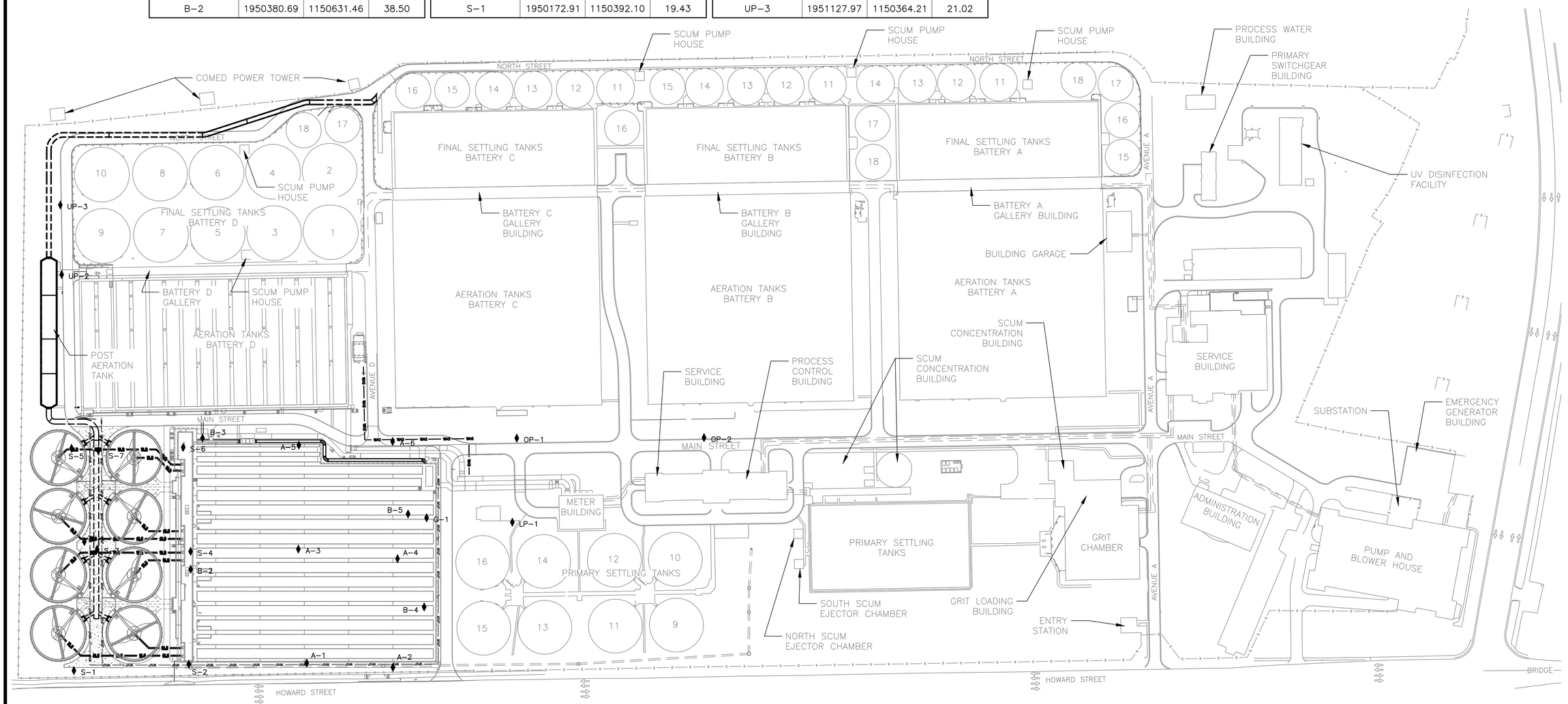
Sheet Number: LP-003
Page Number: 15

PLOT DATE: 10/10/2025 3:03 PM PLOTTED BY: CANCIO JR, ALLAN REY M
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BORING BORING LOCATIONS			
SOIL BORING I.D.	NORTHING	EASTING	ELEVATION
A–1	1950188.43	1150869.24	19.27
A–2	1950179.49	1151046.12	18.94
A–3	1950422.04	1150852.12	39.88
A–4	1950402.48	1151055.45	21.37
A–5	1950635.44	1150853.20	23.01
A–6	1950642.83	1151045.40	22.19
B–1	1950437.62	1150413.54	37.17
B–2	1950380.69	1150631.46	38.50

BORING BORING LOCATIONS			
SOIL BORING I.D.	NORTHING	EASTING	ELEVATION
B–3	1950650.04	1150655.73	23.33
B–4	1950303.45	1151110.06	21.50
B–5	1950494.12	1151077.06	21.50
G–1	1950486.27	1151115.05	22.30
LP–1	1950477.14	1151290.88	24.19
OP–1	1950649.67	1151299.92	23.38
OP–2	1950650.72	1151683.84	22.83
S–1	1950172.91	1150392.10	19.43

BORING BORING LOCATIONS			
SOIL BORING I.D.	NORTHING	EASTING	ELEVATION
S–2	1950185.80	1150627.61	17.72
S–3	1950421.85	1150439.70	37.17
S–4	1950417.36	1150631.31	39.39
S–5	1950628.80	1150387.19	37.66
S–6	1950630.84	1150616.16	23.21
S–7	1950624.22	1150442.07	25.04
UP–2	1950985.14	1150367.05	21.76
UP–3	1951127.97	1150364.21	21.02



SOIL BORINGS - LOCATION PLAN
SCALE: 1" = 100'

GENERAL NOTES:

1. BORING LOG INFORMATION IS ON SHEETS C–007 – C–011.

100 0 100 200
SCALE: 1" = 100'

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	HC	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Designed by:	Checked by:	Appr. by:
HHC	BP	
Drawn by:	Reviewed by:	Appr. by:
LK	BP	
Date:	Scale:	
JULY 2025	AS SHOWN	

CONTRACT 22–RFP–06
OBRIEN WATER RECLAMATION PLANT
NEW ACTIVATED SLUDGE BATTERY

SOIL BORINGS LOCATION PLAN

HSING HUA CHU
062–057110
LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

Sheet Number: C–006
Page Number: 22

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PLOT DATE: 10/16/2025 8:05 AM PLOTTED BY: KOSTAMO, LISA

O:\Contracts\22-RFP-06\Civil\Sheets\C-007-rev1.dwg 10/13/2025 2:58 PM

CLIENT: AECOM
LOG OF BORING NUMBER: A-1
PROJECT LOCATION: North Side Water Reclamation Plant (NSWRP), Skokie, IL
BORING LOCATION: Northing: XX, Easting: XX
PROJECT NAME: Relocated Battery E Facilities @ NSWRP Site, Skokie, IL
Water Reclamation District of Greater Chicago (MWRDGC)–Geotechnical Investigation

DEPTH (ft.) BELOW GROUND SURFACE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION	UNIT DRY WT. Lbs./Ft.³
0.0	1	AS			TOPSOIL FILL	
	2	SS			LEAN CLAY–brown to dark brown–very stiff to hard (CL) FILL	106
5.0	3	SS				104
	4	SS			LEAN CLAY–brown & gray–very stiff (CL)	110
10.0	5	SS			LEAN CLAY w/SAND–gray–soft to stiff (CL)	111
	6	SS			Torvane @ –12.0' Shear Strength = 860psf	104
	7	SS			Torvane @ –14.0' Shear Strength = 450psf ▼ wet	100
15.0	8	SS			Torvane @ –17.0' Shear Strength = 570psf	102
	9	SS			Torvane @ –18.0' Shear Strength = 810psf	105
20.0	10	SS			Torvane @ –22.0' Shear Strength = 810psf	108
	11	SS			Torvane @ –24.0' Shear Strength = 880psf	107
25.0	12	SS		nr		
	13	SS			Torvane @ –28.0' Shear Strength = 940psf	113
30.0	14	SS				107
35.0	15	SS				105
40.0						

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.²
CALIBRATED PENETROMETER TONS/FT.²
LIQUID ✕ LIMIT WATER ● CONTENT % PLASTIC △ LIMIT
STANDARD "N" PENETRATION (BLOWS/FT.)
GROUND SURFACE ELEVATION +XX.X CCD

Boring Continued On Following Page

WATER LEVEL OBSERVATIONS	
Water Level While Drilling	–13.5' ▼
Water Level After Boring	–XX' ▽

O'BRIEN & ASSOCIATES, INC. CONSULTING ENGINEERS
1235 E. DAVIS ST./ARLINGTON HTS., IL 60005
(847)368-1441 * FAX(847) 368-2378

BORING STARTED			May 4, 2010
BORING COMPLETED			May 4, 2010
RIG	CME–75	FOREMAN	RJ
DRAWN	VPB	APPROVED	DOB
OBA JOB No.	10524	SHEET	1 OF 2

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E-124

CLIENT: AECOM
LOG OF BORING NUMBER: A-1
PROJECT LOCATION: North Side Water Reclamation Plant (NSWRP), Skokie, IL
BORING LOCATION: Northing: XX, Easting: XX
PROJECT NAME: Relocated Battery E Facilities @ NSWRP Site, Skokie, IL
Water Reclamation District of Greater Chicago (MWRDGC)–Geotechnical Investigation

DEPTH (ft.) BELOW GROUND SURFACE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION	UNIT DRY WT. Lbs./Ft.³
0.0					LEAN CLAY w/SAND–gray–soft to stiff (CL)	
45.0	16	SS			SANDY SILTY CLAY–gray–very stiff (CL)	131
					END OF BORING	

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.²
CALIBRATED PENETROMETER TONS/FT.²
LIQUID ✕ LIMIT WATER ● CONTENT % PLASTIC △ LIMIT
STANDARD "N" PENETRATION (BLOWS/FT.)
GROUND SURFACE ELEVATION +XX.X CCD

WATER LEVEL OBSERVATIONS	
Water Level While Drilling	–13.5' ▼
Water Level After Boring	–XX.X' ▽

O'BRIEN & ASSOCIATES, INC. CONSULTING ENGINEERS
1235 E. DAVIS ST./ARLINGTON HTS., IL 60005
(847)368-1441 * FAX(847) 368-2378

BORING STARTED			May 4, 2010
BORING COMPLETED			May 4, 2010
RIG	CME–75	FOREMAN	RJ
DRAWN	VPB	APPROVED	DOB
OBA JOB No.	10524	SHEET	2 OF 2

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E-125

CLIENT: AECOM
LOG OF BORING NUMBER: A-2
PROJECT LOCATION: North Side Water Reclamation Plant (NSWRP), Skokie, IL
BORING LOCATION: Northing: XX, Easting: XX
PROJECT NAME: Relocated Battery E Facilities @ NSWRP Site, Skokie, IL
Water Reclamation District of Greater Chicago (MWRDGC)–Geotechnical Investigation

DEPTH (ft.) BELOW GROUND SURFACE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION	UNIT DRY WT. Lbs./Ft.³
0.0	1	AS			TOPSOIL FILL	
	2	SS			LEAN CLAY–brown & gray–very stiff to hard (CL) FILL	104
5.0	3	SS				108
	4	SS				107
10.0	5	SS			LEAN CLAY–brown & gray–stiff to very stiff (CL)	111
	6	SS				105
15.0	7	SS			LEAN CLAY–gray–medium stiff to stiff (CL) w/sand below –16.0'	108
	8	SS				112
	9	SS				112
20.0	10	SS			Torvane @ –22.0' Shear Strength = 940psf	111
	11	SS			Torvane @ –24.0' Shear Strength = 1070psf	111
25.0	12	SS				111
	13	SS				108
30.0	14	SS			Torvane @ –34.0' Shear Strength = 740psf	106
35.0	15	SS			Torvane @ –38.0' Shear Strength = 750psf	102
40.0						

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.²
CALIBRATED PENETROMETER TONS/FT.²
LIQUID ✕ LIMIT WATER ● CONTENT % PLASTIC △ LIMIT
STANDARD "N" PENETRATION (BLOWS/FT.)
GROUND SURFACE ELEVATION +XX.X CCD

Boring Continued On Following Page

WATER LEVEL OBSERVATIONS	
Water Level While Drilling	Dry ▼
Water Level After Boring	Dry ▽

O'BRIEN & ASSOCIATES, INC. CONSULTING ENGINEERS
1235 E. DAVIS ST./ARLINGTON HTS., IL 60005
(847)368-1441 * FAX(847) 368-2378

BORING STARTED			May 3, 2010
BORING COMPLETED			May 3, 2010
RIG	CME–75	FOREMAN	RJ
DRAWN	VPB	APPROVED	DOB
OBA JOB No.	10524	SHEET	1 OF 2

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E-126

CLIENT: AECOM
LOG OF BORING NUMBER: A-2
PROJECT LOCATION: North Side Water Reclamation Plant (NSWRP), Skokie, IL
BORING LOCATION: Northing: XX, Easting: XX
PROJECT NAME: Relocated Battery E Facilities @ NSWRP Site, Skokie, IL
Water Reclamation District of Greater Chicago (MWRDGC)–Geotechnical Investigation

DEPTH (ft.) BELOW GROUND SURFACE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION	UNIT DRY WT. Lbs./Ft.³
0.0					LEAN CLAY w/SAND–gray–very stiff (CL)	117
45.0	16	SS				
					END OF BORING	

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.²
CALIBRATED PENETROMETER TONS/FT.²
LIQUID ✕ LIMIT WATER ● CONTENT % PLASTIC △ LIMIT
STANDARD "N" PENETRATION (BLOWS/FT.)
GROUND SURFACE ELEVATION +XX.X CCD

WATER LEVEL OBSERVATIONS	
Water Level While Drilling	Dry ▼
Water Level After Boring	Dry ▽

O'BRIEN & ASSOCIATES, INC. CONSULTING ENGINEERS
1235 E. DAVIS ST./ARLINGTON HTS., IL 60005
(847)368-1441 * FAX(847) 368-2378

BORING STARTED			May 3, 2010
BORING COMPLETED			May 3, 2010
RIG	CME–75	FOREMAN	RJ
DRAWN	VPB	APPROVED	DOB
OBA JOB No.	10524	SHEET	2 OF 2

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E-127

CLIENT: AECOM
LOG OF BORING NUMBER: A-3
PROJECT LOCATION: North Side Water Reclamation Plant (NSWRP), Skokie, IL
BORING LOCATION: Northing: XX, Easting: XX
PROJECT NAME: Relocated Battery E Facilities @ NSWRP Site, Skokie, IL
Water Reclamation District of Greater Chicago (MWRDGC)–Geotechnical Investigation

DEPTH (ft.) BELOW GROUND SURFACE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION	UNIT DRY WT. Lbs./Ft.³
0.0	1	AS			Dark Brown TOPSOIL FILL	
	2	SS			LEAN CLAY FILL–brown and gray, spotted black in places–stiff to hard (CL)	110
5.0	3	SS				112
	4	SS				116
10.0	5	SS				110
	6	SS				111
	7	SS				107
15.0	8	SS				109
	9	SS				112
20.0	10	SS				114
	11	SS				112
25.0	12	SS				105
	13	SS				111
30.0	14	SS			Torvane @ –32.0' Shear Strength = 740psf	104
35.0	15	SS			Vane Shear @ –33.0' Shear Strength = 610psf	114
	16	SS			Vane Shear @ –38.0' Shear Strength = 770psf LEAN CLAY FILL–gray–medium stiff (CL) Vane Shear @ –38.0' Shear Strength = 570psf	105
40.0						

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.²
CALIBRATED PENETROMETER TONS/FT.²
LIQUID ✕ LIMIT WATER ● CONTENT % PLASTIC △ LIMIT
STANDARD "N" PENETRATION (BLOWS/FT.)
GROUND SURFACE ELEVATION +XX.X CCD

Boring Continued On Following Page

WATER LEVEL OBSERVATIONS	
Water Level While Drilling	Dry ▼
Water Level After Boring	Dry ▽

O'BRIEN & ASSOCIATES, INC. CONSULTING ENGINEERS
1235 E. DAVIS ST./ARLINGTON HTS., IL 60005
(847)368-1441 * FAX(847) 368-2378

BORING STARTED			May 6, 2010
BORING COMPLETED			May 10, 2010
RIG	CME–75	FOREMAN	RJ
DRAWN	VPB	APPROVED	DOB
OBA JOB No.	10524	SHEET	1 OF 2

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E-128

CLIENT: AECOM
LOG OF BORING NUMBER: A-3
PROJECT LOCATION: North Side Water Reclamation Plant (NSWRP), Skokie, IL
BORING LOCATION: Northing: XX, Easting: XX
PROJECT NAME: Relocated Battery E Facilities @ NSWRP Site, Skokie, IL
Water Reclamation District of Greater Chicago (MWRDGC)–Geotechnical Investigation

DEPTH (ft.) BELOW GROUND SURFACE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION	UNIT DRY WT. Lbs./Ft.³
0.0	17	SS			Vane Shear @ –41.0' Shear Strength = 1060psf trace concrete rubble LEAN CLAY FILL–gray–medium stiff (CL)	111
45.0	18	SS			Vane Shear @ –43.5' Shear Strength = 1140psf	109
	19	SS			Torvane @ –47.0' Shear Strength = 820psf	115
	20	SS			LEAN CLAY w/SAND–gray–medium stiff to stiff (CL)	112
60.0	21	SS				104
	22	SS				104
					END OF BORING	

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.²
CALIBRATED PENETROMETER TONS/FT.²
LIQUID ✕ LIMIT WATER ● CONTENT % PLASTIC △ LIMIT
STANDARD "N" PENETRATION (BLOWS/FT.)
GROUND SURFACE ELEVATION +XX.X CCD

WATER LEVEL OBSERVATIONS	
Water Level While Drilling	Dry ▼
Water Level After Boring	Dry ▽

O'BRIEN & ASSOCIATES, INC. CONSULTING ENGINEERS
1235 E. DAVIS ST./ARLINGTON HTS., IL 60005
(847)368-1441 * FAX(847) 368-2378

BORING STARTED			May 6, 2010
BORING COMPLETED			May 10, 2010
RIG	CME–75	FOREMAN	RJ
DRAWN	VPB	APPROVED	DOB
OBA JOB No.	10524	SHEET	2 OF 2

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E-129

CLIENT: AECOM
LOG OF BORING NUMBER: A-4
PROJECT LOCATION: North Side Water Reclamation Plant (NSWRP), Skokie, IL
BORING LOCATION: Northing: XX, Easting: XX
PROJECT NAME: Relocated Battery E Facilities @ NSWRP Site, Skokie, IL
Water Reclamation District of Greater Chicago (MWRDGC)–Geotechnical Investigation

DEPTH (ft.) BELOW GROUND SURFACE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION	UNIT DRY WT. Lbs./Ft.³
0.0	1	SS			TOPSOIL FILL wet	
	2	SS			LEAN CLAY w/rubble–brown–hard (CL) Fill	107
5.0	3	SS			LEAN CLAY–brown & gray–stiff (CL) wet	96
	4	SS				116
10.0	5	SS				105
	6	SS			Torvane @ –12.0' Shear Strength = 1020psf	102
	7	SS			Vane Shear @ –15.0' Shear Strength = 870psf	104
15.0	8	SS			Torvane @ –17.0' Shear Strength = 740psf	104
	9	SS			Torvane @ –18.0' Shear Strength = 720psf	104
20.0	10	SS			Vane Shear @ –21.0' Shear Strength = 650psf	104
	11	ST			LEAN CLAY–gray–medium stiff to stiff (CL) w/sand below –23.5'	
25.0	12	SS			Vane Shear @ –26.0' Shear Strength = 590psf	108
	13	SS			Torvane @ –28.0' Shear Strength = 940psf	109
30.0	14	SS			Torvane @ –34.0' Shear Strength = 1000psf	109
35.0	15	SS				113
40.0						

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.²
CALIBRATED PENETROMETER TONS/FT.²
LIQUID ✕ LIMIT WATER ● CONTENT % PLASTIC △ LIMIT
STANDARD "N" PENETRATION (BLOWS/FT.)
GROUND SURFACE ELEVATION +XX.X CCD

END OF BORING

WATER LEVEL OBSERVATIONS	
Water Level While Drilling	NA ▼
Water Level After Boring	NA ▽
Rotary Drilling @ –5.0'	

O'BRIEN & ASSOCIATES, INC. CONSULTING ENGINEERS
1235 E. DAVIS ST./ARLINGTON HTS., IL 60005
(847)368-1441 * FAX(847) 368-2378

BORING STARTED			May 25, 2010
BORING COMPLETED			May 25, 2010
RIG	CME–75	FOREMAN	RJ
DRAWN	VPB	APPROVED	DOB
OBA JOB No.	10524	SHEET	1 OF 1

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E-130

CLIENT: AECOM
LOG OF BORING NUMBER: A-5
PROJECT LOCATION: North Side Water Reclamation Plant (NSWRP), Skokie, IL
BORING LOCATION: Northing: XX, Easting: XX
PROJECT NAME: Relocated Battery E Facilities @ NSWRP Site, Skokie, IL
Water Reclamation District of Greater Chicago (MWRDGC)–Geotechnical Investigation

DEPTH (ft.) BELOW GROUND SURFACE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION	UNIT DRY WT. Lbs./Ft.³
0.0	1	AS			Dark Brown TOPSOIL FILL w/rubble	
	2	SS			LEAN CLAY–dark brown–very stiff to hard (CL) Fill	
5.0	3	SS				
	4	SS			LEAN CLAY–dark gray–medium stiff (CL) wet	95
10.0	5	SS			LEAN CLAY–brown & gray–stiff (CL)	106
	6	SS				111
	7	SS			Torvane @ –14.0' Shear Strength = 980psf	104
15.0	8	SS			Torvane @ –17.0' Shear Strength = 740psf	102
	9	SS			Torvane @ –18.0' Shear Strength = 610psf	103
20.0	10	ST			Vane Shear @ –21.0' Shear Strength = 650psf LEAN CLAY w/SAND–gray–medium stiff to stiff (CL)	
	11	SS			Torvane @ –24.0' Shear Strength = 610psf	112
25.0	12	SS			Vane Shear @ –26.0' Shear Strength = 1360psf	106
	13	SS				115
30.0	14	SS			Torvane @ –34.0' Shear Strength = 980psf	108
35.0	15	SS				108
40.0						

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.²
CALIBRATED PENETROMETER TONS/FT.²
LIQUID ✕ LIMIT WATER ● CONTENT % PLASTIC △ LIMIT
STANDARD "N" PENETRATION (BLOWS/FT.)
GROUND SURFACE ELEVATION +XX.X CCD

END OF BORING

WATER LEVEL OBSERVATIONS	
Water Level While Drilling	–3.5' ▼
Water Level After Boring	–10.0' ▽

O'BRIEN & ASSOCIATES, INC. CONSULTING ENGINEERS
1235 E. DAVIS ST./ARLINGTON HTS., IL 60005
(847)368-1441 * FAX(847) 368-2378

BORING STARTED			May 24, 2010
BORING COMPLETED			May 24, 2010
RIG	CME–75	FOREMAN	RJ
DRAWN	VPB	APPROVED	DOB
OBA JOB No.	10524	SHEET	1 OF 1

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E-131

GENERAL NOTES:

BORING LOGS INDICATE CONDITIONS ENCOUNTERED ONLY AT TEST BORING LOCATIONS. NOTHING IN THE CONTRACT DOCUMENTS SHALL BE CONSTRUED AS GUARANTEE THAT OTHER MATERIALS WILL NOT BE ENCOUNTERED OR THAT PROPORTION OF MATERIALS WILL NOT VARY FROM PROPORTIONS SHOWN ON THE LOGS OF TEST BORINGS. O'BRIEN AND ASSOCIATES, INC. PERFORMED THE WORK AND COLLECTED THE INFORMATION CONTAINED IN THE BORING LOGS.

1

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	HC	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Designed by: HHC | Checked by: BP
Drawn by: LK | Reviewed by: BP
Date: JULY 2025 | Scale: AS SHOWN

CONTRACT 22–RFP–06
OBRIEN WATER RECLAMATION PLANT
NEW ACTIVATED SLUDGE BATTERY

SOIL BORING LOGS – 1

HSING HUA CHU
062-057110
LICENSED PROFESSIONAL ENGINEER
OF
ILLINOIS

Sheet Number: C–007
Page Number: 23

PLOT DATE: 10/13/2025 3:48 PM PLOTTED BY: KOSTAMO, LISA

CLIENT: AECOM
LOG OF BORING NUMBER: A–6
PROJECT LOCATION: North Side Water Reclamation Plant (NSWRP), Skokie, IL
BORING LOCATION: Northing: XX, Easting: XX
PROJECT NAME: Relocated Battery E Facilities @ NSWRP Site, Skokie, IL
Water Reclamation District of Greater Chicago (MWRDGC)–Geotechnical Investigation

	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION	UNIT DRY WT. Lbs./Ft.³
1	AS				4.0" ASPHALT	
2	SS				MISC. SAND & STONE FILL mixed w/ CLAY–medium dense	
5.0						
3	SS				LEAN CLAY–gray–very stiff (CL) FILL	118
4	SS				LEAN CLAY w/SAND–brown & gray–medium stiff to stiff (CL) wet 6.0' to 10.0'	101
10.0						
5	SS					98
6	SS					111
15.0						
7	SS				LEAN CLAY w/SAND–gray–very soft to stiff (CL)	113
8	SS					
20.0						
9	ST					wet
10	SS					wet
25.0						
11	ST					
12	SS					wet
30.0						
13	ST					
35.0						
14	SS					107
40.0						
15	SS					104

Torvane @ –7.0' Shear Strength = 1170psf
Torvane @ –9.0' Shear Strength = 1270psf
Torvane @ –17.0' Shear Strength = 680psf
Torvane @ –18.0' Shear Strength = 450psf
Torvane @ –21.5' Shear Strength = 530psf
Torvane @ –22.5' Shear Strength = 370psf
Torvane @ –24.0' Shear Strength = 610psf
Torvane @ –25.0' Shear Strength = 580psf
Torvane @ –27.0' Shear Strength = 350psf
Torvane @ –34.0' Shear Strength = 900psf
Torvane @ –38.0' Shear Strength = 980psf

END OF BORING

WATER LEVEL OBSERVATIONS		BORING STARTED	June 2, 2010
Water Level While Drilling	–1.0'	BORING COMPLETED	June 2, 2010
Water Level After Boring	NA	RIG B–57 FOREMAN DR	
Rotary Drilling @ –10.0'		DRAWN VPB APPROVED DOB	
		OBA JOB No. 10524 SHEET 1 OF 2	

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E-132

CLIENT: AECOM
LOG OF BORING NUMBER: OP–2
PROJECT LOCATION: North Side Water Reclamation Plant (NSWRP), Skokie, IL
BORING LOCATION: Northing: XX, Easting: XX
PROJECT NAME: Relocated Battery E Facilities @ NSWRP Site, Skokie, IL
Water Reclamation District of Greater Chicago (MWRDGC)–Geotechnical Investigation

	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION	UNIT DRY WT. Lbs./Ft.³
1	AS				MISC. SAND & STONE FILL mixed w/ CLAY–medium dense	
2	SS					
5.0						
3	SS				LEAN CLAY–gray–very stiff (CL) FILL	118
4	SS				LEAN CLAY w/SAND–brown & gray–medium stiff to stiff (CL) wet 6.0' to 10.0'	101
10.0						
5	SS					98
6	SS					111
15.0						
7	SS				LEAN CLAY w/SAND–gray–very soft to stiff (CL)	113
8	SS					
20.0						
9	ST					wet
10	SS					wet
25.0						
11	ST					
12	SS					wet
30.0						
13	ST					
35.0						
14	SS					107
40.0						
15	SS					104

Torvane @ –7.0' Shear Strength = 1170psf
Torvane @ –9.0' Shear Strength = 1270psf
Torvane @ –17.0' Shear Strength = 680psf
Torvane @ –18.0' Shear Strength = 450psf
Torvane @ –21.5' Shear Strength = 530psf
Torvane @ –22.5' Shear Strength = 370psf
Torvane @ –24.0' Shear Strength = 610psf
Torvane @ –25.0' Shear Strength = 580psf
Torvane @ –27.0' Shear Strength = 350psf
Torvane @ –34.0' Shear Strength = 900psf
Torvane @ –38.0' Shear Strength = 980psf

Boring Continued On Following Page

WATER LEVEL OBSERVATIONS		BORING STARTED	June 2, 2010
Water Level While Drilling	–1.0'	BORING COMPLETED	June 2, 2010
Water Level After Boring	NA	RIG B–57 FOREMAN DR	
Rotary Drilling @ –10.0'		DRAWN VPB APPROVED DOB	
		OBA JOB No. 10524 SHEET 1 OF 2	

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E-136

CLIENT: AECOM
LOG OF BORING NUMBER: G–1
PROJECT LOCATION: North Side Water Reclamation Plant (NSWRP), Skokie, IL
BORING LOCATION: Northing: XX, Easting: XX
PROJECT NAME: Relocated Battery E Facilities @ NSWRP Site, Skokie, IL
Water Reclamation District of Greater Chicago (MWRDGC)–Geotechnical Investigation

	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION	UNIT DRY WT. Lbs./Ft.³
1	AS				TOPSOIL FILL w/stone	
2	SS				LEAN CLAY–dark brown–hard (CL) Fill	
5.0						
3	SS					111
4	SS				LEAN CLAY–brown & gray, spotted black–medium stiff to stiff (CL) Possible Fill wet	109
10.0						
5	SS					99
6	SS				LEAN CLAY w/SAND–gray–medium to very stiff (CL)	119
15.0						
7	SS					104
8	SS					104
20.0						
9	SS					102

Torvane @ –8.0' Shear Strength = 820psf
Torvane @ –14.0' Shear Strength = 1360psf
Torvane @ –17.0' Shear Strength = 510psf
Torvane @ –18.0' Shear Strength = 980psf

END OF BORING

WATER LEVEL OBSERVATIONS		BORING STARTED	May 28, 2010
Water Level While Drilling	–10.0'	BORING COMPLETED	May 28, 2010
Water Level After Boring	–16.0'	RIG CME–75 FOREMAN RJ	
		DRAWN VPB APPROVED DOB	
		OBA JOB No. 10524 SHEET 1 OF 1	

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E-133

CLIENT: AECOM
LOG OF BORING NUMBER: OP–2
PROJECT LOCATION: North Side Water Reclamation Plant (NSWRP), Skokie, IL
BORING LOCATION: Northing: XX, Easting: XX
PROJECT NAME: Relocated Battery E Facilities @ NSWRP Site, Skokie, IL
Water Reclamation District of Greater Chicago (MWRDGC)–Geotechnical Investigation

	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION	UNIT DRY WT. Lbs./Ft.³
16	SS				LEAN CLAY w/SAND–gray–very soft to stiff (CL)	
45.0						
17	SS				LEAN CLAY w/SAND–gray–very stiff to hard (CL)	124
50.0						
18	SS					
55.0						
19	SS					123
60.0						

END OF BORING

WATER LEVEL OBSERVATIONS		BORING STARTED	June 2, 2010
Water Level While Drilling	–1.0'	BORING COMPLETED	June 2, 2010
Water Level After Boring	NA	RIG B–57 FOREMAN DR	
Rotary Drilling @ –10.0'		DRAWN VPB APPROVED DOB	
		OBA JOB No. 10524 SHEET 2 OF 2	

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E-137

CLIENT: AECOM
LOG OF BORING NUMBER: OP–1
PROJECT LOCATION: North Side Water Reclamation Plant (NSWRP), Skokie, IL
BORING LOCATION: Northing: XX, Easting: XX
PROJECT NAME: Relocated Battery E Facilities @ NSWRP Site, Skokie, IL
Water Reclamation District of Greater Chicago (MWRDGC)–Geotechnical Investigation

	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION	UNIT DRY WT. Lbs./Ft.³
1	AS				Black TOPSOIL FILL	
2	SS				LEAN CLAY–dark brown–very stiff to hard (CL) FILL	114
5.0						
3	SS					
4	SS				LEAN CLAY–dark gray–very stiff (CL)	109
10.0						
5	SS				LEAN CLAY–brown & gray–very stiff (CL)	111
6	SS					
15.0						
7	SS					101
8	SS					
20.0						
9	ST					
10	SS					101
11	SS					103
25.0						
12	ST					
13	SS					108
30.0						
14	SS				LEAN CLAY w/SAND–gray–very soft to stiff (CL)	
35.0						
15	SS					107
40.0						

<0.25
@1.3&5
<0.25

Torvane @ –14.0' Shear Strength = 550psf
Yane Shear @ –16.5' Shear Strength = 830psf
Torvane @ –17.0' Shear Strength = 410psf
Torvane @ –20.0' Shear Strength = 450psf
Torvane @ –22.0' Shear Strength = 280psf
Yane Shear @ –23.5' Shear Strength = 270psf
Torvane @ –24.0' Shear Strength = 460psf
Torvane @ –27.0' Shear Strength = 270psf
Yane Shear @ –28.5' Shear Strength = 890psf
Torvane @ –30.0' Shear Strength = 270psf
Torvane @ –34.0' Shear Strength = 410psf

Boring Continued On Following Page

WATER LEVEL OBSERVATIONS		BORING STARTED	June 8, 2010
Water Level While Drilling	NA	BORING COMPLETED	June 8, 2010
Water Level After Boring	NA	RIG B–57 FOREMAN DR	
Rotary Drilling @ –10.0'		DRAWN VPB APPROVED DOB	
		OBA JOB No. 10524 SHEET 1 OF 2	

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E-134

CLIENT: AECOM
LOG OF BORING NUMBER: S–1
PROJECT LOCATION: North Side Water Reclamation Plant (NSWRP), Skokie, IL
BORING LOCATION: Northing: XX, Easting: XX
PROJECT NAME: Relocated Battery E Facilities @ NSWRP Site, Skokie, IL
Water Reclamation District of Greater Chicago (MWRDGC)–Geotechnical Investigation

	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION	UNIT DRY WT. Lbs./Ft.³
1	AS				BLACK TOPSOIL FILL wet	
2	SS				LEAN CLAY–brown & gray–very soft to hard (CL) FILL	108
5.0						
3	SS					
4	SS					101
10.0						
5	SS				LEAN CLAY w/SAND–gray–very soft to stiff (CL)	
6	SS					
15.0						
7	SS					98
8	ST					
20.0						
9	SS					103
10	ST					
25.0						
11	SS					109
12	ST					
13	SS					106
30.0						
14	SS					101
35.0						
15	SS					122
40.0						

<0.25
<0.25

Torvane @ –7.0' Shear Strength = 530psf
Torvane @ –14.0' Shear Strength = 530psf
Yane Shear @ –16.5' Shear Strength = 530psf
Torvane @ –18.0' Shear Strength = 550psf
Yane Shear @ –21.5' Shear Strength = 590psf
Torvane @ –24.0' Shear Strength = 610psf
Yane Shear @ –28.0' Shear Strength = 970psf
Torvane @ –28.0' Shear Strength = 310psf
Torvane @ –34.0' Shear Strength = 450psf
Torvane @ –38.0' Shear Strength = 280psf

END OF BORING

WATER LEVEL OBSERVATIONS		BORING STARTED	June 9, 2010
Water Level While Drilling	NA	BORING COMPLETED	June 9, 2010
Water Level After Boring	NA	RIG D–50 FOREMAN DR	
Rotary Drilling @ –6.0'		DRAWN VPB APPROVED DOB	
		OBA JOB No. 10524 SHEET 1 OF 1	

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E-138

CLIENT: AECOM
LOG OF BORING NUMBER: OP–1
PROJECT LOCATION: North Side Water Reclamation Plant (NSWRP), Skokie, IL
BORING LOCATION: Northing: XX, Easting: XX
PROJECT NAME: Relocated Battery E Facilities @ NSWRP Site, Skokie, IL
Water Reclamation District of Greater Chicago (MWRDGC)–Geotechnical Investigation

	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION	UNIT DRY WT. Lbs./Ft.³
45.0						
16	SS				LEAN CLAY w/SAND–gray–stiff to hard (CL)	
50.0						
17	SS					114
55.0						
18	SS					
60.0						
19	SS					118
65.0						
70.0						
75.0						
80.0						

72

END OF BORING

WATER LEVEL OBSERVATIONS		BORING STARTED	June 8, 2010
Water Level While Drilling	NA	BORING COMPLETED	June 8, 2010
Water Level After Boring	NA	RIG B–57 FOREMAN DR	
Rotary Drilling @ –10.0'		DRAWN VPB APPROVED DOB	
		OBA JOB No. 10524 SHEET 2 OF 2	

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E-135

CLIENT: AECOM
LOG OF BORING NUMBER: S–2
PROJECT LOCATION: North Side Water Reclamation Plant (NSWRP), Skokie, IL
BORING LOCATION: Northing: XX, Easting: XX
PROJECT NAME: Relocated Battery E Facilities @ NSWRP Site, Skokie, IL
Water Reclamation District of Greater Chicago (MWRDGC)–Geotechnical Investigation

	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION	UNIT DRY WT. Lbs./Ft.³
1	AS				Brown TOPSOIL FILL	
2	SS				LEAN CLAY–brown & gray, spotted black–hard (CL) Fill	
3	SS				LEAN CLAY–dark gray–very stiff (CL)	100
5.0						
4	SS					106
5	SS				LEAN CLAY–gray–very soft to stiff (CL) w/sand below –11.0' wet 11.0' to 15.0'	
10.0						
6	SS					98
7	ST					
15.0						
8	SS					104
9	ST					
20.0						
10	SS					110
11	ST					
25.0						
12	SS					110
13	SS					103
30.0						
14	SS					105
35.0						
15	SS					104
40.0						

<0.25
<0.25

Torvane @ –12.0' Shear Strength = 570psf
Torvane @ –14.0' Shear Strength = 310psf
Yane Shear @ –16.0' Shear Strength = 540psf
Torvane @ –17.0' Shear Strength = 530psf
Torvane @ –18.0' Shear Strength = 510psf
Yane Shear @ –21.0' Shear Strength = 760psf
Torvane @ –22.0' Shear Strength = 490psf
Torvane @ –24.0' Shear Strength = 570psf
Torvane @ –27.0' Shear Strength = 510psf
Yane Shear @ –28.0' Shear Strength = 880psf
Torvane @ –30.0' Shear Strength = 550psf
Torvane @ –34.0' Shear Strength = 510psf
Torvane @ –38.0' Shear Strength = 410psf

END OF BORING

WATER LEVEL OBSERVATIONS		BORING STARTED	June 10, 2010
Water Level While Drilling	NA	BORING COMPLETED	June 10, 2010
Water Level After Boring	NA	RIG D–50 FOREMAN DR	
Rotary Drilling @ –6.0'		DRAWN VPB APPROVED DOB	
		OBA JOB No. 10524 SHEET 1 OF 1	

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E-139

GENERAL NOTES:

BORING LOGS INDICATE CONDITIONS ENCOUNTERED ONLY AT TEST BORING LOCATIONS. NOTHING IN THE CONTRACT DOCUMENTS SHALL BE CONSTRUED AS GUARANTEE THAT OTHER MATERIALS WILL NOT BE ENCOUNTERED OR THAT PROPORTION OF MATERIALS WILL NOT VARY FROM PROPORTIONS SHOWN ON THE LOGS OF TEST BORINGS. O'BRIEN AND ASSOCIATES, INC. PERFORMED THE WORK AND COLLECTED THE INFORMATION CONTAINED IN THE BORING LOGS.

1

HSING HUA CHU
062-057110
LICENSED PROFESSIONAL ENGINEER
OF
ILLINOIS

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	HC	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Designed by:	Checked by:	Drawn by:	Reviewed by:	Date:	Scale:
HHC	BP	LK	BP	JULY 2025	AS SHOWN

CONTRACT 22–RFP–06
OBRIEN WATER RECLAMATION PLANT
NEW ACTIVATED SLUDGE BATTERY

SOIL BORING LOGS – 2

Sheet Number: C–008
Page Number: 24

PLOT DATE: 10/13/2025 3:46 PM PLOTTED BY: KOSTAMO, LISA

O:\Contracts\22–RFP–06\Civil\Sheets\C–008–rev1.dwg 10/13/2025 3:00 PM

O:\Contracts\22-RFP-06\Civil\Sheets\C-009-rev1.dwg 10/13/2025 3:04 PM

CLIENT: AECOM
LOG OF BORING NUMBER: S-3
PROJECT LOCATION: North Side Water Reclamation Plant (NSWRP), Skokie, IL
BORING LOCATION: Northing: XX, Easting: XX
PROJECT NAME: Relocated Battery E Facilities @ NSWRP Site, Skokie, IL
Water Reclamation District of Greater Chicago (MWRDGC)–Geotechnical Investigation

DEPTH (ft.) BELOW GROUND SURFACE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION	UNIT DRY WT. Lbs./Ft.³
					GROUND SURFACE ELEVATION +XX.X CCD	
0.0	1	AS			TOPSOIL FILL wet	
	2	SS			LEAN CLAY FILL–brown and gray, spotted black in places–stiff to hard (CL)	118
5.0	3	SS				110
	4	SS				112
	5	SS				111
10.0	6	SS				112
	7	SS				106
15.0	8	SS				112
	9	SS			wet	97
20.0	10	SS			LEAN CLAY–brown and gray–stiff to hard (CL)	114
	11	SS				108
25.0	12	SS				
	13	SS			Torvane @ –25.0' Shear Strength = 820psf	107
30.0	14	SS			Torvane @ –27.0' Shear Strength = 610psf w/sand below –31.0'	107
	15	SS			Vane Shear @ –25.5' Shear Strength = 880psf	104
35.0	16	SS			LEAN CLAY–gray–medium stiff (CL) Torvane @ –32.0' Shear Strength = 660psf	107
	17	SS			Vane Shear @ –35.0' Shear Strength = 830psf	110
40.0						

TOPSOIL/ORGANIC, FILL, CLAY, SILT, SAND, GRAVEL, BEDROCK
UNCONFINED COMPRESSIVE STRENGTH TONS/FT.²
CALIBRATED PENETROMETER TONS/FT.²
LIQUID × LIMIT WATER ● CONTENT % PLASTIC △ LIMIT
STANDARD "N" PENETRATION (BLOWS/FT.)

Boring Continued On Following Page

WATER LEVEL OBSERVATIONS		BORING STARTED	May 10, 2010		
Water Level While Drilling	N/A	BORING COMPLETED	May 12, 2010		
Water Level After Boring	N/A	RIG	CME–75	FOREMAN	RJ
		DRAWN	VPB	APPROVED	DOB
Rotary Drilling @ –10.0'		OBA JOB No.	10524	SHEET	1 OF 2

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CLIENT: AECOM
LOG OF BORING NUMBER: S-3
PROJECT LOCATION: North Side Water Reclamation Plant (NSWRP), Skokie, IL
BORING LOCATION: Northing: XX, Easting: XX
PROJECT NAME: Relocated Battery E Facilities @ NSWRP Site, Skokie, IL
Water Reclamation District of Greater Chicago (MWRDGC)–Geotechnical Investigation

DEPTH (ft.) BELOW GROUND SURFACE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION	UNIT DRY WT. Lbs./Ft.³
					GROUND SURFACE ELEVATION +XX.X CCD	
40.0	18	SS			LEAN CLAY w/SAND–gray–medium stiff to stiff (CL)	111
45.0	19	SS			Torvane @ –46.0' Shear Strength = 880psf Torvane @ –48.0' Shear Strength = 820psf	112
50.0	20	SS				102
55.0	21	SS			SANDY SILTY CLAY w/GRAVEL–gray–very stiff (CL–ML)	127
60.0					END OF BORING	

S@10%

WATER LEVEL OBSERVATIONS		BORING STARTED	May 10, 2010		
Water Level While Drilling	N/A	BORING COMPLETED	May 12, 2010		
Water Level After Boring	N/A	RIG	CME–75	FOREMAN	RJ
		DRAWN	VPB	APPROVED	DOB
Rotary Drilling @ –10.0'		OBA JOB No.	10524	SHEET	2 OF 2

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CLIENT: AECOM
LOG OF BORING NUMBER: S-4
PROJECT LOCATION: North Side Water Reclamation Plant (NSWRP), Skokie, IL
BORING LOCATION: Northing: XX, Easting: XX
PROJECT NAME: Relocated Battery E Facilities @ NSWRP Site, Skokie, IL
Water Reclamation District of Greater Chicago (MWRDGC)–Geotechnical Investigation

DEPTH (ft.) BELOW GROUND SURFACE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION	UNIT DRY WT. Lbs./Ft.³
					GROUND SURFACE ELEVATION +XX.X CCD	
0.0	1	AS			TOPSOIL FILL wet	
	2	SS			LEAN CLAY FILL–brown and gray, spotted black in places–medium stiff to hard (CL)	102
5.0	3	SS				109
	4	SS			Torvane @ –6.0' Shear Strength = 960psf	108
10.0	5	SS				108
	6	SS				106
15.0	7	SS				114
	8	SS				120
20.0	9	SS				101
	10	SS				110
25.0	11	SS			wet LEAN CLAY–gray–very soft to stiff (CL) wet	<0.25
	12	SS				<0.25
30.0	13	SS			Torvane @ –32.0' Shear Strength = 880psf Torvane @ –32.0' Shear Strength = 880psf w/sand below –31.0'	103
	14	SS				110
35.0	15	SS			Vane Shear @ –35.5' Shear Strength = 880psf	117
	16	SS			Torvane @ –37.0' Shear Strength = 780psf	105
40.0	17	SS			Torvane @ –38.0' Shear Strength = 840psf	108

Boring Continued On Following Page

WATER LEVEL OBSERVATIONS		BORING STARTED	May 5, 2010		
Water Level While Drilling	N/A	BORING COMPLETED	May 5, 2010		
Water Level After Boring	N/A	RIG	CME–75	FOREMAN	RJ
		DRAWN	VPB	APPROVED	DOB
Rotary Drilling @ –6.0'		OBA JOB No.	10524	SHEET	1 OF 2

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CLIENT: AECOM
LOG OF BORING NUMBER: S-4
PROJECT LOCATION: North Side Water Reclamation Plant (NSWRP), Skokie, IL
BORING LOCATION: Northing: XX, Easting: XX
PROJECT NAME: Relocated Battery E Facilities @ NSWRP Site, Skokie, IL
Water Reclamation District of Greater Chicago (MWRDGC)–Geotechnical Investigation

DEPTH (ft.) BELOW GROUND SURFACE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION	UNIT DRY WT. Lbs./Ft.³
					GROUND SURFACE ELEVATION +XX.X CCD	
40.0	18	SS			LEAN CLAY w/SAND–gray–medium stiff to stiff (CL)	116
45.0	19	SS			Torvane @ –48.0' Shear Strength = 880psf	107
50.0	20	SS			Torvane @ –54.0' Shear Strength = 1280psf	103
55.0	21	SS			Torvane @ –58.0' Shear Strength = 880psf	105
60.0					END OF BORING	

WATER LEVEL OBSERVATIONS		BORING STARTED	May 5, 2010		
Water Level While Drilling	Dry	BORING COMPLETED	May 5, 2010		
Water Level After Boring	Dry	RIG	CME–75	FOREMAN	RJ
		DRAWN	VPB	APPROVED	DOB
Rotary Drilling @ –6.0'		OBA JOB No.	10524	SHEET	2 OF 2

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CLIENT: AECOM
LOG OF BORING NUMBER: S-5
PROJECT LOCATION: North Side Water Reclamation Plant (NSWRP), Skokie, IL
BORING LOCATION: Northing: XX, Easting: XX
PROJECT NAME: Relocated Battery E Facilities @ NSWRP Site, Skokie, IL
Water Reclamation District of Greater Chicago (MWRDGC)–Geotechnical Investigation

DEPTH (ft.) BELOW GROUND SURFACE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION	UNIT DRY WT. Lbs./Ft.³
					GROUND SURFACE ELEVATION +XX.X CCD	
0.0	1	AS			Dark Brown TOPSOIL FILL wet	
	2	SS			LEAN CLAY–brown & gray to gray–very stiff to hard (CL) Fill	114
5.0	3	SS				110
	4	SS				111
	5	SS				109
10.0	6	SS				116
	7	SS				119
15.0	8	SS				105
	9	SS				
20.0	10	SS				
	11	SS				
25.0	12	SS			LEAN CLAY w/SAND–medium gray–very soft (CL) wet	94
	13	SS			LEAN CLAY w/SAND–gray–stiff (CL)	103
30.0					END OF BORING	
35.0						
40.0						

TOPSOIL/ORGANIC, FILL, CLAY, SILT, SAND, GRAVEL, BEDROCK
UNCONFINED COMPRESSIVE STRENGTH TONS/FT.²
CALIBRATED PENETROMETER TONS/FT.²
LIQUID × LIMIT WATER ● CONTENT % PLASTIC △ LIMIT
STANDARD "N" PENETRATION (BLOWS/FT.)

WATER LEVEL OBSERVATIONS		BORING STARTED	June 10, 2010		
Water Level While Drilling	NA	BORING COMPLETED	June 10, 2010		
Water Level After Boring	NA	RIG	D–50	FOREMAN	DR
		DRAWN	VPB	APPROVED	DOB
Rotary Drilling @ –6.0'		OBA JOB No.	10524	SHEET	1 OF 1

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CLIENT: AECOM
LOG OF BORING NUMBER: S-6
PROJECT LOCATION: North Side Water Reclamation Plant (NSWRP), Skokie, IL
BORING LOCATION: Northing: XX, Easting: XX
PROJECT NAME: Relocated Battery E Facilities @ NSWRP Site, Skokie, IL
Water Reclamation District of Greater Chicago (MWRDGC)–Geotechnical Investigation

DEPTH (ft.) BELOW GROUND SURFACE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION	UNIT DRY WT. Lbs./Ft.³
					GROUND SURFACE ELEVATION +XX.X CCD	
0.0	1	AS			TOPSOIL FILL w/GRAVEL	
	2	SS			LEAN CLAY–dark brown–hard (CL) Fill	
5.0	3	SS				
	4	SS			LEAN CLAY–dark brown to black–very stiff (CL)	103
	5	SS			LEAN CLAY–brown & gray–very stiff (CL)	105
10.0	6	SS				110
	7	SS			Torvane @ –14.0' Shear Strength = 640psf	104
15.0	8	SS			LEAN CLAY–gray–medium stiff (CL) Torvane @ –17.0' Shear Strength = 660psf	104
	9	ST			SAND w/SILTY CLAY–gray (SW–SC)	
20.0	10	SS			Torvane @ –22.0' Shear Strength = 900psf	106
	11	SS			LEAN CLAY w/SAND–gray–medium stiff to stiff (CL)	116
25.0	12	SS			Torvane @ –27.0' Shear Strength = 700psf	113
	13	SS			Torvane @ –29.0' Shear Strength = 880psf disturbed	
30.0	14	SS			Torvane @ –32.0' Shear Strength = 960psf	109
	15	SS			Torvane @ –34.0' Shear Strength = 760psf	113
35.0	16	SS			Vane Shear @ –36.0' Shear Strength = +880psf	107
40.0					END OF BORING	

TOPSOIL/ORGANIC, FILL, CLAY, SILT, SAND, GRAVEL, BEDROCK
UNCONFINED COMPRESSIVE STRENGTH TONS/FT.²
CALIBRATED PENETROMETER TONS/FT.²
LIQUID × LIMIT WATER ● CONTENT % PLASTIC △ LIMIT
STANDARD "N" PENETRATION (BLOWS/FT.)

WATER LEVEL OBSERVATIONS		BORING STARTED	May 25, 2010		
Water Level While Drilling	–16.0'	BORING COMPLETED	May 25, 2010		
Water Level After Boring	NA	RIG	CME–75	FOREMAN	RJ
		DRAWN	VPB	APPROVED	DOB
		OBA JOB No.	10524	SHEET	1 OF 1

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CLIENT: AECOM
LOG OF BORING NUMBER: S-7
PROJECT LOCATION: North Side Water Reclamation Plant (NSWRP), Skokie, IL
BORING LOCATION: Northing: XX, Easting: XX
PROJECT NAME: Relocated Battery E Facilities @ NSWRP Site, Skokie, IL
Water Reclamation District of Greater Chicago (MWRDGC)–Geotechnical Investigation

DEPTH (ft.) BELOW GROUND SURFACE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION	UNIT DRY WT. Lbs./Ft.³
					GROUND SURFACE ELEVATION +XX.X CCD	
0.0	1	AS			Brown CLAYEY TOPSOIL FILL	
	2	SS			LEAN CLAY–brown & gray, w/black from 3.5' tp 6.0'–some rubble–very stiff to hard (CL) FILL	104
5.0	3	SS				115
	4	SS				
	5	SS			LEAN CLAY–brown & gray–stiff to very stiff (CL)	102
10.0	6	SS				111
	7	SS				102
15.0	8	ST			Torvane @ –17.0' Shear Strength = 490psf	
	9	SS			Torvane @ –19.0' Shear Strength = 350psf	100
20.0	10	ST			Vane Shear @ –21.0' Shear Strength = 650psf	<0.25
	11	SS			Torvane @ –22.0' Shear Strength = 410psf	102
25.0	12	ST			Torvane @ –24.0' Shear Strength = 410psf Vane Shear @ –26.0' Shear Strength = 810psf	
	13	SS			Torvane @ –32.0' Shear Strength = 550psf	
30.0	14	SS			Torvane @ –32.0' Shear Strength = 410psf Vane Shear @ –31.0' Shear Strength = 1000psf	109
	15	SS			LEAN CLAY w/SAND–gray–very soft to medium stiff (CL) Torvane @ –34.0' Shear Strength = 590psf	101
35.0						
40.0					Torvane @ –38.0' Shear Strength = 810psf wet END OF BORING	100

WATER LEVEL OBSERVATIONS		BORING STARTED	June 11, 2010		
Water Level While Drilling	Dry	BORING COMPLETED	June 11, 2010		
Water Level After Boring	Dry	RIG	D–50	FOREMAN	DR
		DRAWN	VPB	APPROVED	DOB
		OBA JOB No.	10524	SHEET	1 OF 1

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CLIENT: AECOM
LOG OF BORING NUMBER: UP-2
PROJECT LOCATION: North Side Water Reclamation Plant (NSWRP), Skokie, IL
BORING LOCATION: Northing: XX, Easting: XX
PROJECT NAME: Relocated Battery E Facilities @ NSWRP Site, Skokie, IL
Water Reclamation District of Greater Chicago (MWRDGC)–Geotechnical Investigation

DEPTH (ft.) BELOW GROUND SURFACE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION	UNIT DRY WT. Lbs./Ft.³
					GROUND SURFACE ELEVATION +XX.X CCD	
0.0	1	AS			Dark Brown TOPSOIL FILL wet	
	2	SS			LEAN CLAY–brown & gray to dark brown–very stiff to hard (CL) Fill	113
5.0	3	SS				110
	4	SS				107
	5	SS			Torvane @ –9.0' Shear Strength = 880psf LEAN CLAY–brown & gray–medium stiff (CL) wet	99
10.0	6	SS			LEAN CLAY w/SAND–gray–very soft to stiff (CL)	105
	7	ST			Torvane @ –14.0' Shear Strength = 1080psf wet	
15.0	8	ST			Vane Shear @ –15.5' Shear Strength = 840psf	105
	9	ST			Torvane @ –17.0' Shear Strength = 450psf	
20.0	10	SS			Torvane @ –20.0' Shear Strength = 740psf	
	11	ST			Torvane @ –22.0' Shear Strength = 810psf	106
25.0	12	SS			Torvane @ –25.0' Shear Strength = 1,080psf	
30.0					Torvane @ –28.0' Shear Strength = 410psf END OF BORING	116
35.0						
40.0						

TOPSOIL/ORGANIC, FILL, CLAY, SILT, SAND, GRAVEL, BEDROCK
UNCONFINED COMPRESSIVE STRENGTH TONS/FT.²
CALIBRATED PENETROMETER TONS/FT.²
LIQUID × LIMIT WATER ● CONTENT % PLASTIC △ LIMIT
STANDARD "N" PENETRATION (BLOWS/FT.)

WATER LEVEL OBSERVATIONS		BORING STARTED	June 1, 2010		
Water Level While Drilling	NA	BORING COMPLETED	June 1, 2010		
Water Level After Boring	NA	RIG	B–57	FOREMAN	DR
		DRAWN	VPB	APPROVED	DOB
Rotary Drilling @ –10.0'		OBA JOB No.	10524	SHEET	1 OF 1

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GENERAL NOTES:

BORING LOGS INDICATE CONDITIONS ENCOUNTERED ONLY AT TEST BORING LOCATIONS. NOTHING IN THE CONTRACT DOCUMENTS SHALL BE CONSTRUED AS GUARANTEE THAT OTHER MATERIALS WILL NOT BE ENCOUNTERED OR THAT PROPORTION OF MATERIALS WILL NOT VARY FROM PROPORTIONS SHOWN ON THE LOGS OF TEST BORINGS. O'BRIEN AND ASSOCIATES, INC. PERFORMED THE WORK AND COLLECTED THE INFORMATION CONTAINED IN THE BORING LOGS.

1

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	HC	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Designed by: HHC
Drawn by: LK
Checked by: BP
Reviewed by: BP
Date: JULY 2025
Scale: AS SHOWN

CONTRACT 22–RFP–06
OBRIEN WATER RECLAMATION PLANT
NEW ACTIVATED SLUDGE BATTERY

SOIL BORING LOGS – 3

HSING HUA CHU
062-057110
LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

Sheet Number: C–009
Page Number: 25

PLOT DATE: 10/13/2025 3:45 PM PLOTTED BY: KOSTAMO, LISA

O:\Contracts\22-RFP-06\Civil\Sheets\C-010-rev1.dwg 10/13/2025 3:05 PM

CLIENT: AECOM
LOG OF BORING NUMBER: UP-3
PROJECT LOCATION: North Side Water Reclamation Plant (NSWRP), Skokie, IL
BORING LOCATION: Northing: XX, Easting: XX
PROJECT NAME: Relocated Battery E Facilities @ NSWRP Site, Skokie, IL
Water Reclamation District of Greater Chicago (MWRDGC)–Geotechnical Investigation

TOPSOIL/ORGANIC, FILL, CLAY, SILT, SAND, GRAVEL, BEDROCK

DEPTH (ft.) BELOW GROUND SURFACE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION	UNIT DRY WT. Lbs./Ft.³
GROUND SURFACE ELEVATION +XX.X CCD						
0.0	1	AS			Black TOPSOIL FILL wet	
	2	SS			SANDY LEAN CLAY w/SAND–gray–very stiff (CL) Fill	
5.0	3	SS				120
	4	SS			LEAN CLAY w/SAND–brown & gray–stiff to very stiff (CL)	113
10.0	5	SS				113
	6	SS				111
15.0	7	SS			Torvane @ –14.0' Shear Strength = 780psf	116
	8	ST			Torvane @ –17.0' Shear Strength = 960psf; Tone Sheer @ –19.0' Shear Strength = 700psf	
20.0	9	ST			Torvane @ –21.0' Shear Strength = 820psf	
25.0	10	SS			LEAN CLAY w/SAND–gray–very soft to stiff (CL)	
30.0	11	SS			Torvane @ –28.0' Shear Strength = 880psf	106

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.² (1 2 3 4 5 6+)
CALIBRATED PENETROMETER TONS/FT.²
LIQUID X LIMIT, WATER ● CONTENT %, PLASTIC △ LIMIT
STANDARD "N" PENETRATION (BLOWS/FT.) (10 20 30 40 50 60+)

END OF BORING

WATER LEVEL OBSERVATIONS	
Water Level While Drilling	NA ▼
Water Level After Boring	NA ▽
	▽
Rotary Drilling @ –10.0'	

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O'BRIEN & ASSOCIATES, INC. CONSULTING ENGINEERS
1235 E. DAVIS ST./ARLINGTON HTS., IL 60005
(847)398-1441 * FAX(847) 398-2376

BORING STARTED	June 1, 2010		
BORING COMPLETED	June 1, 2010		
RIG	B-57	FOREMAN	DR
DRAWN	VPB	APPROVED	DOB
OBA JOB No.	10524	SHEET	1 OF 1

BORING LOG

CLIENT: Metropolitan Water Reclamation District of Greater Chicago
PROJECT: Proposed Battery E (Contract 21-092-3P) & Chem P Dosing Facility (Contract 20-087-3P)
ENGINEER: Metropolitan Water Reclamation District of Greater Chicago
LOCATION: O'Brien Water Reclamation Plant, Skokie, IL

BORING NUMBER B-1
APPROX. SURFACE ELEVATION (C.C.D.) + 37.17
NORTH 1950437.62 EAST 1150413.54

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)	UNIT DRY WT. LBS./FT.³	STD "N" PENETRATION BLOWS PER FT.	REMARKS
		HS			FILL: 10" SILTY CLAY TOPSOIL, Dark Brown and Black			
2.5	1	SS	67		FILL: SILTY CLAY, Brown and Gray, Little Dark Brown, Trace Sand and Gravel, Very Stiff, Moist (CL)			
5.0	2	SS	75		FILL: SILTY CLAY, Brown and Gray, Trace Dark Brown, Trace Sand, Little Gravel, Very Stiff, Moist (CL)			
		HS						
7.5	3		63		FILL: SILTY CLAY, Brown and Gray, Trace Black and Dark Brown, Trace Sand and Gravel, Stiff to Very Stiff to Stiff to Very Stiff, Moist (CL)			
10.0		HS						
	4	SS	58					
12.5		HS						
	5	SS	75					
15.0		HS						
17.5	6	SS	67			115.4		
20.0		HS						
22.5	7	SS	58		SILTY CLAY, Brown and Gray, Trace Sand and Gravel, Very Stiff, Moist (CL)	107.1		
25.0		HS						
27.5	8	SS	67		SILTY CLAY, Gray, Trace to Little Sand, Trace Gravel, Soft to Medium to Very Soft to Medium, Moist (CL)	103.7		O.C.=2.15% ACR C.A. WS
30.0	ST-1	ST	95					
32.5		HS						
	9	SS	83					

Unconfined Compressive Strength, Tons/Ft.² (1 2 3 4 5); PL MC LL
STD "N" PENETRATION BLOWS PER FT. (10 20 30 40 50)
Calibrated Penetrometer Unconfined Compression

Water Level Observations	
33' WS	31' ACR

SEECO Consultants, Inc.
7350 Duvan Drive, Tinley Park, IL 60477
Approved By CWG Job No. 12033G-11

Boring Started	8/10/23		
Boring Completed	8/10/23		
Driller	EN	Rig	CME-750
Drawn By	GG	Sheet	1 of 3

BORING LOG

CLIENT: Metropolitan Water Reclamation District of Greater Chicago
PROJECT: Proposed Battery E (Contract 21-092-3P) & Chem P Dosing Facility (Contract 20-087-3P)
ENGINEER: Metropolitan Water Reclamation District of Greater Chicago
LOCATION: O'Brien Water Reclamation Plant, Skokie, IL

BORING NUMBER B-1
APPROX. SURFACE ELEVATION (C.C.D.) + 37.17
NORTH 1950437.62 EAST 1150413.54

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)	UNIT DRY WT. LBS./FT.³	STD "N" PENETRATION BLOWS PER FT.	REMARKS
ST-2	ST		80					
37.5		HS						
	10	SS	92					
40.0	ST-3	ST	87					
42.5		HS						
	11	SS	79					
45.0	ST-4	ST	93					
47.5		HS						
	12	SS	71		SILTY CLAY, Gray, Trace Sand and Gravel, Very Stiff to Medium, Moist (CL)			
50.0		HS						
52.5	13	SS	83					
55.0		HS						
57.5	14	SS	79		SILTY CLAY, Gray, Trace Sand and Gravel, Hard to Very Stiff to Hard to Very Stiff to Stiff, Moist (CL)			
60.0		HS						
62.5	15	SS	88					
65.0		HS						
67.5	16	SS	67					
70.0		HS						

Unconfined Compressive Strength, Tons/Ft.² (1 2 3 4 5); PL MC LL
STD "N" PENETRATION BLOWS PER FT. (10 20 30 40 50)
Calibrated Penetrometer Unconfined Compression

SEECO Consultants Inc.

Job No.	12033G-11
Sheet	2 of 3

BORING LOG

CLIENT: Metropolitan Water Reclamation District of Greater Chicago
PROJECT: Proposed Battery E (Contract 21-092-3P) & Chem P Dosing Facility (Contract 20-087-3P)
ENGINEER: Metropolitan Water Reclamation District of Greater Chicago
LOCATION: O'Brien Water Reclamation Plant, Skokie, IL

BORING NUMBER B-1
APPROX. SURFACE ELEVATION (C.C.D.) + 37.17
NORTH 1950437.62 EAST 1150413.54

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)	UNIT DRY WT. LBS./FT.³	STD "N" PENETRATION BLOWS PER FT.	REMARKS
72.5	17	SS	92			116.9	6-2	
75.0		HS						
77.5	18	SS	83			98.4	1-2	
80.0		HS						
82.5	19A	SS	75		SANDY SILT, Gray, Loose, Moist (ML)			
85.0	19B				SILTY CLAY, Gray, Trace Sand, Stiff, Wet (CL)			
87.5		HS						
90.0	20	SS	100		APPARENT LIMESTONE BEDROCK, Light Gray, Weathered			N=50/5" at 88.42'
92.5		HS			End of Boring @ 89 Feet			
95.0								
97.5								
100.0								
102.5								
105.0								
107.5								

Unconfined Compressive Strength, Tons/Ft.² (1 2 3 4 5); PL MC LL
STD "N" PENETRATION BLOWS PER FT. (10 20 30 40 50)
Calibrated Penetrometer Unconfined Compression

Notes:
1. Total split spoon sampler was encountered at approximately 88.42 feet b.e.g.l. and total hollow stem auger refusal was encountered at approximately 89 feet b.e.g.l. The apparent top of solid dolomitic limestone bedrock is approximately 89 feet b.e.g.l. and the apparent top of weathered limestone bedrock is approximately 88 feet b.e.g.l. (Field Engineer's Observation)

2. Boring was offset approximately 25' N and 70' East due to existing slope and wooded area.

SEECO Consultants Inc.

Job No.	12033G-11
Sheet	3 of 3

BORING LOG

CLIENT: Metropolitan Water Reclamation District of Greater Chicago
PROJECT: Proposed Battery E (Contract 21-092-3P) & Chem P Dosing Facility (Contract 20-087-3P)
ENGINEER: Metropolitan Water Reclamation District of Greater Chicago
LOCATION: O'Brien Water Reclamation Plant, Skokie, IL

BORING NUMBER B-2
APPROX. SURFACE ELEVATION (C.C.D.) + 38.50
NORTH 1950380.69 EAST 1150631.46

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)	UNIT DRY WT. LBS./FT.³	STD "N" PENETRATION BLOWS PER FT.	REMARKS
		HS						
	1A				FILL: 8" SILTY CLAY TOPSOIL, Dark Brown and Black, Trace Sand, Trace Roots (CL)			
2.5	1B	SS	71		FILL: SILTY CLAY, Brown and Gray, Some Dark Brown, Trace Sand, Little Gravel, Hard, Moist (CL)			
	1C							
		HS						
5.0	2	SS	33		FILL: SAND AND GRAVEL, Brown and Gray, Trace Dark Brown, Medium Dense, Moist (GP-SP)			
		HS						
7.5	3		58		FILL: SILTY CLAY, Brown and Gray, Trace Dark Brown, Trace Sand and Gravel, Stiff, Moist (CL)			
10.0		HS			FILL: SILTY CLAY, Dark Brown and Brown, Trace Gray and Black, Trace Sand, Some Gravel, Very Stiff, Moist (CL)			
	4	SS	54					
12.5		HS						
	5	SS	67		FILL: SILTY CLAY, Brown and Gray, Trace to Some Black, Trace Sand and Gravel, Very Stiff, Moist (CL)			
15.0		HS						
17.5	6	SS	75			107.0		
20.0		HS						
22.5	7	SS	79		SILTY CLAY, Brown and Gray, Trace Sand and Gravel, Trace Shale, Very Stiff, Moist (CL)			ACR
25.0		HS						
27.5	8	SS	71		SILTY CLAY, Gray, Trace Sand and Gravel, Stiff, Moist (CL)	119.6	2-5	WS
30.0		HS						
32.5	9	SS	75		SILTY CLAY, Gray, Trace to Little Sand, Trace Gravel, Soft to Medium, Moist (CL)			

Unconfined Compressive Strength, Tons/Ft.² (1 2 3 4 5); PL MC LL
STD "N" PENETRATION BLOWS PER FT. (10 20 30 40 50)
Calibrated Penetrometer Unconfined Compression

Water Level Observations	
28' WS	24' ACR

SEECO Consultants, Inc.
7350 Duvan Drive, Tinley Park, IL 60477
Approved By CWG Job No. 12033G-11

Boring Started	8/11/23		
Boring Completed	8/14/23		
Driller	EN	Rig	CME-750
Drawn By	GG	Sheet	1 of 3

BORING LOG

CLIENT: Metropolitan Water Reclamation District of Greater Chicago
PROJECT: Proposed Battery E (Contract 21-092-3P) & Chem P Dosing Facility (Contract 20-087-3P)
ENGINEER: Metropolitan Water Reclamation District of Greater Chicago
LOCATION: O'Brien Water Reclamation Plant, Skokie, IL

BORING NUMBER B-2
APPROX. SURFACE ELEVATION (C.C.D.) + 38.50
NORTH 1950380.69 EAST 1150631.46

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)	UNIT DRY WT. LBS./FT.³	STD "N" PENETRATION BLOWS PER FT.	REMARKS
ST-1	ST		92					
37.5		HS						
	10	SS	92					
40.0	ST-2	ST	90					
42.5		HS						
	11	SS	83					
45.0	ST-3	ST	93					
47.5		HS						
	12	SS	79					Consol. Test
50.0	ST-4	ST	83			109.5	0-8	
52.5		HS						
55.0	13	SS	75					
57.5		HS						
	14	SS	67		SILTY CLAY, Gray, Trace Sand and Gravel, Very Stiff to Stiff to Very Stiff, Moist (CL)			
60.0		HS						
62.5	15	SS	88			119.6	2-1	
65.0		HS						
67.5	16	SS	79					
70.0		HS						

Unconfined Compressive Strength, Tons/Ft.² (1 2 3 4 5); PL MC LL
STD "N" PENETRATION BLOWS PER FT. (10 20 30 40 50)
Calibrated Penetrometer Unconfined Compression

SEECO Consultants Inc.

Job No.	12033G-11
Sheet	2 of 3

BORING LOG

CLIENT: Metropolitan Water Reclamation District of Greater Chicago
PROJECT: Proposed Battery E (Contract 21-092-3P) & Chem P Dosing Facility (Contract 20-087-3P)
ENGINEER: Metropolitan Water Reclamation District of Greater Chicago
LOCATION: O'Brien Water Reclamation Plant, Skokie, IL

BORING NUMBER B-2
APPROX. SURFACE ELEVATION (C.C.D.) + 38.50
NORTH 1950380.69 EAST 1150631.46

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)	UNIT DRY WT. LBS./FT.³	STD "N" PENETRATION BLOWS PER FT.	REMARKS
72.5								
75.0	17	SS	71			121.2	2-5	
77.5		HS						
80.0	18	SS	67		SILTY CLAY, Gray, Trace Sand and Gravel, Stiff to Very Stiff, Moist (CL)			
82.5		HS						
85.0	19	SS	58			113.1	2-7	
87.5		HS						
90.0	20A	SS	86		POORLY GRADED SAND, Gray, Trace Gravel, Dense, Saturated (SP)			
	20B							
	20C	HS			SILTY SAND, Gray, Trace Gravel, Dense, Saturated (SM)		100	N=100/3" at 89.75'
92.5					APPARENT LIMESTONE BEDROCK, Light Gray, Weathered			
95.0					End of Boring @ 90 Feet			
97.5								
100.0								
102.5								
105.0								
107.5								

Notes:
1. Total split spoon sampler was encountered at approximately 89.75 feet b.e.g.l. and total hollow stem auger refusal was encountered at approximately 90 feet b.e.g.l. The apparent top of solid dolomitic limestone bedrock is approximately 90 feet b.e.g.l. and the apparent top of weathered limestone bedrock is approximately 89.5 feet b.e.g.l. (Field Engineer's Observation)

Unconfined Compressive Strength, Tons/Ft.² (1 2 3 4 5); PL MC LL
STD "N" PENETRATION BLOWS PER FT. (10 20 30 40 50)
Calibrated Penetrometer Unconfined Compression

SEECO Consultants Inc.

Job No.	12033G-11
Sheet	3 of 3

BORING LOG

CLIENT: Metropolitan Water Reclamation District of Greater Chicago
PROJECT: Proposed Battery E (Contract 21-092-3P) & Chem P Dosing Facility (Contract 20-087-3P)
ENGINEER: Metropolitan Water Reclamation District of Greater Chicago
LOCATION: O'Brien Water Reclamation Plant, Skokie, IL

BORING NUMBER B-3
APPROX. SURFACE ELEVATION (C.C.D.) + 23.33
NORTH 1950650.04 EAST 1150655.73

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)	UNIT DRY WT. LBS./FT.³	STD "N" PENETRATION BLOWS PER FT.	REMARKS
		HS			FILL: 9" SILTY CLAY TOPSOIL, Dark Brown, Trace Black, Trace Sand, Gravel and Roots (OL)			
2.5	1	SS	75		FILL: SILTY CLAY, Brown, Gray, Trace to Little Black, Trace Sand, Trace to Little Gravel, Hard to Very Stiff, Moist (CL)			
		HS						
5.0	2	SS	50					
		HS						
7.5	3A	SS	54		24" SILTY CLAY TOPSOIL, Dark Brown and Dark Gray, Trace Sand, Trace Wood Fibers, Very Stiff, Wet (OL)			O.C.=6.23%
10.0	3B							
		HS						
	4	SS	58		SILTY CLAY, Brown and Gray, Trace Sand and Gravel, Very Stiff, Moist (CL)	110.3		
12.5		HS						
	5	SS	71		SILTY CLAY, Gray, Trace Sand and Gravel, Very Stiff, Moist (CL)			
15.0		HS						
17.5	6	SS	88		SILTY CLAY, Gray, Little to Trace Sand, Trace Gravel, Very Soft to Medium to Stiff to Medium, Moist (CL)			
20.0	ST-1	ST	80			104.9	0-4	
22.5		HS						
	7	SS	88					
25.0	ST-2	ST	82					
27.5		HS						
	8	SS	92					
30.0	ST-3	ST	88					
32.5		HS						
	9	SS	63					

Unconfined Compressive Strength, Tons/Ft.² (1 2 3 4 5); PL MC LL
STD "N" PENETRATION BLOWS PER FT. (10 20 30 40 50)
Calibrated Penetrometer Unconfined Compression

Water Level Observations	
63' WS	56' ACR

SEECO Consultants, Inc.
7350 Duvan Drive, Tinley Park, IL 60477
Approved By CWG Job No. 12033G-11

Boring Started	8/17/23		
Boring Completed	8/18/23		
Driller	EN	Rig	CME-750
Drawn By	GG	Sheet	1 of 3

GENERAL NOTES:

BORING LOGS INDICATE CONDITIONS ENCOUNTERED ONLY AT TEST BORING LOCATIONS. NOTHING IN THE CONTRACT DOCUMENTS SHALL BE CONSTRUED AS GUARANTEE THAT OTHER MATERIALS WILL NOT BE ENCOUNTERED OR THAT PROPORTION OF MATERIALS WILL NOT VARY FROM PROPORTIONS SHOWN ON THE LOGS OF TEST BORINGS. O'BRIEN AND ASSOCIATES, INC. PERFORMED THE WORK AND COLLECTED THE INFORMATION CONTAINED IN THE BORING LOGS.

1

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	HC	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Designed by:	Checked by:
HHC	BP
Drawn by:	Reviewed by:
LK	BP
Date:	Scale:
JULY 2025	AS SHOWN

CONTRACT 22-RFP-06
OBRIEN WATER RECLAMATION PLANT
NEW ACTIVATED SLUDGE BATTERY

SOIL BORING LOGS - 4

HSING HUA CHU
062-057110
LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

Sheet Number: C-010
Page Number: 26

PLOT DATE: 10/13/2025 3:43 PM PLOTTED BY: KOSTAMO, LISA

O:\Contracts\22-RFP-06\Civil\Sheets\C-011-rev1.dwg 10/13/2025 3:07 PM

BORING LOG

CLIENT: Metropolitan Water Reclamation District of Greater Chicago
ENGINEER: Metropolitan Water Reclamation District of Greater Chicago
PROJECT: Proposed Battery E (Contract 21-092-3P) & Chem P Dosing Facility (Contract 20-087-3P)
LOCATION: O'Brien Water Reclamation Plant, Skokie, IL

BORING NUMBER **B-3**
APPROX. SURFACE ELEVATION (C.C.D.) + 23.33
NORTH 1950650.04 EAST 1150655.73
DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)

Unconfined Compressive Strength, Tons/Ft.^{2}: 1 2 3 4 5 — PL MC LL
STD "N" PENETRATION BLOWS PER FT.: 10 20 30 40 50

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	UNIT DRY WT. LBS./FT.^{3}	REMARKS
37.5	ST-4	ST	95		106.8	
		HS				
40.0	10	SS	92		109.1	
		HS				
42.5					109.9	
45.0	11	SS	75			
		HS				
47.5						
50.0	12	SS	79		123.0	
		HS				
52.5						
55.0	13	SS	88		122.5	
		HS				
57.5						
60.0	14	SS	83		104.9	
		HS				
62.5						
65.0	15	SS	75			
		HS				
67.5						
70.0	16	SS	29			
		HS				

Qu = 0.7, 1.2, 0.6 (tsf); Qp = 3.9, 2.1, 3.3 (tsf)

Consol. Test
ACR
WS

SILTY CLAY, Gray, Trace Sand and Gravel, Stiff to Very Stiff to Stiff, Moist (CL)
SILTY CLAY, Gray, Little Sand and Gravel, Very Stiff to Hard, Dry (CL)
SILTY CLAY, Gray, Trace Sand and Gravel, Very Stiff to Stiff, Moist (CL)

Calibrated Penetrometer Unconfined Compression

SEECO Consultants Inc. | Job No. 12033G-11 | Sheet 2 of 3

BORING LOG

CLIENT: Metropolitan Water Reclamation District of Greater Chicago
ENGINEER: Metropolitan Water Reclamation District of Greater Chicago
PROJECT: Proposed Battery E (Contract 21-092-3P) & Chem P Dosing Facility (Contract 20-087-3P)
LOCATION: O'Brien Water Reclamation Plant, Skokie, IL

BORING NUMBER **B-3**
APPROX. SURFACE ELEVATION (C.C.D.) + 23.33
NORTH 1950650.04 EAST 1150655.73
DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)

Unconfined Compressive Strength, Tons/Ft.^{2}: 1 2 3 4 5 — PL MC LL
STD "N" PENETRATION BLOWS PER FT.: 10 20 30 40 50

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	UNIT DRY WT. LBS./FT.^{3}	REMARKS
72.5	17A	SS	63			
	17B	HS				
75.0						
77.5						
80.0						
82.5						
85.0						
87.5						
90.0						
92.5						
95.0						
97.5						
100.0						
102.5						
105.0						
107.5						

SILTY SAND, Gray, Trace Gravel, Contains Limestone Fragments, Very Dense, Saturated (SM)
APPARENT LIMESTONE BEDROCK, Light Gray, Weathered
End of Boring @ 76 Feet

Notes:
1. Total hollow stem auger refusal was encountered at approximately 76 feet b.e.g.l. The apparent top of solid dolomitic limestone bedrock is approximately 76 feet b.e.g.l. and the apparent top of weathered limestone bedrock is approximately 74 feet b.e.g.l . (Field Engineer's Observation)

Calibrated Penetrometer Unconfined Compression

SEECO Consultants Inc. | Job No. 12033G-11 | Sheet 3 of 3

BORING LOG

CLIENT: Metropolitan Water Reclamation District of Greater Chicago
ENGINEER: Metropolitan Water Reclamation District of Greater Chicago
PROJECT: Proposed Battery E (Contract 21-092-3P) & Chem P Dosing Facility (Contract 20-087-3P)
LOCATION: O'Brien Water Reclamation Plant, Skokie, IL

BORING NUMBER **B-4**
APPROX. SURFACE ELEVATION (C.C.D.) + 21.50
NORTH 1950303.45 EAST 1151110.06
DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)

Unconfined Compressive Strength, Tons/Ft.^{2}: 1 2 3 4 5 — PL MC LL
STD "N" PENETRATION BLOWS PER FT.: 10 20 30 40 50

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	UNIT DRY WT. LBS./FT.^{3}	REMARKS
		HS				
2.5	1	SS	54			
		HS				
5.0	2	SS	67		114.8	
		HS				
7.5	3A	SS	58			
	3B					
10.0		HS				
	4	SS	75		105.8	
12.5		HS				
	5	SS	17			
15.0		HS				
17.5	6	SS	67			
20.0	ST-1	ST	93		106.7	
22.5		HS				
	7	SS	71			
25.0	ST-2	ST	85			
27.5		HS				
	8	SS	83			
30.0	ST-3	ST	85			
32.5		HS				
	9	SS	75			

Qu = 0.3 (tsf); Qp = 114.8, 105.8, 106.7 (tsf)

Consol. Test

FILL: 14" SILTY CLAY TOPSOIL, Dark Brown and Black, Some Brown, Trace Sand and Gravel (OL)
FILL: SILTY CLAY, Brown, Trace Gray and Dark Brown, Trace Sand, Little Gravel, Hard, Moist (CL)
FILL: SILTY CLAY, Brown and Gray, Trace Sand, Little Gravel, Trace Shale, Hard, Moist (CL)
FILL: SILTY CLAY, Brown and Gray, Some Dark Dark Gray, Trace Sand and Gravel, Stiff, Moist (CL)
SILTY CLAY, Brown and Gray, Trace Dark Gray, Trace Sand, Very Stiff, Moist (CL)
SILTY CLAY, Brown and Gray, Trace Sand and Gravel, Very Stiff, Moist (CL)
SILTY CLAY, Gray, Trace to Little Sand and Gravel, Medium to Very Soft to Medium, Moist (CL)

Calibrated Penetrometer Unconfined Compression

Water Level Observations		SEECO Consultants, Inc. 7350 Duvan Drive, Tinley Park, IL 60477	Boring Started	8/15/23
68' WS	66' ACR		Boring Completed	8/15/23
			Driller EN	Rig CME-750
		Approved By CWG	Job No. 12033G-11	Drawn By GG	Sheet 1 of 3

BORING LOG

CLIENT: Metropolitan Water Reclamation District of Greater Chicago
ENGINEER: Metropolitan Water Reclamation District of Greater Chicago
PROJECT: Proposed Battery E (Contract 21-092-3P) & Chem P Dosing Facility (Contract 20-087-3P)
LOCATION: O'Brien Water Reclamation Plant, Skokie, IL

BORING NUMBER **B-4**
APPROX. SURFACE ELEVATION (C.C.D.) + 21.50
NORTH 1950303.45 EAST 1151110.06
DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)

Unconfined Compressive Strength, Tons/Ft.^{2}: 1 2 3 4 5 — PL MC LL
STD "N" PENETRATION BLOWS PER FT.: 10 20 30 40 50

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	UNIT DRY WT. LBS./FT.^{3}	REMARKS
37.5	ST-4	ST	88		107.7	
		HS				
40.0	10	SS	75		122.2	
		HS				
42.5						
45.0	11	SS	25			
		HS				
47.5						
50.0	12	SS	67		116.9	
		HS				
52.5						
55.0	13	SS	75			
		HS				
57.5						
60.0	14	SS	79		119.3	
		HS				
62.5						
65.0	15A	SS	88			
	15B					
67.5		HS				
70.0	16	SS	71			
		HS				

Qu = 1.0, 3.2 (tsf); Qp = 4.5, 8.9 (tsf)

ACR
WS

POORLY GRADED SAND, Gray, Medium Dense, Moist (SP)
CLAYEY SANDY SILT, Gray, Trace Gravel, Dense, Dry to Moist (ML)

Calibrated Penetrometer Unconfined Compression

SEECO Consultants Inc. | Job No. 12033G-11 | Sheet 2 of 3

BORING LOG

CLIENT: Metropolitan Water Reclamation District of Greater Chicago
ENGINEER: Metropolitan Water Reclamation District of Greater Chicago
PROJECT: Proposed Battery E (Contract 21-092-3P) & Chem P Dosing Facility (Contract 20-087-3P)
LOCATION: O'Brien Water Reclamation Plant, Skokie, IL

BORING NUMBER **B-4**
APPROX. SURFACE ELEVATION (C.C.D.) + 21.50
NORTH 1950303.45 EAST 1151110.06
DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)

Unconfined Compressive Strength, Tons/Ft.^{2}: 1 2 3 4 5 — PL MC LL
STD "N" PENETRATION BLOWS PER FT.: 10 20 30 40 50

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	UNIT DRY WT. LBS./FT.^{3}	REMARKS
72.5	17A	SS	25			
	17B	HS				
75.0						
77.5						
80.0						
82.5						
85.0						
87.5						
90.0						
92.5						
95.0						
97.5						
100.0						
102.5						
105.0						
107.5						

APPARENT LIMESTONE BEDROCK, Light Gray, Weathered
End of Boring @ 74 Feet.

Notes:
1. Total split spoon sampler was encountered at approximately 73.67 feet b.e.g.l. and total hollow stem auger refusal was encountered at approximately 74 feet b.e.g.l. The apparent top of solid dolomitic limestone bedrock is approximately 74 feet b.e.g.l. and the apparent top of weathered limestone bedrock is approximately 73.5 feet b.e.g.l . (Field Engineer's Observation)

100 N=100/2" at 73.67'

Calibrated Penetrometer Unconfined Compression

SEECO Consultants Inc. | Job No. 12033G-11 | Sheet 3 of 3

BORING LOG

CLIENT: Metropolitan Water Reclamation District of Greater Chicago
ENGINEER: Metropolitan Water Reclamation District of Greater Chicago
PROJECT: Proposed Battery E (Contract 21-092-3P) & Chem P Dosing Facility (Contract 20-087-3P)
LOCATION: O'Brien Water Reclamation Plant, Skokie, IL

BORING NUMBER **B-5**
APPROX. SURFACE ELEVATION (C.C.D.) + 21.50
NORTH 1950494.12 EAST 1151077.06
DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)

Unconfined Compressive Strength, Tons/Ft.^{2}: 1 2 3 4 5 — PL MC LL
STD "N" PENETRATION BLOWS PER FT.: 10 20 30 40 50

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	UNIT DRY WT. LBS./FT.^{3}	REMARKS
		HS				
2.5	1	SS	67			
		HS				
5.0	2	SS	58			
		HS				
7.5	3A	SS	71			O.C.=5.46%
	3B					
10.0		HS				
	4	SS	38		102.8	
12.5		HS				
	5	SS	75		112.5	
15.0		HS				
17.5	6	SS	92			
20.0	ST-1	ST	78			
22.5		HS				
	7	SS	79			
25.0	ST-2	ST	60		109.0	
27.5		HS				
	8	SS	83			
30.0	ST-3	ST	92			
32.5		HS				
	9	SS	88			

Qu = 1.0, 0.5 (tsf)

12" SILTY CLAY TOPSOIL, Black, Trace Sand, Very Stiff, Moist (OL)
SILTY CLAY, Brown and Gray, Trace Dark Gray, Trace Sand and Gravel, Stiff, Moist (CL)
SILTY CLAY, Gray, Trace Sand and Gravel, Medium, Moist (CL)
SILTY CLAY, Gray, Trace to Little Sand and Gravel, Soft to Medium to Stiff to Soft, Moist (CL)

Calibrated Penetrometer Unconfined Compression

Water Level Observations		SEECO Consultants, Inc. 7350 Duvan Drive, Tinley Park, IL 60477	Boring Started	8/16/23
53' WS	50' ACR		Boring Completed	8/16/23
			Driller EN	Rig CME-750
		Approved By CWG	Job No. 12033G-11	Drawn By GG	Sheet 1 of 3

BORING LOG

CLIENT: Metropolitan Water Reclamation District of Greater Chicago
ENGINEER: Metropolitan Water Reclamation District of Greater Chicago
PROJECT: Proposed Battery E (Contract 21-092-3P) & Chem P Dosing Facility (Contract 20-087-3P)
LOCATION: O'Brien Water Reclamation Plant, Skokie, IL

BORING NUMBER **B-5**
APPROX. SURFACE ELEVATION (C.C.D.) + 21.50
NORTH 1950494.12 EAST 1151077.06
DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)

Unconfined Compressive Strength, Tons/Ft.^{2}: 1 2 3 4 5 — PL MC LL
STD "N" PENETRATION BLOWS PER FT.: 10 20 30 40 50

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	UNIT DRY WT. LBS./FT.^{3}	REMARKS
37.5	ST-4	ST	88			
		HS				
40.0	10	SS	83		107.9	
		HS				
42.5						
45.0	11	SS	63		96.1	
		HS				
47.5						
50.0	12	SS	54		110.1	
		HS				
52.5						
55.0	13	SS	58			
		HS				
57.5						
60.0	14	SS	71			
		HS				
62.5						
65.0	15	SS	92			
		HS				
67.5						
70.0	16	SS	75		97.3	
		HS				

Qu = 1.4, 0.3 (tsf); Qp = 1.7, 1.3 (tsf)

Consol. Test
ACR
WS

SILTY CLAY, Gray, Trace Sand and Gravel, Stiff, Moist (CL)
SILTY CLAY, Gray, Trace Sand and Gravel, Very Stiff to Hard to Very Stiff to Stiff, Moist (CL)

Calibrated Penetrometer Unconfined Compression

SEECO Consultants Inc. | Job No. 12033G-11 | Sheet 2 of 3

BORING LOG

CLIENT: Metropolitan Water Reclamation District of Greater Chicago
ENGINEER: Metropolitan Water Reclamation District of Greater Chicago
PROJECT: Proposed Battery E (Contract 21-092-3P) & Chem P Dosing Facility (Contract 20-087-3P)
LOCATION: O'Brien Water Reclamation Plant, Skokie, IL

BORING NUMBER **B-5**
APPROX. SURFACE ELEVATION (C.C.D.) + 21.50
NORTH 1950494.12 EAST 1151077.06
DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)

Unconfined Compressive Strength, Tons/Ft.^{2}: 1 2 3 4 5 — PL MC LL
STD "N" PENETRATION BLOWS PER FT.: 10 20 30 40 50

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	UNIT DRY WT. LBS./FT.^{3}	REMARKS
72.5	17A	SS	80			
	17B	HS				
75.0						
77.5						
80.0						
82.5						
85.0						
87.5						
90.0						
92.5						
95.0						
97.5						
100.0						
102.5						
105.0						
107.5						

POORLY GRADED SAND, Gray, Contains Limestone Fragments, Dense, Saturated (SP)
APPARENT LIMESTONE BEDROCK, Light Gray, Weathered
End of Boring @ 74 Feet.

Notes:
1. Total split spoon sampler was encountered at approximately 73.67 feet b.e.g.l. and total hollow stem auger refusal was encountered at approximately 74 feet b.e.g.l. The apparent top of solid dolomitic limestone bedrock is approximately 74 feet b.e.g.l. and the apparent top of weathered limestone bedrock is approximately 73.5 feet b.e.g.l . (Field Engineer's Observation)

80 N=80/2" at 73.67'

Calibrated Penetrometer Unconfined Compression

SEECO Consultants Inc. | Job No. 12033G-11 | Sheet 3 of 3

GENERAL NOTES:

BORING LOGS INDICATE CONDITIONS ENCOUNTERED ONLY AT TEST BORING LOCATIONS. NOTHING IN THE CONTRACT DOCUMENTS SHALL BE CONSTRUED AS GUARANTEE THAT OTHER MATERIALS WILL NOT BE ENCOUNTERED OR THAT PROPORTION OF MATERIALS WILL NOT VARY FROM PROPORTIONS SHOWN ON THE LOGS OF TEST BORINGS. O'BRIEN AND ASSOCIATES, INC. PERFORMED THE WORK AND COLLECTED THE INFORMATION CONTAINED IN THE BORING LOGS.

1

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	HC	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Designed by: HHC | Checked by: BP
Drawn by: LK | Reviewed by: BP
Date: JULY 2025 | Scale: AS SHOWN

CONTRACT 22-RFP-06
OBRIEN WATER RECLAMATION PLANT
NEW ACTIVATED SLUDGE BATTERY

SOIL BORING LOGS - 5

HAIYING HUA CHU 062-057110 LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

Sheet Number: C-011
Page Number: 27

PLOT DATE: 10/13/2025 3:39 PM PLOTTED BY: KOSTAMO, LISA

O:\Contracts\22-RFP-06\Civil\Sheets\C-028-rev1.dwg 10/13/2025 3:10 PM
PLOT DATE: 10/13/2025 3:21 PM PLOTTED BY: KOSTAMO, LISA

N

1150400E 1150500E 1150600E 1150700E 1150800E 1150900E 1151000E 1151100E 1151200E

1951500N
1951400N
1951300N
1951200N

DEMOLISH EXISTING CHAINLINK FENCE (1,971 LF)

DEMOLISH STORM SEWER (39 LF) AND CATCH BASINS

DEMOLISH ABANDONED SPRINKLER SYSTEM (2,037 LF, TOTAL ALL SHEETS)

DEMOLISH SPRINKLER SYSTEM

REMOVE EXISTING FENCE AND PROVIDE TEMPORARY SECURITY FENCE TO MAINTAIN A SECURE PERIMETER. REFER TO C-034 FOR NEW FENCE.

COMED POWER TOWER

REMOVE FULL DEPTH OF EXISTING PAVEMENT (4537 SQYD CONCRETE/1,400 SQYD ASPHALT) AND CURB AND GUTTER (4520 LF) TOTAL ALL SHEETS.

PROTECT EXISTING SCUM LINE, GUARDRAIL, AND LIGHTING CONDUIT

PROTECT EXISTING TREES AND RAIN GARDEN. CLEAR AND GRUB AS REQUIRED FOR CONSTRUCTION.

DEMOLISH EXISTING 24" EFFLUENT PIPING (144 LF): SEE S-608 FOR MORE DETAILS ON THE EFFLUENT PIPING DEMOLITION AND SUBSURFACE CONDITIONS. (1)

SEE DRAWING C-054 FOR EFFLUENT CONDUIT CONSTRUCTION INFORMATION.

FINAL SETTLING TANKS BATTERY C

FINAL SETTLING TANKS BATTERY D

AERATION TANKS BATTERY C

GALLERY BUILDING

AVENUE D

10 8 6 4 2 16 15 18 17 9 7 5 3 1 20 24 29 28 21 21

FOR CONTINUATION SEE C-026 & C-027

LEGEND:

- UTILITY REMOVAL WORK
- EXISTING FENCE REMOVAL
- CONCRETE PAVEMENT AND CURB AND GUTTER REMOVAL

GENERAL NOTES:

1. MAINTAIN 15-FOOT SEPARATION BETWEEN ALL EQUIPMENT OR LOAD AND ANY 138kV TRANSMISSION CIRCUIT
2. REFER TO SHEETS C-050 THROUGH C-057 FOR EXISTING UTILITY INVERT ELEVATIONS.
3. REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL DEMOLITION INFORMATION.
4. CONTRACTOR SHALL SURVEY EXISTING PAVING AND SUBMIT TO DISTRICT FOR APPROVAL BEFORE DEMOLITION. ROADWAYS TO BE REINSTALLED SHALL MAINTAIN EXISTING GRADE.
5. CONTRACTOR PHASING TO BE SUBMITTED TO ENGINEER AND DISTRICT. NOTE THAT ACCESS TO AVE D IS REQUIRED AT ALL TIMES.
6. ANY TREES THAT CONFLICT WITH NEW WORK SHALL BE COMPLETELY REMOVED DOWN TO THE ROOT SYSTEM TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST. ANY EXISTING TREES ADJACENT TO NEW WORK SHALL BE PROTECTED ACCORDING TO DETAIL 01 ON C-014.

(1) SITE DEMOLITION PLAN
SCALE: 1" = 30'

30 0 30 60
SCALE: 1" = 30'

KEYPLAN

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	HC	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Designed by:	Checked by:
HHC	BP
Drawn by:	Reviewed by:
LK	BP
Date:	Scale:
JULY 2025	AS SHOWN

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

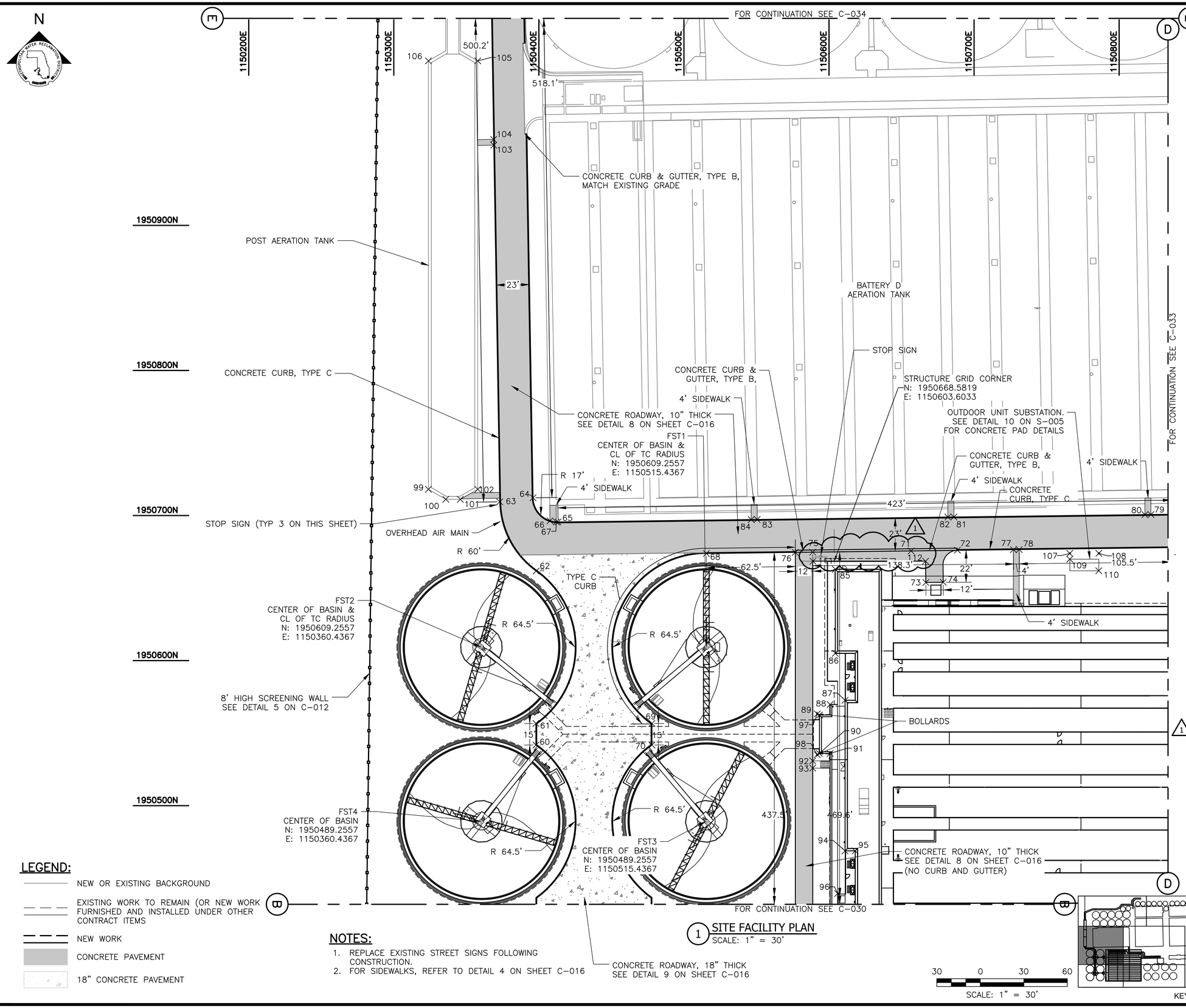
ORION ENGINEERS
312 NORTH MAY STREET
SUITE 100
CHICAGO, IL 60607

CONTRACT 22-RFP-06
22-RFP-06
NEW ACTIVATED SLUDGE BATTERY

SITE DEMOLITION PLAN - 5

HSTING HUA CHU
062-057110
LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

Sheet Number: C-028
Page Number: 44



LEGEND:

- NEW OR EXISTING BACKGROUND
- EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS
- NEW WORK
- CONCRETE PAVEMENT
- 18" CONCRETE PAVEMENT

NOTES:

1. REPLACE EXISTING STREET SIGNS FOLLOWING CONSTRUCTION.
2. FOR SIDEWALKS, REFER TO DETAIL 4 ON SHEET C-016

1 SITE FACILITY PLAN
SCALE: 1" = 30'

COORDINATES

POINT #	NORTHING	EASTING	DESCRIPTION
60	1950541.83	1150397.94	TC
61	1950556.68	1150397.94	TC
62	1950661.75	1150398.06	TC
63	1950709.51	1150373.02	TC
64	1950712.26	1150395.98	TC
65	1950695.55	1150413.19	TC
66	1950696.40	1150407.66	CONC
67	1950695.57	1150412.02	CONC
68	1950673.83	1150515.44	TC
69	1950556.68	1150477.94	TC
70	1950541.83	1150477.94	TC
71	1950675.61	1150656.59	TC
72	1950676.14	1150688.46	TC
73	1950653.86	1150666.74	EP
74	1950654.01	1150678.73	EP
75	1950674.76	1150588.78	TC
76	1950674.61	1150576.78	TC
77	1950676.51	1150727.10	CONC
78	1950676.56	1150731.10	CONC
79	1950700.70	1150821.89	CONC
80	1950700.65	1150817.75	CONC
81	1950698.99	1150686.08	CONC
82	1950698.94	1150681.95	CONC
83	1950697.28	1150550.48	CONC
84	1950697.23	1150546.35	CONC
85	1950663.00	1150604.34	BLDG
86	1950604.99	1150604.34	BLDG
87	1950572.67	1150611.01	BLDG
88	1950569.76	1150600.77	BLDG
89	1950562.51	1150593.44	BLDG
90	1950536.01	1150593.44	BLDG
91	1950536.01	1150600.77	BLDG
92	1950530.88	1150588.78	CONC
93	1950525.88	1150588.78	CONC
94	1950468.86	1150611.01	BLDG
95	1950468.86	1150618.01	BLDG
96	1950439.45	1150605.94	BLDG
97	1950563.30	1150591.86	BOLLARD
98	1950535.21	1150591.86	BOLLARD
99	1950718.10	1150323.86	TANK
100	1950711.17	1150335.86	TANK
101	1950711.17	1150345.86	TANK
102	1950718.10	1150357.86	TANK
103	1950955.30	1150368.90	CONC
104	1950959.30	1150368.83	CONC
105	1951013.41	1150357.86	TANK
106	1951013.41	1150323.86	TANK
107	1950673.92	1150765.96	BOLLARD
108	1950673.93	1150785.96	BOLLARD
109	1950669.93	1150765.96	CONC
110	1950661.93	1150785.96	CONC
111	1950668.55	1150588.88	TC
112	1950668.56	1150666.55	TC

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	HC	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Designed by: HHC | Checked by: BP
Drawn by: LK | Reviewed by: BP
Date: JULY 2025 | Scale: AS SHOWN

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

DBS | DB STERLIN CONSULTANTS INC
DB STERLIN CONSULTANTS
123 N UPPER WACKER DR.
SUITE 20
CHICAGO, IL 60606

CONTRACT 21-092-3P
OBRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY

SITE FACILITY PLAN - 3

HSING HUA CHU
062-057110
LICENSED PROFESSIONAL ENGINEER
OF
ILLINOIS

Sheet Number: C-032

O:\Contracts\22-RFP-06\Civil\Sheets\C-039-rev1.dwg 10/7/2025 12:39 PM

N

FOR CONTINUATION SEE ##### (E)

FOR CONTINUATION SEE C-040 (D)

FOR CONTINUATION SEE C-037 (B)

1950900N

1950800N

1950700N

1950600N

1950500N

1150300E

1150400E

1150500E

1150600E

1150700E

1150800E

THE SHOWN PAVEMENT HAS BEEN DESIGNED FOR A MAXIMUM CRANE OUTRIGGER LOAD OF 210 KIPS. OUTRIGGER MUST BE USED. EACH STEEL OUTRIGGER PAD MUST HAVE A MINIMUM BEARING AREA OF 75 SQUARE FEET AND MINIMUM THICKNESS OF 10 INCHES. PAVEMENT MUST BE IN PLACE BEFORE CRANE CAN BE USED WITHIN THIS AREA. SEE S-501. PAVEMENT MUST BE IN PLACE BEFORE CRANE CAN BE USED WITHIN THIS AREA. SEE NOTE 1

POST AERATION TANK

AERATION TANK BATTERY D

PROPOSED AERATION TANKS

CONCRETE ACCESS DRIVE

FST-5

FST-6

FST-7

FST-8

T/WALL ELEV. +23.0
B/WALL ELEV. +20.5, TYP.

VEHICLE LANE

RIM=20.79
21.26
20.76

RIM=20.59

RIM=19.01

RIM=21.60

RIM=20.00

RIM=19.00

RIM=20.24

20.95
20.45

19.50
19.00

22.83

22.86

23.25

14.49

15.00

20.00
19.50

22.10
21.60

22.41

23.00

23.49

20.50

20.88

20.46

20.49

20.42

-0.1%

-0.5%

1.3%

1.8%

-0.2%

-2.4%

0.8%

0.9%

0.6%

1 SITE GRADING PLAN
SCALE: 1" = 30'

30 0 30 60
SCALE: 1" = 30'

KEYPLAN

GENERAL NOTES:

1. CONTRACTOR MUST SUBMIT CRANE APPROVAL PLAN TO THE DISTRICT BEFORE WORK MAY BEGIN. SEE SECTION 01500 FOR SPECIFIC REQUIREMENTS.

LEGEND:

- NEW OR EXISTING BACKGROUND
- EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS
- NEW WORK
- FUTURE WORK
- XXX.XX / XXX.XX TOP OF CURB / FLOW LINE

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	HC	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Designed by: BB | Checked by: HHC
Drawn by: PP | Reviewed by: BP
Date: FEB 2023 | Scale: AS SHOWN

AECOM

ORION ENGINEERS
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

ORION ENGINEERS
312 NORTH MAY STREET
SUITE 100
CHICAGO, IL 60607

CONTRACT 22-RFP-06
OBRIEN WATER RECLAMATION PLANT
NEW ACTIVATED SLUDGE BATTERY

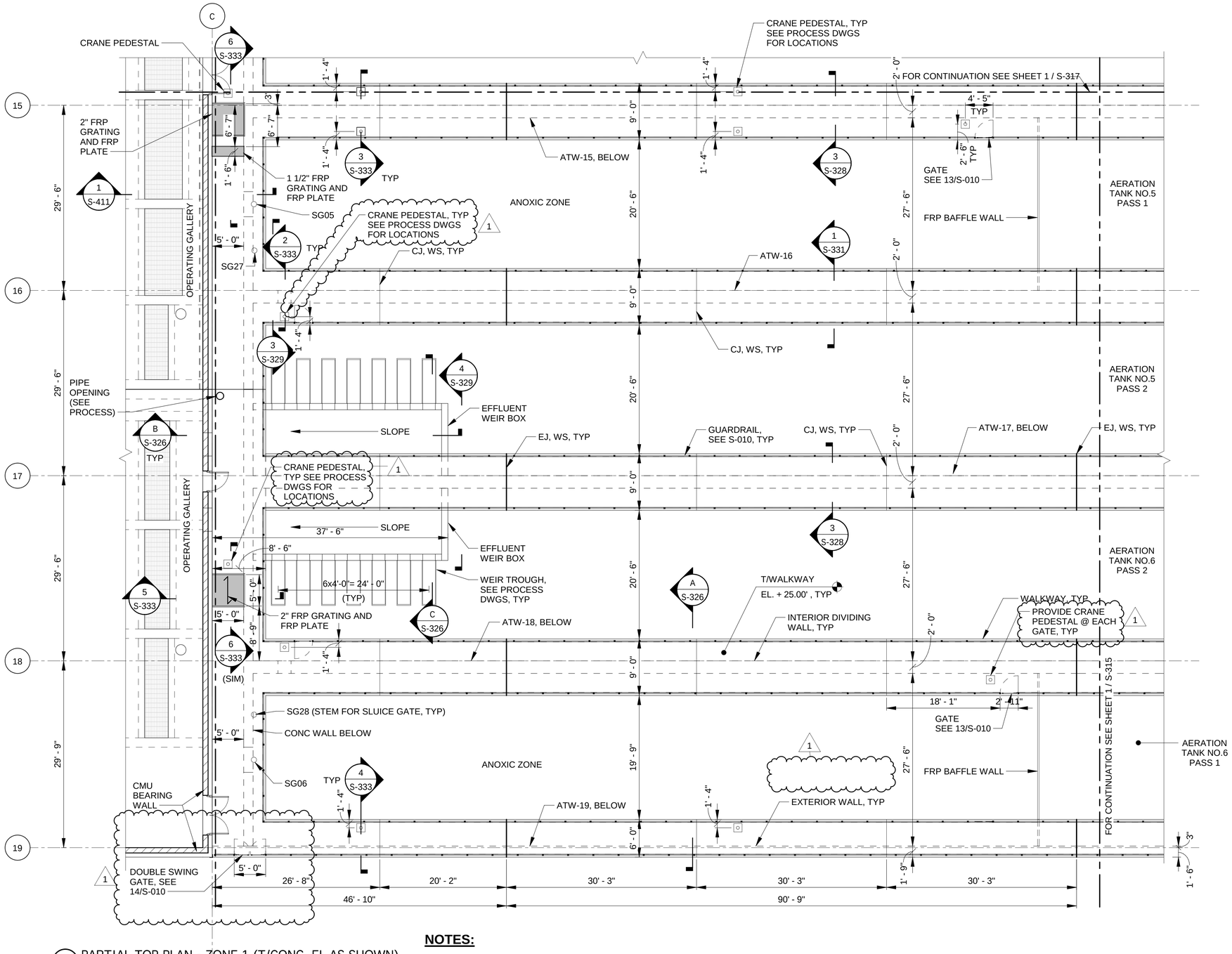
SITE GRADING PLAN - 3

Sheet Number: C-039
Page Number: 55

HSIANG HUA CHU
062-057110
LICENSED PROFESSIONAL ENGINEER
OF
ILLINOIS

PLOT DATE: 10/13/2025 3:28 PM PLOTTED BY: KOSTAMO, LISA

Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt



1 S-301 PARTIAL TOP PLAN - ZONE 1 (T/CONC. EL.AS SHOWN)
SCALE: 1/8" = 1'-0"

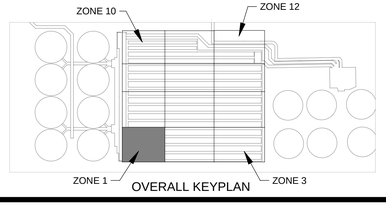
LEGEND:

- NEW OR EXISTING BACKGROUND
- EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
- NEW WORK

NOTES:

1. FOR STRUCTURAL GENERAL NOTES, SEE SHEETS S-001 AND S-002.
2. PROVIDE MINIMAL SLOPE (1/16" PER FOOT) OF TOP OF WALKWAY CONCRETE SLAB FOR DRAIN FROM CENTER TO EACH EDGE.
3. ATW-XX DENOTES NAME OF THE AERATION TANK CONCRETE WALL.
4. SGXX DENOTES SLUICE GATE NUMBER.
5. CONTRACTOR RESPONSIBLE FOR LOCATING THE EQUIPMENT DAVIT CRANE EMBEDDED PEDESTALS BASED ON EQUIPMENT LOCATIONS SHOWN ON PROCESS DRAWINGS. NOTE THAT FINAL MIXER LOCATIONS AND POSITIONING TO BE DETERMINED BY MANUFACTURER'S CFD MODELING SUBMITTAL APPROVED BY THE ENGINEER.

0 4' 8' 12' 18' 24'
SCALE: 1/8" = 1'-0"



OVERALL KEYPLAN

STATE OF ILLINOIS
HOWDEN W. YARNAPAN
081-5131
REGISTERED STRUCTURAL ENGINEER

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Designed by:	Checked by:	Reviewed by:	Scale:
AS	JB	MF	As indicated
Drawn by:			
MS			
Date:			
7/1/2025			

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

RME
Rubinos & Mesia Engineers, Inc.
200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482

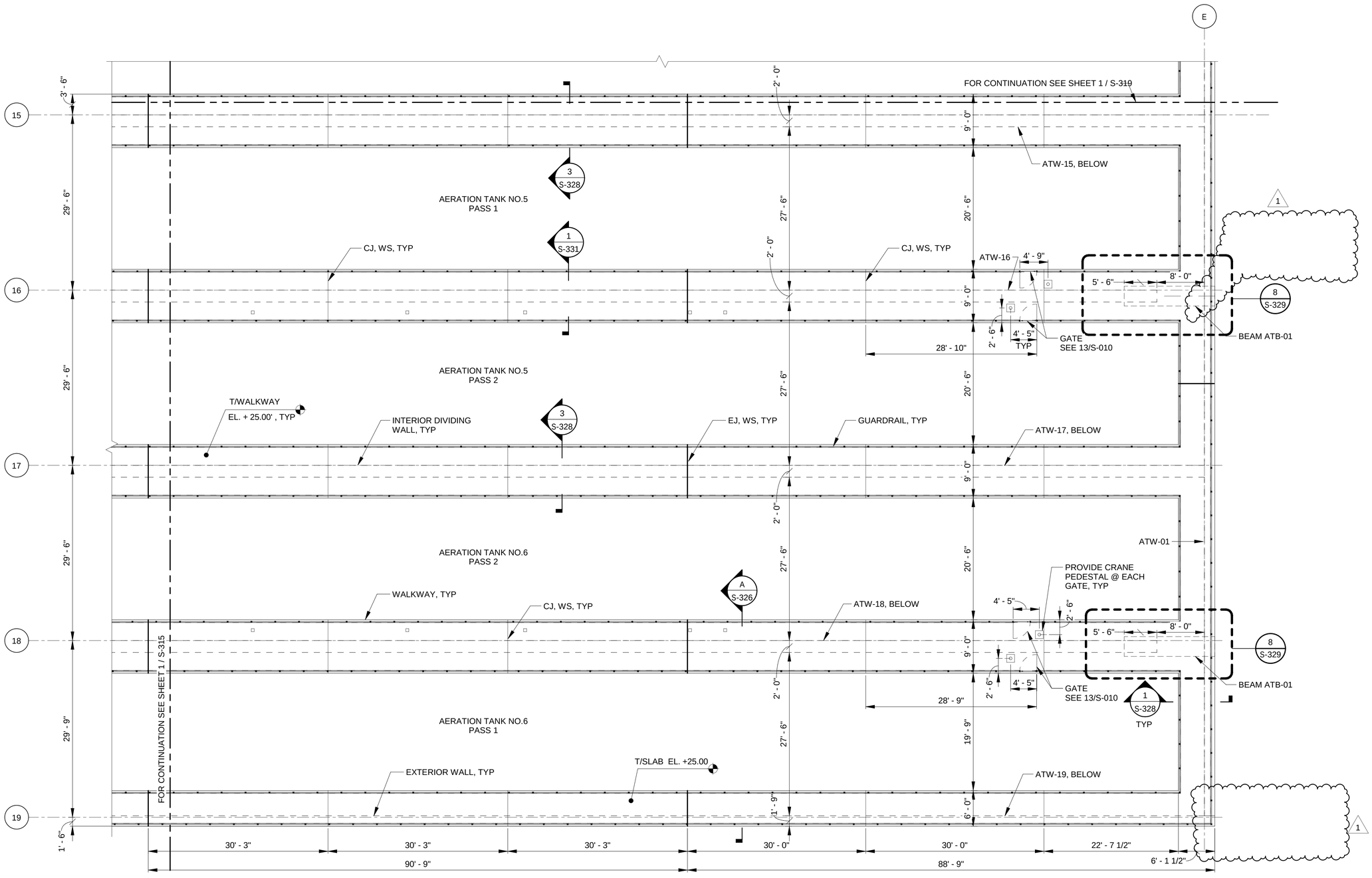
CONTRACT 21-092-3P
OBRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
FERMENTER & AERATION TANKS
PARTIAL TOP PLAN - ZONE 1

Sheet Number: S-314
Page Number: 119

PLOT DATE: 10/15/2025 8:00:03 PM

Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt

N



1 / S-301 PARTIAL TOP PLAN - ZONE 3 (T/CONC. EL.AS SHOWN)
SCALE: 1/8" = 1'-0"

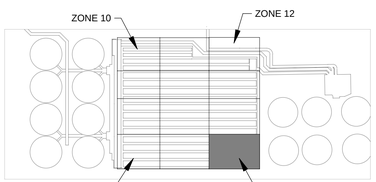
LEGEND:

- NEW OR EXISTING BACKGROUND
- EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
- NEW WORK

NOTES:

1. FOR STRUCTURAL GENERAL NOTES, SEE SHEETS S-001 AND S-002.
2. ATW-XX DENOTES NAME OF THE AERATION TANK CONCRETE WALL.
3. PROVIDE MINIMAL SLOPE (1/16" PER FOOT) OF TOP OF WALKWAY CONCRETE SLAB FOR DRAIN.
4. CONTRACTOR RESPONSIBLE FOR LOCATING THE EQUIPMENT DAVIT CRANE EMBEDDED PEDESTALS BASED ON EQUIPMENT LOCATIONS SHOWN ON PROCESS DRAWINGS. NOTE THAT FINAL MIXER LOCATIONS AND POSITIONING TO BE DETERMINED BY MANUFACTURER'S CFD MODELING SUBMITTAL APPROVED BY THE ENGINEER.

0 4' 8' 12' 18' 24'
SCALE: 1/8" = 1'-0"



OVERALL KEYPLAN

STATE OF ILLINOIS
HAIDEN W. TARRANT
81-5131
REGISTERED STRUCTURAL ENGINEER

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

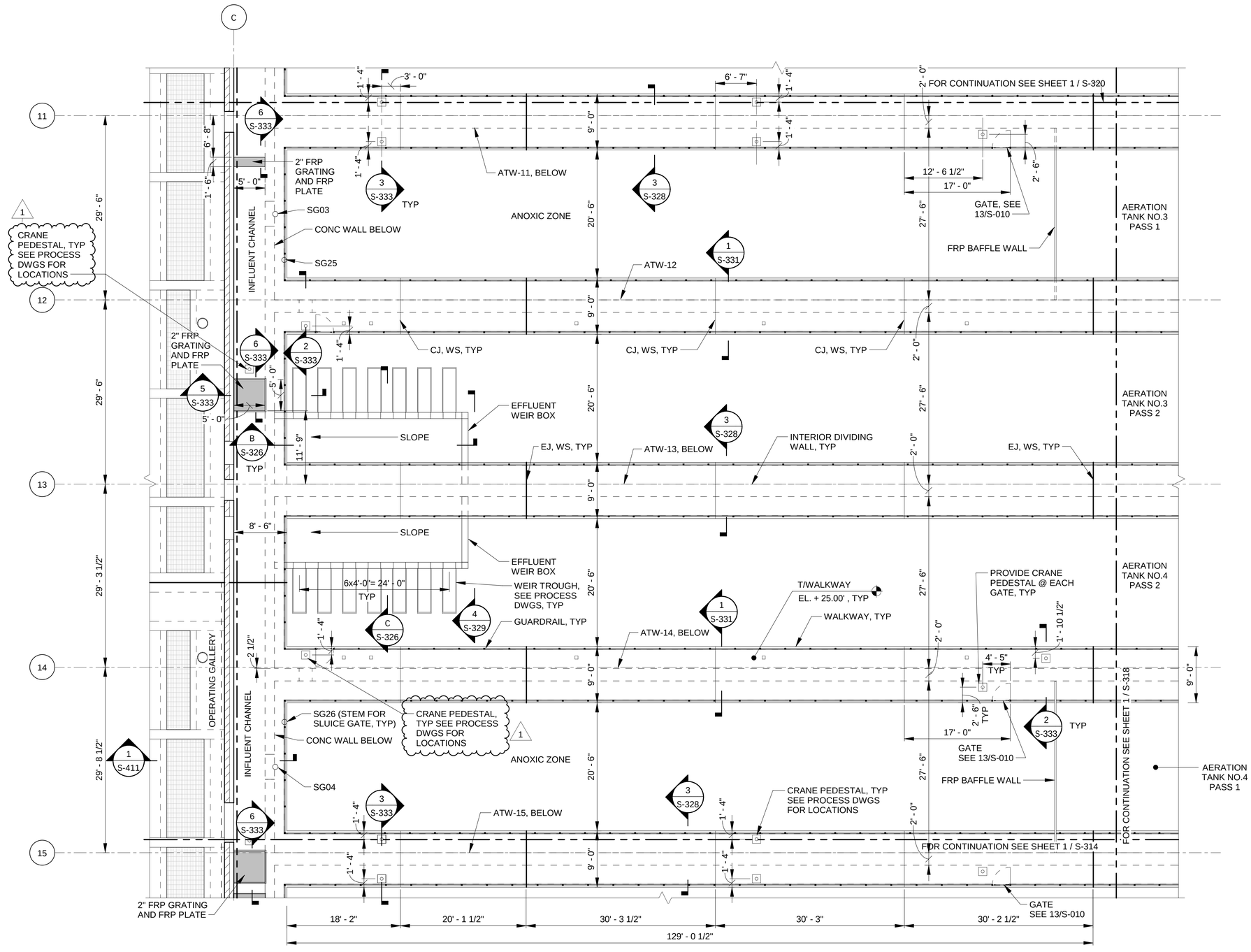
Designed by:	Checked by:	Rubinos & Mesia Engineers, Inc.
AS	JB	RME
Drawn by:	Reviewed by:	200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482
MS	MF	AECOM
Date:	Scale:	PRUDENTIAL PLAZA ONE 130 E RANDOLPH STREET SUITE 2400 CHICAGO, IL 60601, USA
7/1/2025	As indicated	

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
FERMENTER & AERATION TANKS
PARTIAL TOP PLAN - ZONE 3

Sheet Number:
S-316
Page Number: 121

PLOT DATE: 10/17/2025 6:42:27 AM

Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt



1 S-301 PARTIAL TOP PLAN - ZONE 4 (T/CONC. EL.AS SHOWN)
SCALE: 1/8" = 1'-0"

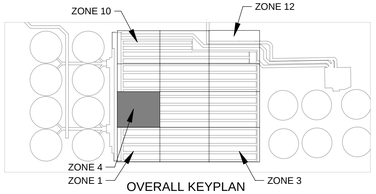
LEGEND:

- NEW OR EXISTING BACKGROUND
- EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
- NEW WORK

NOTES:

1. FOR STRUCTURAL GENERAL NOTES, SEE SHEETS S-001 AND S-002.
2. ATW-XX DENOTES NAME OF THE AERATION TANK CONCRETE WALL.
3. PROVIDE MINIMAL SLOPE (1/16" PER FOOT) OF TOP OF WALKWAY CONCRETE SLAB FOR DRAIN FROM CENTER TO EACH EDGE.
4. SGXX DENOTES SLUICE GATE NUMBER.
5. CONTRACTOR RESPONSIBLE FOR LOCATING THE EQUIPMENT DAVIT CRANE EMBEDDED PEDESTALS BASED ON EQUIPMENT LOCATIONS SHOWN ON PROCESS DRAWINGS. NOTE THAT FINAL MIXER LOCATIONS AND POSITIONING TO BE DETERMINED BY MANUFACTURER'S CFD MODELING SUBMITTAL APPROVED BY THE ENGINEER.

0 4' 8' 12' 18' 24'
SCALE: 1/8" = 1'-0"



OVERALL KEYPLAN

STATE OF ILLINOIS
MICHAEL W. MARSHALL
81-5131
REGISTERED STRUCTURAL ENGINEER

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Designed by: AS	Checked by: JB	Reviewed by: MF
Drawn by: MS	Scale: As indicated	
Date: 7/1/2025		

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

RME Rubinos & Mesia Engineers, Inc.
200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
FERMENTER & AERATION TANKS

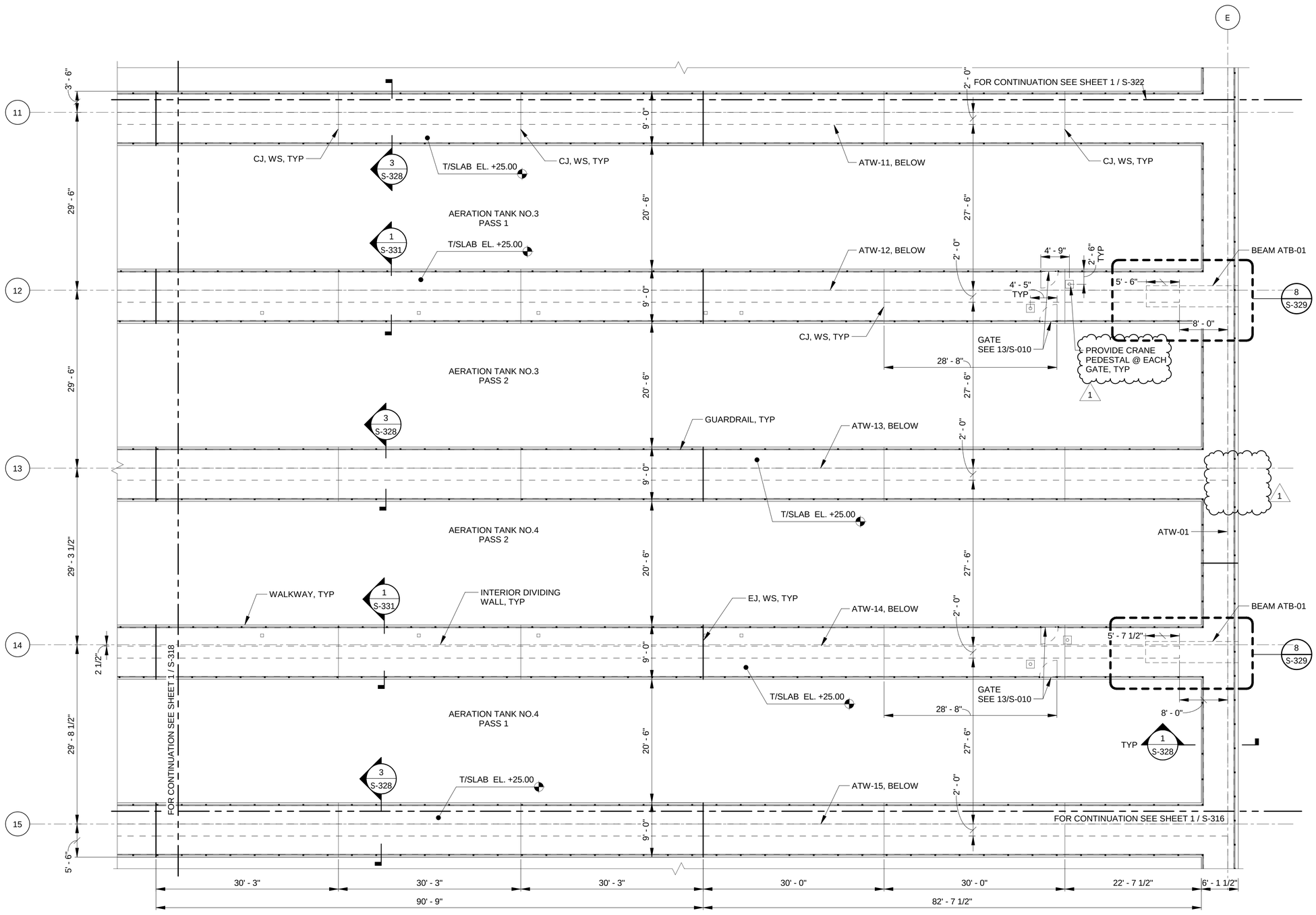
PARTIAL TOP PLAN - ZONE 4

Sheet Number: S-317
Page Number: 122

PLOT DATE: 10/15/2025 8:04:48 PM

Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt

N



1 / S-301 PARTIAL TOP PLAN - ZONE 6 (T/CONC. EL.AS SHOWN)
SCALE: 1/8" = 1'-0"

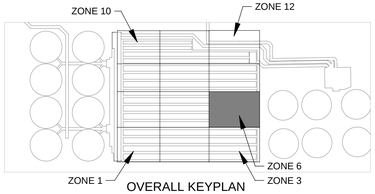
LEGEND:

- NEW OR EXISTING BACKGROUND
- EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
- NEW WORK

NOTES:

1. FOR STRUCTURAL GENERAL NOTES, SEE SHEETS S-001 AND S-002.
2. ATW-XX DENOTES NAME OF THE AERATION TANK CONCRETE WALL.
3. PROVIDE MINIMAL SLOPE (1/16" PER FOOT) OF TOP OF WALKWAY CONCRETE SLAB FOR DRAIN.
4. CONTRACTOR RESPONSIBLE FOR LOCATING THE EQUIPMENT DAVIT CRANE EMBEDDED PEDESTALS BASED ON EQUIPMENT LOCATIONS SHOWN ON PROCESS DRAWINGS. NOTE THAT FINAL MIXER LOCATIONS AND POSITIONING TO BE DETERMINED BY MANUFACTURER'S CFD MODELING SUBMITTAL APPROVED BY THE ENGINEER.

0 4' 8' 12' 18' 24'
SCALE: 1/8" = 1'-0"



OVERALL KEYPLAN

STATE OF ILLINOIS
HUBERT W. MARSHALL
81-5131
REGISTERED STRUCTURAL ENGINEER

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Designed by:	Checked by:	Drawn by:	Reviewed by:	Date:	Scale:
AS	JB	MS	MF	7/1/2025	As indicated

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

RME Rubinos & Mesia Engineers, Inc.
200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482

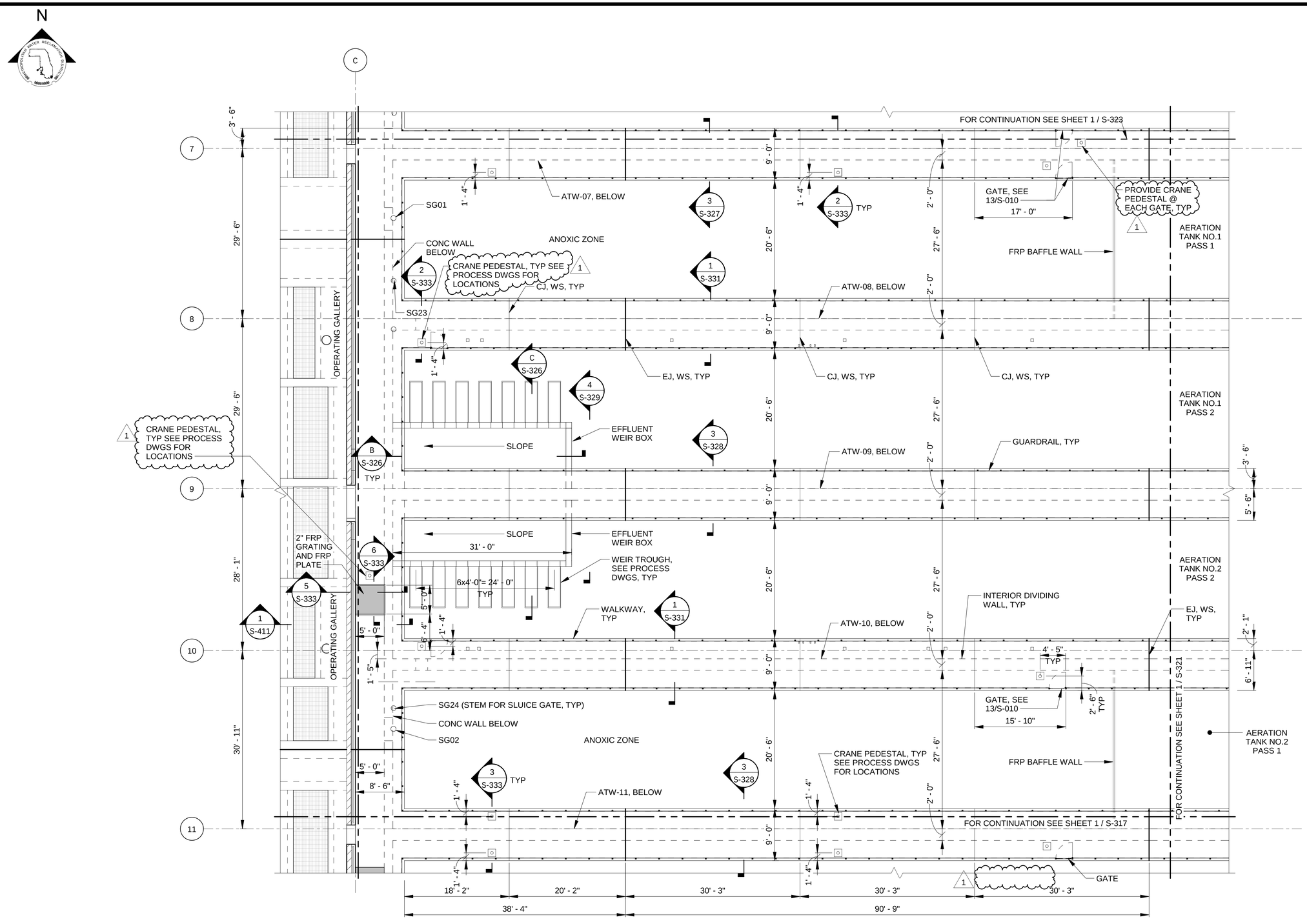
CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
FERMENTER & AERATION TANKS
PARTIAL TOP PLAN - ZONE 6

Sheet Number: S-319
Page Number: 124

PLOT DATE: 10/17/2025 6:45:25 AM

Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt

PLOT DATE: 10/15/2025 8:10:08 PM



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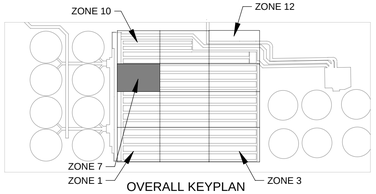
- NEW OR EXISTING BACKGROUND
- EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
- NEW WORK

1 / S-301 PARTIAL TOP PLAN - ZONE 7 (T/CONC. EL.AS SHOWN)
SCALE: 1/8" = 1'-0"

NOTES:

1. STRUCTURAL GENERAL NOTES SEE SHEETS S-001 AND S-002.
2. PROVIDE MINIMAL SLOPE (1/16" PER FOOT) OF TOP OF WALKWAY CONCRETE SLAB FOR DRAIN.
3. ATW-XX DENOTES NAME OF THE AERATION TANK CONCRETE WALL.
4. SGXX DENOTES SLUICE GATE NUMBER.
5. CONTRACTOR RESPONSIBLE FOR LOCATING THE EQUIPMENT DAVIT CRANE EMBEDDED PEDESTALS BASED ON EQUIPMENT LOCATIONS SHOWN ON PROCESS DRAWINGS. NOTE THAT FINAL MIXER LOCATIONS AND POSITIONING TO BE DETERMINED BY MANUFACTURER'S CFD MODELING SUBMITTAL APPROVED BY THE ENGINEER.

0 4' 8' 12' 18' 24'
SCALE: 1/8" = 1'-0"



OVERALL KEYPLAN

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Designed by:	Checked by:	Reviewed by:	Scale:
AS	JB	MF	As indicated
Drawn by:			
MS			
Date:			
7/1/2025			

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

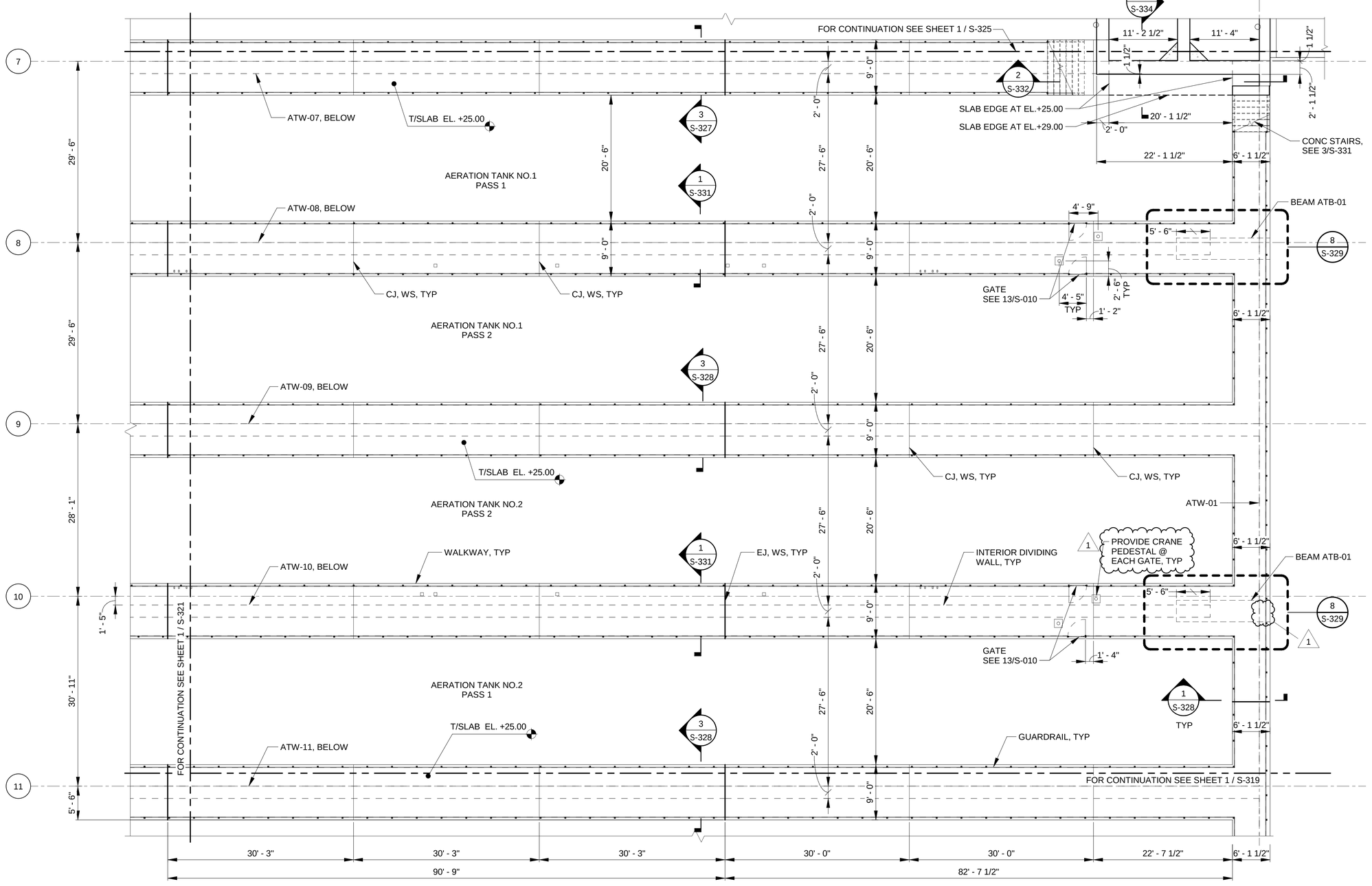
RME
Rubinos & Mesia Engineers, Inc.
200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
FERMENTER & AERATION TANKS
PARTIAL TOP PLAN - ZONE 7

STATE OF ILLINOIS
HOWARD W. MARMANIS
81-5131
REGISTERED STRUCTURAL ENGINEER

Sheet Number:
S-320
Page Number: 125

Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt



LEGEND:

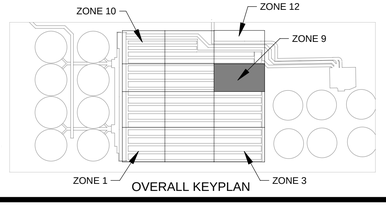
- NEW OR EXISTING BACKGROUND
- EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
- NEW WORK

1 / S-301 PARTIAL TOP PLAN - ZONE 9 (T/CONC. EL.AS SHOWN)
SCALE: 1/8" = 1'-0"

NOTES:

1. FOR STRUCTURAL GENERAL NOTES, SEE SHEETS S-001 AND S-002.
2. ATW-XX DENOTES NAME OF THE AERATION TANK CONCRETE WALL.
3. PROVIDE MINIMAL SLOPE (1/16" PER FOOT) OF TOP OF WALKWAY CONCRETE SLAB FOR DRAIN.
4. CONTRACTOR RESPONSIBLE FOR LOCATING THE EQUIPMENT DAVIT CRANE EMBEDDED PEDESTALS BASED ON EQUIPMENT LOCATIONS SHOWN ON PROCESS DRAWINGS. NOTE THAT FINAL MIXER LOCATIONS AND POSITIONING TO BE DETERMINED BY MANUFACTURER'S CFD MODELING SUBMITTAL APPROVED BY THE ENGINEER.

0 4' 8' 12' 18' 24'
SCALE: 1/8" = 1'-0"



OVERALL KEYPLAN

STATE OF ILLINOIS
HOWARD W. MAHRENHOLZ
81-5131
REGISTERED STRUCTURAL ENGINEER

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Designed by:	Checked by:	Drawn by:	Reviewed by:	Date:	Scale:
AS	JB	MS	MF	7/1/2025	As indicated

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

RME Rubinos & Mesia Engineers, Inc.
200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482

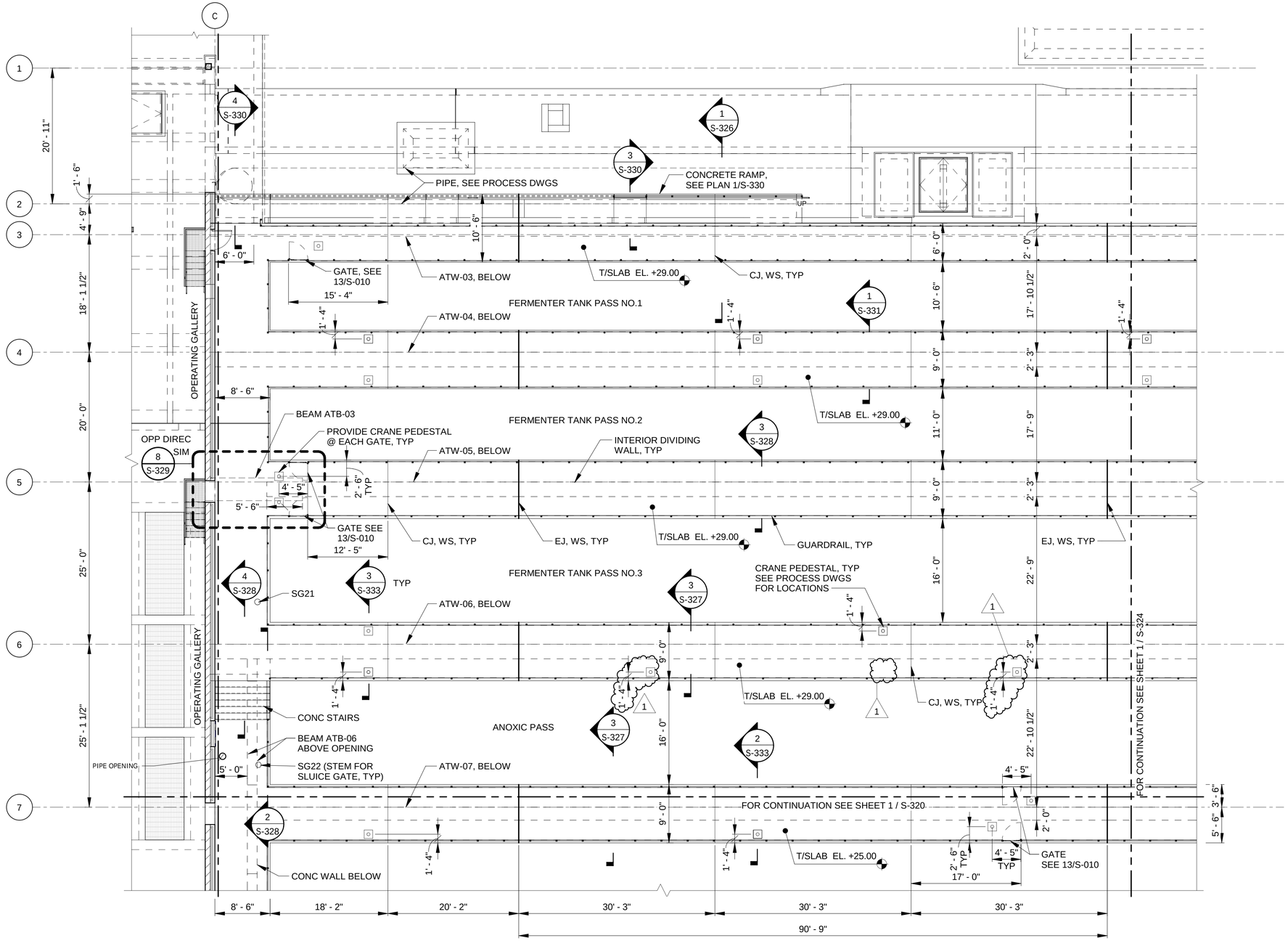
CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
FERMENTER & AERATION TANKS
PARTIAL TOP PLAN - ZONE 9

Sheet Number: S-322
Page Number: 127

PLOT DATE: 10/15/2025 8:13:03 PM

Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt

N



1 / S-301 PARTIAL TOP PLAN - ZONE 10 (T/CONC. EL.AS SHOWN)
SCALE: 1/8" = 1'-0"

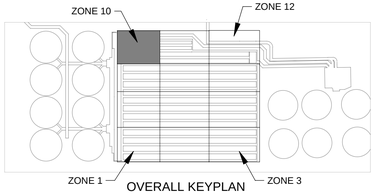
LEGEND:

- NEW OR EXISTING BACKGROUND
- EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
- NEW WORK

NOTES:

1. FOR STRUCTURAL GENERAL NOTES, SEE SHEETS S-001 AND S-002.
2. ATW-XX DENOTES NAME OF THE AERATION TANK CONCRETE WALL.
3. PROVIDE MINIMAL SLOPE (1/16" PER FOOT) OF TOP OF WALKWAY CONCRETE SLAB FOR DRAIN.
4. SGXX DENOTES SLUICE GATE NUMBER.
5. CONTRACTOR RESPONSIBLE FOR LOCATING THE EQUIPMENT DAVIT CRANE EMBEDDED PEDESTALS BASED ON EQUIPMENT LOCATIONS SHOWN ON PROCESS DRAWINGS. NOTE THAT FINAL MIXER LOCATIONS AND POSITIONING TO BE DETERMINED BY MANUFACTURER'S CFD MODELING SUBMITTAL APPROVED BY THE ENGINEER.

0 4' 8' 12' 18' 24'
SCALE: 1/8" = 1'-0"



OVERALL KEYPLAN

STATE OF ILLINOIS
HOLGER W. HAWLEY
81-5131
REGISTERED STRUCTURAL ENGINEER

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

AECOM

Rubinos & Mesia Engineers, Inc.
RME
200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482

PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Designed by:	Checked by:	Drawn by:	Reviewed by:	Date:	Scale:
AS	JB	MS	MF	7/1/2025	As indicated

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
FERMENTER & AERATION TANKS

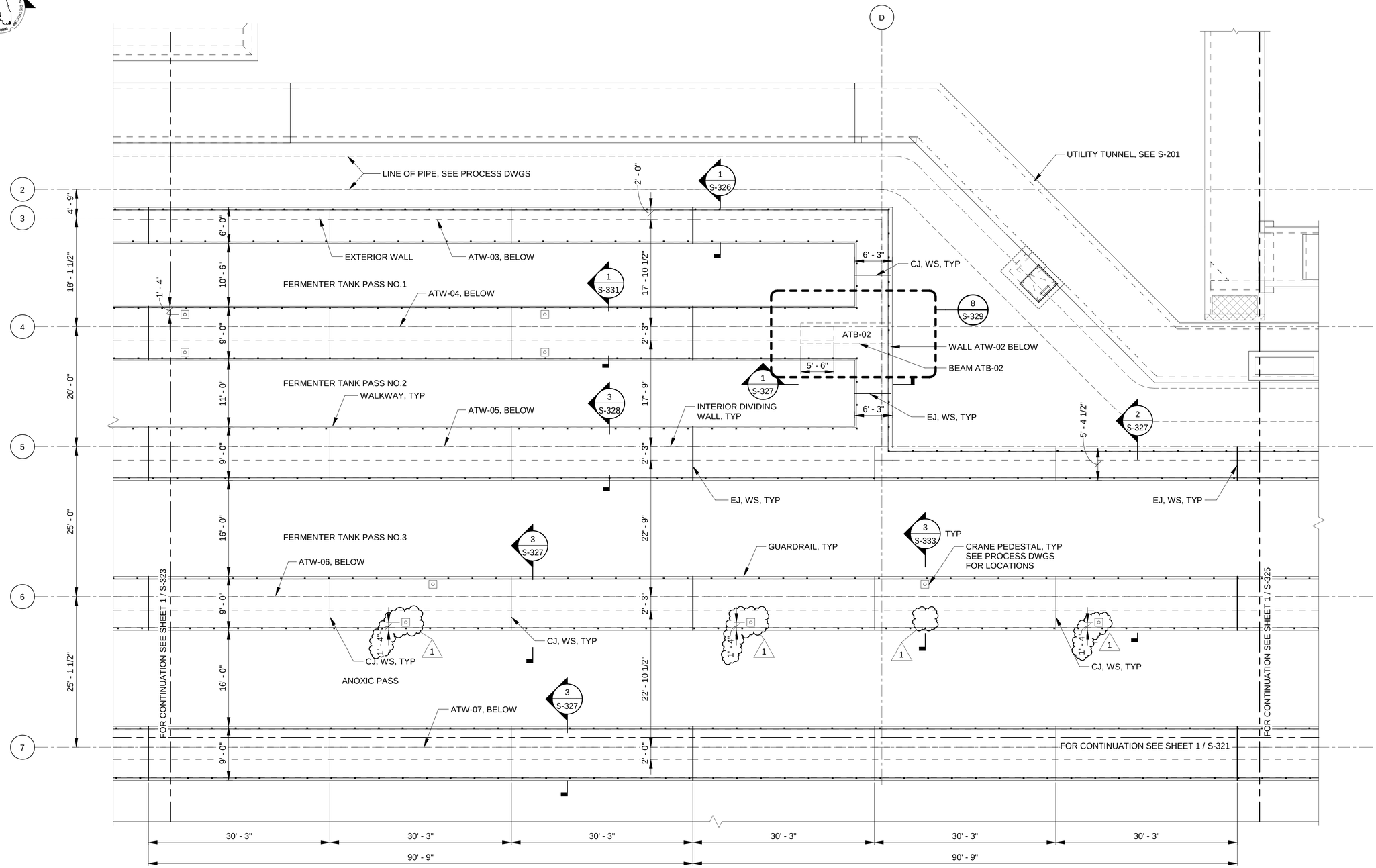
PARTIAL TOP PLAN - ZONE 10

Sheet Number: S-323
Page Number: 128

PLOT DATE: 10/17/2025 6:47:26 AM

Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt

N



1 S-301 PARTIAL TOP PLAN - ZONE 11 (T/CONC. EL.AS SHOWN)
SCALE: 1/8" = 1'-0"

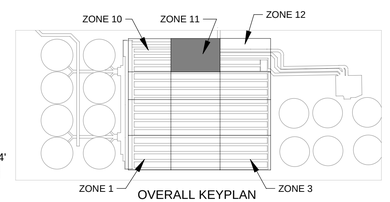
LEGEND:

- NEW OR EXISTING BACKGROUND
- EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
- NEW WORK

NOTES:

1. FOR STRUCTURAL GENERAL NOTES, SEE SHEETS S-001 AND S-002.
2. ATW-XX DENOTES NAME OF THE AERATION TANK CONCRETE WALL.
3. PROVIDE MINIMAL SLOPE (1/16" PER FOOT) OF TOP OF WALKWAY CONCRETE SLAB FOR DRAIN FROM CENTER TO EACH EDGE.
4. CONTRACTOR RESPONSIBLE FOR LOCATING THE EQUIPMENT DAVIT CRANE EMBEDDED PEDESTALS BASED ON EQUIPMENT LOCATIONS SHOWN ON PROCESS DRAWINGS. NOTE THAT FINAL MIXER LOCATIONS AND POSITIONING TO BE DETERMINED BY MANUFACTURER'S CFD MODELING SUBMITTAL APPROVED BY THE ENGINEER.

0 4' 8' 12' 18' 24'
SCALE: 1/8" = 1'-0"



OVERALL KEYPLAN

STATE OF ILLINOIS
ROBERT W. FARRENKOPF
81-5131
REGISTERED STRUCTURAL ENGINEER

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Designed by: AS	Checked by: JB	Reviewed by: MF	Scale: As indicated
Drawn by: MS	Date: 7/1/2025		

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

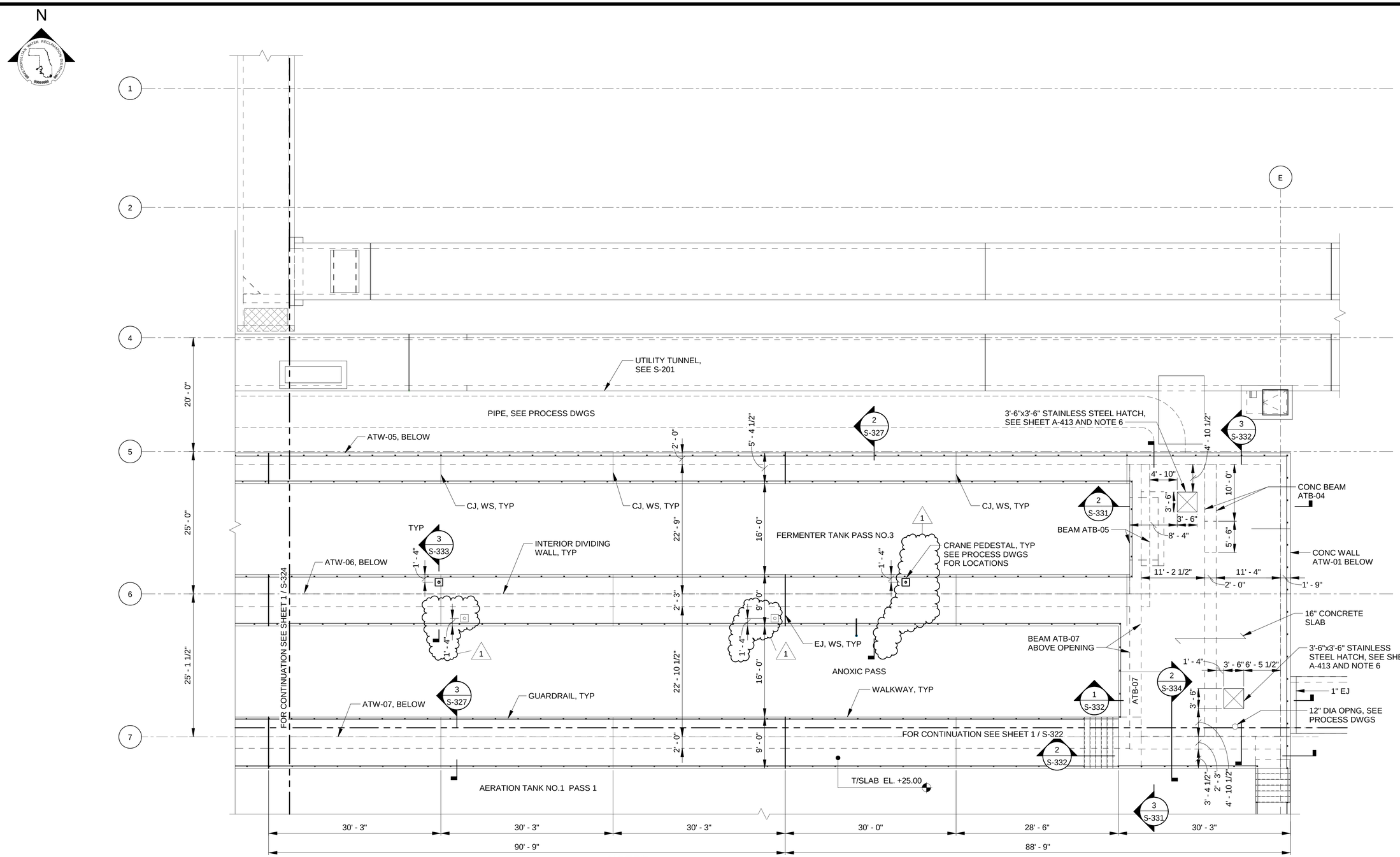
RME Rubinos & Mesia Engineers, Inc.
200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
FERMENTER & AERATION TANKS
PARTIAL TOP PLAN - ZONE 11

Sheet Number: S-324
Page Number: 129

PLOT DATE: 10/15/2025 8:20:07 PM

Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt



1 S-301 PARTIAL TOP PLAN - ZONE 12 (T/CONC. EL.AS SHOWN)
SCALE: 1/8" = 1'-0"

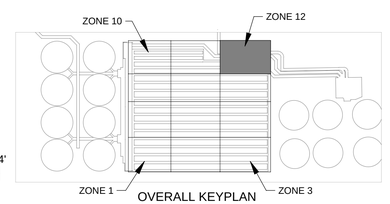
NOTES:

1. STRUCTURAL GENERAL NOTES SEE SHEETS S-001 AND S-002.
2. PROVIDE MINIMAL SLOPE (1/16" PER FOOT) OF TOP OF WALKWAY CONCRETE SLAB FOR DRAIN FROM CENTER TO EACH EDGE.
3. ATW-XX DENOTES NAME OF THE AERATION TANK CONCRETE WALL.
4. SGXX DENOTES SLUICE GATE NUMBER.
5. CONTRACTOR RESPONSIBLE FOR LOCATING THE EQUIPMENT DAVIT CRANE EMBEDDED PEDESTALS BASED ON EQUIPMENT LOCATIONS SHOWN ON PROCESS DRAWINGS. NOTE THAT FINAL MIXER LOCATIONS AND POSITIONING TO BE DETERMINED BY MANUFACTURER'S CFD MODELING SUBMITTAL APPROVED BY THE ENGINEER.
6. STAINLESS STEEL HATCH SHALL BE WEATHERTIGHT. ATTACHMENT OF HATCH FRAME TO CONCRETE STRUCTURE SHALL BE PER HATCH MANUFACTURER. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR THE HATCH PRIOR TO WORK. REFER TO SPECIFICATION SECTION 05500.

LEGEND:

- NEW OR EXISTING BACKGROUND
- EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
- NEW WORK

0 4' 8' 12' 18' 24'
SCALE: 1/8" = 1'-0"



OVERALL KEYPLAN

STATE OF ILLINOIS
ANDREW W. MARRANDINO
81-5131
REGISTERED STRUCTURAL ENGINEER

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

RME Rubinos & Mesia Engineers, Inc.
200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482

Designed by:	Checked by:	Reviewed by:	Scale:
AS	JB	MF	As indicated
Drawn by:			
MS			
Date:			
7/1/2025			

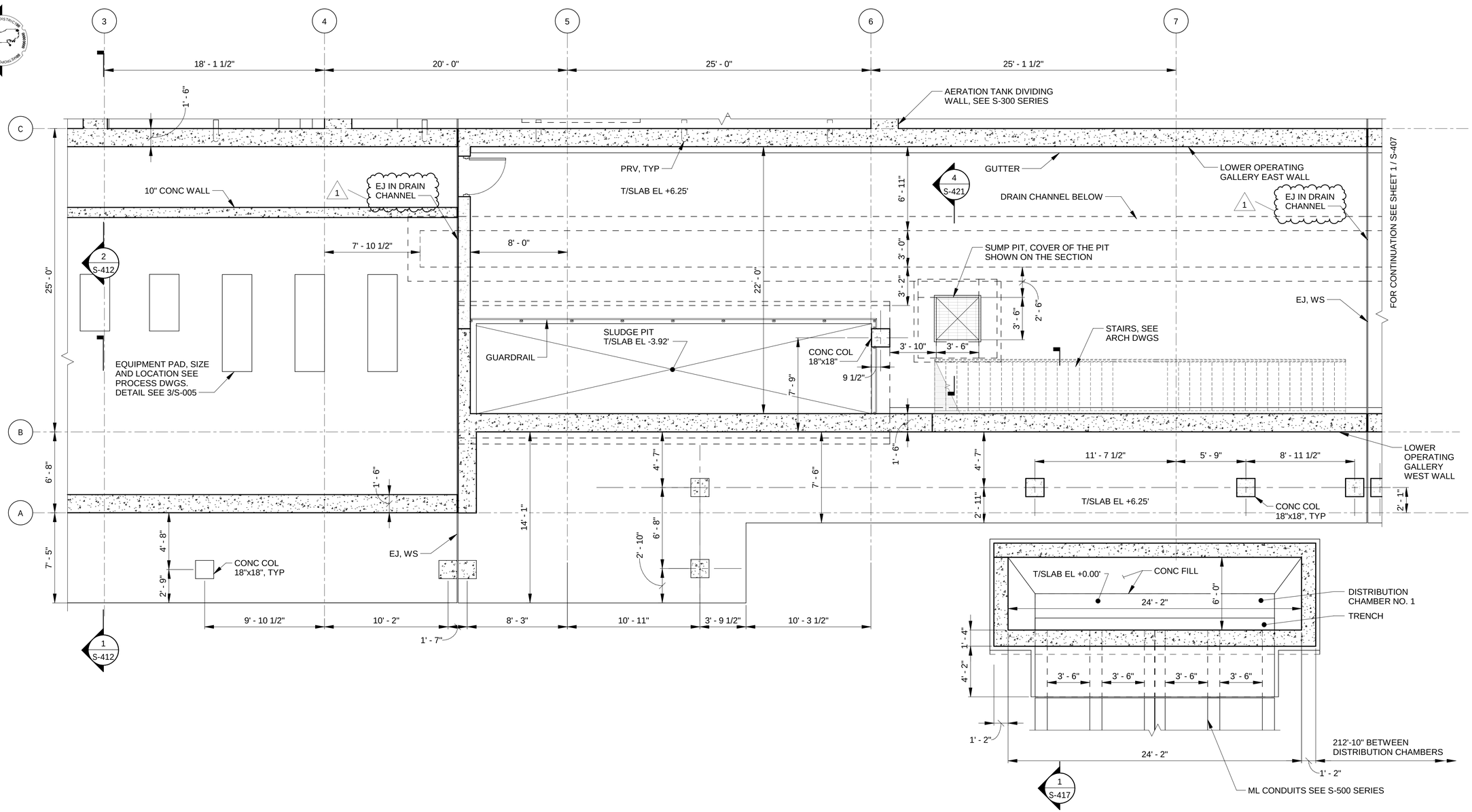
CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
FERMENTER & AERATION TANKS

PARTIAL TOP PLAN - ZONE 12

Sheet Number: S-325
Page Number: 130

PLOT DATE: 10/15/2025 8:21:35 PM

Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt

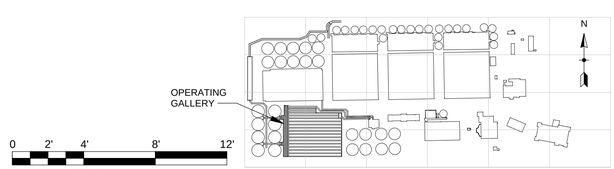


1 LOWER OPERATING GALLERY ENLARGED PLAN (NORTH) (T/CONC EL.AS SHOWN)
SCALE: 1/4" = 1'-0"

(APPLICABLE FROM LINE 5 TO 7)

NOTES:

1. SEE DETAIL 1 & 2 SHEET S-004 FOR EXPANSION JOINT DETAILS. FOR STRUCTURAL NOTES AND STANDARD DETAILS, SEE SHEETS S-001 THROUGH S-010.
2. PROVIDE CONCRETE COLUMN 18"x18" WITH (8)-#8 VERTICAL REBARS AND CLOSED TIES #4 @10" OC.
3. PROVIDE MINIMAL SLOPE OF TOP OF LOWER OPERATING GALLERY CONCRETE SLAB FOR DRAIN FROM CENTER TO EAST AND WEST WALLS.



OVERALL KEYPLAN

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Designed by:	Checked by:	Reviewed by:	Scale:
JB	AS	MF	1/4" = 1'-0"
Drawn by:			
DA			
Date:			
7/1/2025			

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PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

RME Rubinos & Mesia Engineers, Inc.
200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
OPERATING GALLERY

LARGE SCALE PLANS

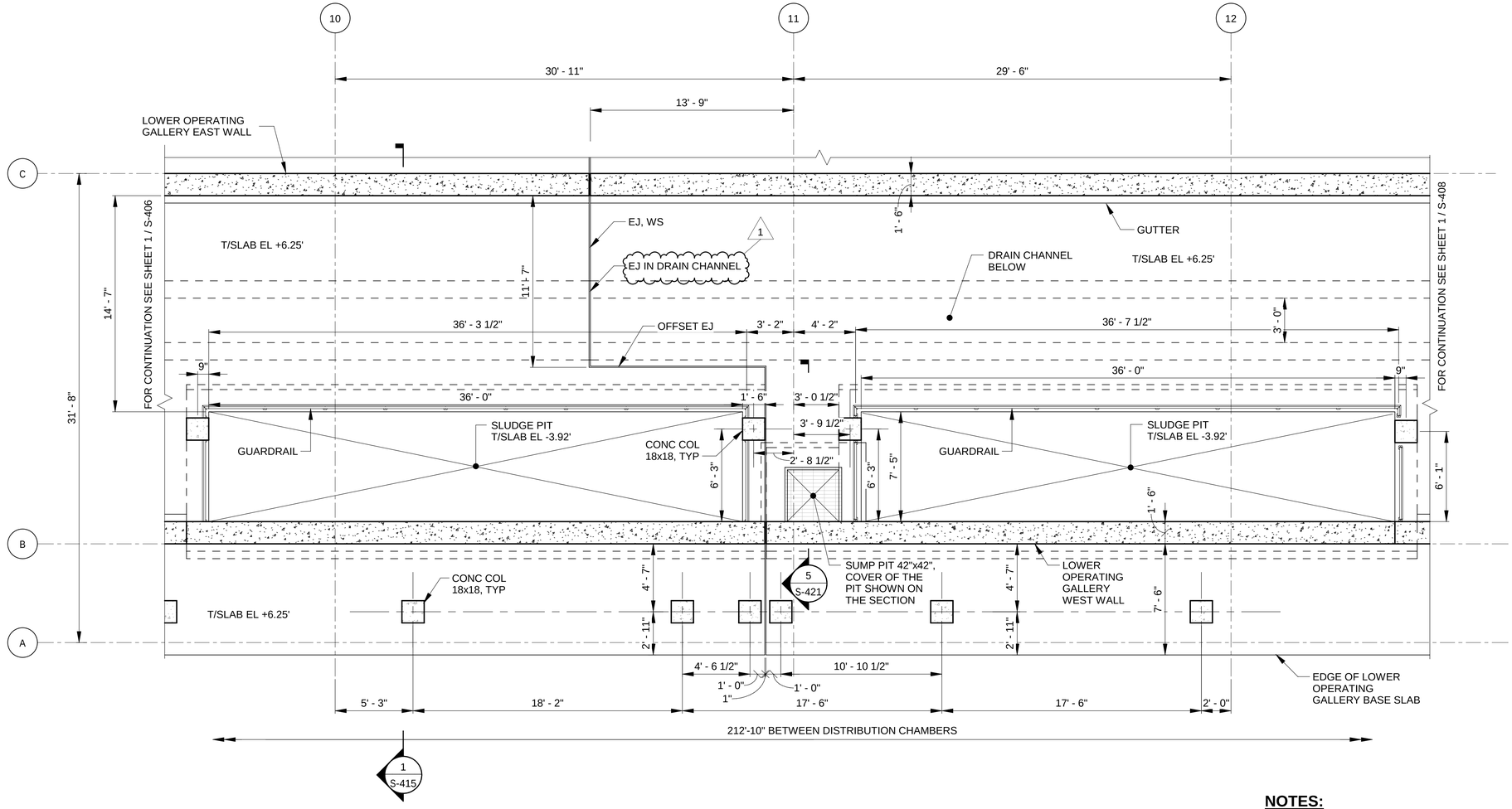
Sheet Number: S-406
Page Number: 145

STATE OF ILLINOIS
ROBERT W. PARAMORE
81-5131
REGISTERED STRUCTURAL ENGINEER

PLOT DATE: 10/15/2025 5:59:50 AM

Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt

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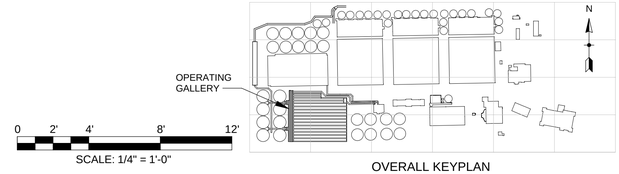
1 LOWER OPERATING GALLERY ENLARGED PLAN (MIDDLE) (T/CONC EL.AS SHOWN)

SCALE: 1/4" = 1'-0"

(APPLICABLE FROM LINE 10 TO 12)

NOTES:

1. SEE DETAIL 1 & 2 SHEET S-004 FOR EXPANSION JOINT DETAILS. FOR STRUCTURAL NOTES AND STANDARD DETAILS, SEE SHEETS S-001 THROUGH S-010.
2. PROVIDE CONCRETE COLUMN 18"x18" WITH (8)-#8 VERTICAL REBARS AND CLOSED TIES #4 @10" OC.
3. PROVIDE MINIMAL SLOPE OF TOP OF LOWER OPERATING GALLERY CONCRETE SLAB FOR DRAIN FROM CENTER TO EAST AND WEST WALLS.



OVERALL KEYPLAN

STATE OF ILLINOIS
HOWARD W. YAMAMOTO
081-5131
REGISTERED STRUCTURAL ENGINEER

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Designed by: JB | Checked by: AS | Drawn by: DA | Reviewed by: MF | Date: 7/1/2025 | Scale: 1/4" = 1'-0"

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

RME Rubinos & Mesia Engineers, Inc.
200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
OPERATING GALLERY

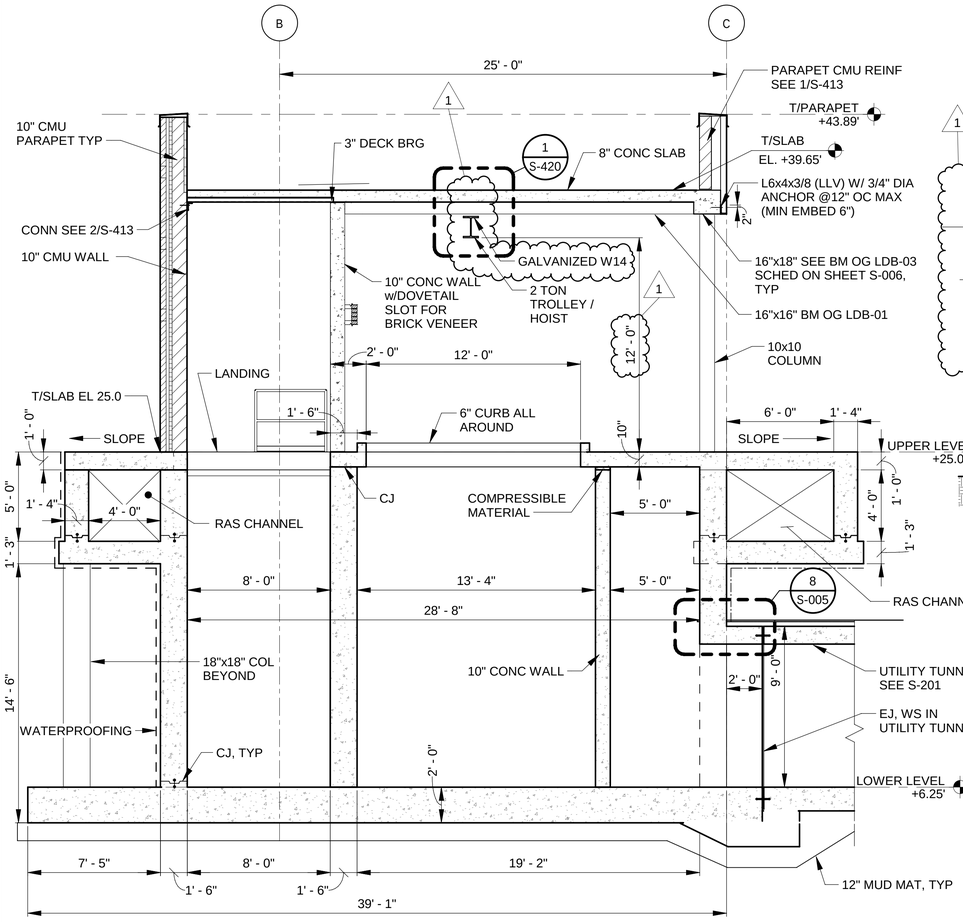
LARGE SCALE PLANS

Sheet Number: S-407

Page Number: 146

PLOT DATE: 10/13/2025 9:39:56 AM

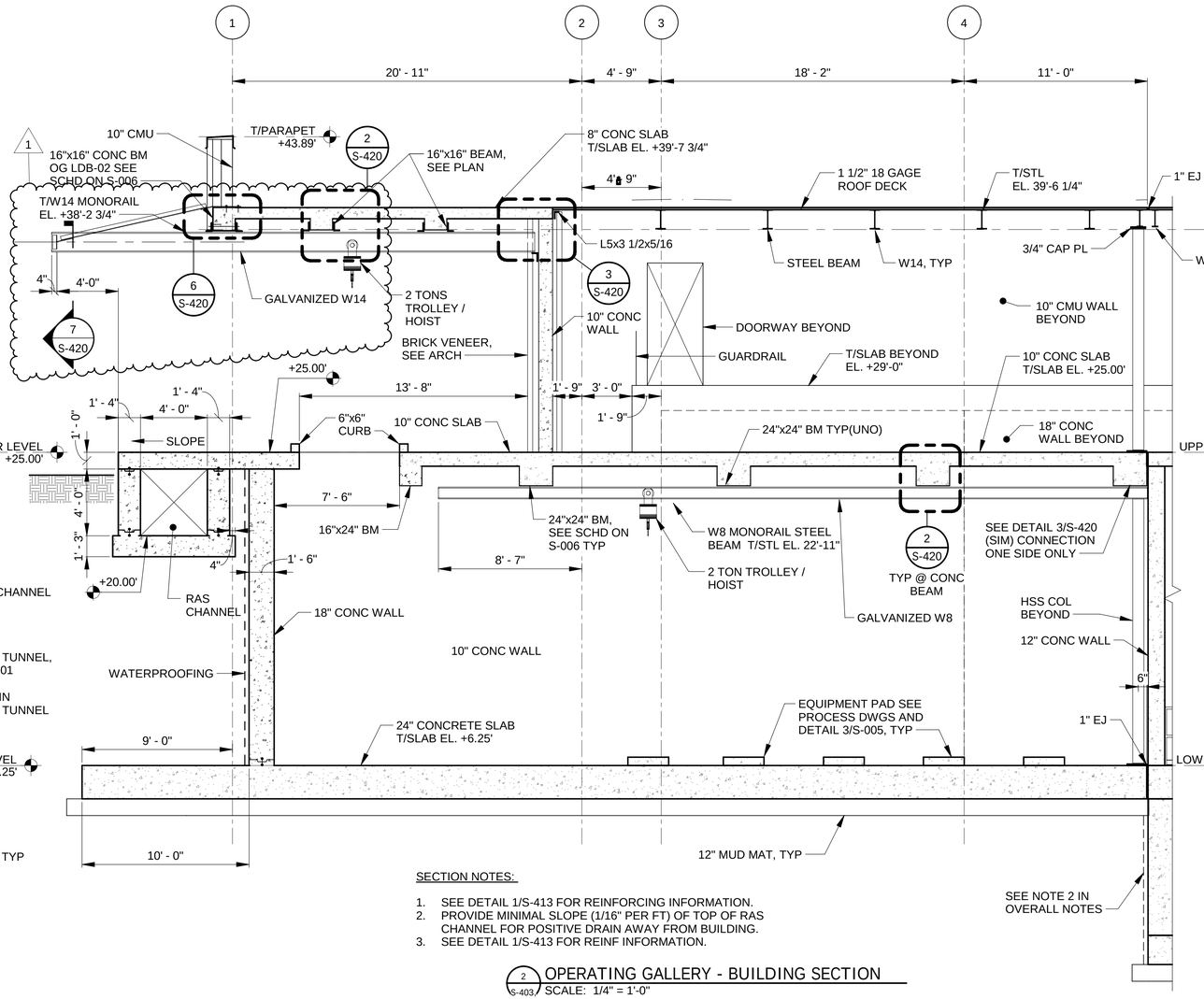
Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt



SECTION NOTES:

1. FOR CLADDING REQUIREMENT ON 10" CONC WALLS AND CMU PARAPETS SEE 2/S-413, 1/S-414 AND 2/S-414 FOR REINFORCING INFORMATION.
2. PROVIDE MINIMAL SLOPE OF TOP OF RAS CHANNEL FOR POSITIVE DRAIN AWAY FROM BUILDING.
3. SEE DETAIL 2/S-413 FOR REINF INFORMATION.

1 / S-403, S-404, S-405 OPERATING GALLERY - BUILDING SECTION
SCALE: 1/4" = 1'-0"



SECTION NOTES:

1. SEE DETAIL 1/S-413 FOR REINFORCING INFORMATION.
2. PROVIDE MINIMAL SLOPE (1/16" PER FT) OF TOP OF RAS CHANNEL FOR POSITIVE DRAIN AWAY FROM BUILDING.
3. SEE DETAIL 1/S-413 FOR REINF INFORMATION.

2 / S-403, S-405 OPERATING GALLERY - BUILDING SECTION
SCALE: 1/4" = 1'-0"

NOTES:

1. GENERAL NOTES SEE SHEETS S-001 AND S-002.
2. SOIL STRENGTH IS MINIMUM. THE CONTRACTOR TO DESIGN THE RIGID BRACING SYSTEM (RBS) TO SUPPORT THE SOIL DURING CONSTRUCTION.
3. ANY DISTURBED AREAS OF IN-SITU SOIL SHALL BE REPLACED WITH STRUCTURAL BACKFILL. STRUCTURAL BACKFILL TO BE CA-6, TYPE B, COMPACTED IN 8" LIFTS TO 90% MODIFIED PROCTOR.
4. FOR INSTALLATION OF ACCESS HATCH FRAME INTO CONCRETE SEE ARCHITECTURAL DRAWINGS.

0 2' 4' 8' 12'
SCALE: 1/4" = 1'-0"

STATE OF ILLINOIS · HUSSEIN W. YEHIA · 081-5131 · REGISTERED STRUCTURAL ENGINEER

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Rubinos & Mesia Engineers, Inc.
200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

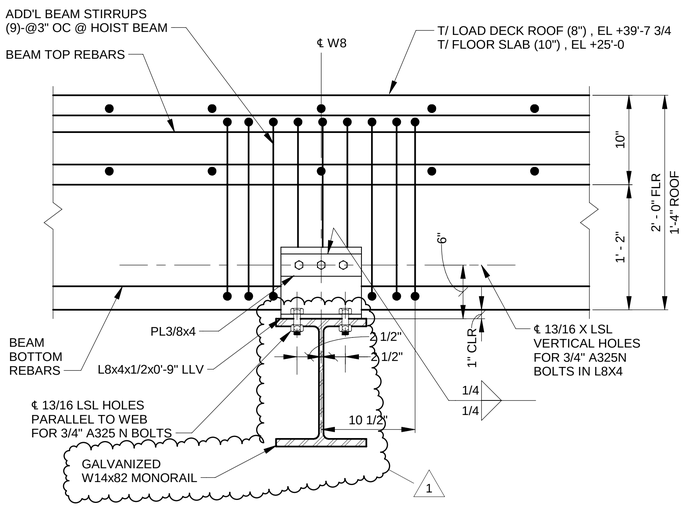
Designed by: JB
Checked by: AS
Drawn by: DA
Reviewed by: MF
Date: 7/1/2025
Scale: 1/4" = 1'-0"

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
OPERATING GALLERY
SECTIONS

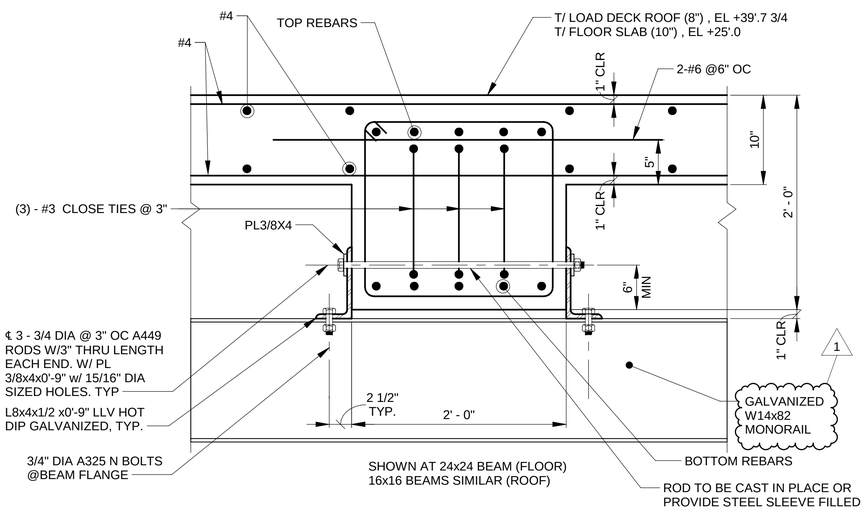
Sheet Number: S-409
Page Number: 148

PLOT DATE: 10/16/2025 6:53:06 AM

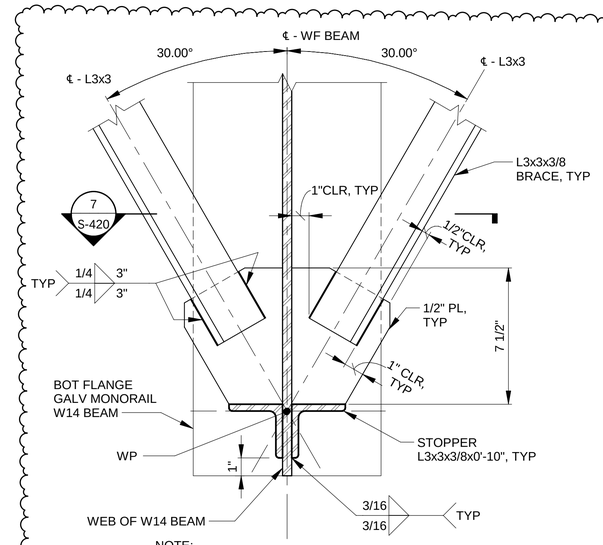
Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt



1 / S-409, S-414 2 TON MONORAIL DETAIL
SCALE: 1 1/2" = 1'-0"

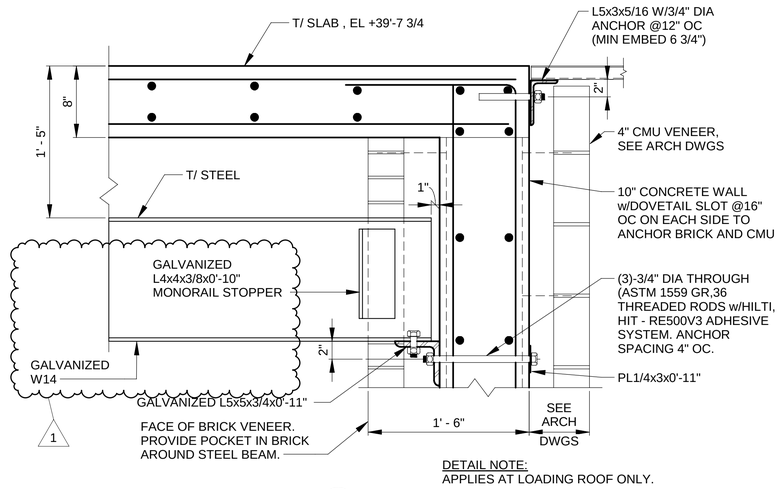


2 / S-409, S-413 SECTION THRU BEAM
SCALE: 1 1/2" = 1'-0"



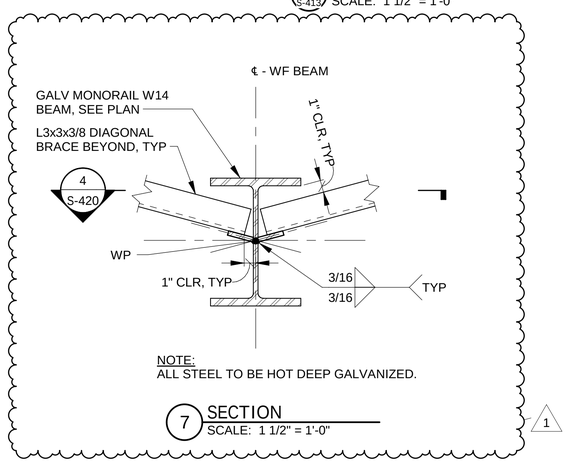
NOTE:
ALL STEEL TO BE HOT DEEP GALVANIZED.

4 PLAN DETAIL
SCALE: 3" = 1'-0"



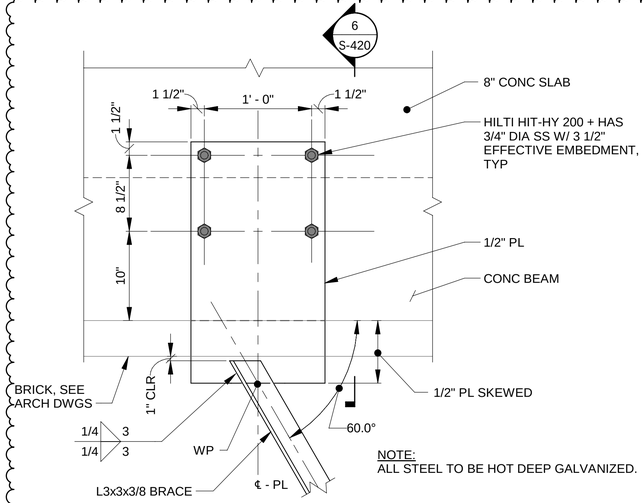
DETAIL NOTE:
APPLIES AT LOADING ROOF ONLY.

3 / S-413 DETAIL
SCALE: 1 1/2" = 1'-0"



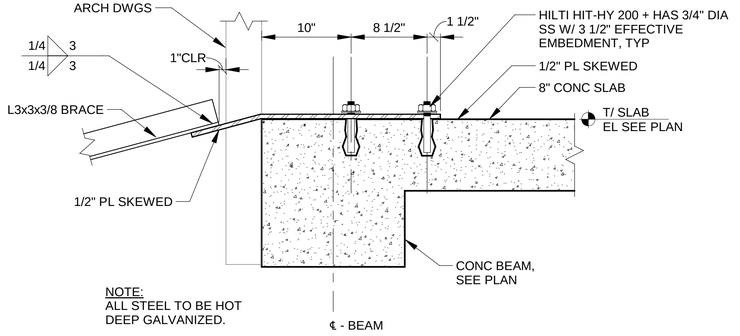
NOTE:
ALL STEEL TO BE HOT DEEP GALVANIZED.

7 SECTION
SCALE: 1 1/2" = 1'-0"



NOTE:
ALL STEEL TO BE HOT DEEP GALVANIZED.

5 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



NOTE:
ALL STEEL TO BE HOT
DEEP GALVANIZED.

6 SECTION
SCALE: 1 1/2" = 1'-0"

NOTES:

1. GENERAL NOTES SEE SHEETS S-001 AND S-002.
2. SEE SCHEDULE ON S-006 FOR BEAM REINFORCING.

0 3" 6" 9" 1' 2'
SCALE: 1 1/2" = 1'-0"

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

RME Rubinos & Mesia Engineers, Inc.
200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482

Designed by: JB | Checked by: AS | Reviewed by: MF | Approved by:
Drawn by: DA | Date: 7/1/2025 | Scale: As indicated

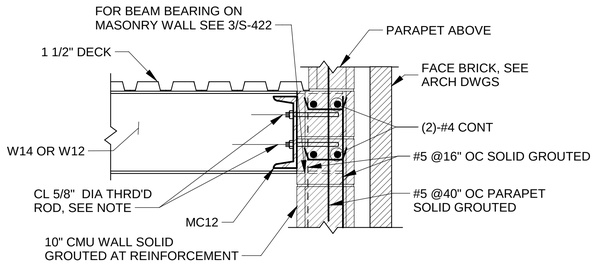
CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
OPERATING GALLERY

MONORAIL DETAILS

STATE OF ILLINOIS
HOWARD W. MARKHAM
081-5131
REGISTERED STRUCTURAL ENGINEER

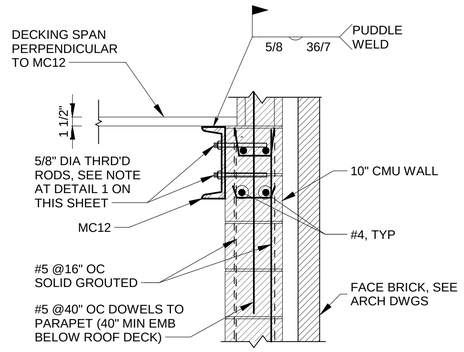
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Page Number: 159

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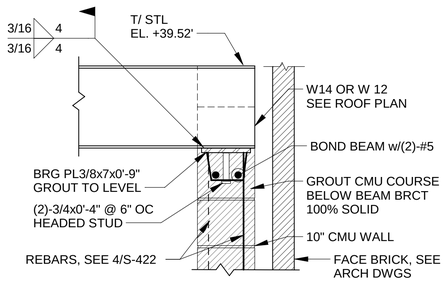


MASONRY ANCHOR NOTE:
PROVIDE 5/8 DIA THREADED RODS (ASTM 36) WITH HILTI HIT-HY270 HYBRID ADHESIVE ANCHOR SYSTEM AT 1'-10" OC. STAGGER ROWS @11" (MIN. EMBED 5 5/8") SOLID GROUTED MASONRY.

1 DETAIL
SCALE: 1" = 1'-0"

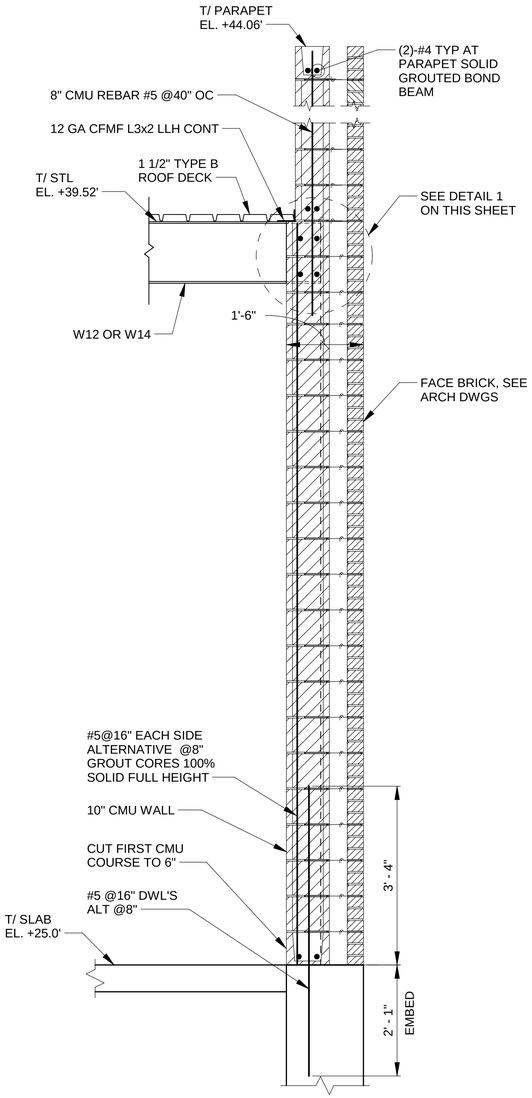


2 S-410 DETAIL - AT END WALLS
SCALE: 1" = 1'-0"



DETAIL NOTES:
1. WELD BEAM WEST SIDE ONLY.
2. EAST SIDE OF BEAM ALLOWED TO MOVE.

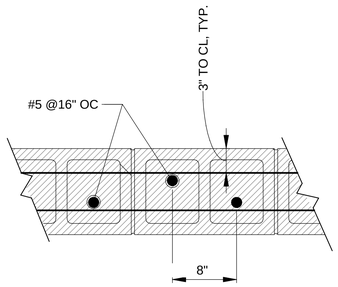
3 S-410 DETAIL - BEAM BEARING
SCALE: 1" = 1'-0"



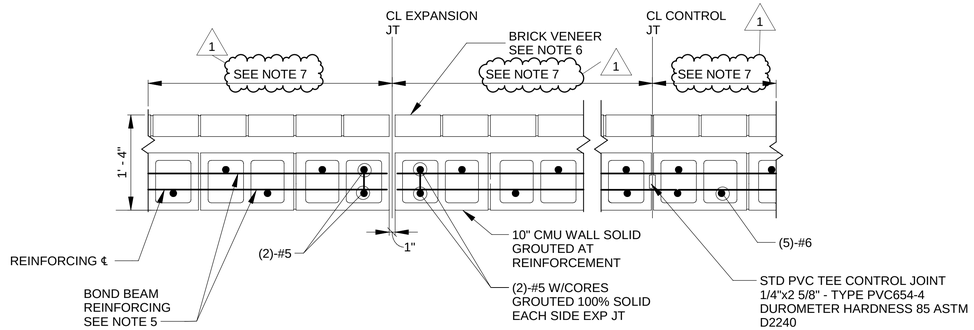
MASONRY WALL NOTES:

1. PROVIDE VERTICAL CONTROL JOINTS AT 30'-0" CENTERS
2. CONTROL JOINTS SHALL HAVE SASH BLOCKS EACH SIDE WITH PVC PREFORMED CONTROL JOINT TEES.
3. ASTM D2287 DUROMETER HARDNESS 90.

4 S-404 CMU SECTION
SCALE: 3/4" = 1'-0"
LOOKING SOUTH



5 REBAR SETTING
SCALE: 1 1/2" = 1'-0"



NOTES:
1. CONTROL JOINTS SHALL HAVE BACKER RODS AND SEALANT.
2. BRICK MASONRY EXPANSION JOINTS ARE REQUIRED TO ALIGN WITH CMU CONTROL JOINTS
3. EXPANSION JOINT MATERIAL SHOULD BE 50% COMPRESSIBLE AND OF HIGH DENSITY CELLULAR POLYURETHANE FOAM.
4. EXPANSION JOINT MATERIAL SHOULD HAVE EPOXY ADHESIVE AT THE JOINT FACES AND FIELD INJECTED SILICONE SEALANT BANDS.
5. BOND BEAM REINFORCING DO NOT PASS THROUGH CONTROL AND EXPANSION JOINTS.
6. 10" CMU WALL SHALL HAVE LADDER REINFORCING AT 16" C/C AND ADJUSTABLE TIE TO ANCHOR BRICK VENEER.
7. SEE A-403 FOR JT SPACING.

1

6 CMU - CONTROL AND EXPANSION JOINT
SCALE: 1" = 1'-0"

0 6" 1' 2' 3' 4'
SCALE: 3/4" = 1'-0"

0 3" 6" 9" 1' 2'
SCALE: 1 1/2" = 1'-0"

0 6" 1' 2' 3'
SCALE: 1" = 1-0"'

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Designed by: JB | Checked by: AS
Drawn by: DA | Reviewed by: MF
Date: 7/1/2025 | Scale: AS SHOWN

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

RME
Rubinos & Mesia Engineers, Inc.
200 S. Michigan Avenue, Suite 1500, Chicago, IL 60604-2482

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
OPERATING GALLERY

CMU DETAILS

Sheet Number: S-422
Page Number: 161

STATE OF ILLINOIS
ROBERT W. PARRISH
81-5131
REGISTERED STRUCTURAL ENGINEER

Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt
PLOT DATE: 10/13/2025 10:37:38 AM

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LIST OF ABBREVIATIONS

A/	ABOVE
A.B.	ANCHOR BOLT
ACT	ACOUSTICAL CEILING
ADJ	TILE ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AGG	AGGREGATE
ALT	ALTERNATE
AL	ALUMINUM
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
AUTO	AUTOMATIC
AVG	AVERAGE
BD	BOARD
BEJ	BUILDING EXPANSION JOINT
BIT	BITUMINOUS
BLDG	BUILDING
BLKG	BLOCKING
BRG	BEARING
BRK	BRICK
BTM	BOTTOM
B/	BOTTOM OF
BTWN	BETWEEN
B.U.R.	BUILT UP ROOF
CAB	CABINET
C.C.D.	CHICAGO CITY DATUM
CEM	CEMENT
CFMF	COLD FORMED METAL FRAMING
CU.FT.	CUBIC FOOT
C.I.	CAST IRON
CJ	CONTROL JOINT
CL	CENTER LINE
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
CTR	COUNTER
CTSK	COUNTERSINK
CPT	CARPET
CT	CERAMIC TILE
CTB	CERAMIC TILE BASE
CU.YD.	CUBIC YARD
DBL	DOUBLE
DEG	DEGREE
DEMO	DEMOLITION
DET	DETAIL
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DIV.	DIVISION
D.L.	DEAD LOAD
DN	DOWN
DR	DOOR
DS	DOWNSPOUT
DWG	DRAWING
E	EAST
EA	EACH
E.W.	EACH WAY
EFVM	ELECTRONIC FIELD VECTOR MAPPING
EJ	EXPANSION JOINT (BRICK)
ELEC	ELECTRIC
EL	ELEVATION
ELEV	ELEVATOR
ENCL	ENCLOSURE
ENTR	ENTRANCE
EPDM	ETHYLENE-PROPYLENE-DIENE-MONOMER ROOF MEMBRANE
EQ	EQUAL
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EXH	EXHAUST
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
F/	FACE OF
F.A.	FIRE ALARM
F.D.	FLOOR DRAIN
F.E.	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
F.F.L.	FINISHED FLOOR LINE
FIN FL	FINISH FLOOR
FLUOR	FLUORESCENT
FDN	FOUNDATION
FP	FIREPROOF
F.R.	FIRE RATED
FR	FRAME
F.R.T.	FIRE RETARDANT TREATED
FT	FOOT/FEET
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
G.C.	GENERAL CONTRACTOR
CMU	CONCRETE MASONRY UNIT
GL	GLASS/GLAZING
GR	GRADE
GWB	GYPSUM WALL BOARD
GYP	GYPSUM
HDCP	HANDICAPPED ACCESSIBLE
HT	HEIGHT
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HRDN	HARDENED
HVAC	HEATING, VENTILATION & AIR CONDITIONING
HYD	HYDRANT

LIST OF ABBREVIATIONS

IN	INCHES
INCL	INCLUDE, INCLUDING
INSUL	INSULATION
INT	INTERIOR
JT	JOINT
JAN	JANITOR'S CLOSET
KIPS	KILO POUNDS PER SF
KPL	KICKPLATE
lb	POUND
L.L.	LIVE LOAD
LLH.	LONG LEG HORIZONTAL
LLV.	LONG LEG VERTICAL
LP	LOW POINT
LT	LIGHT
MAINT	MAINTENANCE
MFR	MANUFACTURER
MAS	MASONRY
MAT'L	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MED	MEDIUM
MIN	MINIMUM
MISC	MISCELLANEOUS
M.O.	MASONRY OPENING
MR	MOISTURE RESISTANT
MTG	MOUNTING
MTL	METAL
MULL	MULLION
N	NORTH
NAT	NATURAL
NIC	NOT IN CONTRACT
No	NUMBER
NOM	NOMINAL
O.A.	OVER ALL
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
OH	OVERHEAD
OPN'G	OPENING
OPP	OPPOSITE
PART	PARTITION
PHCC	PRE-CAST HOLLOW CORE CONCRETE
PL	PLATE
PLYWD	PLYWOOD
P.T.	PRESSURE TREATED
PMJF	PREMOULDED JOINT FILLER
PNL	PANEL
PR	PAIR
PREFAB	PREFABRICATED
PROP	PROPOSED
PSF	POUNDS PER SQUARE FOOT
PSI	POUND PER SQUARE INCH
PT	PAINT
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
QT	QUARRY TILE
QTY	QUANTITY
R	RISER
RBC	RESILIENT BASE COVED
RBS	RESILIENT BASE STRAIGHT
RAD	RADIUS
R.D.	ROOF DRAIN
REF	REFERENCE
REFL	REFLECTED
REINF	REINFORCING
RF	RESINOUS FLOORING
RFB	RESINOUS FLOORING BASE
RRF	RAISED RUBBER FLOORING
RM	ROOM
REQ'D	REQUIRED
R.O.	ROUGH OPENING
ROW	RIGHT OF WAY
RSF	RESILIENT SHEET FLOORING
S	SOUTH
SECT	SECTION
SQFT	SQUARE FEET
SGFT	STRUCTURAL GLAZED FACING TILE
SHT	SHEET
SIM	SIMILAR
SQ	SQUARE
SS	STAINLESS STEEL
SPEC(S)	SPECIFICATION(S)
ST	STREET
STA	STATION
STD	STANDARD
STR	STRUCTURAL/STRUCTURE
STOR	STORAGE
STL	STEEL
SUSP	SUSPENDED
SYS	SYSTEM
T	TREAD
T/	TOP OF
THK	THICKNESS
T&B	TOP AND BOTTOM
TYP	TYPICAL
T.R.	TOILET ROOM
UNFIN	UNFINISHED

LIST OF ABBREVIATIONS

V	VOLT
VAR	VARIES
V.B.	VAPOR BARRIER
VCT	VINYL COMPOSITION TILE
VENT	VENTILATION
VIF	VERIFY IN FIELD
VERT	VERTICAL
W	WEST
W/	WITH
W.C.	WATER CLOSET
WD	WOOD
WO	WITHOUT
W.P.	WATERPROOF
WWF	WELDED WIRE FABRIC

SYMBOL LEGEND

NORTH ARROW SYMBOL:

N

DETAIL SYMBOL:

DETAIL NUMBER

REFERENCE SHEET

DETAIL SECTION SYMBOL:

DETAIL NUMBER

SHEET DETAIL IS SHOWN ON

LARGE SCALE PLAN/DETAIL:

DETAIL NUMBER

SHEET DETAIL IS SHOWN ON

ELEVATION SYMBOL:

ELEVATION NUMBER

SHEET ELEVATION IS SHOWN ON

ROOM — NAME OF ROOM/AREA

101 — NUMBER OF ROOM/AREA

X — INTERIOR PARTITION TYPE DESIGNATION

04-101A — DOOR NUMBER DESIGNATION

X — WINDOW NUMBER DESIGNATION

MATERIAL HATCHES

- CMU
- GROUND FACE CMU
- STRUCTURAL GLAZED TILE
- SEALANT & JOINT FILLER
- INSULATION (RIGID)
- INSULATION (BATT)
- COMPRESSED INSULATION
- COMPACTED SOIL
- SAND
- CONCRETE
- STEEL/ STAINLESS
- GRANULAR FILL
- STEEL AT SMALL SCALE
- WOOD BLOCKING
- BLOCKING OR SHIM
- FINISHED WOOD
- PLYWOOD
- GYPSUM BOARD
- TERRAZZO
- CARPET
- CERAMIC TILE
- ACOUSTICAL TILE

GENERAL NOTES

A. GENERAL

1. REFER TO CIVIL, STRUCTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR ADDITIONAL GENERAL NOTES, ABBREVIATIONS, AND SYMBOLS.
2. DETAILS SHOWN ARE TYPICAL IN NATURE AND ARE INDICATIVE OF PROFILES AND TYPES REQUIRED FOR THE WORK. REMAINDER OF THE WORK IS SIMILAR IN CHARACTER TO THESE DETAILS.
3. MATERIALS AND SYSTEMS NOTES ARE TYPICAL IN NATURE AND APPLY TO MULTIPLE DRAWINGS. NOTES ON ANY ONE DRAWING ARE TO APPLY TO ALL OTHER SIMILAR MATERIALS AND SYSTEMS UNLESS NOTED OTHERWISE.
4. ELEVATIONS NOTED ON ARCHITECTURAL DRAWINGS ARE FOR ELEVATIONS AT TOP OF FLOOR SLAB UNLESS NOTED OTHERWISE.
5. COORDINATE FLOOR AND WALL PENETRATIONS, SLEEVES AND MECHANICAL SHAFTS WITH TRADE'S CONTRACTORS, INCLUDING BUT NOT LIMITED TO, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION CONTRACTORS.
6. ALL WORK SHALL CONFORM TO ALL APPLICABLE CODES, STANDARDS, AND GOVERNING AUTHORITIES. VERIFY WITH INTENT OF THE BUILDING CODE ANALYSIS PROVIDED ON A-002.
7. UNLESS NOTED OTHERWISE, WHERE AN ARCHITECTURAL FINISHED FLOOR IS TO BE PROVIDED REQUIRING DEPRESSED STRUCTURAL SLAB, THE FLOOR ELEVATIONS ARE TO THE TOP OF FINISHED FLOOR. WHERE AN ARCHITECTURAL FINISHED FLOOR IS INTENDED FOR SURFACE APPLICATION, THE FLOOR ELEVATIONS ARE TO TOP OF STRUCTURAL SLAB. REFER TO STRUCTURAL DRAWINGS FOR LOCATIONS OF DEPRESSIONS.
8. UNLESS NOTED OTHERWISE, ALL FASTENERS AND FASTENING DEVICES ARE TO BE CONCEALED IN ALL FINISHED SPACES.
9. ALL DISSIMILAR METALS SHALL BE EFFECTIVELY ISOLATED FROM EACH OTHER TO AVOID GALVANIC ACTION.
10. ALL EXTERIOR FERROUS METAL WORK LOCATED IN EXTERIOR OR IN NON-CONDITIONED INTERIOR SPACES SHALL BE HOT-DIPPED GALVANIZED (EXCEPT FOR ORNAMENTAL METAL(S)).
11. PROVIDE A 7'-6" MINIMUM HEADROOM CLEARANCE IN ALL EXIT PASSAGES AT ALL LOCATIONS (BENEATH SPRINKLERS, PIPING, LIGHTING, ETC.)
12. THE ARCHITECT OF RECORD SHALL VERIFY SPECIFICATION OF BUILDING MATERIALS FOR THIS CONTRACT SCOPE OF WORK.
13. BLOCKING IS REQUIRED IN STEEL STUD AND GYPSUM WALLS FOR ALL ITEMS THAT ARE ATTACHED TO THE WALL. WOOD BLOCKING IS REQUIRED AT THE TOP ROW OF ATTACHMENT FOR ALL THE MILLWORK AND CASEWORK WALL CABINETS.

B. FIRE RATINGS

1. A FIRE RATING INDICATED FOR A WALL OR PARTITION IS FOR THE ENTIRE LENGTH AND HEIGHT OF THE WALL.
2. FIRE RATINGS INDICATED MUST COMPLY WITH THE UNDERWRITERS LABORATORIES TESTS AND AS ACCEPTABLE BY THE APPLICABLE BUILDING CODES AND REGULATIONS.
3. FIRE STOP OPENINGS IN THE FLOOR SLAB AND/OR RATED WALLS, INCLUDING SPACES BETWEEN SLAB EDGE AND EXTERIOR WALL, SPACES BETWEEN DUCTS, CONDUITS, PIPING AND OTHER PENETRATIONS, (EXCEPT WHEN COMPLETELY ENCLOSED BY FIRE RATED CONSTRUCTION) ARE TO MAINTAIN THE CONTINUITY OF THE FIRE RATING OF FLOOR OR WALL CONSTRUCTION AND TO PREVENT THE PASSAGE OF SMOKE.
4. ALL JOINTS OF ANY ELEMENT OF CONSTRUCTION WHICH IS REQUIRED TO HAVE A FIRE RESISTANCE RATING SHALL BE INSTALLED PER THE MANUFACTURER'S PUBLISHED TESTED ASSEMBLIES, SHALL BE TIGHT, AND SHALL PREVENT THE PASSAGE OF SMOKE AND FLAME.

C. DIMENSIONING

1. ALL DIMENSIONS ARE IN FEET-INCHES UNLESS NOTED OTHERWISE.
2. EXTERIOR WALLS ARE DIMENSIONED TO THE EXTERIOR FINISHED FACE OF WALL UNLESS NOTED OTHERWISE.
3. INTERIOR WALLS AND PARTITIONS ARE DIMENSIONED TO ONE FINISHED FACE UNLESS NOTED OTHERWISE.
4. DOORS ARE LOCATED BY THEIR JAMB DETAIL RELATIVE TO ADJACENT WALLS AND PARTITIONS. DOOR OPENINGS ARE DIMENSIONED TO THE OUTSIDE FACE OF THE DOOR FRAMES.
5. STAIR, ELEVATOR AND MECHANICAL SHAFTS ARE DIMENSIONED TO THEIR CLEAR OPENINGS.

D. PARTITION NOTES

1. EXTEND PARTITIONS TO THE UNDERSIDE OF THE STRUCTURAL DECK OR FRAMING ABOVE UNLESS SHOWN OR NOTED OTHERWISE.
2. MOVEMENT CONTROL: PROVIDE FOR VERTICAL MOVEMENT AT HEAD OF ALL CMU CONSTRUCTION WHETHER OR NOT INDICATED ON THE DRAWINGS AND NOTES. ARCHITECT OF RECORD SHALL LOCATE ALL MOVEMENT CONTROL JOINTS, REFER TO BUILDING ELEVATIONS ON DRAWING A-403.
3. MISCELLANEOUS: SEAL EXTERIOR JOINTS AROUND DOORS, WINDOWS AND LOUVER FRAMES AND AT PENETRATIONS OF MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION ELEMENTS TO PREVENT AIR AND WATER LEAKAGE.
4. ANCHOR AND REINFORCE CONCRETE CURBS AS SHOWN ON STRUCTURAL DRAWINGS.
5. ALL SOUND ATTENUATION BATT INSULATION TO BE INSTALLED TIGHT IN A COMPRESSION FIT TO STUDS, STRUCTURE AND ADJACENT SURFACES.
6. CONTRACTOR SHALL COORDINATE JOINT AND HEAD TERMINATION DETAILS WITH ACTUAL FIELD CONDITIONS AND FURNISH PER DETAILS SHOWN ON THE DRAWINGS.
7. REFER TO PLANS FOR LOCATIONS OF PARTITION TYPES.
8. USE ZINC ALLOY STEEL CORNER REINFORCEMENT, CASING BEADS, ETC. ON ALL APPLICATIONS. ALL BEADS TO BE POSITIVELY ATTACHED WITH FASTENERS PER TESTED ASSEMBLY (CRIMP ATTACHMENT WILL NOT BE ACCEPTABLE).
9. MAXIMUM SPACING OF CONTROL JOINTS FOR CMU PARTITIONS SHALL BE SPACED A MAXIMUM OF 30'.

E. SEALANTS

1. ALL SEALANT JOINTS SHALL BE SIZED SUCH THAT THEY WILL BE WITHIN THE MINIMUM/MAXIMUM SIZE AS RECOMMENDED BY THE MANUFACTURER IN THEIR INSTALLED POSITION.
2. ALL SEALANT JOINTS SHALL MAINTAIN CONTACT WITH THE ADJOINING PARTS WITHIN ALLOWABLE DIMENSIONED CHANGES IN THE JOINT SIZE. ALL SEALANT JOINTS SHALL MAINTAIN DURABILITY AND INTEGRITY UNDER ALL SPECIFIED CONDITIONS AND CONDITIONS OF THE LOCALITY WHERE THE PROJECT IS LOCATED.
3. ALL SEALANTS SHALL BE INSTALLED WITH APPROPRIATE JOINT FILLER.
4. SEALANT COLOR TO BE SELECTED BY ENGINEER FROM MANUFACTURERS FULL COLOR RANGE (NO CUSTOM COLORS TO BE SPECIFIED).
5. ALL EXPOSED JOINTS SUBJECT TO MOVEMENT ARE TO HAVE CONCEALED BACKUP WITH CAPTIVE SEALANT AND JOINT FILLER OR BOND BREAKER TAPE IN ACCORDANCE WITH SEALANT MANUFACTURE'S MINIMUM PUBLISHED REQUIREMENTS.
6. ARCHITECT OF RECORD SHALL COORDINATE WITH SEALANT MANUFACTURERS (BASIS OF DESIGN) SEALANTS AS SPECIFIED WILL PERFORM PER DESIGN INTENT FOR THIS CONTRACT SCOPE OF WORK.
7. ALL GASKETS, INTERIOR AND EXTERIOR TO BE PROVIDED WITH PREMOLDED VULCANIZED CORNERS. ALL FIELD VULCANIZING TO BE EQUAL IN QUALITY TO FACTORY VULCANIZING.
8. ALL JOINTS TO BE BACKED UP BY PROPERLY SIZED CLOSED CELL BACKER ROD.

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Designed by:	Drawn by:	Checked by:	Reviewed by:	Scale:	Date:
JP	AC	DB	DB	NONE	7/1/2025

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL
ARCHITECTURAL NOTES, SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES

LICENSED ARCHITECT
DAVID E BLOOD
001-019526
STATE OF ILLINOIS
07/15/2025

Sheet Number: A-001
Page Number: 221

PLOT DATE: 10/16/2025 7:04:48 AM

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N

BUILDING CODE ANALYSIS

A. SCOPE OF WORK: AERATION TANK AND OPERATING GALLERY TO INCLUDE: UTILITY TUNNEL,PROCESS EQUIPMENT AREA, MECHANICAL AND ELECTRICAL EQUIPMENT AREA, AND UNISEX TOILET ROOM.

B. APPLICABLE CODES:

2021 INTERNATIONAL BUILDING CODE (IBC) WITH AMENDMENTS
2018 STATE OF ILLINOIS ACCESSIBILITY CODE (IAC)
2021 INTERNATIONAL MECHANICAL CODE (IMC) WITH AMENDMENTS
2021 INTERNATIONAL FUEL GAS CODE (IFGC) WITH AMENDMENTS
2012 INTERNATIONAL FIRE CODE (IFC) WITH AMENDMENTS
2023 LIFE SAFETY CODE (NFPA 101)
2014 STATE OF ILLINOIS PLUMBING CODE (IPC)
2023 NATIONAL ELECTRICAL CODE (NEC)
2021 INTERNATIONAL ENERGY CONSERVATION CODE (IECC) WITH ILLINOIS AMENDMENTS
2024 STANDARD FOR FIRE PROTECTION IN WASTEWATER TREATMENT AND COLLECTION FACILITIES (NFPA 820)
CURRENT OSHA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION LOCAL AMENDMENTS (DESIGNATED BY 'SEC' BELOW)

C. USE AND OCCUPANCY CLASSIFICATION: SECTION 306.3

- SEPARATED USE GROUP F-1 MODERATE HAZARD OCCUPANCY AND U OCCUPANCY (AERATION TANKS)

D. AREA: SECTION 507.3

- ALLOWABLE: 15,500 SQ.FT.
  TWO-STORY, NONSPRINKLERED F-1 BLDG.
- ACTUAL: AREA:
  FIRST FLOOR (GALLERY BLDG.) 10,284 SQFT
  BASEMENT (GALLERY BLDG.) 10,478 SQFT
  FIRST FLOOR (AERATION TANK) 132,400 SQFT

E. HEIGHT: SECTION 504.1.1

- ALLOWABLE: 1 STORY/55 FT
- ACTUAL: 1 STORY/11 FT

F. CONSTRUCTION TYPE: SECTION 602.2

IIB

G. INTERIOR FINISHES FLAME SPREAD RATING:

FLOOR FINISHES - CLASS II SECTION 804.4
WALL AND CEILING - CLASS C TABLE 803.13
(EXITS ENCLOSURES CLASS B)

H. AUTOMATIC SPRINKLER SYSTEM:

REQUIRED FOR BASEMENT AND TUNNEL* SECTION 903.2.11.1

*SPRINKLERS ARE NOT BEING PROVIDED PER DISTRICT DIRECTIVE

I. OCCUPANT LOAD: TABLE 1004.1.1

ACCESSORY STORAGE AREAS, MECH. EQUIP ROOM: 300 SF GROSS/ OCCUPANT

UPPER GALLERY 10,284 SF/300 = 35 OCCUPANTS
LOWER GALLERY 10,478 SF/300 = 35 OCCUPANTS

ACTUAL OCCUPANCY 0 OCCUPANTS (PER MWRD)

J. EXIT REQUIREMENTS:

- MINIMUM NUMBER OF EXITS 2 EXITS TABLE 1006.3.3
  *ONE EXIT PERMITTED FOR OCCUPANT LOAD <50 AND TRAVEL DISTANCE LESS THAN 75'
- MAX. TRAVEL DISTANCE TABLE 1017.2

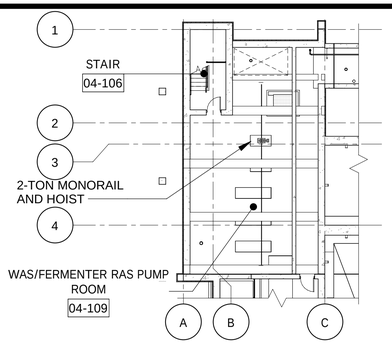
  WITHOUT SPRINKLER SYSTEM 200 FEET
- DEAD ENDS 20 FEET SECTION 1020.5
- COMMON PATH OF TRAVEL 75 FEET SECTION 1006.2.1
- CAPACITY OF EXITS: SECTION 1005.3
  STAIRS 0.3 INCH PER OCCUPANT
  CORRIDORS 0.2 INCH PER OCCUPANT
  DOORS 0.2 INCH PER OCCUPANT
- MINIMUM WIDTH OF EXITS:
  STAIRS (<50 OCCUPANTS) 36 INCHES SECTION 1011.2
  CORRIDORS (<50 OCCUPANTS) 36 INCHES SECTION 1020.3
  DOORS 32 INCHES SECTION 1010.1.1

K. CORRIDOR FIRE RESISTANCE RATING: TABLE 1020.2

WITHOUT SPRINKLER 1 HOUR

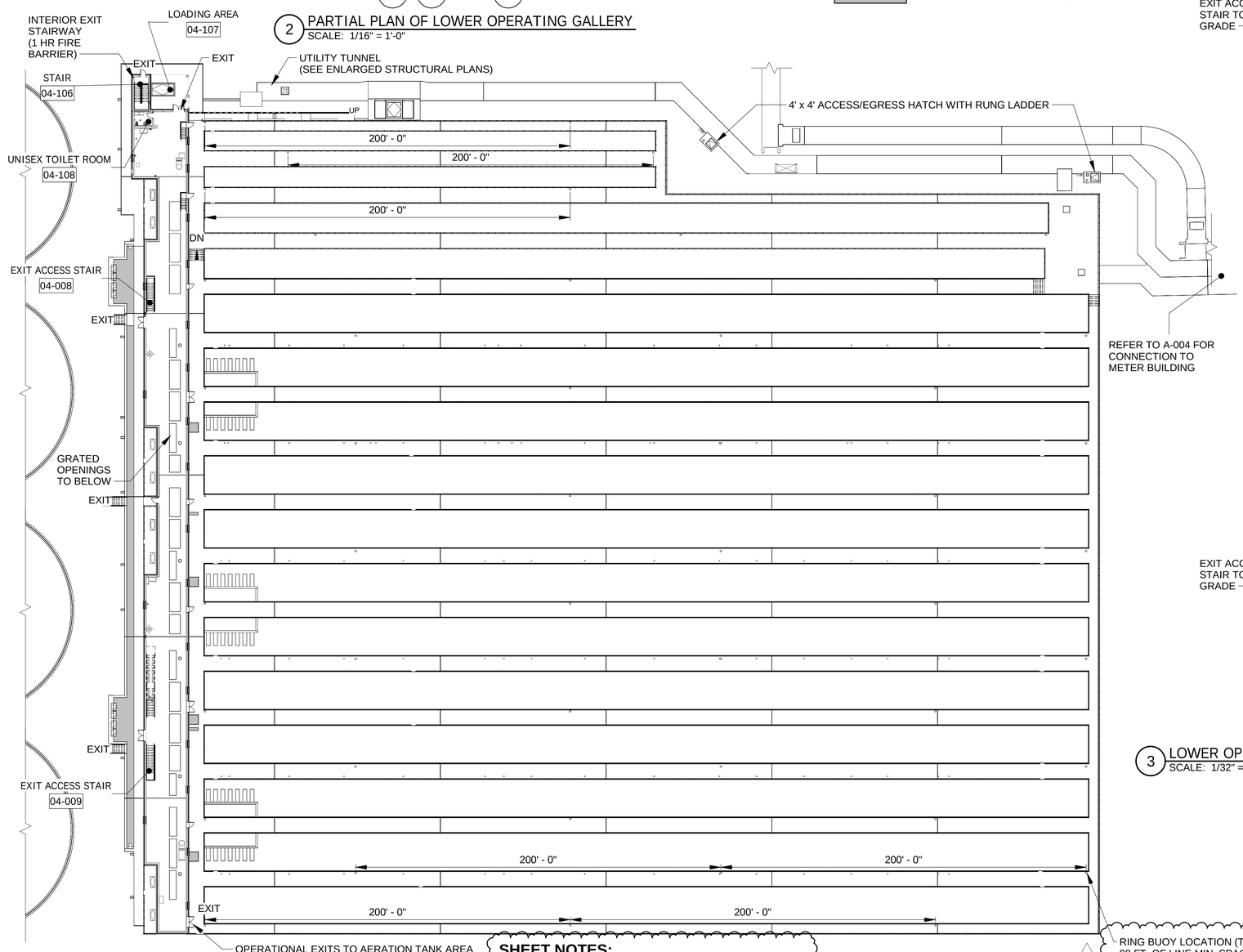
L. ACCESSIBILITY:

- TOILET FACILITIES: SECTION 1110.2



LEGEND:

- NEW OR EXISTING BACKGROUND
- EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
- NEW WORK
- FUTURE WORK
- CLASS 1 DIVISION 2
- FRP GRATING WITH PLATE

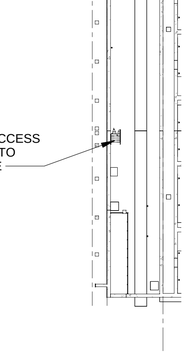


2 PARTIAL PLAN OF LOWER OPERATING GALLERY
SCALE: 1/16" = 1'-0"

1 UPPER OPERATING GALLERY PLAN
SCALE: 1/32" = 1'-0"

SHEET NOTES:

1. RING BUOYS SHALL HAVE A DIAMETER OF 24-IN AND BE MADE OF UNICELLULAR PLASTIC MATERIAL. RING BUOYS AND GRAB LINES SHALL MEET THE REQUIREMENTS OF 46 CFR PART 160 SUBPART 160.050.



3 LOWER OPERATING GALLERY PLAN
SCALE: 1/32" = 1'-0"

0 5' 10' 20' 40' 60' 80' 96'
SCALE: 1/32" = 1'-0"

0 6' 12' 24' 36' 48'
SCALE: 1/16" = 1'-0"

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
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SUITE 2400
CHICAGO, IL 60601, USA

Designed by: JP | Checked by: DB
Drawn by: AC | Reviewed by: DB
Date: 7/1/2025 | Scale: AS SHOWN

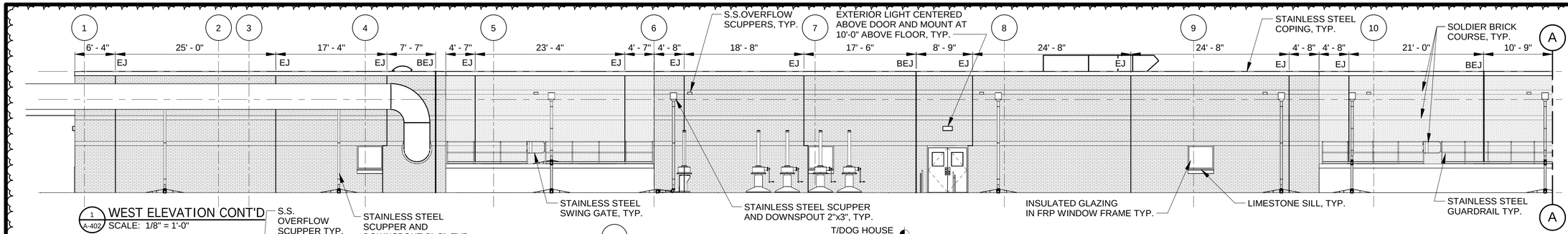
CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL
GENERAL LAYOUT, LIFE SAFETY PLAN, AND CODE MATRIX

LICENSED ARCHITECT
DAVID E BLOOD
001-019526
STATE OF ILLINOIS
07/01/2025

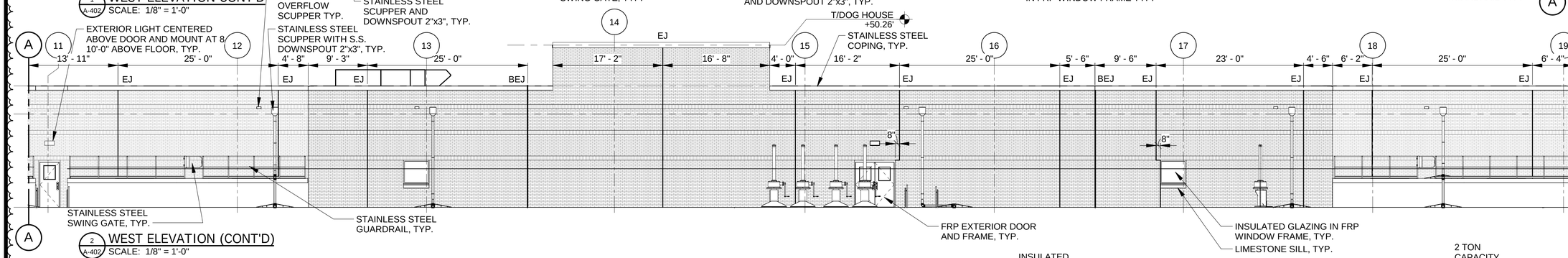
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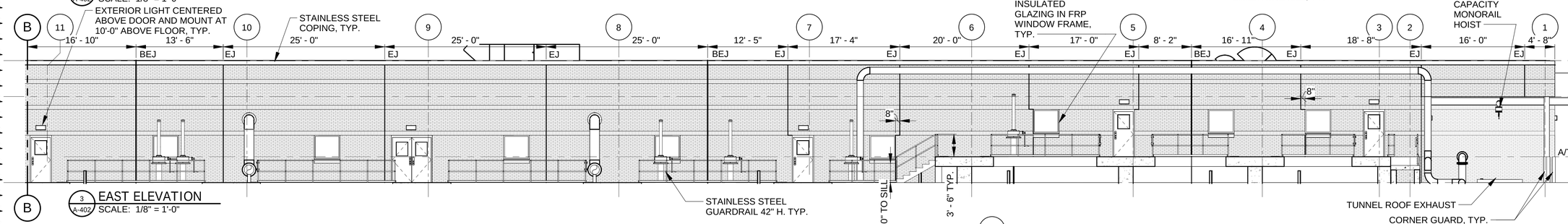
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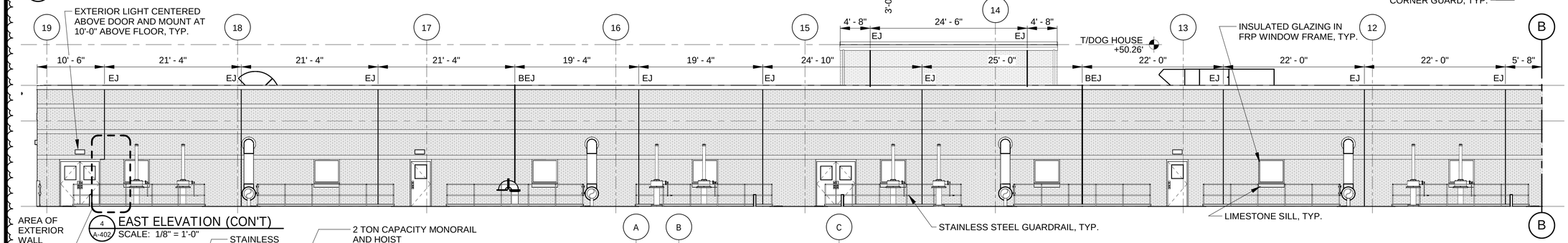
1 A-402 WEST ELEVATION CONT'D
SCALE: 1/8" = 1'-0"



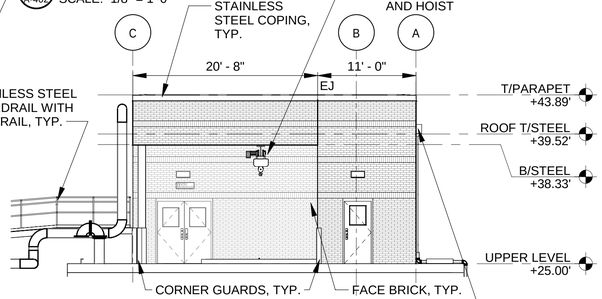
2 A-402 WEST ELEVATION (CONT'D)
SCALE: 1/8" = 1'-0"



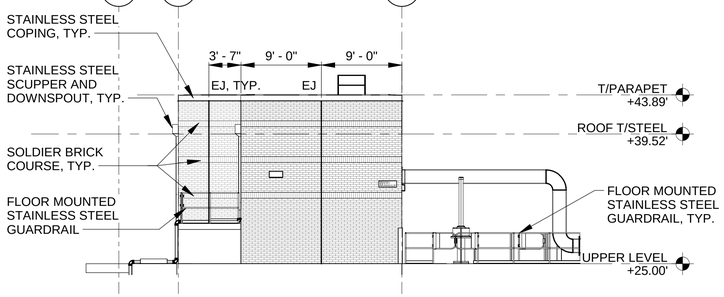
3 A-402 EAST ELEVATION
SCALE: 1/8" = 1'-0"



4 A-402 EAST ELEVATION (CON'T)
SCALE: 1/8" = 1'-0"



5 A-402 NORTH ELEVATION
SCALE: 1/8" = 1'-0"



6 A-402 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"

0 4' 8' 12' 18' 24'
SCALE: 1/8" = 1'-0"

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Primera
550 W. Jackson Boulevard • Suite 600 • Chicago, Illinois 60661

Designed by:	Drawn by:	Checked by:	Reviewed by:	Scale:	Date:
JP	AC	DB	DB	1/8" = 1'-0"	7/1/2025

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
OPERATING GALLERY

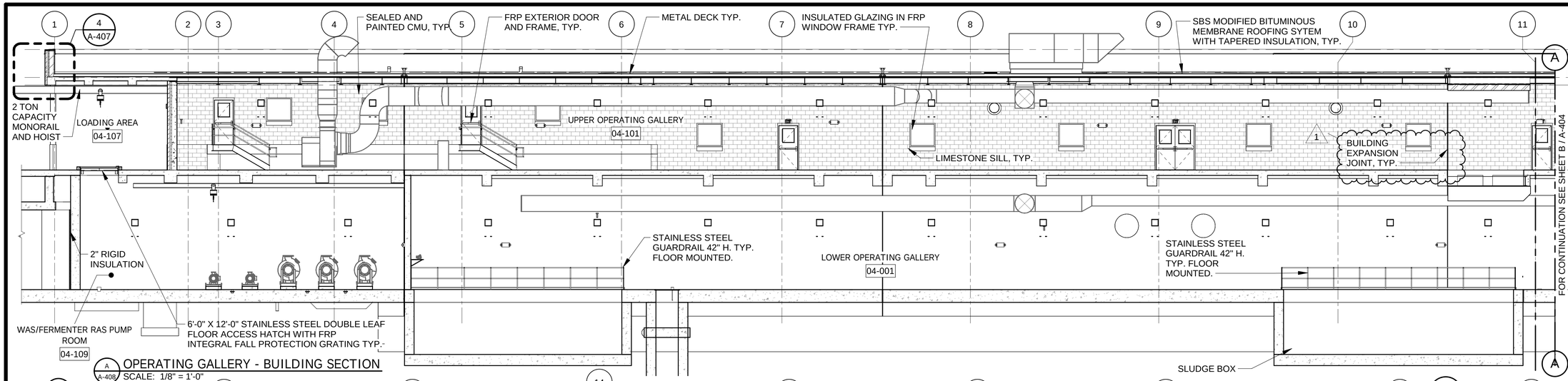
ELEVATIONS

LICENSED ARCHITECT
DAVID E BLOOD
001-019526
STATE OF ILLINOIS
07/11/2025

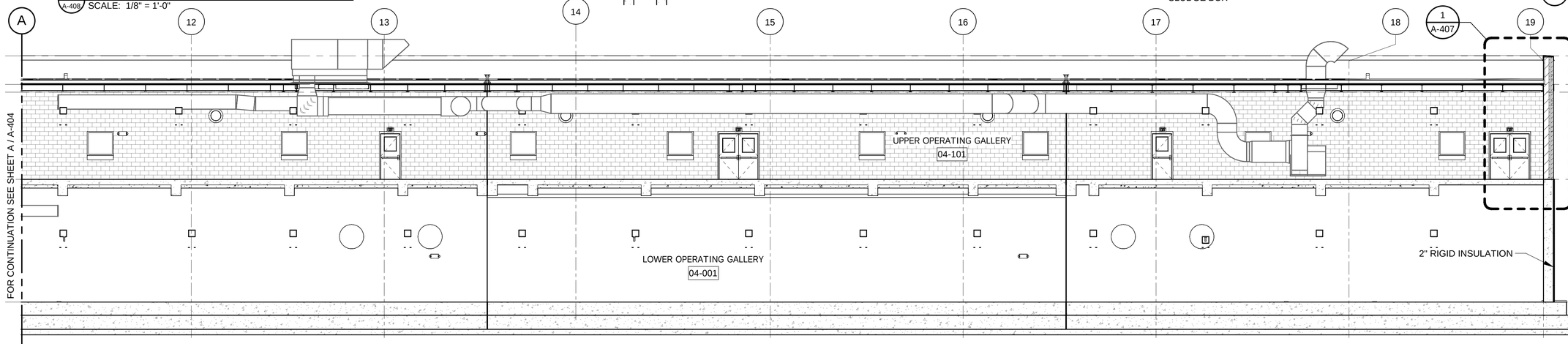
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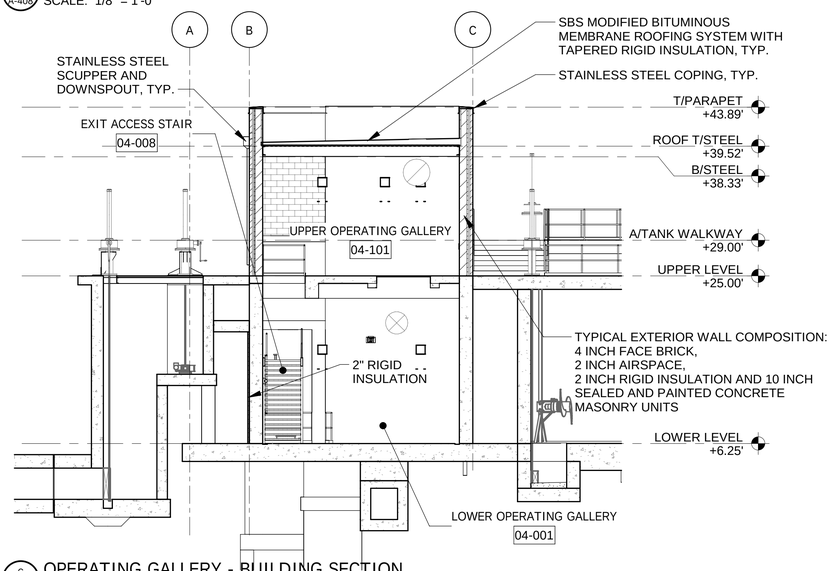
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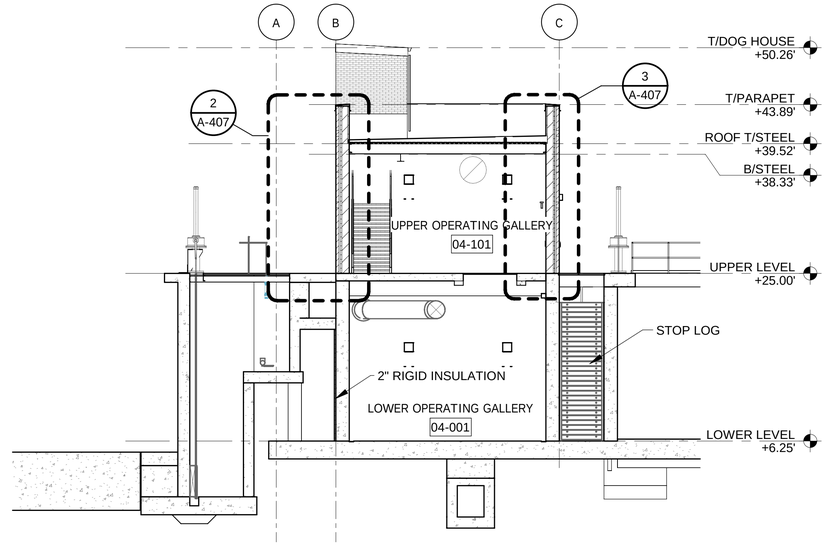
A-408 OPERATING GALLERY - BUILDING SECTION
SCALE: 1/8" = 1'-0"



B A-408 OPERATING GALLERY - BUILDING SECTION (CON'T)
SCALE: 1/8" = 1'-0"



C A-408 OPERATING GALLERY - BUILDING SECTION
SCALE: 1/8" = 1'-0"



D A-408 OPERATING GALLERY - BUILDING SECTION
SCALE: 1/8" = 1'-0"

0 4' 8' 12' 18' 24'
SCALE: 1/8" = 1'-0"

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METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

AECOM
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130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

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Designed by:	Checked by:	Scale:
JP	DB	1/8" = 1'-0"
Drawn by:	Reviewed by:	
AC	DB	
Date: 7/1/2025		

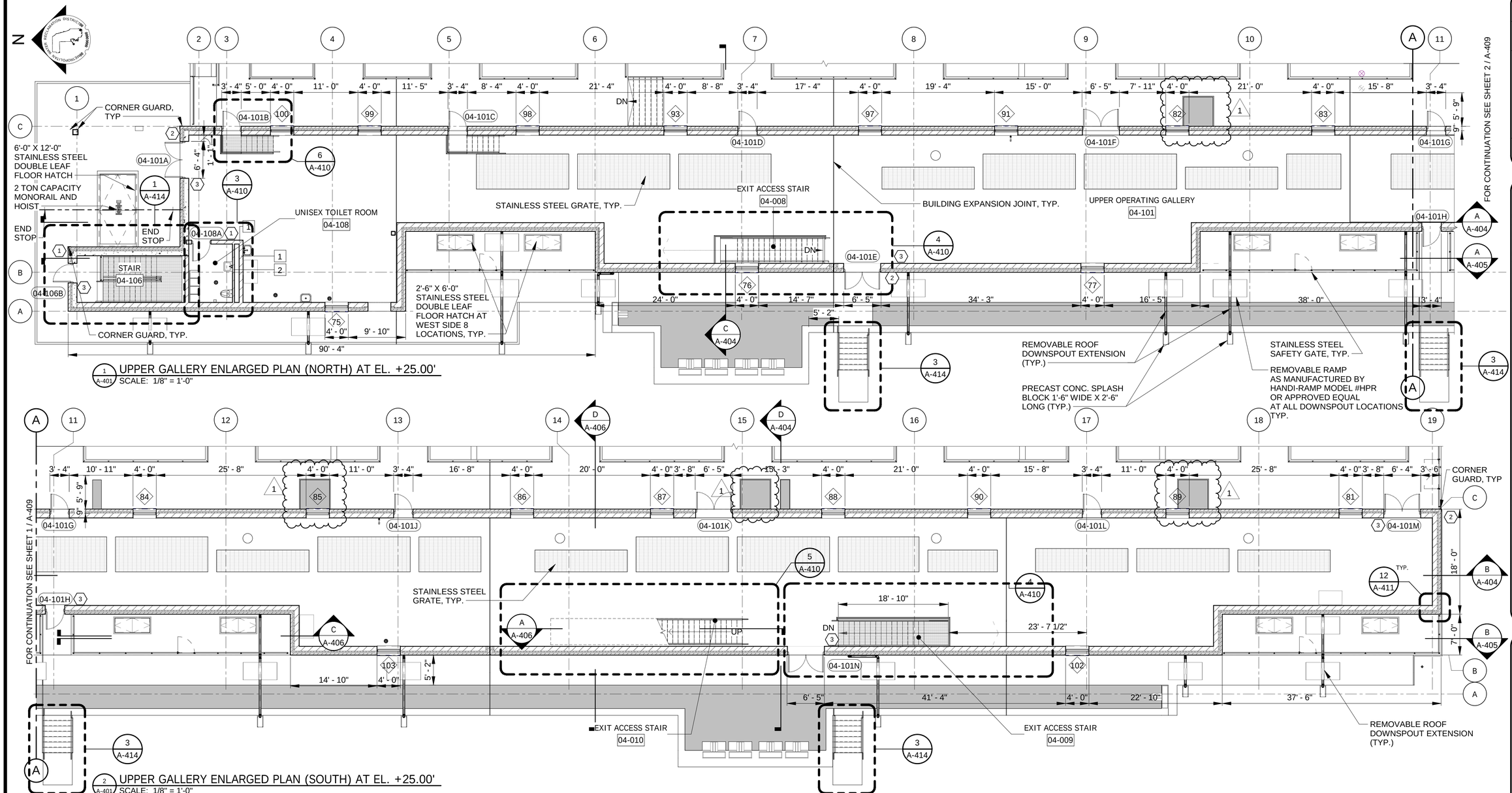
CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
OPERATING GALLERY
SECTIONS

LICENSED ARCHITECT
DAVID E BLOOD
001-019526
STATE OF ILLINOIS
07/01/2025

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Page Number: 228

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1 A-401 UPPER GALLERY ENLARGED PLAN (NORTH) AT EL. +25.00'
SCALE: 1/8" = 1'-0"

2 A-401 UPPER GALLERY ENLARGED PLAN (SOUTH) AT EL. +25.00'
SCALE: 1/8" = 1'-0"

LEGEND:

- NEW OR EXISTING BACKGROUND
- EXISTING WORK TO REMAIN (OR NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS)
- NEW WORK
- FUTURE WORK
- CLASS 1 DIVISION 2
- FRP GRATING WITH PLATE

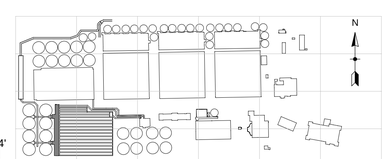
KEYED NOTES:

1. PROVIDE S-1 SIGNAGE
2. PROVIDE S-2 SIGNAGE
3. PROVIDE S-3 SIGNAGE

GENERAL NOTES:

1. CONTRACTOR TO VERIFY IN FIELD ALL DIMENSIONS AND EXISTING CONDITIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK.
2. DIMENSIONS IN THE DRAWINGS ARE APPROXIMATE. CONTRACTOR SHALL NOT SCALE THE DRAWINGS OR THE DETAILS. VERIFY ALL DIMENSIONS IN FIELD.
3. NO DEBRIS SHALL BE ALLOWED TO ACCUMULATE ON THE SITE. DEBRIS SHALL BE REMOVED BY THE CONTRACTOR AS THE JOB PROCEEDS. THE SITE SHALL BE LEFT BROOM CLEAN AT THE COMPLETION OF EACH DAY.
4. ALL CONTRACTOR STAGING AND STORAGE TO BE COORDINATED WITH THE RESIDENT ENGINEER THROUGHOUT CONSTRUCTION.
5. CONTRACTOR IS RESPONSIBLE FOR CREATING A SECURE AREA OF ALL STAGING AND STORAGE.
6. CONTRACTOR ACCESS TO THE SITE TO BE COORDINATED WITH THE RESIDENT ENGINEER.

0 4' 8' 12' 18' 24'
SCALE: 1/8" = 1'-0"



OVERALL KEYPLAN

LICENSED ARCHITECT
DAVID E BLOOD
001-019526
STATE OF ILLINOIS
07/11/2025

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550 W. Jackson Boulevard • Suite 600 • Chicago, Illinois 60661
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Designed by:	Checked by:	Scale:
JP	DB	AS SHOWN
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Date: 7/1/2025		

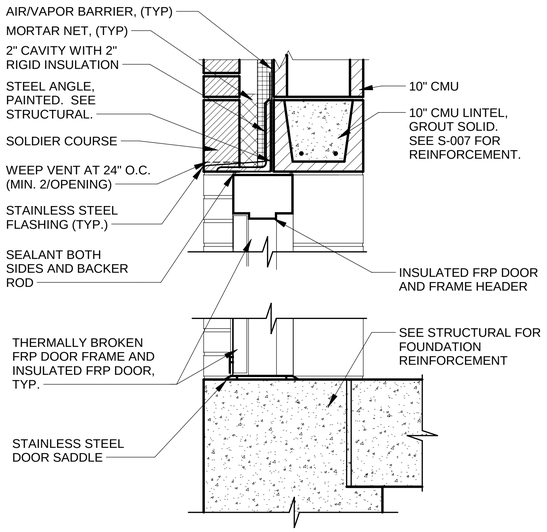
CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
OPERATING GALLERY

LARGE SCALE PLANS

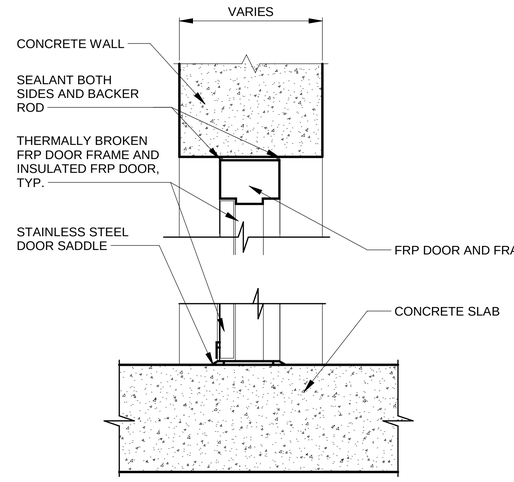
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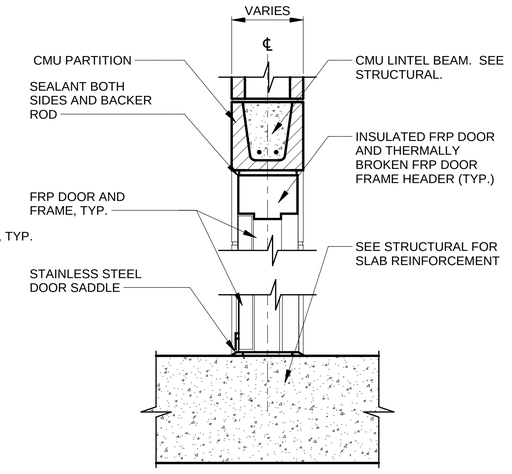
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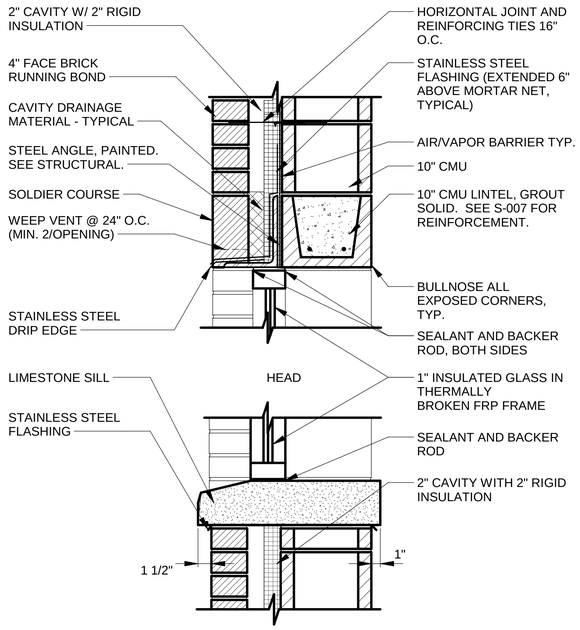
1 DOOR SILL AND HEAD DETAIL, TYPICAL
SCALE: 1 1/2" = 1'-0"



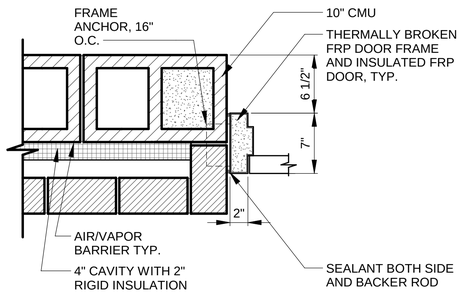
2 DOOR SILL AND HEAD DETAIL AT CONCRETE WALL
SCALE: 1 1/2" = 1'-0"



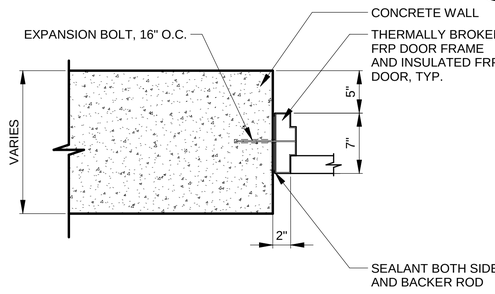
3 DOOR SILL AND HEAD DETAIL AT CMU WALL
SCALE: 1 1/2" = 1'-0"



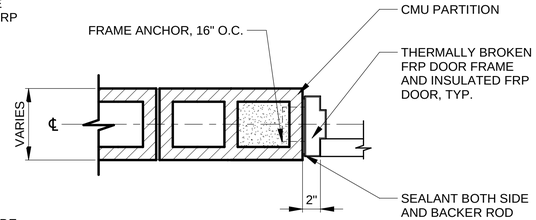
4 WINDOW SILL AND HEAD DETAIL, TYPICAL
SCALE: 1 1/2" = 1'-0"



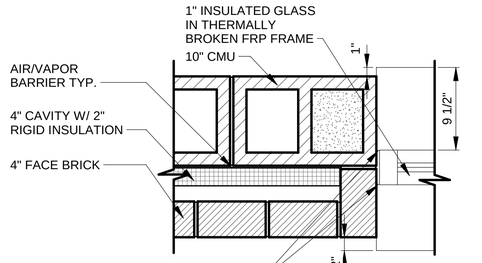
5 EXTERIOR DOOR DETAIL - JAMB
SCALE: 1 1/2" = 1'-0"



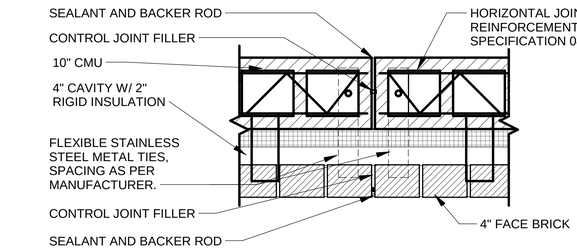
6 INTERIOR DOOR AT CONCRETE WALL DETAIL - JAMB
SCALE: 1 1/2" = 1'-0"



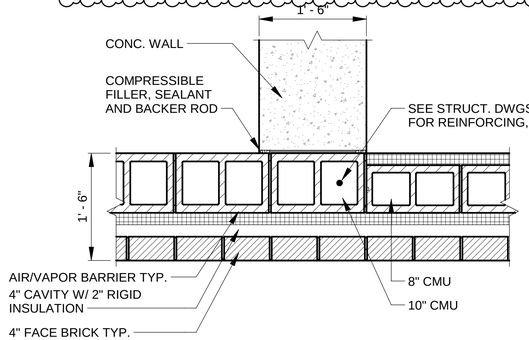
7 INTERIOR DOOR AT CMU WALL DETAIL - JAMB
SCALE: 1 1/2" = 1'-0"



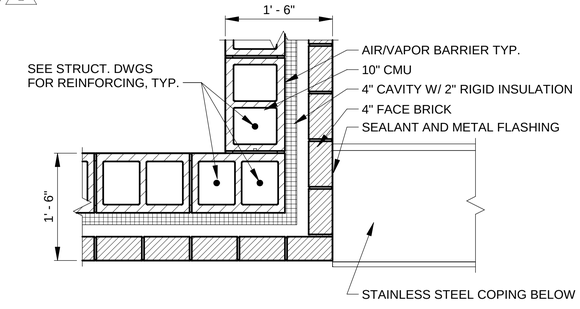
8 EXTERIOR WINDOW DETAIL - JAMB
SCALE: 1 1/2" = 1'-0"



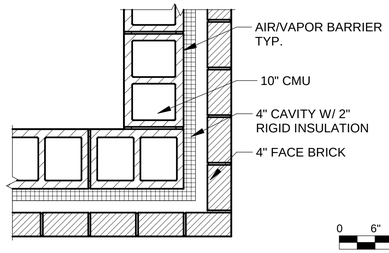
9 FULL MASONRY EXPANSION JOINT (BRICK)
SCALE: 1 1/2" = 1'-0"



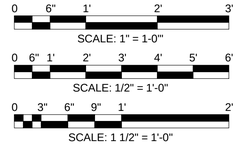
10 ROOF PLAN - DETAIL
SCALE: 1" = 1'-0" AT INTERSECTION OF DOG HOUSE/PARAPET WALLS



11 ROOF PLAN - DETAIL
SCALE: 1" = 1'-0" AT CORNER OF DOG HOUSE WALL



12 TYPICAL CORNER DETAIL
SCALE: 1" = 1'-0"



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130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Primera
550 W. Jackson Boulevard · Suite 600 · Chicago, Illinois 60661

Designed by:	Checked by:	Reviewed by:	Scale:
JP	DB	DB	AS SHOWN
Drawn by:			Date:
AC			7/1/2025

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
OPERATING GALLERY

DETAILS

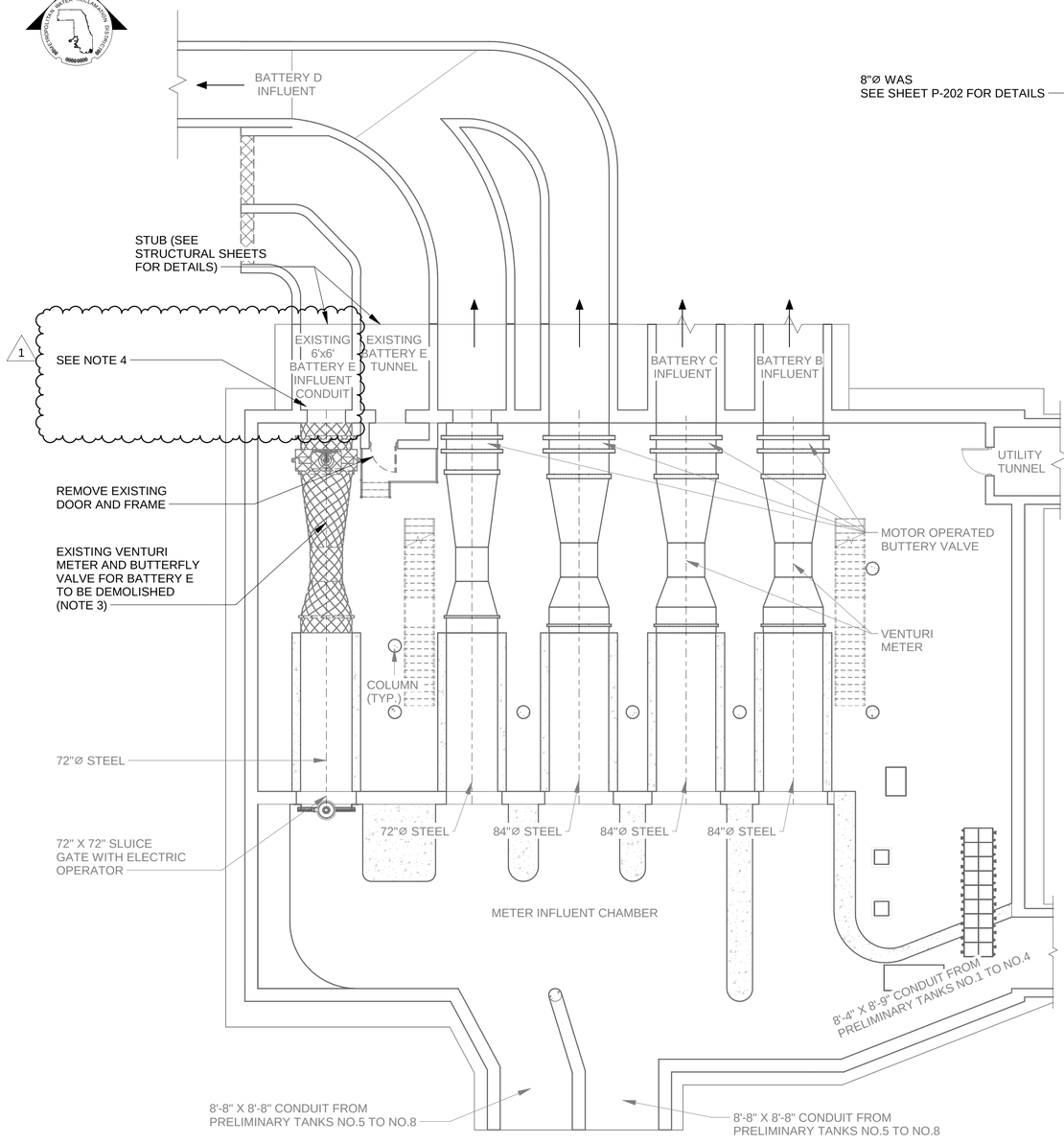
LICENSED ARCHITECT
DAVID E BLOOD
001-019526
STATE OF ILLINOIS
07/15/2025

Sheet Number: A-411
Page Number: 235

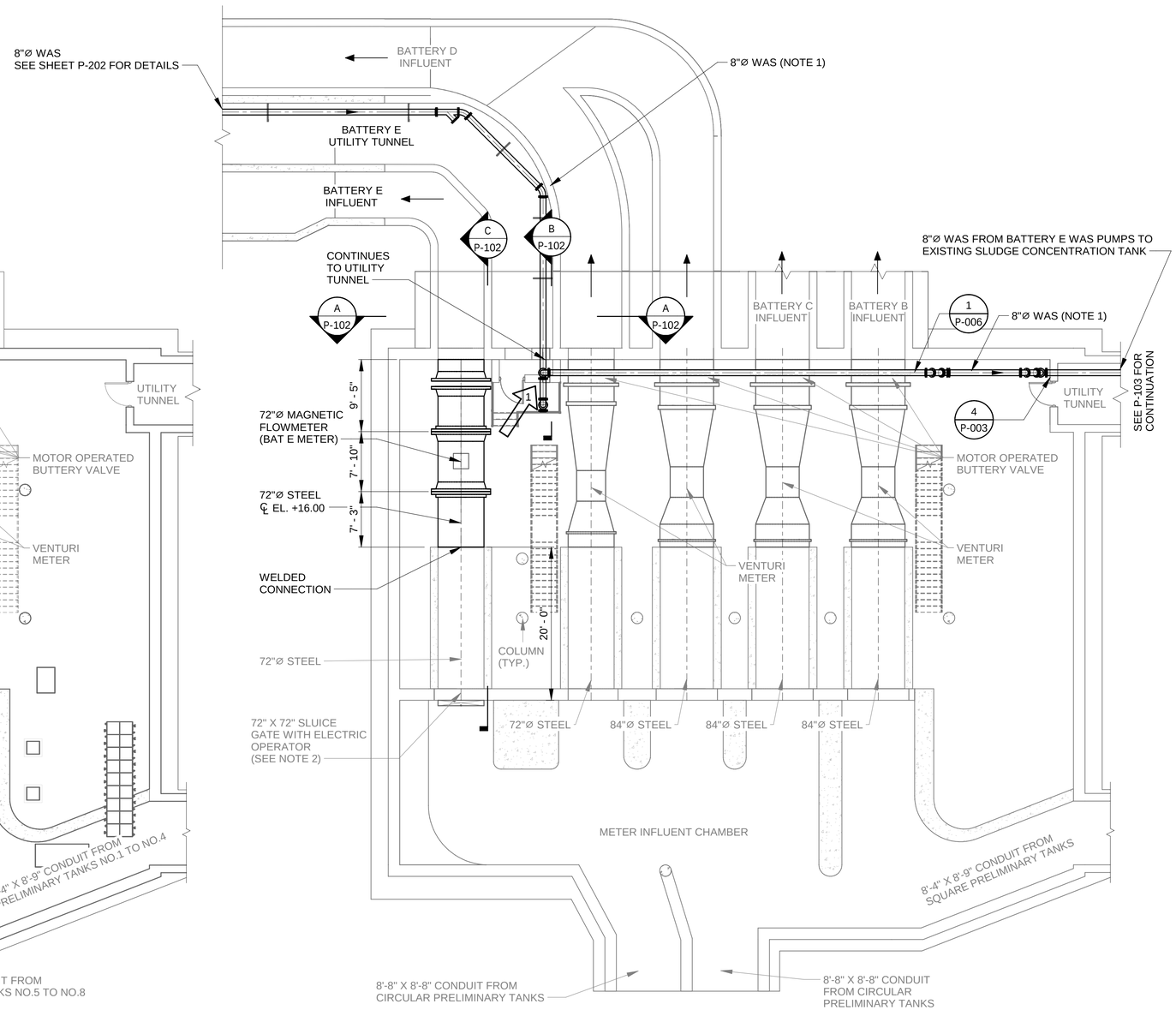
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N



1 METER BUILDING DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

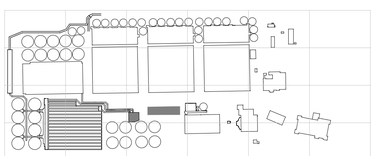


2 METER BUILDING PROPOSED PLAN
SCALE: 1/8" = 1'-0"

NOTES:

1. SEE PHOTOGRAPHS ON P-104 FOR 3D REPRESENTATION OF WAS ROUTE.
2. EXISTING 72" x 72" SLUICE GATE MAY NOT ENABLE COMPLETE ISOLATION FOR CONSTRUCTION OF BATTERY E CONDUIT. CONTRACTOR TO PROVIDE ADDITIONAL STOP LOGS OR OTHER APPROVED MODIFICATIONS NEEDED TO ISOLATE THE CONDUIT TO ENABLE LEAK PROOF ISOLATION.
3. SEE REFERENCE DRAWINGS R-29 TO R-42 FOR DETAILS ON EXISTING METER BUILDING AND TROLLEY HOIST.
1 4. CONTRACTOR SHALL ASSUME THAT THE EXISTING BATTERY E 72" PIPING, FLOW METER, VALVE, AND CONDUIT STUB IS COMPLETELY FULL OF WASTEWATER. CONTRACTOR SHALL BE RESPONSIBLE FOR PUMPING OUT THE WASTEWATER PRIOR TO DEMOLITION. CONTRACTOR WILL BE ALLOWED TO PUMP INTO THE METER BUILDING INFLUENT CHAMBER.

0 4' 8' 12' 18' 24'
SCALE: 1/8" = 1'-0"


OVERALL KEYPLAN

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METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Designed by: WW/FK
Drawn by: AT
Checked by: RK
Reviewed by: BK
Date: 7/1/2025
Scale: 1/8" = 1'-0"

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
PROCESS CONTROL BUILDING & METER BUILDING

METER BUILDING - DEMOLITION AND NEW WORK

BARRY E. KLEPP
062-046153
LICENSED PROFESSIONAL ENGINEER
OF ILLINOIS
7/18/2025
EXP 11-30-2025

Sheet Number: P-101
Page Number: 260

PLOT DATE: 10/15/2025 8:39:20 PM

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GENERAL PIPING SYMBOLS

- PIPE CAP
- STRAIGHT CROSS
- 90° ELBOW
- 90° ELBOW TURNED DOWN
- 90° ELBOW TURNED UP
- SIDE OUTLET ELBOW TURNED DOWN
- SIDE OUTLET ELBOW TURNED UP
- LATERAL
- TEE
- TEE OUTLET UP
- TEE OUTLET DOWN
- UNION
- STRAINER
- THERMOMETER
- PRESSURE, VACUUM OR COMPOUND GAUGE
- AIR ELIMINATOR (AIR VENT)
- SHOCK ABSORBER
- FLOW INDICATOR
- REDUCER

VALVE SYMBOLS

- GATE VALVE
- GLOBE VALVE
- BUTTERFLY VALVE
- CHECK VALVE
- PLUG VALVE
- BALL VALVE
- CALIBRATED BALANCE VALVE VALVE
- PRESSURE REDUCING OR REGULATING VALVE (NUMBERS = INITIAL AND FINAL PRESSURE IN PSIG) — 100 50
- HOSE BIBB (HB) OR WALL HYDRANT (WH)
- REDUCER

HEATING & VENTILATING SYMBOLS

- UH-1 — HORIZONTAL UNIT HEATER
- UH-1 — CABINET TYPE UNIT HEATER
- (E) EMERGENCY STOP
- (H) HUMIDISTAT
- (T) THERMOSTAT
- (G) GAS DETECTOR SENSOR CARBON MONOXIDE (CO) & NITROGEN DIOXIDE (NO_2)
- (C) WIRED WALL CONTROLLER FOR CEILING FAN
- 12x16 OR 12x16 — DUCT SIZE (FIRST FIGURE SIZE OF SIDE SHOWN, SECOND FIGURE SIZE OF SIDE NOT SHOWN.)
- POSITIVE PRESSURE AIR DUCT RISE
- POSITIVE PRESSURE AIR DUCT DROP
- NEGATIVE PRESSURE AIR DUCT RISE
- NEGATIVE PRESSURE AIR DUCT DROP
- FLEXIBLE DUCTWORK
- TURNING VANES
- VD OR VD — VOLUME CONTROL DAMPER
- M OR M — MOTOR OPERATED DAMPER
- F1 — FIRE DAMPER (HORIZONTAL POSITION) 1 1/2 HOUR (F1), 3 HOUR (F3)
- F1 — FIRE DAMPER (VERTICAL POSITION) 1 1/2 HOUR (F1), 3 HOUR (F3)
- TAG / CFM / SIZE OR — SUPPLY REGISTER OR GRILLE DUCT MOUNTED
- TAG / CFM / SIZE OR — SUPPLY REGISTER OR GRILLE IN WALL AIR FLOW
- FLEXIBLE CONNECTION FAN OR EQUIPMENT
- D — DUCT DROPS IN THE DIRECTION OF AIR FLOW
- R — DUCT RISES IN THE DIRECTION OF AIR FLOW
- D — DUCT DROPS IN THE DIRECTION OF AIR FLOW
- R — DUCT RISES IN THE DIRECTION OF AIR FLOW

HVAC ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
BDD	BACK-DRAFT DAMPER
BOD	BOTTOM OF DUCT
BOG	BOTTOM OF GRILLE
CFM	CUBIC FOOT PER MINUTE
COP	CENTER OF PIPE
DG	DOOR GRILLE
EF	EXHAUST FAN
EL	ELEVATION
EA	EXHAUST AIR
MAU	MAKE-UP AIR UNIT
NG	NATURAL GAS
OA	OUTSIDE AIR
PF	PRESSURIZATION FAN
PRV	PRESSURE REGULATING VALVE
RM	ROOM
SA	SUPPLY AIR
T.O.	TOP OF
WMS	WIREMESH SCREEN

THIS IS A STANDARD LEGEND. NOT ALL THE INFORMATION SHOWN ON THIS LEGEND IS USED ON THIS PROJECT.

HVAC GENERAL NOTES

1. THE DRAWINGS ARE SCHEMATIC IN NATURE. ALL REQUIRED DUCTWORK AND PIPING MODIFICATIONS SHALL BE INCLUDED IN THE BASE BID TO ACCOMMODATE ACTUAL FIELD CONDITIONS. FINAL LOCATIONS OF ALL WORK SHALL BE COORDINATED IN THE FIELD AND INSTALLED AS REQUIRED.
2. CONTRACTOR SHALL COORDINATE ALL WORK WITH THAT OF OTHER TRADES. COORDINATE WALL, FLOOR, AND ROOF OPENINGS WITH GENERAL CONTRACTOR.
3. INSTALL ALL DUCTWORK, PIPING, AND SUSPENDED EQUIPMENT AS HIGH AS POSSIBLE TO MAXIMUM CLEARANCE UNLESS SPECIFIED OTHERWISE.
4. ALL EQUIPMENT, PIPING, AND DUCTWORK SHALL BE SUPPORTED AS DETAILED, SPECIFIED, AND AS REQUIRED TO PROVIDE A VIBRATION FREE INSTALLATION.
5. DUCT SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS.
6. MAXIMUM LENGTH FOR FLEX DUCT SHALL BE LIMITED TO 8'-0".
7. DUCTWORK SHALL BE GALVANIZED STEEL.
8. DUCTWORK SHALL BE INSULATED AS SCHEDULED AND SPECIFIED IN PROJECT MANUAL DOCUMENTS.
9. PROVIDE TURNING VANES IN ALL RECTANGULAR DUCT ELBOWS.
10. PIPE PENETRATIONS THROUGH FLOORS AND WALLS SHALL BE SLEEVED AND SEALED.
11. THE CONTRACTOR SHALL PROVIDE OFFSETS IN THE PIPING RUNS, IN ADDITION TO WHAT IS SHOWN ON THE DRAWINGS, WHERE REQUIRED TO CLEAR HVAC, STRUCTURAL, ARCHITECTURAL, ELECTRICAL, MECHANICAL AND OTHER SYSTEMS.
12. PIPES THAT PASS THROUGH FIRE RATED WALLS AND FLOORS SHALL BE INSTALLED TO MEET APPLICABLE UL SYSTEM REQUIREMENTS PERTAINING TO TYPE OF CONSTRUCTION. REFER TO ARCHITECTURAL DRAWINGS FOR WALLS WHICH ARE FIRE RATED.
13. PROVIDE ISOLATION VALVE AND UNION OR FLANGE AT EQUIPMENT CONNECTIONS IF NOT PROVIDED ON PROCESS SIDE.
14. ALL CONTROL WIRING SHALL BE RUN IN RIGID METAL CONDUIT.
15. ELECTRICAL SCOPE OF WORK:
    a. POWER SUPPLY BY DIVISION 16.
    b. CONTROL POWER FROM TEMPERATURE CONTROL PANEL TO DEVICES BY DIVISION 15.
    c. CONTROL POWER FROM MECHANICAL EQUIPMENT TO REMOTE PANELS BY DIVISION 15.
16. EXHAUST AIR SHALL BE DISCHARGED TO THE OUTSIDE AT A POINT WHERE IT WILL NOT CAUSE A NUISANCE, AND FROM WHICH IT CANNOT AGAIN BE READILY DRAWN IN BY A VENTILATING SYSTEM. ALL EXHAUST SHALL BE A MINIMUM OF 15' FROM THE NEAREST OUTSIDE AIR INTAKE.
17. PROVIDE WMS WHERE INDICATED ON THE DRAWINGS. SEE DETAIL 4 ON M-002 FOR INFORMATION ON WMS. (1)

GAS PIPING NOTES

1. PROVIDE GAS PIPING FROM GAS METER TO ALL EQUIPMENT REQUIRING SERVICE.
2. GAS PIPING AND CONTROLS MUST CONFORM TO THE INTERNATIONAL FUEL GAS CODE (IFGC), CHAPTER 4 (WITH MODIFICATIONS AS NOTED IN ARTICLE 14).
3. GAS PIPING MUST BE SIZED IN ACCORDANCE WITH IFGC TABLES 402.(1) THROUGH 402.3(34). GAS PRESSURE AT METER SHALL BE SET FOR 2#/PSI.
4. THE MAXIMUM DESIGN OPERATING PRESSURE FOR GAS PIPING SYSTEMS LOCATED INSIDE BUILDINGS SHALL NOT EXCEED 5 PSIG (SOME EXCEPTIONS ARE NOTED).
5. GAS PIPING MATERIALS MUST CONFORM TO THE GAS PIPING & TUBING MATERIAL MATRIX (IFGC 403 REQUIREMENTS).
6. MINIMUM REQUIRED BURIAL DEPTH FOR UNDERGROUND PIPING SYSTEMS MUST CONFORM TO IFGC 404.9.
7. GAS PIPES MUST BE SLOPED AT 1/4 INCH IN EVERY 15 FEET. [IFGC 408.1].
8. LOCATION OF OUTLETS MUST CONFORM TO IFGC 404.13.
9. SHUT-OFFS MAY NOT BE PLACED IN LOCATIONS INDICATED IN IFGC 409.12.
10. PIPING IN CONCEALED LOCATIONS MUST CONFORM TO THIS IFGC 404.3
11. NATURAL GAS HEATING VALUE IS BASED ON 1028 BTU/CFH.
12. DEPTH OF UNDERGROUND GAS PIPING SHALL BE PER NICOR REQUIREMENTS.
13. NATURAL GAS DISTRIBUTION PIPING SHALL BE SCHEDULE 40 BLACK WELDED STEEL PIPING WITH STANDARD WELD FITTINGS. SCHEDULE 40 BLACK STEEL PIPING WITH 150# MALLEABLE IRON THREADED FITTING ALLOWED IF OUTSIDE AND AFTER THE GAS REGULATOR.
14. PROVIDE PRESSURE REGULATING VALVE AT ALL EQUIPMENT, AND ADJUST TO MATCH MANUFACTURER REQUIRED GAS PRESSURE FOR ASSOCAITED UNIT.

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Designed by:	Checked by:	Reviewed by:	Scale:
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CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL

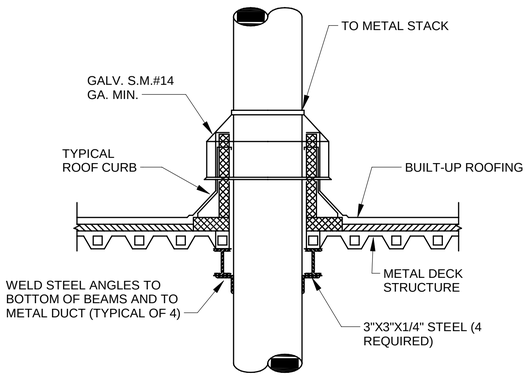
MECHANICAL NOTES SYMBOLS AND ABBREVIATIONS

PAUL GHASSAN 062-059554 LICENSED PROFESSIONAL ENGINEER OF ILLINOIS
EXP: 11/30/2025

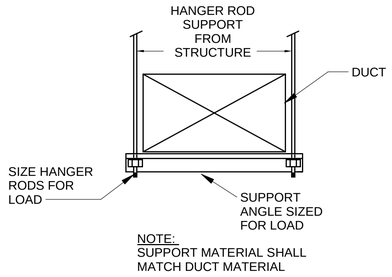
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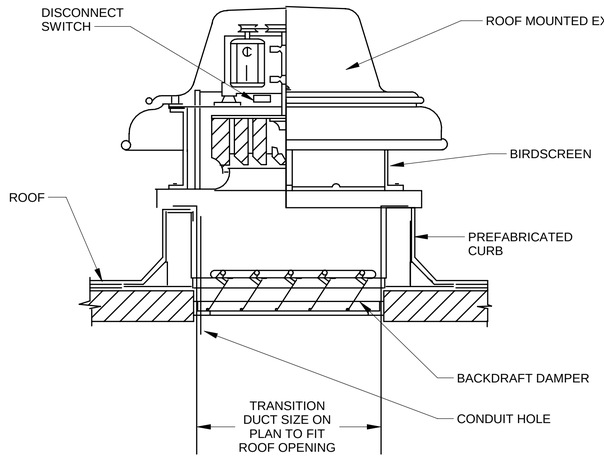
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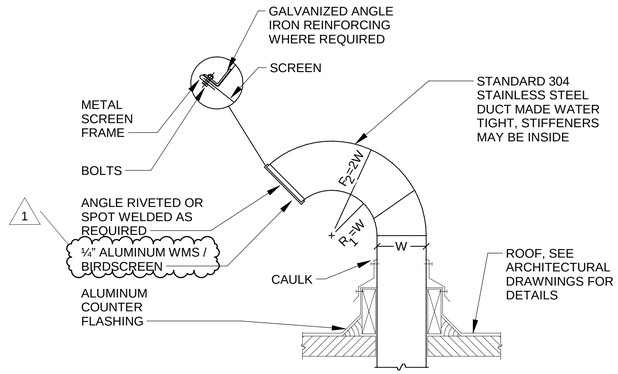
1 HVAC - DUCT THRU ROOF PENETRATION
NOT TO SCALE



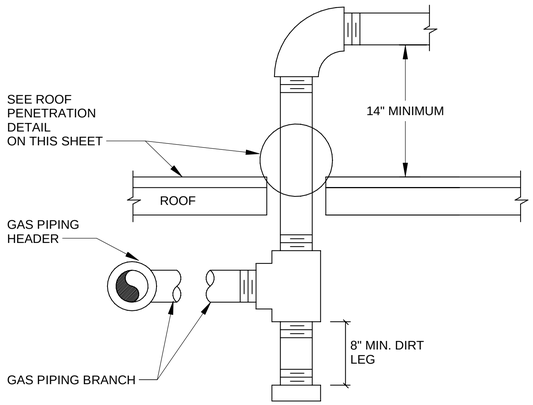
2 HVAC - DUCT HANGING DETAIL
NOT TO SCALE



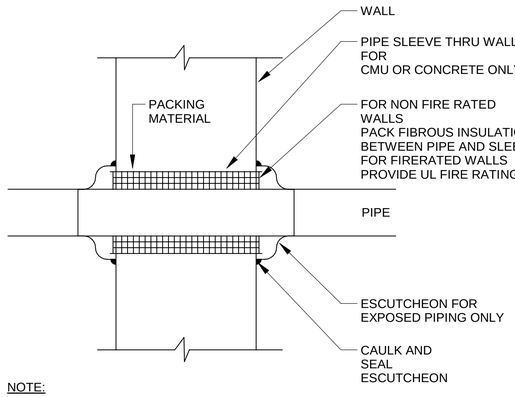
3 HVAC - POWER ROOF EXHAUSTER DETAIL
NOT TO SCALE



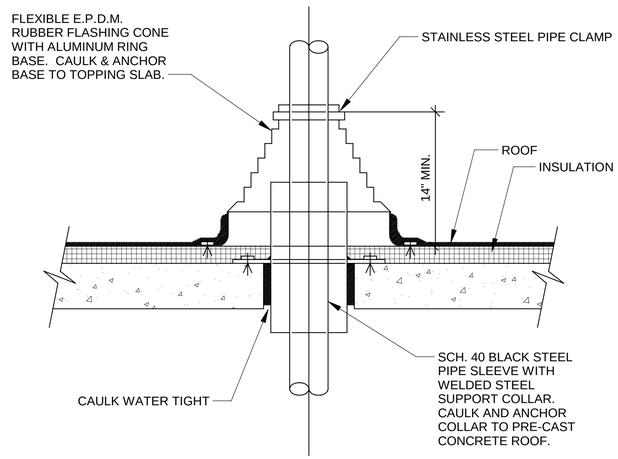
4 HVAC - GOOSENECK DETAIL
NOT TO SCALE



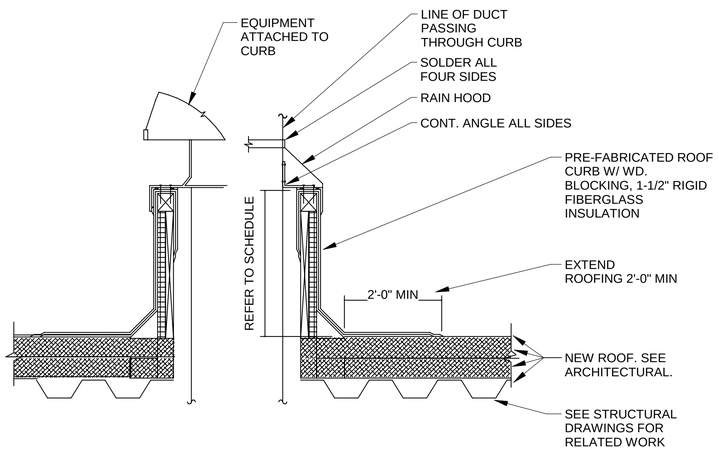
5 HVAC - GAS PIPING AT ROOF EQUIPMENT
NOT TO SCALE



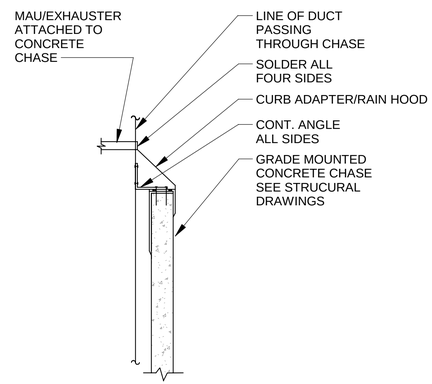
6 HVAC - PIPE THRU WALL
NOT TO SCALE



7 HVAC - SINGLE PIPE AT ROOF PENETRATION
NOT TO SCALE



8 HVAC - ROOF CURB DETAIL
NOT TO SCALE



9 HVAC - MAU/EXHAUSTER TO CONCRETE CHASE
NOT TO SCALE

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METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Designed by:	Checked by:	Approved by:	Date:
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CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL

STANDARD DETAILS 1

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EXP: 11/30/2025

Sheet Number: M-002
Page Number: 332

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MAKE-UP AIR UNIT SCHEDULE (GAS)

TAG	SERVICE	HEATING			FAN				MOTOR						BASIS OF DESIGN		WEIGHT	HEIGHT	NOTES
		INPUT	OUTPUT	EFFICIENCY	VOLUME	OUTSIDE AIR	SP	SPEED	POWER	VOLT	PHASE	FREQ.	MCA	SPEED	MANUFACTURER	MODEL			
		MBH	MBH	%	CFM	CFM	IN. WG	RPM	Hp	V	Ø	Hz	A	RPM			LBS	IN.	
MAU-1	GALLERY	1,315	1,210	92	16,000	16,000	2.30	766	15	460	3	60	32.8	766	ABSOLUTAIRE	AA5-HOX	3,700	54	1,2,3,4,5,6,7,8,9
MAU-2	GALLERY	1,315	1,210	92	16,000	16,000	2.30	766	15	460	3	60	32.8	766	ABSOLUTAIRE	AA5-HOX	3,700	54	1,2,3,4,5,6,7,8,9
MAU-3	TUNNEL	534	491	92	6,500	6,500	2.05	1,096	5	460	3	60	15.6	1,096	ABSOLUTAIRE	AA2-HOM	1,425	33	1,2,3,4,5,6,7,8,9
MAU-4	WAS/RAS	205	189	92	2,500	2,500	2.05	1,360	2	460	3	60	10.4	1,360	ABSOLUTAIRE	AA3000-HOM	950	28	1,2,3,4,5,6,7,8,9

1. WEATHERHOOD WITH 2" ALUMINUM MESH FILTERS.
2. AIR FILTER GAUGE. PROVIDE TYPICAL MERV 11 FILTERS.
3. INLET AIR SENSOR.
4. MULTI-STAGE GAS CONTROL. 7.5"WC-14"WC PRESSURE.
5. ALUMINIZED STEEL HEAT EXCHANGER.
6. DISCHARGE TEMPERATURE SENSOR (70 degF).
7. REMOTE CONTROL PANEL.
8. CONVENIENCE OUTLET.
9. 14" ROOF CURB.

FAN SCHEDULE

TAG	LOCATION	SERVICE	CFM	E.S.P. IN WC	FAN DATA				MOTOR DATA					MANUFACTURER AND MODEL	UNIT WT LBS.	REMARKS
					FAN TYPE	CLASS	RPM	DRIVE	BHP	HP	VOLT	PH	HZ			
EF-1	TOP GALLERY	GALLERY	16,000	1	CENTRIFUGAL	I	640	BELT	4.98	7.5	460	3	60	GREENHECK USF-36	1,007	1,5,6,8,10
EF-2	TOP GALLERY	GALLERY	16,000	1	CENTRIFUGAL	I	640	BELT	4.98	7.5	460	3	60	GREENHECK USF-36	1,007	1,5,6,8
EF-3A	GRADE LEVEL	TUNNEL	3,250	0.75	DOWNBLAST	I	1,060	DIRECT	0.77	2	208	1	60	GREENHECK G-180-VG	120	1,5,6,8
EF-3B	GRADE LEVEL	TUNNEL	3,250	0.75	DOWNBLAST	I	1,060	DIRECT	0.77	2	208	1	60	GREENHECK G-180-VG	120	1,5,6,8
EF-4	TOP GALLERY	RAS/WAS PUMP RM	2,500	0.75	INLINE	I	1,172	DIRECT	0.60	1	208	1	60	GREENHECK SQ-160-VG	141	1,3,5,6,8
EF-5	GALLERY ROOF	UPPER GALLERY TOILET RM	200	0.25	DOWNBLAST	I	1,300	DIRECT	0.01	1/60	115	1	60	GREENHECK G-70-VG	24	1,3,6,7,10
PF-1	TUNNEL VESTIBULE	TUNNEL VESTIBULE	100	0.15	INLINE	I	1,083	DIRECT	0.01	1/15	115	1	60	GREENHECK SQ-70-VG	67	1,3,5,6,9
PF-2	TUNNEL VESTIBULE	TUNNEL VESTIBULE	100	0.15	INLINE	I	1,083	DIRECT	0.01	1/15	115	1	60	GREENHECK SQ-70-VG	67	1,3,5,6,9

1. PROVIDE W/ SPEED CONTROL ACCESSORY.
2. PROVIDE W/ WALL MOUNTED TIMER SET TO RUN FAN FOR 10 MINUTES (ADJUSTABLE)
3. PROVIDE W/ EC MOTOR.
4. THERMOSTAT CONTROLLED.
5. UNITS OPERATE 24/7 BY DEFAULT (ADJUSTABLE).
6. PROVIDE WITH MOTORIZED BACKDRAFT DAMPER. VOLTAGE OF DAMPER SHALL MATCH FAN VOLTAGE. MECHANICAL CONTRACTOR SHALL INSTALL DAMPER IN DUCTWORK, ELECTRICAL SHALL WIRE.
7. INTERLOCK OPERATION WITH BATHROOM LIGHT SWITCH/OCCUPANCY SENSOR.
8. INTERLOCK OPERATION WITH ASSOCIATED MAU.
9. PROVIDE WITH FILTER BOX OPTION. MERV 8 FILTER.
10. PROVIDE 24" HIGH ROOF CURB ABOVE ROOF FINISHED SURFACE. COORDINATE WITH ROOFER.
11. CLASS 1 DIV 2 MOTOR.

ELECTRIC UNIT HEATER SCHEDULE

TAG	LOCATIONS (QUANTITY) SHEET #	DIMENSIONS	CFM	HEATING COIL DATA				FAN DATA		ELECTRICAL DATA			UNIT WEIGHT (LBS)	BASIS OF DESIGN		NOTES
				EAT	LAT	KW	STAGES	QTY	HP	VOLT	PH	HZ		MANFR.	MODEL	
EH-1A	SEE NOTE 4	20x16x6	100	60	110	4	1	1	-	208	1	60	-	QMARK	FRC4020-4000W	1,3,4
EH-1B	SEE NOTE 4	20x16x6	100	60	110	4	1	1	-	208	1	60	-	QMARK	FRC4020-4000W	1,3,4
EH-1C	SEE NOTE 4	20x16x6	100	60	110	4	1	1	-	208	1	60	-	QMARK	FRC4020-4000W	1,3,4
EH-1D	SEE NOTE 4	20x16x6	100	60	110	4	1	1	-	208	1	60	-	QMARK	FRC4020-4000W	1,3,4
EH-2A	SEE NOTE 5	20x16x6	100	60	110	2	1	1	-	208	1	60	-	QMARK	FRC4020-2000W	1,3,5
EH-2B	SEE NOTE 5	20x16x6	100	60	110	2	1	1	-	208	1	60	-	QMARK	FRC4020-2000W	1,3,5

1

1. PROVIDE UNIT HEATER WITH MOUNTING HARDWARE.
2. UNUSED
3. PROVIDE UNIT HEATER WITH DISCONNECT SWITCH AND UNIT MOUNTED THERMOSTAT.
4. SEE PLAN LOCATIONS (1) M-406, (1) M-405, (2) M-205
5. SEE PLAN LOCATIONS (1) M-204 (1) M-203

DIFFUSER/REGISTER/GRILLE SCHEDULE

TAG	TYPE	DESCRIPTION	MATERIAL	FINISH	MANUFACTURER	MODEL	REMARKS
A	SUPPLY	SPIRAL DUCT-MOUNT	ALUMINUM	WHITE	PRICE	SDG	1,2,3,4
B	EXHAUST	SPIRAL DUCT-MOUNT	ALUMINUM	WHITE	PRICE	SDGER	1,2,4

1. SEE DRAWINGS FOR INDIVIDUAL DIFFUSER NECK SIZES.
2. COORDINATE FINISH COLOR AND MOUNTING TYPE WITH ARCHITECT.
3. PROVIDE WITH ADJUSTABLE AIR SCOOP EXTRACTOR.
4. PROVIDE WITH BALANCING DAMPER INTEGRATED INTO DIFFUSER OR AT DUCT INLET.

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CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL

MECHANICAL SCHEDULES

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POWER CONDUIT AND CABLE SCHEDULE

CONDUIT	SIZE/TYPE	WIRE/CABLE	FUNCTION	FROM	TO	SHEET REFERENCE	REMARKS
P001	4" RGPVC	3#1/0 MV CABLE 1#1/0 AWG CABLE GND	POWER	PCB (WIRING)	UST-E1	E-101, E-103, E-202, E-203, E-204, E-205	TRANSITION TO RTRC FOR DUCTBANK BETWEEN TUNNEL AND TRANSFORMER. REUSE EXISTING CONDUIT BETWEEN PCB AND JB-2BAT-E-2
P002	4" RGPVC	3#1/0 MV CABLE 1#1/0 AWG CABLE GND	POWER	PCB (WIRING)	UST-E2	E-101, E-103, E-202, E-203, E-204, E-205	TRANSITION TO RTRC FOR DUCTBANK BETWEEN TUNNEL AND TRANSFORMER. REUSE EXISTING CONDUIT BETWEEN PCB AND JB-2BAT-E-2
P003	(3)4" RGPVC	EACH WITH 4-600KCMIL, 1-600KCMIL GND	POWER	UST-E1	MDP-E1	E-205, E-403	TRANSITION TO RTRC FOR DUCTBANK BETWEEN TUNNEL AND TRANSFORMER, VIA JB-MDP-E1
P004	(3)4" RGPVC	EACH WITH 4-600KCMIL, 1-600KCMIL GND	POWER	UST-E2	MDP-E2	E-205, E-403	TRANSITION TO RTRC FOR DUCTBANK BETWEEN TUNNEL AND TRANSFORMER, VIA JB-MDP-E2
P005	(3)4" RGPVC	EACH WITH 4-600KCMIL, 1-600KCMIL GND	POWER	MDP-E1	MDP-E2	E-412	
P006	2" RGPVC	3#4/0 AWG, 1#4 GND	POWER	MDP-E1	E-DP-E1	E-412, E-413	
P007	2" RGPVC	3#4/0 AWG, 1#4 GND	POWER	MDP-E1	E-DP-E2	E-412, E-413	
P008	2" RGPVC	3#4/0 AWG, 1#4 GND	POWER	MDP-E1	E-DP-E3	E-412, E-413	
P009	2" RGPVC	3#4/0 AWG, 1#4 GND	POWER	MDP-E1	E-DP-E4	E-412	
P010	1 1/2" RGPVC	3#2 AWG, 1#8 GND	POWER	MDP-E1	T-E1	E-412, E-413	
P011	2" RGPVC	4#1/0 AWG, 1#6 GND	POWER	T-E1	E-LP-1	E-413	
P012	2 1/2" RGPVC	3#250 KCMIL, 1#4 GND	POWER	MDP-E2	E-DP-E5	E-412, E-413, E-414, E-415	
P013	2 1/2" RGPVC	3#250 KCMIL, 1#4 GND	POWER	MDP-E2	E-DP-E6	E-412, E-413, E-414, E-415	
P014	1 1/2" RGPVC	3#1 AWG, 1#6 GND	POWER	MDP-E2	T-E2	E-412, E-413, E-414, E-415	
P015	1 1/2" RGPVC	4#1 AWG, 1#6 GND	POWER	T-E2	E-LP-2	E-415	
P016	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING FT1-M01, FT1-M02, FT1-M03, FT1-M04	PB-FTM	FT1-M01	E-302	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P017	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING FT1-M01, FT1-M02, FT1-M03, FT1-M04	FT1-M01	FT1-M02	E-302	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P018	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING FT1-M01, FT1-M02, FT1-M03, FT1-M04	FT1-M02	FT1-M03	E-302	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P019	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING FT1-M01, FT1-M02, FT1-M03, FT1-M04	FT1-M03	FT1-M04	E-302	
P020	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING FT1-M05, FT1-M06, FT1-M07, FT1-M08	PB-FTM	FT2-M01	E-302	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P021	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING FT1-M05, FT1-M06, FT1-M07, FT1-M08	FT2-M01	FT2-M02	E-302	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P022	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING FT1-M05, FT1-M06, FT1-M07, FT1-M08	FT2-M02	FT2-M03	E-302	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P023	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING FT1-M05, FT1-M06, FT1-M07, FT1-M08	FT2-M03	FT2-M04	E-302	
P024	3/4" RGPVC	6#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING FT1-M09, FT1-M10, FT1-M11 CIRCUIT CONTAINING FT1-M12, FT1-M13, FT1-M14	E-DP-E1	FT3-M01	E-302, E-303, E-413	VIA PB-DP1, PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P025	3/4" RGPVC	6#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING FT1-M09, FT1-M10, FT1-M11 CIRCUIT CONTAINING FT1-M12, FT1-M13, FT1-M14	FT3-M01	FT3-M02	E-302	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P026	3/4" RGPVC	6#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING FT1-M09, FT1-M10, FT1-M11 CIRCUIT CONTAINING FT1-M12, FT1-M13, FT1-M14	FT3-M02	FT3-M03	E-302	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P027	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING FT1-M11, FT1-M12, FT1-M13, FT1-M14	FT3-M03	FT3-M04	E-302	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P028	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING FT1-M11, FT1-M12, FT1-M13, FT1-M14	FT3-M04	FT3-M05	E-302	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P029	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING FT1-M11, FT1-M12, FT1-M13, FT1-M14	FT3-M05	FT3-M06	E-302	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P030	1" RGPVC	6#8 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING AP-M01, AP-M02, AP-M03, AP-M04 CIRCUIT CONTAINING AP-M05, AP-M06, AP-M07, AP-M08	E-DP-E1	AP-M01	E-302, E-303, E-413	VIA PB-DP1, PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P031	1" RGPVC	6#8 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING AP-M01, AP-M02, AP-M03, AP-M04 CIRCUIT CONTAINING AP-M05, AP-M06, AP-M07, AP-M08	AP-M01	AP-M02	E-302	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P032	1" RGPVC	6#8 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING AP-M01, AP-M02, AP-M03, AP-M04 CIRCUIT CONTAINING AP-M05, AP-M06, AP-M07, AP-M08	AP-M02	AP-M03	E-302	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P033	1" RGPVC	6#8 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING AP-M01, AP-M02, AP-M03, AP-M04 CIRCUIT CONTAINING AP-M05, AP-M06, AP-M07, AP-M08	AP-M03	AP-M04	E-302	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P034	3/4" RGPVC	3#8 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING AP-M05, AP-M06, AP-M07, AP-M08	AP-M04	AP-M05	E-302	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P035	3/4" RGPVC	3#8 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING AP-M05, AP-M06, AP-M07, AP-M08	AP-M05	AP-M06	E-302	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P036	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING AT1-M01, AT1-M02	E-DP-E2	AT1-M01	E-303, E-413	VIA PB-DP1, PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P037	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING AT1-M01, AT1-M02	AT1-M01	AT1-M02	E-303	
P038	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING AT2-M01, AT2-M02	E-DP-E3	AT2-M01	E-303, E-413	VIA PB-DP3, PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES

NOTES:
(1) SEE ELECTRICAL LEGEND ON SHEET E-003 AND GENERAL LEGEND ON SHEET G-002.
(2) RIO-01 CONSISTS OF TWO BAYS, RIO-01L AND RIO-01R. RIO-01L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-01R SHALL BE FOR DIGITAL I/O.
(3) RIO-02 CONSISTS OF TWO BAYS, RIO-02L AND RIO-02R. RIO-02L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-02R SHALL BE FOR DIGITAL I/O.

1

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Primera
550 W. Jackson Boulevard · Suite 600 · Chicago, Illinois 60661

Designed by: AR
Drawn by: BM
Checked by: DES
Reviewed by: CA
Date: 7/1/2025
Scale: NONE

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL

CONDUIT AND CABLE SCHEDULE 1 OF 25

ROZALYA G. LAZEBNY
062-057988
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS
EXPIRES 11.30.25

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Page Number: 380

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POWER CONDUIT AND CABLE SCHEDULE

CONDUIT	SIZE/TYPE	WIRE/CABLE	FUNCTION	FROM	TO	SHEET REFERENCE	REMARKS
P039	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING AT2-M01, AT2-M02	AT2-M01	AT2-M02	E-303	
P040	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING AT3-M01, AT3-M02	E-DP-E5	AT3-M01	E-304, E-414, E-415	VIA PB-DP5, PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P041	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING AT3-M01, AT3-M02	AT3-M01	AT3-M02	E-304	
P042	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING AT4-M01, AT4-M02	E-DP-E6	AT4-M01	E-304, E-414, E-415	VIA PB-DP6, PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P043	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING AT4-M01, AT4-M02	AT4-M01	AT4-M02	E-304	
P044	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING AT5-M01, AT5-M02	E-DP-E7	AT5-M01	E-305, E-415	VIA PB-DP7, PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P045	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING AT5-M01, AT5-M02	AT5-M01	AT5-M02	E-305	
P046	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING AT6-M01, AT6-M02	E-DP-E7	AT6-M01	E-305, E-415	VIA PB-DP7, PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P047	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT6-M01, AT6-M02	AT6-M01	AT6-M02	E-305	
P048	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER	E-DP-E2	EF-1	E-412, E-413	VIA EF-1 STARTER
P049	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER	E-DP-E6	EF-2	E-415	VIA EF-2 STARTER
P050	3/4" RTRC	3#12 AWG, 1#12 GND	POWER	DP-FSTN-2	FST-01 PLOW	E-502	
P051	3/4" RTRC	3#12 AWG, 1#12 GND	POWER	DP-FSTN-2	FST-02 PLOW	E-502	
P052	3/4" RTRC	3#12 AWG, 1#12 GND	POWER	DP-FSTN-2	FST-04 PLOW	E-502	
P053	3/4" RTRC	3#12 AWG, 1#12 GND	POWER	DP-FSTN-2	FST-03 PLOW	E-502	
P054	3/4" RTRC	3#12 AWG, 1#12 GND	POWER	DP-FSTS	FST-05 PLOW	E-505	
P055	3/4" RTRC	3#12 AWG, 1#12 GND	POWER	DP-FSTS	FST-06 PLOW	E-505	
P056	3/4" RTRC	3#12 AWG, 1#12 GND	POWER	DP-FSTS	FST-07 PLOW	E-505	
P057	3/4" RTRC	3#12 AWG, 1#12 GND	POWER	DP-FSTS	FST-08 PLOW	E-505	
P058	1" RGPVC	3#8 AWG, 1#8 GND	POWER	E-DP-E4	HOIST-2	E-412	
P059	1 1/2" RGPVC	3#6 AWG, 1#10 GND	POWER	E-DP-E2	MAU-1	E-412, E-413	VIA MAU-1 STARTER
P060	1 1/2" RGPVC	3#6 AWG, 1#10 GND	POWER	E-DP-E6	MAU-2	E-414, E-415	VIA MAU-2 STARTER
P061	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER	E-DP-E8	MAU-4	E-412	VIA MAU-4 STARTER
P062	1" RGPVC	3#4 AWG, 3#10AWG, 1#8 GND	POWER	E-DP-E2	AT1-IMLRP	E-303, E-413	VIA PB-DP1
P063	1" RGPVC	3#4 AWG, 3#10AWG, 1#8 GND	POWER	E-DP-E3	AT2-IMLRP	E-303, E-413	VIA PB-DP3
P064	1" RGPVC	3#4 AWG, 3#10AWG, 1#8 GND	POWER	E-DP-E5	AT3-IMLRP	E-304, E-414, E-415	VIA PB-DP5
P065	1" RGPVC	3#4 AWG, 3#10AWG, 1#8 GND	POWER	E-DP-E6	AT4-IMLRP	E-304, E-414, E-415	VIA PB-DP6
P066	1" RGPVC	3#4 AWG, 3#10AWG, 1#8 GND	POWER	E-DP-E7	AT5-IMLRP	E-305, E-415	VIA PB-DP7
P067	1" RGPVC	3#4 AWG, 3#10AWG, 1#8 GND	POWER	E-DP-E7	AT6-IMLRP	E-305, E-415	VIA PB-DP7
P068	1" RGPVC	3#8 AWG, 1#10 GND	POWER	PP-RAS	RAS-P01	E-403, E-412	VIA RAS-P01 VFD
P069	1" RGPVC	3#8 AWG, 1#10 GND	POWER	PP-RAS	RAS-P02	E-403, E-412	VIA RAS-P02 VFD
P070	1" RGPVC	3#8 AWG, 1#10 GND	POWER	E-DP-E8	RAS-P03	E-403, E-412	VIA RAS-P03 VFD
P071	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER	E-DP-E1	SP-1	E-403, E-404	
P072	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER	E-DP-E5	SP-2	E-406	
P073	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER	E-DP-E8	SP-3	E-403	
P074	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER	PB-WAS	WAS-P01	E-403, E-412	VIA WAS-P01 VFD
P075	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER	PB-WAS	WAS-P02	E-403, E-412	VIA WAS-P02 VFD
P076	1 1/2" RGPVC	3#6 AWG, 1#10 GND	POWER	E-DP-E1	WH-1	E-412, E-413	
P077	1 1/2" RGPVC	6#8 AWG, 1#8 GND	POWER FOR CIRCUIT CONTAINING EF-3B CIRCUIT CONTAINING EF-3A	E-DP-E4	EF-3B	E-205, E-403, E-412	
P078	1 1/2" RGPVC	6#8 AWG, 1#8 GND	POWER FOR CIRCUIT CONTAINING SP-4 CIRCUIT CONTAINING SP-5	E-DP-E4	SP-4	E-205, E-403, E-412	
P079	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER	E-DP-E4	MAU-3	E-204, E-205, E-403, E-412	
P080	1 1/2" RGPVC	6#6 AWG, 1#6 GND	POWER FOR CIRCUIT CONTAINING SP-6 CIRCUIT CONTAINING SP-7	E-DP-E4	SP-6	E-203, E-204, E-205, E-403, E-412	
P081	1" RGPVC	3#8 AWG, 1#8 GND	POWER	EF-3B	EF-3A	E-202, E-203, E-204, E-205	
P082	1 1/2" RGPVC	3#6 AWG, 1#6 GND	POWER	SP-6	SP-7	E-202, E-203	
P083	1" RGPVC	3#8 AWG, 1#8 GND	POWER	SP-4	SP-5	E-204, E-205	
P084	2 1/2" RGPVC	3#250 KCMIL, 1#4 GND	POWER	MDP-E2	E-DP-E7	E-412, E-413, E-414, E-415	
P085	2 1/2" RGPVC	3#4/0 AWG, 1#4 GND	POWER	MDP-E2	E-DP-E8	E-412	
P086	2 1/2" RGPVC	3#4/0 AWG, 1#4 GND	POWER	MDP-E2	E-DP-E9	E-412, E-413	
P089	1 1/2" RGPVC	6#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING KGV-02 CIRCUIT CONTAINING KGV-03	E-DP-E4	KGV-02	E-205, E-403, E-412	
P090	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING KGV-03	KGV-02	KGV-03	E-205	
P091	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER	E-DP-E8	HOIST-1	E-403	
P092	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FST1-FCV1A, FST1-FCV1B, FST2-FCV2A, FST2-FCV2B	E-DP-E2	FST2-FCV2B	E-403, E-404	
P093	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER	E-DP-E5	SAM-P02	E-405, E-406	VIA SAM-P02 STARTER
P094	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER	E-DP-E8	SAM-P01	E-403	VIA SAM-P01 STARTER
P095	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FST1-FCV1A, FST1-FCV1B, FST2-FCV2A, FST2-FCV2B	FST2-FCV2B	FST2-FCV2A	E-403	
P096	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FST1-FCV1A, FST1-FCV1B, FST2-FCV2A, FST2-FCV2B	FST2-FCV2A	FST1-FCV1B	E-403	
P097	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FST1-FCV1A, FST1-FCV1B, FST2-FCV2A, FST2-FCV2B	FST1-FCV1B	FST1-FCV1A	E-403	
P098	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FST3-FCV3A, FST3-FCV3B, FST4-FCV4A, FST4-FCV4B	E-DP-E3	FST3-FCV3A	E-404	
P099	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FST3-FCV3A, FST3-FCV3B, FST4-FCV4A, FST4-FCV4B	FST3-FCV3A	FST3-FCV3B	E-404	
P100	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FST3-FCV3A, FST3-FCV3B, FST4-FCV4A, FST4-FCV4B	FST3-FCV3B	FST4-FCV4A	E-404	

NOTES:
(1) SEE ELECTRICAL LEGEND ON SHEET E-003 AND GENERAL LEGEND ON SHEET G-002.
(2) RIO-01 CONSISTS OF TWO BAYS, RIO-01L AND RIO-01R. RIO-01L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-01R SHALL BE FOR DIGITAL I/O.
(3) RIO-02 CONSISTS OF TWO BAYS, RIO-02L AND RIO-02R. RIO-02L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-02R SHALL BE FOR DIGITAL I/O.

1

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Primera
550 W. Jackson Boulevard · Suite 600 · Chicago, Illinois 60661

Designed by:	Checked by:	Drawn by:	Reviewed by:	Date:	Scale:
AR	DES	BM	CA	7/1/2025	NONE

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL

CONDUIT AND CABLE SCHEDULE 2 OF 25

ROSALIA G. LAZEBNIK
062-057988
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS
EXPIRES 11.30.25

Sheet Number: E-018
Page Number: 381

PLOT DATE: 10/16/2025 8:44:18 AM

Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt

POWER CONDUIT AND CABLE SCHEDULE

CONDUIT	SIZE/TYPE	WIRE/CABLE	FUNCTION	FROM	TO	SHEET REFERENCE	REMARKS
P101	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FST3-FCV3A, FST3-FCV3B, FST4-FCV4A, FST4-FCV4B	FST4-FCV4A	FST4-FCV4B	E-404	
P102	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FST5-FCV5A, FST5-FCV5B, FST6-FCV6A, FST6-FCV6B	E-DP-E5	FST6-FCV6B	E-405, E-406	
P103	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FST5-FCV5A, FST5-FCV5B, FST6-FCV6A, FST6-FCV6B	FST6-FCV6B	FST6-FCV6A	E-405	
P104	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FST5-FCV5A, FST5-FCV5B, FST6-FCV6A, FST6-FCV6B	FST6-FCV6A	FST5-FCV5B	E-405	
P105	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FST5-FCV5A, FST5-FCV5B, FST6-FCV6A, FST6-FCV6B	FST5-FCV5B	FST5-FCV5A	E-405	
P106	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FST7-FCV7A, FST7-FCV7B, FST8-FCV8A, FST8-FCV8B	E-DP-E6	FST7-FCV7A	E-406	
P107	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FST7-FCV7A, FST7-FCV7B, FST8-FCV8A, FST8-FCV8B	FST7-FCV7A	FST7-FCV7B	E-406	
P108	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FST7-FCV7A, FST7-FCV7B, FST8-FCV8A, FST8-FCV8B	FST7-FCV7B	FST8-FCV8A	E-406	
P109	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FST7-FCV7A, FST7-FCV7B, FST8-FCV8A, FST8-FCV8B	FST8-FCV8A	FST8-FCV8B	E-406	
P110	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING SG-07, SG-08	SG-08	SG-07	E-412	
P111	1" RTRC	6#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING SG-07, SG-08	E-DP-E2	SG-08	E-403, E-404, E-412	
P112	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING SG-09, SG-10	SG-10	SG-09	E-413	
P113	1" RTRC	6#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING SG-09, SG-10	E-DP-E3	SG-10	E-404, E-413	
P114	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING SG-11, SG-12	SG-11	SG-12	E-414	
P115	1" RTRC	6#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING SG-11, SG-12	E-DP-E5	SG-12	E-405, E-406, E-414, E-415	
P116	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING SG-13, SG-14	SG-13	SG-14	E-415	
P117	1" RTRC	6#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING SG-13, SG-14	E-DP-E6	SG-14	E-406, E-415	
P118	1" RGPVC	6#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING ODOR-1 CIRCUIT CONTAINING ODOR-2	E-DP-E1	PB-ODOR	E-302, E-303, E-413	VIA PB-DP1
P119	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER	PB-ODOR	ODOR-1	E-302	
P120	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER	PB-ODOR	ODOR-2	E-302	
P121	1" RGPVC	6#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING INFL-M01 CIRCUIT CONTAINING INFL-M02	E-DP-E3	INFL-M01	E-303, E-413	VIA INFL-M01 DISCONNECT AND PB-DP3
P122	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING INFL-M03	PP-DP7	INFL-M03	E-305	VIA INFL-M03 DISCONNECT
P123	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING INFL-M04	PP-DP7	INFL-M04	E-305	VIA INFL-M04 DISCONNECT
P124	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT1-FCV1, AT1-FCV2, AT1-FCV3, AT1-FCV4, AT1-FCV5, AT1-FCV6, AT1-FCV7	E-DP-E2	AT1-FCV7	E-303, E-413	VIA PB-DP2, PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P125	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT1-FCV1, AT1-FCV2, AT1-FCV3, AT1-FCV4, AT1-FCV5, AT1-FCV6, AT1-FCV7	AT1-FCV7	AT1-FCV6	E-303	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P126	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT1-FCV1, AT1-FCV2, AT1-FCV3, AT1-FCV4, AT1-FCV5, AT1-FCV6, AT1-FCV7	AT1-FCV6	AT1-FCV1	E-303	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P127	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT1-FCV1, AT1-FCV2, AT1-FCV3, AT1-FCV4, AT1-FCV5, AT1-FCV6, AT1-FCV7	AT1-FCV6	AT1-FCV5	E-303	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P128	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT1-FCV1, AT1-FCV2, AT1-FCV3, AT1-FCV4, AT1-FCV5, AT1-FCV6, AT1-FCV7	AT1-FCV5	AT1-FCV2	E-303	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P129	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT1-FCV1, AT1-FCV2, AT1-FCV3, AT1-FCV4, AT1-FCV5, AT1-FCV6, AT1-FCV7	AT1-FCV5	AT1-FCV4	E-303	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P130	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT1-FCV1, AT1-FCV2, AT1-FCV3, AT1-FCV4, AT1-FCV5, AT1-FCV6, AT1-FCV7	AT1-FCV4	AT1-FCV3	E-303	
P131	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT2-FCV1, AT2-FCV2, AT2-FCV3, AT2-FCV4, AT2-FCV5, AT2-FCV6, AT2-FCV7	E-DP-E3	AT2-FCV7	E-303, E-413	VIA PB-DP3, PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P132	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT2-FCV1, AT2-FCV2, AT2-FCV3, AT2-FCV4, AT2-FCV5, AT2-FCV6, AT2-FCV7	AT2-FCV7	AT2-FCV1	E-303	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P133	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT2-FCV1, AT2-FCV2, AT2-FCV3, AT2-FCV4, AT2-FCV5, AT2-FCV6, AT2-FCV7	AT2-FCV1	AT2-FCV6	E-303	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P134	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT2-FCV1, AT2-FCV2, AT2-FCV3, AT2-FCV4, AT2-FCV5, AT2-FCV6, AT2-FCV7	AT2-FCV1	AT2-FCV2	E-303	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES

NOTES:
(1) SEE ELECTRICAL LEGEND ON SHEET E-003 AND GENERAL LEGEND ON SHEET G-002.
(2) RIO-01 CONSISTS OF TWO BAYS, RIO-01L AND RIO-01R. RIO-01L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-01R SHALL BE FOR DIGITAL I/O.
(3) RIO-02 CONSISTS OF TWO BAYS, RIO-02L AND RIO-02R. RIO-02L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-02R SHALL BE FOR DIGITAL I/O.

1

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Designed by: AR | Drawn by: BM | Checked by: DES | Reviewed by: CA | Date: 7/1/2025 | Scale: NONE

AECOM Primera
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA
550 W. Jackson Boulevard • Suite 600 • Chicago, Illinois 60661

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL

CONDUIT AND CABLE SCHEDULE 3 OF 25

ROXANA G. LAZENK
062-057988
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS
EXPIRES 11.30.25

Sheet Number: E-019
Page Number: 382

PLOT DATE: 10/16/2025 8:44:21 AM

Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt

POWER CONDUIT AND CABLE SCHEDULE

CONDUIT	SIZE/TYPE	WIRE/CABLE	FUNCTION	FROM	TO	SHEET REFERENCE	REMARKS
P135	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT2-FCV1, AT2-FCV2, AT2-FCV3, AT2-FCV4, AT2-FCV5, AT2-FCV6, AT2-FCV7	AT2-FCV2	AT2-FCV5	E-303	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P136	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT2-FCV1, AT2-FCV2, AT2-FCV3, AT2-FCV4, AT2-FCV5, AT2-FCV6, AT2-FCV7	AT2-FCV2	AT2-FCV3	E-303	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P137	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT2-FCV1, AT2-FCV2, AT2-FCV3, AT2-FCV4, AT2-FCV5, AT2-FCV6, AT2-FCV7	AT2-FCV3	AT2-FCV4	E-303	
P138	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT3-FCV1, AT3-FCV2, AT3-FCV3, AT3-FCV4, AT3-FCV5, AT3-FCV6, AT3-FCV7	E-DP-E5	AT3-FCV7	E-304, E-414, E-415	VIA PB-DP5, PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P139	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT3-FCV1, AT3-FCV2, AT3-FCV3, AT3-FCV4, AT3-FCV5, AT3-FCV6, AT3-FCV7	AT3-FCV7	AT3-FCV6	E-304	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P140	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT3-FCV1, AT3-FCV2, AT3-FCV3, AT3-FCV4, AT3-FCV5, AT3-FCV6, AT3-FCV7	AT3-FCV6	AT3-FCV1	E-304	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P141	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT3-FCV1, AT3-FCV2, AT3-FCV3, AT3-FCV4, AT3-FCV5, AT3-FCV6, AT3-FCV7	AT3-FCV6	AT3-FCV5	E-304	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P142	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT3-FCV1, AT3-FCV2, AT3-FCV3, AT3-FCV4, AT3-FCV5, AT3-FCV6, AT3-FCV7	AT3-FCV5	AT3-FCV2	E-304	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P143	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT3-FCV1, AT3-FCV2, AT3-FCV3, AT3-FCV4, AT3-FCV5, AT3-FCV6, AT3-FCV7	AT3-FCV5	AT3-FCV4	E-304	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P144	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT3-FCV1, AT3-FCV2, AT3-FCV3, AT3-FCV4, AT3-FCV5, AT3-FCV6, AT3-FCV7	AT3-FCV4	AT3-FCV3	E-304	
P145	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT4-FCV1, AT4-FCV2, AT4-FCV3, AT4-FCV4, AT4-FCV5, AT4-FCV6, AT4-FCV7	E-DP-E6	AT4-FCV7	E-304, E-414, E-415	VIA PB-DP6, PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P146	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT4-FCV1, AT4-FCV2, AT4-FCV3, AT4-FCV4, AT4-FCV5, AT4-FCV6, AT4-FCV7	AT4-FCV7	AT4-FCV1	E-304	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P147	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT4-FCV1, AT4-FCV2, AT4-FCV3, AT4-FCV4, AT4-FCV5, AT4-FCV6, AT4-FCV7	AT4-FCV1	AT4-FCV6	E-304	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P148	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT4-FCV1, AT4-FCV2, AT4-FCV3, AT4-FCV4, AT4-FCV5, AT4-FCV6, AT4-FCV7	AT4-FCV1	AT4-FCV2	E-304	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P149	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT4-FCV1, AT4-FCV2, AT4-FCV3, AT4-FCV4, AT4-FCV5, AT4-FCV6, AT4-FCV7	AT4-FCV2	AT4-FCV5	E-304	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P150	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT4-FCV1, AT4-FCV2, AT4-FCV3, AT4-FCV4, AT4-FCV5, AT4-FCV6, AT4-FCV7	AT4-FCV2	AT4-FCV3	E-304	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P151	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT4-FCV1, AT4-FCV2, AT4-FCV3, AT4-FCV4, AT4-FCV5, AT4-FCV6, AT4-FCV7	AT4-FCV3	AT4-FCV4	E-304	
P152	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT5-FCV1, AT5-FCV2, AT5-FCV3, AT5-FCV4, AT5-FCV5, AT5-FCV6, AT5-FCV7	E-DP-E7	AT5-FCV7	E-305, E-415	VIA PB-DP7, PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P153	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT5-FCV1, AT5-FCV2, AT5-FCV3, AT5-FCV4, AT5-FCV5, AT5-FCV6, AT5-FCV7	AT5-FCV7	AT5-FCV6	E-305	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P154	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT5-FCV1, AT5-FCV2, AT5-FCV3, AT5-FCV4, AT5-FCV5, AT5-FCV6, AT5-FCV7	AT5-FCV6	AT5-FCV1	E-305	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P155	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT5-FCV1, AT5-FCV2, AT5-FCV3, AT5-FCV4, AT5-FCV5, AT5-FCV6, AT5-FCV7	AT5-FCV6	AT5-FCV5	E-305	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P156	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT5-FCV1, AT5-FCV2, AT5-FCV3, AT5-FCV4, AT5-FCV5, AT5-FCV6, AT5-FCV7	AT5-FCV5	AT5-FCV2	E-305	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P157	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT5-FCV1, AT5-FCV2, AT5-FCV3, AT5-FCV4, AT5-FCV5, AT5-FCV6, AT5-FCV7	AT5-FCV5	AT5-FCV4	E-305	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P158	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT5-FCV1, AT5-FCV2, AT5-FCV3, AT5-FCV4, AT5-FCV5, AT5-FCV6, AT5-FCV7	AT5-FCV4	AT5-FCV3	E-305	
P159	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT6-FCV1, AT6-FCV2, AT6-FCV3, AT6-FCV4, AT6-FCV5, AT6-FCV6, AT6-FCV7	E-DP-E7	AT6-FCV7	E-305, E-415	VIA PB-DP7, PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES

NOTES:
(1) SEE ELECTRICAL LEGEND ON SHEET E-003 AND GENERAL LEGEND ON SHEET G-002.
(2) RIO-01 CONSISTS OF TWO BAYS, RIO-01L AND RIO-01R. RIO-01L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-01R SHALL BE FOR DIGITAL I/O.
(3) RIO-02 CONSISTS OF TWO BAYS, RIO-02L AND RIO-02R. RIO-02L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-02R SHALL BE FOR DIGITAL I/O.

1

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Primera
550 W. Jackson Boulevard · Suite 600 · Chicago, Illinois 60661

Designed by:	Checked by:	Appr.	Date
AR	DES	GD	10/15/25
Drawn by:	Reviewed by:		
BM	CA		
Date:	Scale:		
7/1/2025	NONE		

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL

CONDUIT AND CABLE SCHEDULE 4 OF 25

ROXANA G. LAZENBY
062-057988
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS
EXPIRES 11.30.25

Sheet Number: E-020
Page Number: 383

PLOT DATE: 10/16/2025 8:44:23 AM

Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt

POWER CONDUIT AND CABLE SCHEDULE

CONDUIT	SIZE/TYPE	WIRE/CABLE	FUNCTION	FROM	TO	SHEET REFERENCE	REMARKS
P160	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT6-FCV1, AT6-FCV2, AT6-FCV3, AT6-FCV4, AT6-FCV5, AT6-FCV6, AT6-FCV7	AT6-FCV7	AT6-FCV1	E-305	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P161	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT6-FCV1, AT6-FCV2, AT6-FCV3, AT6-FCV4, AT6-FCV5, AT6-FCV6, AT6-FCV7	AT6-FCV1	AT6-FCV6	E-305	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P162	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT6-FCV1, AT6-FCV2, AT6-FCV3, AT6-FCV4, AT6-FCV5, AT6-FCV6, AT6-FCV7	AT6-FCV1	AT6-FCV2	E-305	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P163	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT6-FCV1, AT6-FCV2, AT6-FCV3, AT6-FCV4, AT6-FCV5, AT6-FCV6, AT6-FCV7	AT6-FCV2	AT6-FCV5	E-305	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P164	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT6-FCV1, AT6-FCV2, AT6-FCV3, AT6-FCV4, AT6-FCV5, AT6-FCV6, AT6-FCV7	AT6-FCV2	AT6-FCV3	E-305	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P165	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AT6-FCV1, AT6-FCV2, AT6-FCV3, AT6-FCV4, AT6-FCV5, AT6-FCV6, AT6-FCV7	AT6-FCV3	AT6-FCV4	E-305	
P166	1" RTRC	3#8 AWG, 1#8 GND	POWER	E-DP-E9	SG-15	E-404, E-502, E-601	TRANSITION TO RGPVC WITHIN OPERATING GALLERY
P167	1" RTRC	3#8 AWG, 1#8 GND	POWER	E-DP-E9	SG-16	E-404, E-502, E-601	TRANSITION TO RGPVC WITHIN OPERATING GALLERY
P168	1" RTRC	3#8 AWG, 1#8 GND	POWER	E-DP-E9	SG-18	E-404, E-502, E-601	TRANSITION TO RGPVC WITHIN OPERATING GALLERY
P169	1" RTRC	3#8 AWG, 1#8 GND	POWER	E-DP-E9	SG-17	E-404, E-502, E-601	TRANSITION TO RGPVC WITHIN OPERATING GALLERY
P170	1" RTRC	3#8 AWG, 1#8 GND	POWER	E-DP-E9	SG-19	E-404, E-502, E-601	TRANSITION TO RGPVC WITHIN OPERATING GALLERY
P171	1" RTRC	3#8 AWG, 1#8 GND	POWER	E-DP-E9	SG-20	E-404, E-502, E-601	TRANSITION TO RGPVC WITHIN OPERATING GALLERY
P172	1" RTRC	3#8 AWG, 1#8 GND	POWER	E-DP-E9	PAT-FCV1	E-404, E-502, E-601	TRANSITION TO RGPVC WITHIN OPERATING GALLERY
P173	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER	E-MP-3	AIT-316F	E-306, E-307, E-416, E-417	VIA PB-E3
P174	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-316A, AIT-316B, AIT-316F	E-MP-3	AIT-316B	E-306, E-307, E-416, E-417	VIA PB-E3
P175	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-316A, AIT-316B, AIT-316F	AIT-316B	AIT-316A	E-307	
P176	1" RGPVC	4#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-314A, FIT-314F, FIT-314G CIRCUIT CONTAINING FIT-314B, FIT-314C, FIT-314D, FIT-314E	E-MP-3	FIT-314G	E-306, E-307, E-416, E-417	VIA PB-E3
P177	1" RGPVC	4#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-314A, FIT-314F, FIT-314G CIRCUIT CONTAINING FIT-314B, FIT-314C, FIT-314D, FIT-314E	FIT-314F	FIT-314G	E-307	
P178	1" RGPVC	4#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-314A, FIT-314F, FIT-314G CIRCUIT CONTAINING FIT-314B, FIT-314C, FIT-314D, FIT-314E	FIT-314A	FIT-314F	E-307	
P179	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-314B, FIT-314C, FIT-314D, FIT-314E	FIT-314F	FIT-314B	E-307	
P180	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-314B, FIT-314C, FIT-314D, FIT-314E	FIT-314B	FIT-314E	E-307	
P181	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-314B, FIT-314C, FIT-314D, FIT-314E	FIT-314E	FIT-314C	E-307	
P182	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-314B, FIT-314C, FIT-314D, FIT-314E	FIT-314C	FIT-314D	E-307	
P183	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-316C, AIT-316D, AIT-316E	E-MP-3	AIT-316E	E-306, E-307, E-416, E-417	VIA PB-E3
P184	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-316C, AIT-316D, AIT-316E	AIT-316E	AIT-316D	E-307	
P185	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-316C, AIT-316D, AIT-316E	AIT-316D	AIT-316C	E-307	
P186	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-326C, AIT-326D, AIT-326E	E-MP-4	AIT-326E	E-307, E-417	VIA PB-E4
P187	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-326C, AIT-326D, AIT-326E	AIT-326E	AIT-326D	E-307	
P188	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-326C, AIT-326D, AIT-326E	AIT-326D	AIT-326C	E-307	
P189	1" RGPVC	4#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-324A, FIT-324F, FIT-324G CIRCUIT CONTAINING FIT-324B, FIT-324C, FIT-324D, FIT-324E	E-MP-4	FIT-324G	E-307, E-417	VIA PB-E4
P190	1" RGPVC	4#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-324A, FIT-324F, FIT-324G CIRCUIT CONTAINING FIT-324B, FIT-324C, FIT-324D, FIT-324E	FIT-324G	FIT-324A	E-307	
P191	1" RGPVC	4#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-324A, FIT-324F, FIT-324G CIRCUIT CONTAINING FIT-324B, FIT-324C, FIT-324D, FIT-324E	FIT-324A	FIT-324F	E-307	
P192	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-324B, FIT-324C, FIT-324D, FIT-324E	FIT-324F	FIT-324B	E-307	
P193	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-324B, FIT-324C, FIT-324D, FIT-324E	FIT-324B	FIT-324E	E-307	
P194	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-324B, FIT-324C, FIT-324D, FIT-324E	FIT-324E	FIT-324C	E-307	
P195	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-324B, FIT-324C, FIT-324D, FIT-324E	FIT-324C	FIT-324D	E-307	
P196	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-326A, AIT-326B, AIT-326F	E-MP-4	AIT-326F	E-307, E-417	VIA PB-E4

NOTES:
(1) SEE ELECTRICAL LEGEND ON SHEET E-003 AND GENERAL LEGEND ON SHEET G-002.
(2) RIO-01 CONSISTS OF TWO BAYS, RIO-01L AND RIO-01R. RIO-01L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-01R SHALL BE FOR DIGITAL I/O.
(3) RIO-02 CONSISTS OF TWO BAYS, RIO-02L AND RIO-02R. RIO-02L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-02R SHALL BE FOR DIGITAL I/O.

1

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Primera
550 W. Jackson Boulevard · Suite 600 · Chicago, Illinois 60661

Designed by: AR	Checked by: DES	Scale: NONE
Drawn by: BM	Reviewed by: CA	Date: 7/1/2025

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL

CONDUIT AND CABLE SCHEDULE 5 OF 25

ROLANDO A. G. LAZERNAS
062-057988
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS
EXPIRES 11.30.25

Sheet Number: E-020A
Page Number: 384

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Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt

POWER CONDUIT AND CABLE SCHEDULE

CONDUIT	SIZE/TYPE	WIRE/CABLE	FUNCTION	FROM	TO	SHEET REFERENCE	REMARKS
P197	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-326A, AIT-326B, AIT-326F	AIT-326F	AIT-326B	E-307	
P198	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-326A, AIT-326B, AIT-326F	AIT-326B	AIT-326A	E-307	
P199	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER	E-MP-5	AIT-336F	E-308, E-418	VIA PB-E5
P200	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-336A, AIT-336B	E-MP-5	AIT-336A	E-308, E-418	VIA PB-E5
P201	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-336A, AIT-336B	AIT-336A	AIT-336B	E-308	
P202	1" RGPVC	4#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-334A, FIT-334F, FIT-334G CIRCUIT CONTAINING FIT-334B, FIT-334C, FIT-334D, FIT-334E	E-MP-5	FIT-334G	E-308, E-418	VIA PB-E5
P203	1" RGPVC	4#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-334A, FIT-334F, FIT-334G CIRCUIT CONTAINING FIT-334B, FIT-334C, FIT-334D, FIT-334E	FIT-334G	FIT-334A	E-308	
P204	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-334B, FIT-334C, FIT-334D, FIT-334E	FIT-334A	FIT-334B	E-308	
P205	1" RGPVC	4#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-334A, FIT-334F, FIT-334G CIRCUIT CONTAINING FIT-334B, FIT-334C, FIT-334D, FIT-334E	FIT-334F	FIT-334A	E-308	
P206	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-334B, FIT-334C, FIT-334D, FIT-334E	FIT-334E	FIT-334C	E-308	
P207	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-334B, FIT-334C, FIT-334D, FIT-334E	FIT-334C	FIT-334D	E-308	
P208	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-336C, AIT-336D, AIT-336E	E-MP-5	AIT-336E	E-308, E-418	VIA PB-E5
P209	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-336C, AIT-336D, AIT-336E	AIT-336E	AIT-336D	E-308	
P210	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-336C, AIT-336D, AIT-336E	AIT-336D	AIT-336C	E-308	
P211	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-346C, AIT-346D, AIT-346E	E-MP-5	AIT-346E	E-308, E-418	VIA PB-E5
P212	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-346C, AIT-346D, AIT-346E	AIT-346E	AIT-346D	E-308	
P213	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-346C, AIT-346D, AIT-346E	AIT-346D	AIT-346C	E-308	
P214	1" RGPVC	4#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-344A, FIT-344F, FIT-344G CIRCUIT CONTAINING FIT-344B, FIT-344C, FIT-344D, FIT-344E	E-MP-5	FIT-334G	E-308, E-418	VIA PB-E5
P215	1" RGPVC	4#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-344A, FIT-344F, FIT-344G CIRCUIT CONTAINING FIT-344B, FIT-344C, FIT-344D, FIT-344E	FIT-334G	FIT-344A	E-308	
P216	1" RGPVC	4#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-344A, FIT-344F, FIT-344G CIRCUIT CONTAINING FIT-344B, FIT-344C, FIT-344D, FIT-344E	FIT-344A	FIT-344F	E-308	
P217	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-344B, FIT-344C, FIT-344D, FIT-344E	FIT-344F	FIT-344B	E-308	
P218	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-344B, FIT-344C, FIT-344D, FIT-344E	FIT-344B	FIT-344E	E-308	
P219	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-344B, FIT-344C, FIT-344D, FIT-344E	FIT-344E	FIT-344C	E-308	
P220	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-344B, FIT-344C, FIT-344D, FIT-344E	FIT-344C	FIT-344D	E-308	
P221	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-346A, AIT-346B, AIT-346F	E-MP-5	AIT-346F	E-308, E-418	VIA BP-E5
P222	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-346A, AIT-346B, AIT-346F	AIT-346F	AIT-346B	E-308	
P223	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-346A, AIT-346B, AIT-346F	AIT-346B	AIT-346A	E-308	
P224	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER	E-MP-6	AIT-356F	E-309, E-419	VIA PB-E6
P225	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-356A, AIT-356B	E-MP-6	AIT-356B	E-309, E-419	VIA PB-E6
P226	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-356A, AIT-356B	AIT-356B	AIT-356A	E-309	
P227	1" RGPVC	4#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-354A, FIT-354F, FIT-354G CIRCUIT CONTAINING FIT-354B, FIT-354C, FIT-354D, FIT-354E	E-MP-6	FIT-354G	E-309, E-419	VIA PB-E6
P228	1" RGPVC	4#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-354A, FIT-354F, FIT-354G CIRCUIT CONTAINING FIT-354B, FIT-354C, FIT-354D, FIT-354E	FIT-354G	FIT-354A	E-309	
P229	1" RGPVC	4#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-354A, FIT-354F, FIT-354G CIRCUIT CONTAINING FIT-354B, FIT-354C, FIT-354D, FIT-354E	FIT-354A	FIT-354F	E-309	
P230	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-354B, FIT-354C, FIT-354D, FIT-354E	FIT-354F	FIT-354B	E-309	
P231	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-354B, FIT-354C, FIT-354D, FIT-354E	FIT-354B	FIT-354E	E-309	
P232	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-354B, FIT-354C, FIT-354D, FIT-354E	FIT-354E	FIT-354C	E-309	

NOTES:
(1) SEE ELECTRICAL LEGEND ON SHEET E-003 AND GENERAL LEGEND ON SHEET G-002.
(2) RIO-01 CONSISTS OF TWO BAYS, RIO-01L AND RIO-01R. RIO-01L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-01R SHALL BE FOR DIGITAL I/O.
(3) RIO-02 CONSISTS OF TWO BAYS, RIO-02L AND RIO-02R. RIO-02L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-02R SHALL BE FOR DIGITAL I/O.

1

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METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Primera
550 W. Jackson Boulevard · Suite 600 · Chicago, Illinois 60661

Designed by: AR	Checked by: DES	Drawn by: BM	Reviewed by: CA
Date: 7/1/2025	Scale: NONE		

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL

CONDUIT AND CABLE SCHEDULE 6 OF 25

ROLANDO A. G. LAZERNAS
062-057988
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS
EXPIRES 11.30.25

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POWER CONDUIT AND CABLE SCHEDULE

CONDUIT	SIZE/TYPE	WIRE/CABLE	FUNCTION	FROM	TO	SHEET REFERENCE	REMARKS
P233	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-354B, FIT-354C, FIT-354D, FIT-354E	FIT-354C	FIT-354D	E-309	
P234	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-356C, AIT-356D, AIT-356E	E-MP-6	AIT-356E	E-309, E-419	VIA PB-E6
P235	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-356C, AIT-356D, AIT-356E	AIT-356E	AIT-356D	E-309	
P236	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-356C, AIT-356D, AIT-356E	AIT-356D	AIT-356C	E-309	
P237	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-366C, AIT-366D, AIT-366E	E-MP-6	AIT-366E	E-309, E-419	VIA PB-E6
P238	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-366C, AIT-366D, AIT-366E	AIT-366E	AIT-366D	E-309	
P239	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-366C, AIT-366D, AIT-366E	AIT-366D	AIT-366C	E-309	
P240	1" RGPVC	4#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-364A, FIT-364B, FIT-364G CIRCUIT CONTAINING FIT-364C, FIT-364D, FIT-364E, FIT-364F	E-MP-6	FIT-364A	E-309, E-419	VIA PB-E6
P241	1" RGPVC	4#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-364A, FIT-364B, FIT-364G CIRCUIT CONTAINING FIT-364C, FIT-364D, FIT-364E, FIT-364F	FIT-364A	FIT-364B	E-309	
P242	1" RGPVC	4#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-364A, FIT-364B, FIT-364G CIRCUIT CONTAINING FIT-364C, FIT-364D, FIT-364E, FIT-364F	FIT-364B	FIT-364G	E-309	
P243	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-364C, FIT-364D, FIT-364E, FIT-364F	FIT-364G	FIT-364C	E-309	
P244	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-364C, FIT-364D, FIT-364E, FIT-364F	FIT-364C	FIT-364F	E-309	
P245	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-364C, FIT-364D, FIT-364E, FIT-364F	FIT-364F	FIT-364D	E-309	
P246	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-364C, FIT-364D, FIT-364E, FIT-364F	FIT-364D	FIT-364E	E-309	
P247	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-366A, AIT-366B, AIT-366F	E-MP-6	AIT-366F	E-309, E-419	VIA PB-E6
P248	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-366A, AIT-366B, AIT-366F	AIT-366F	AIT-366B	E-309	
P249	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING AIT-366A, AIT-366B, AIT-366F	AIT-366B	AIT-366A	E-309	
P250	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER	E-MP-3	AIT-301A	E-306	VIA PB-E3
P251	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER	E-MP-3	AIT-301B	E-306	VIA PB-E3
P252	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-200, FIT-414, FIT-422	FIT-414	FIT-200	E-205, E-209, E-407	
P253	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-200, FIT-414, FIT-422	FIT-414	FIT-422	E-407	
P254	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-200, FIT-414, FIT-422	E-MP-4	FIT-414	E-407, E-408	
P255	1" RTRC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING LIT-510C, LIT-520C	HH-FSTN-2	LIT-510C	E-503	
P256	1" RTRC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING LIT-530C, LIT-540C	HH-FSTN-2	LIT-530C	E-503	
P257	1" RTRC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING LIT-510C, LIT-520C	HH-FSTN-2	LIT-520C	E-503	
P258	1" RTRC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING LIT-530C, LIT-540C	HH-FSTN-2	LIT-540C	E-503	
P259	1" RTRC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING LIT-550C, LIT-560C	HH-FSTS-2	LIT-550C	E-506	
P260	1" RTRC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING LIT-550C, LIT-560C	HH-FSTS-2	LIT-560C	E-506	
P261	1" RTRC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING LIT-570C, LIT-580C	HH-FSTS-2	LIT-570C	E-506	
P262	1" RTRC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING LIT-570C, LIT-580C	HH-FSTS-2	LIT-580C	E-506	
P263	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER	E-DP-E9	SP-8	E-404, E-405	
P264	3/4" RGPVC	2#8 AWG, 1#8 GND	POWER FOR CIRCUIT CONTAINING AIT-608A, AIT-608B, FIT-606	AIT-608A	AIT-608B	E-602	
P265	1" RGPVC	2#8 AWG, 1#8 GND	POWER FOR CIRCUIT CONTAINING AIT-608A, AIT-608B, FIT-606	PAP-P	FIT-606	E-602	
P266	1" RTRC	2#8 AWG, 1#8 GND	POWER FOR CIRCUIT CONTAINING AIT-608A, AIT-608B, FIT-606	E-MP-4	PAP-P	E-408, E-503, E-602	TRANSITION TO RGPVC WITHIN OPERATING GALLERY
P268	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-510D, FIT-510F, FIT-520D, FIT-520F	FIT-510F	FIT-510D	E-407	
P269	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-510D, FIT-510F, FIT-520D, FIT-520F	FIT-520D	FIT-510F	E-407	
P270	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-510D, FIT-510F, FIT-520D, FIT-520F	FIT-520F	FIT-520D	E-407	
P271	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-510D, FIT-510F, FIT-520D, FIT-520F	FIT-520F	E-MP-3	E-407	
P272	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-530D, FIT-530F, FIT-540D, FIT-540F	FIT-540D	FIT-540F	E-408	
P273	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-530D, FIT-530F, FIT-540D, FIT-540F	FIT-530F	FIT-540D	E-408	

NOTES:
(1) SEE ELECTRICAL LEGEND ON SHEET E-003 AND GENERAL LEGEND ON SHEET G-002.
(2) RIO-01 CONSISTS OF TWO BAYS, RIO-01L AND RIO-01R. RIO-01L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-01R SHALL BE FOR DIGITAL I/O.
(3) RIO-02 CONSISTS OF TWO BAYS, RIO-02L AND RIO-02R. RIO-02L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-02R SHALL BE FOR DIGITAL I/O.

1

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Designed by: AR	Checked by: DES	Appr.	Date
Drawn by: BM	Reviewed by: CA	Scale:	NONE
Date: 7/1/2025			

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Primera
550 W. Jackson Boulevard · Suite 600 · Chicago, Illinois 60661

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL

CONDUIT AND CABLE SCHEDULE 7 OF 25

ROXANA G. LAZENIK
062-057988
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS
EXPIRES 11.30.25

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POWER CONDUIT AND CABLE SCHEDULE

CONDUIT	SIZE/TYPE	WIRE/CABLE	FUNCTION	FROM	TO	SHEET REFERENCE	REMARKS
P274	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-530D, FIT-530F, FIT-540D, FIT-540F	FIT-530D	FIT-530F	E-408	
P275	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-530D, FIT-530F, FIT-540D, FIT-540F	E-MP-4	FIT-530D	E-408	
P276	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-550D, FIT-550F, FIT-560D, FIT-560F	FIT-550F	FIT-550D	E-409	
P277	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-550D, FIT-550F, FIT-560D, FIT-560F	FIT-560D	FIT-550F	E-409	
P278	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-550D, FIT-550F, FIT-560D, FIT-560F	FIT-560F	FIT-560D	E-409	
P279	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-550D, FIT-550F, FIT-560D, FIT-560F	E-MP-5	FIT-560F	E-409	
P280	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-570D, FIT-570F, FIT-580D, FIT-580F	FIT-580D	FIT-580F	E-410	
P281	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-570D, FIT-570F, FIT-580D, FIT-580F	FIT-570F	FIT-580D	E-410	
P282	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-570D, FIT-570F, FIT-580D, FIT-580F	FIT-570D	FIT-570F	E-410	
P283	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FIT-570D, FIT-570F, FIT-580D, FIT-580F	E-MP-6	FIT-570D	E-410	
P284	1" RGPVC	2#8 AWG, 1#8 GND	POWER FOR CIRCUIT CONTAINING AIT-608A, AIT-608B, FIT-606	PAP-P	AIT-608A	E-602	
P285	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING TS-01, TS-02, TS-03	E-MP-3	TS-01	E-407, E-408	
P286	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING TS-01, TS-02, TS-03	TS-01	TS-03	E-407	
P287	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING TS-01, TS-02, TS-03	TS-01	TS-02	E-407, E-408, E-417	
P288	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER	E-DP-E8	AS-1	E-412	
P289	3/4" RGPVC	3#8 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING AP-M05, AP-M06, AP-M07, AP-M08	AP-M06	AP-M07	E-302	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
P290	3/4" RGPVC	3#8 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING AP-M05, AP-M06, AP-M07, AP-M08	AP-M07	AP-M08	E-302	
P291	3/4" RGPVC	6#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING INFL-M03 CIRCUIT CONTAINING INFL-M04	E-DP-E7	PB-DP7	E-415	
P292	3/4" RGPVC	3#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING INFL-M02	INFL-M01	INFL-M02	E-303, E-304	VIA INFL-M02 DISCONNECT
P293	2" RGPVC	4#1/0 AWG, 1#6 GND	POWER	T-E3	E-MP-3	E-412	
P294	1 1/2" RGPVC	3#2 AWG, 1#8 GND	POWER	E-DP-E2	T-E3	E-412, E-413	VIA DISCONNECT
P295	2" RGPVC	4#1/0 AWG, 1#6 GND	POWER	T-E4	E-MP-4	E-413	
P296	1 1/2" RGPVC	3#2 AWG, 1#8 GND	POWER	E-DP-E3	T-E4	E-413	VIA DISCONNECT
P297	2" RGPVC	4#1/0 AWG, 1#6 GND	POWER	T-E3	E-MP-3	E-414	
P298	1 1/2" RGPVC	3#2 AWG, 1#8 GND	POWER	E-DP-E5	T-E5	E-414, E-415	VIA DISCONNECT
P299	2" RGPVC	4#1/0 AWG, 1#6 GND	POWER	T-E6	E-MP-6	E-415	
P300	1 1/2" RGPVC	3#2 AWG, 1#8 GND	POWER	E-DP-E6	T-E6	E-415	VIA DISCONNECT
P301	1" RGPVC	6#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING FT1-M01, FT1-M02, FT1-M03, FT1-M04 CIRCUIT CONTAINING FT1-M05, FT1-M06, FT1-M07, FT1-M08	E-DP-E1	PB-FTM	E-302, E-303, E-413	VIA PB-DP1
P302	1" RGPVC	6#8 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING RAS-P01 CIRCUIT CONTAINING RAS-P02	E-DP-E8	PB-RAS	E-412	
P303	1" RGPVC	6#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING WAS-P01 CIRCUIT CONTAINING WAS-P02	E-DP-E8	PB-WAS	E-403, E-412, E-413	
P304	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING SG-01	AT1-IMLRP	SG-01	E-303	
P305	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING SG-02	AT2-IMLRP	SG-02	E-302, E-303	
P306	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING SG-03	AT3-IMLRP	SG-03	E-304	
P307	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING SG-04	AT4-IMLRP	SG-04	E-304, E-414, E-415	
P308	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING SG-05	AT5-IMLRP	SG-05	E-305	
P309	3/4" RGPVC	3#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING SG-06	AT6 IMLRP	SG-06	E-305	
P310	1" RTRC	2#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING LIT-510C, LIT-520C CIRCUIT CONTAINING FST-01, FST-02 LTG/REC	E-MP-3	HH-FSTN-2	E-407, E-408, E-503	TRANSITION TO RGPVC WITHIN OPERATING GALLERY
P311	1" RTRC	2#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING LIT-530C, LIT-540C CIRCUIT CONTAINING FST-03, FST-04 LTG/REC	E-MP-4	HH-FSTN-2	E-408, E-503	TRANSITION TO RGPVC WITHIN OPERATING GALLERY
P312	1" RTRC	6#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FST-03 PLOW CIRCUIT CONTAINING FST-04 PLOW	E-DP-E3	DB-FSTN-2	E-404, E-405, E-502	TRANSITION TO RGPVC WITHIN OPERATING GALLERY
P313	1" RTRC	6#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FST-01 PLOW CIRCUIT CONTAINING FST-02 PLOW	E-DP-E2	DB-FSTN-2	E-404, E-405, E-502	TRANSITION TO RGPVC WITHIN OPERATING GALLERY

NOTES:
(1) SEE ELECTRICAL LEGEND ON SHEET E-003 AND GENERAL LEGEND ON SHEET G-002.
(2) RIO-01 CONSISTS OF TWO BAYS, RIO-01L AND RIO-01R. RIO-01L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-01R SHALL BE FOR DIGITAL I/O.
(3) RIO-02 CONSISTS OF TWO BAYS, RIO-02L AND RIO-02R. RIO-02L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-02R SHALL BE FOR DIGITAL I/O.

1

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Designed by: AR | Checked by: DES
Drawn by: BM | Reviewed by: CA
Date: 7/1/2025 | Scale: NONE

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Primera
550 W. Jackson Boulevard · Suite 600 · Chicago, Illinois 60661

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL

CONDUIT AND CABLE SCHEDULE 8 OF 25

ROSALIA A. G. LAZEBNIK
062-057988
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS
EXPIRES 11.30.25

Sheet Number: E-020D
Page Number: 387

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POWER CONDUIT AND CABLE SCHEDULE

CONDUIT	SIZE/TYPE	WIRE/CABLE	FUNCTION	FROM	TO	SHEET REFERENCE	REMARKS
P314	1" RTRC	2#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING LIT-550C, LIT-560C CIRCUIT CONTAINING FST-05, FST-06 LTG/REC	E-MP-5	HH-FSTS-2	E-409, E-410, E-506	TRANSITION TO RGPVC WITHIN OPERATING GALLERY
P315	1" RTRC	2#10 AWG, 1#10 GND	POWER FOR CIRCUIT CONTAINING LIT-570C, LIT-580C CIRCUIT CONTAINING FST-07, FST-08 LTG/REC	E-MP-6	HH-FSTS-2	E-410, E-506	TRANSITION TO RGPVC WITHIN OPERATING GALLERY
P316	1" RTRC	6#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FST-05 PLOW CIRCUIT CONTAINING FST-06 PLOW	E-DP-E5	DB-FSTS	E-406, E-505	TRANSITION TO RGPVC WITHIN OPERATING GALLERY
P317	1" RTRC	6#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING FST-07 PLOW CIRCUIT CONTAINING FST-08 PLOW	E-DP-E6	DB-FSTS	E-406, E-505	TRANSITION TO RGPVC WITHIN OPERATING GALLERY
P318	3/4" RTRC	2#12 AWG, 1#12 GND	POWER	01 KGV FIT	ACP	E-101	
P319	1 1/2" RGPVC	3#4 AWG, 1#10 GND	POWER	E-DP-E4	WELDING REC	E-412	
P320	3/4" RGPVC	6#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING ANALYZER 1 CIRCUIT CONTAINING ANALYZER 2 CIRCUIT CONTAINING CHEMSCAN	E-MP-3	JB-ANN	E-416	
P321	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER	JB-ANN	ANALYZER 1	E-416	
P322	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER	JB-ANN	CHEMSCAN	E-416	
P323	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER	JB-ANN	ANALYZER 2	E-416	
P324	3/4" RGPVC	6#12 AWG, 1#12 GND	POWER FOR CIRCUIT CONTAINING ANALYZER 3 CIRCUIT CONTAINING ANALYZER 4 CIRCUIT CONTAINING SAMPLER	E-MP-5	JB-ANS	E-418	
P325	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER	JB-ANS	ANALYZER 3	E-418	
P326	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER	JB-ANS	SAMPLER	E-418	
P327	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER	JB-ANS	ANALYZER 4	E-418	
P328	3" RGPVC	1#600 KCMIL	POWER	UST-E1	HRG-E1	E-205	
P329	3" RGPVC	1#600 KCMIL	POWER	UST-E2	HRG-E2	E-205	
P330	1 1/2" RGPVC	3#1 AWG	POWER	MDP-E1	MDP-E1 SPD	E-412	
P331	1 1/2" RGPVC	3#1 AWG	POWER	MDP-E2	MDP-E2 SPD	E-412	
P332	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR ODOR-01 HEAT TRACE	E-MP-3	JB-HT-ODOR-01	E-306, E-416	VIA JB-E3. PROVIDE NEUTRAL WIRE. COORDINATE WITH HEAT TRACE DELEGATED DESIGN
P333	3/4" RGPVC	2#12 AWG, 1#12 GND	POWER FOR ODOR-02 HEAT TRACE	E-MP-3	JB-HT-ODOR-02	E-306, E-416	VIA JB-E3. PROVIDE NEUTRAL WIRE. COORDINATE WITH HEAT TRACE DELEGATED DESIGN

NOTES:
(1) SEE ELECTRICAL LEGEND ON SHEET E-003 AND GENERAL LEGEND ON SHEET G-002.
(2) RIO-01 CONSISTS OF TWO BAYS, RIO-01L AND RIO-01R. RIO-01L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-01R SHALL BE FOR DIGITAL I/O.
(3) RIO-02 CONSISTS OF TWO BAYS, RIO-02L AND RIO-02R. RIO-02L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-02R SHALL BE FOR DIGITAL I/O.

1

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

Designed by: AR	Checked by: DES	AECOM	Primera
Drawn by: BM	Reviewed by: CA	PRUDENTIAL PLAZA ONE 130 E RANDOLPH STREET SUITE 2400 CHICAGO, IL 60601, USA	550 W. Jackson Boulevard · Suite 600 · Chicago, Illinois 60661
Date: 7/1/2025	Scale: NONE		

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL

CONDUIT AND CABLE SCHEDULE 9 OF 25

ROXANA G. LAZENBY
062-057988
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS
EXPIRES 11.30.25

Sheet Number: E-020E
Page Number: 388

PLOT DATE: 10/16/2025 8:44:38 AM

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I&C CONDUIT AND CABLE SCHEDULE

CONDUIT	SIZE/TYPE	WIRE/CABLE	FUNCTION	FROM	TO	SHEET REFERENCE	REMARKS
197	3/4" RGPVC	(16) STP	CONTROL FOR AIT-291	AIT-291	RIO-01	E-209, E-407, E-416, E-417	
C001	1" RGPVC	(1) 24 STD FIBER	COMMUNICATION FOR DCS	PCB NETWORK CABINET	RIO-01	E-101, E-102, E-103, E-202, E-205, E-206, E-207, E-208, E-209, E-407, E-416, E-417	USE EXISTING CONDUIT BETWEEN JB-2BAT-E-2 AND NETWORK CABINET. NETWORK CABINET IS LOCATED IN THE PCB DCS ROOM (STORE ROOM) AT EL.39.71 AS SHOWN ON E-103
C002	1" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR RIO-02	RIO-01	RIO-02	E-417, E-418	
C003	2" RGPVC	(8) CAT6 ETHERNET	CONTROL FOR THE FOLLOWING: -(1) CAT6 FOR FT1-M01, FT1-M02, FT1-M03, FT1-M04 -(1) CAT6 FOR FT2-M01, FT2-M02, FT2-M03, FT2-M04 -(1) CAT6 FOR FT3-M01, FT3-M02, FT3-M03, FT3-M04, FT3-M05, FT3-M06 -(1) CAT6 FOR AP-M01, AP-M02, AP-M03, AP-M04, AP-M05, AP-M06, AP-M07, AP-M08 -(1) CAT6 FOR AT1-M01, AT1-M02 -(1) CAT6 RETURNING FROM AT1-M02 -(1) CAT6 FOR AT2-M01, AT2-M02 -(1) CAT6 FOR INFL-M01, AT3-M01, AT3-M02	RIO-01	CPN-C	E-417	
C004	2" RGPVC	(92) #14	CONTROL FOR THE FOLLOWING: -(43)#14 FOR AT1-IMLRP, AT1-FCV1, AT1-FCV2, AT1-FCV3, AT1-FCV4, AT1-FCV5, AT1-FCV6, AT1-FCV7 -(43)#14 FOR AT2-IMLRP, AT2-FCV1, AT2-FCV2, AT2-FCV3, AT2-FCV4, AT2-FCV5, AT2-FCV6, AT2-FCV7 -(3)#14 FOR ODOR-1 -(3)#14 FOR ODOR-2	RIO-01	CPN-C	E-417	
C005	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR FT1-M01, FT1-M02, FT1-M03, FT1-M04	CPN-C	FT1-M01	E-306, E-307, E-417	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
C006	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR FT1-M02, FT1-M03, FT1-M04	FT1-M01	FT1-M02	E-306	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
C007	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR FT1-M03, FT1-M04	FT1-M02	FT1-M03	E-306	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
C008	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR FT1-M04	FT1-M03	FT1-M04	E-306	
C009	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR FT2-M01, FT2-M02, FT2-M03, FT2-M04	CPN-C	FT2-M01	E-306, E-307, E-417	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
C010	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR FT2-M02, FT2-M03, FT2-M04	FT2-M01	FT2-M02	E-306	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
C011	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR FT2-M03, FT2-M04	FT2-M02	FT2-M03	E-306	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
C012	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR FT2-M04	FT2-M03	FT2-M04	E-306	
C013	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR FT3-M01, FT3-M02, FT3-M03, FT3-M04, FT3-M05, FT3-M06	CPN-C	FT3-M01	E-306, E-307, E-417	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
C014	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR FT3-M02, FT3-M03, FT3-M04, FT3-M05, FT3-M06	FT3-M01	FT3-M02	E-306	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
C015	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR FT3-M03, FT3-M04, FT3-M05, FT3-M06	FT3-M02	FT3-M03	E-306	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
C016	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR FT3-M04, FT3-M05, FT3-M06	FT3-M03	FT3-M04	E-306	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
C017	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR FT3-M05, FT3-M06	FT3-M04	FT3-M05	E-306	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
C018	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR FT3-M06	FT3-M05	FT3-M06	E-306	
C019	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR AP-M01, AP-M02, AP-M03, AP-M04, AP-M05, AP-M06, AP-M07, AP-M08	CPN-C	AP-M01	E-306, E-307, E-417	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
C020	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR AP-M02, AP-M03, AP-M04, AP-M05, AP-M06, AP-M07, AP-M08	AP-M01	AP-M02	E-306	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
C021	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR AP-M03, AP-M04, AP-M05, AP-M06, AP-M07, AP-M08	AP-M02	AP-M03	E-306	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
C022	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR AP-M04, AP-M05, AP-M06, AP-M07, AP-M08	AP-M03	AP-M04	E-306	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
C023	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR AP-M05, AP-M06, AP-M07, AP-M08	AP-M04	AP-M05	E-306	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
C024	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR AP-M06, AP-M07, AP-M08	AP-M05	AP-M06	E-306	
C025	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR AT1-M01, AT1-M02	CPN-C	AT1-M01	E-307, E-417	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
C026	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR AT1-M02	AT1-M01	AT1-M02	E-307	
C027	1 1/2" RGPVC	(43)#14	CONTROL FOR THE FOLLOWING: -(8)#14 FOR AT1-IMLRP -(5)#14 FOR AT1-FCV-7 -(5)#14 FOR AT1-FCV-6 -(5)#14 FOR AT1-FCV-1 -(5)#14 FOR AT1-FCV-5 -(5)#14 FOR AT1-FCV-2 -(5)#14 FOR AT1-FCV-4 -(5)#14 FOR AT1-FCV-3	CPN-C	AT1-IMLRP	E-307, E-417	
C028	1 1/2" RGPVC	(43)#14	CONTROL FOR THE FOLLOWING: -(8)#14 FOR AT2-IMLRP -(5)#14 FOR AT2-FCV-7 -(5)#14 FOR AT2-FCV-6 -(5)#14 FOR AT2-FCV-1 -(5)#14 FOR AT2-FCV-5 -(5)#14 FOR AT2-FCV-2 -(5)#14 FOR AT2-FCV-4 -(5)#14 FOR AT2-FCV-3	CPN-C	AT2-IMLRP	E-307, E-417	
C029	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR AT2-M01, AT2-M02	CPN-C	AT2-M01	E-307, E-417	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
C030	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR AT2-M02	AT2-M01	AT2-M02	E-307	

NOTES:
(1) SEE ELECTRICAL LEGEND ON SHEET E-003 AND GENERAL LEGEND ON SHEET G-002.
(2) RIO-01 CONSISTS OF TWO BAYS, RIO-01L AND RIO-01R. RIO-01L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-01R SHALL BE FOR DIGITAL I/O.
(3) RIO-02 CONSISTS OF TWO BAYS, RIO-02L AND RIO-02R. RIO-02L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-02R SHALL BE FOR DIGITAL I/O.

1

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Primera
550 W. Jackson Boulevard · Suite 600 · Chicago, Illinois 60661

Designed by:	Checked by:	Reviewed by:	Scale:
AR	DES	CA	NONE
Drawn by:			
BM			
Date:			
7/1/2025			

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL

CONDUIT AND CABLE SCHEDULE 10 OF 25

ROXANA A. G. LAZENBY
062-057988
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS
EXPIRES 11.30.25

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I&C CONDUIT AND CABLE SCHEDULE

CONDUIT	SIZE/TYPE	WIRE/CABLE	FUNCTION	FROM	TO	SHEET REFERENCE	REMARKS
C031	2" RGPVC	(4) CAT6 ETHERNET	CONTROL FOR THE FOLLOWING: -(1) CAT6 FOR INFL-M02, AT4-M01, AT4-M02 -(1) CAT6 FOR AT5-M01, AT5-M02 -(1) CAT6 FOR AT6-M01, AT6-M02 -(1) CAT6 FOR INFL-M03, INFL-M04	RIO-02	CPS-C	E-418	
C032	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR AT3-M01, AT3-M02	INFL-M01	AT3-M01	E-307, E-308, E-418	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
C033	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR AT3-M02	AT3-M01	AT3-M02	E-308	
C034	1 1/2" RGPVC	(43)#14	CONTROL FOR THE FOLLOWING: -(8)#14 FOR AT3-IMLRP -(5)#14 FOR AT3-FCV-7 -(5)#14 FOR AT3-FCV-6 -(5)#14 FOR AT3-FCV-1 -(5)#14 FOR AT3-FCV-5 -(5)#14 FOR AT3-FCV-2 -(5)#14 FOR AT3-FCV-4 -(5)#14 FOR AT3-FCV-3	CPS-C	AT3-IMLRP	E-308, E-418	
C035	1 1/2" RGPVC	(43)#14	CONTROL FOR THE FOLLOWING: -(8)#14 FOR AT4-IMLRP -(5)#14 FOR AT4-FCV-7 -(5)#14 FOR AT4-FCV-6 -(5)#14 FOR AT4-FCV-1 -(5)#14 FOR AT4-FCV-5 -(5)#14 FOR AT4-FCV-2 -(5)#14 FOR AT4-FCV-4 -(5)#14 FOR AT4-FCV-3	CPS-C	AT4-IMLRP	E-308, E-418	
C036	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR AT4-M01, AT4-M02	INFL-M02	AT4-M01	E-308, E-418	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
C037	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR AT4-M02	AT4-M01	AT4-M02	E-308	
C038	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR AT5-M01, AT5-M02	CPS-C	AT5-M01	E-308, E-309, E-418, E-419	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
C039	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR AT5-M02	AT5-M01	AT5-M02	E-309	
C040	1 1/2" RGPVC	(43)#14	CONTROL FOR THE FOLLOWING: -(8)#14 FOR AT5-IMLRP -(5)#14 FOR AT5-FCV-7 -(5)#14 FOR AT5-FCV-6 -(5)#14 FOR AT5-FCV-1 -(5)#14 FOR AT5-FCV-5 -(5)#14 FOR AT5-FCV-2 -(5)#14 FOR AT5-FCV-4 -(5)#14 FOR AT5-FCV-3	CPS-C	AT5-IMLRP	E-308, E-309, E-418, E-419	
C041	1 1/2" RGPVC	(43)#14	CONTROL FOR THE FOLLOWING: -(8)#14 FOR AT6-IMLRP -(5)#14 FOR AT6-FCV-7 -(5)#14 FOR AT6-FCV-6 -(5)#14 FOR AT6-FCV-1 -(5)#14 FOR AT6-FCV-5 -(5)#14 FOR AT6-FCV-2 -(5)#14 FOR AT6-FCV-4 -(5)#14 FOR AT6-FCV-3	CPS-C	AT6-IMLRP	E-308, E-309 ,E-418, E-419	
C042	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR AT6-M01, AT6-M02	CPS-C	AT6-M01	E-308, E-309, E-418, E-419	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
C043	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR AT6-M02	AT6-M01	AT6-M02	E-309	
C044	2" RGPVC	(86)#14	CONTROL FOR THE FOLLOWING: -(43)#14 FOR AT3-IMLRP, AT3-FCV1, AT3-FCV2, AT3-FCV3, AT3-FCV4, AT3-FCV5, AT3-FCV6, AT3-FCV7 -(43)#14 FOR AT4-IMLRP, AT4-FCV1, AT4-FCV2, AT4-FCV3, AT4-FCV4, AT4-FCV5, AT4-FCV6, AT4-FCV7	RIO-02	CPS-C	E-418	
C045	2" RGPVC	(86)#14	CONTROL FOR THE FOLLOWING: -(43)#14 FOR AT5-IMLRP, AT5-FCV1, AT5-FCV2, AT5-FCV3, AT5-FCV4, AT5-FCV5, AT5-FCV6, AT5-FCV7 -(43)#14 FOR AT6-IMLRP, AT6-FCV1, AT6-FCV2, AT6-FCV3, AT6-FCV4, AT6-FCV5, AT6-FCV6, AT6-FCV7	RIO-02	CPS-C	E-418	
C046	3/4" RGPVC	(3)#14	CONTROL FOR ODOR-1	CPN-C	ODOR-1	E-306, E-307, E-416	
C047	3/4" RGPVC	(3)#14	CONTROL FOR ODOR-2	CPN-C	ODOR-2	E-306, E-307, E-416	
C048	1" RGPVC	(2) CAT6 ETHERNET	CONTROL FOR WAS-P01 VFD, WAS-P02 VFD, RAS-P01 VFD, RAS-P02 VFD, RAS-P03 VFD	RIO-01	WAS-P01	E-416, E-417	
C049	1" RGPVC	(2) CAT6 ETHERNET	CONTROL FOR RAS-P03 VFD	RAS-P03	RAS-P02	E-416	
C050	1" RGPVC	(2) CAT6 ETHERNET	CONTROL FOR RAS-P02 VFD, RAS-P03 VFD	RAS-P02	RAS-P01	E-416	
C051	1" RGPVC	(2) CAT6 ETHERNET	CONTROL FOR RAS-P01 VFD, RAS-P02 VFD, RAS-P03 VFD	RAS-P01	WAS-P02	E-416	
C052	1" RGPVC	(2) CAT6 ETHERNET	CONTROL FOR WAS-P02 VFD, RAS-P01 VFD, RAS-P02 VFD, RAS-P03 VFD	WAS-P02	WAS-P01	E-416	
C053	1 1/2" RTRC	(36)#14	CONTROL FOR THE FOLLOWING: -(9)#14 FOR FST-01 -(9)#14 FOR FST-02 -(9)#14 FOR FST-03 -(9)#14 FOR FST-04	RIO-01	HH-FSTN-2	E-408, E-503	RTRC TRANSITIONS TO RGPVC VIA FCPN-C WITHIN OPERATING GALLERY
C054	1" RTRC	(9)#14	CONTROL FOR FST-01	HH-FSTN-2	FST-01	E-503	
C055	1" RTRC	(9)#14	CONTROL FOR FST-02	HH-FSTN-2	FST-02	E-503	
C056	1" RTRC	(9)#14	CONTROL FOR FST-03	HH-FSTN-2	FST-03	E-503	
C057	1" RTRC	(9)#14	CONTROL FOR FST-04	HH-FSTN-2	FST-04	E-503	

NOTES:
(1) SEE ELECTRICAL LEGEND ON SHEET E-003 AND GENERAL LEGEND ON SHEET G-002.
(2) RIO-01 CONSISTS OF TWO BAYS, RIO-01L AND RIO-01R. RIO-01L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-01R SHALL BE FOR DIGITAL I/O.
(3) RIO-02 CONSISTS OF TWO BAYS, RIO-02L AND RIO-02R. RIO-02L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-02R SHALL BE FOR DIGITAL I/O.

1

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Primera
550 W. Jackson Boulevard · Suite 600 · Chicago, Illinois 60661

Designed by: AR
Drawn by: BM
Checked by: DES
Reviewed by: CA
Date: 7/1/2025
Scale: NONE

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL

CONDUIT AND CABLE SCHEDULE 11 OF 25

ROXANA G. LAZENIK
062-057988
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS
EXPIRES 11.30.25

Sheet Number: E-022
Page Number: 390

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Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt

I&C CONDUIT AND CABLE SCHEDULE

CONDUIT	SIZE/TYPE	WIRE/CABLE	FUNCTION	FROM	TO	SHEET REFERENCE	REMARKS
C058	1 1/2" RTRC	(36)#14	CONTROL FOR THE FOLLOWING: -(9)#14 FOR FST-05 -(9)#14 FOR FST-06 -(9)#14 FOR FST-07 -(9)#14 FOR FST-08	RIO-02	HH-FSTS-2	E-409, E-410, E-506	RTRC TRANSITIONS TO RGPVC VIA FCPN-C WITHIN OPERATING GALLERY
C059	1" RTRC	(9)#14	CONTROL FOR FST-05	HH-FSTS-2	FST-05	E-506	
C060	1" RTRC	(9)#14	CONTROL FOR FST-06	HH-FSTS-2	FST-06	E-506	
C061	1" RTRC	(9)#14	CONTROL FOR FST-07	HH-FSTS-2	FST-07	E-506	
C062	1" RTRC	(9)#14	CONTROL FOR FST-08	HH-FSTS-2	FST-08	E-506	
C063	1 1/2" RGPVC	(35)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT1-FCV-7 -(5)#14 FOR AT1-FCV-6 -(5)#14 FOR AT1-FCV-1 -(5)#14 FOR AT1-FCV-5 -(5)#14 FOR AT1-FCV-2 -(5)#14 FOR AT1-FCV-4 -(5)#14 FOR AT1-FCV-3	AT1 IMLRP	AT1-FCV7	E-307	
C064	1" RGPVC	(30)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT1-FCV-6 -(5)#14 FOR AT1-FCV-1 -(5)#14 FOR AT1-FCV-5 -(5)#14 FOR AT1-FCV-2 -(5)#14 FOR AT1-FCV-4 -(5)#14 FOR AT1-FCV-3	AT1-FCV7	AT1-FCV6	E-307	
C065	1" RGPVC	(25)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT1-FCV-1 -(5)#14 FOR AT1-FCV-5 -(5)#14 FOR AT1-FCV-2 -(5)#14 FOR AT1-FCV-4 -(5)#14 FOR AT1-FCV-3	AT1-FCV6	AT1-FCV1	E-307	
C066	3/4" RGPVC	(20)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT1-FCV-5 -(5)#14 FOR AT1-FCV-2 -(5)#14 FOR AT1-FCV-4 -(5)#14 FOR AT1-FCV-3	AT1-FCV1	AT1-FCV5	E-307	
C067	3/4" RGPVC	(15)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT1-FCV-2 -(5)#14 FOR AT1-FCV-4 -(5)#14 FOR AT1-FCV-3	AT1-FCV5	AT1-FCV2	E-307	
C068	3/4" RGPVC	(10)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT1-FCV-4 -(5)#14 FOR AT1-FCV-3	AT1-FCV2	AT1-FCV4	E-307	
C069	3/4" RGPVC	(5)#14	CONTROL FOR AT1-FCV-3	AT1-FCV4	AT1-FCV3	E-307	
C070	1 1/2" RGPVC	(35)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT2-FCV-7 -(5)#14 FOR AT2-FCV-6 -(5)#14 FOR AT2-FCV-1 -(5)#14 FOR AT2-FCV-5 -(5)#14 FOR AT2-FCV-2 -(5)#14 FOR AT2-FCV-4 -(5)#14 FOR AT2-FCV-3	AT2 IMLRP	AT2-FCV7	E-307	
C071	1" RGPVC	(30)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT2-FCV-6 -(5)#14 FOR AT2-FCV-1 -(5)#14 FOR AT2-FCV-5 -(5)#14 FOR AT2-FCV-2 -(5)#14 FOR AT2-FCV-4 -(5)#14 FOR AT2-FCV-3	AT2-FCV7	AT2-FCV6	E-307	
C072	1" RGPVC	(25)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT2-FCV-1 -(5)#14 FOR AT2-FCV-5 -(5)#14 FOR AT2-FCV-2 -(5)#14 FOR AT2-FCV-4 -(5)#14 FOR AT2-FCV-3	AT2-FCV6	AT2-FCV1	E-307	
C073	3/4" RGPVC	(20)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT2-FCV-5 -(5)#14 FOR AT2-FCV-2 -(5)#14 FOR AT2-FCV-4 -(5)#14 FOR AT2-FCV-3	AT2-FCV1	AT2-FCV5	E-307	
C074	3/4" RGPVC	(15)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT2-FCV-2 -(5)#14 FOR AT2-FCV-4 -(5)#14 FOR AT2-FCV-3	AT2-FCV5	AT2-FCV2	E-307	
C075	3/4" RGPVC	(10)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT2-FCV-4 -(5)#14 FOR AT2-FCV-3	AT2-FCV2	AT2-FCV4	E-307	
C076	3/4" RGPVC	(5)#14	CONTROL FOR AT2-FCV-3	AT2-FCV4	AT2-FCV3	E-307	
C077	1 1/2" RGPVC	(35)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT3-FCV-7 -(5)#14 FOR AT3-FCV-6 -(5)#14 FOR AT3-FCV-1 -(5)#14 FOR AT3-FCV-5 -(5)#14 FOR AT3-FCV-2 -(5)#14 FOR AT3-FCV-4 -(5)#14 FOR AT3-FCV-3	AT3 IMLRP	AT3-FCV7	E-308	
C078	1" RGPVC	(30)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT3-FCV-6 -(5)#14 FOR AT3-FCV-1 -(5)#14 FOR AT3-FCV-5 -(5)#14 FOR AT3-FCV-2 -(5)#14 FOR AT3-FCV-4 -(5)#14 FOR AT3-FCV-3	AT3-FCV7	AT3-FCV6	E-308	

NOTES:
(1) SEE ELECTRICAL LEGEND ON SHEET E-003 AND GENERAL LEGEND ON SHEET G-002.
(2) RIO-01 CONSISTS OF TWO BAYS, RIO-01L AND RIO-01R. RIO-01L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-01R SHALL BE FOR DIGITAL I/O.
(3) RIO-02 CONSISTS OF TWO BAYS, RIO-02L AND RIO-02R. RIO-02L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-02R SHALL BE FOR DIGITAL I/O.

1

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Primera
550 W. Jackson Boulevard · Suite 600 · Chicago, Illinois 60661

Designed by:	Checked by:	Date:
AR	DES	7/1/2025
Drawn by:	Reviewed by:	Scale:
BM	CA	NONE

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL
CONDUIT AND CABLE SCHEDULE 12 OF 25

ROXANA G. LAZENBY
062-057988
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS
EXPIRES 11.30.25

Sheet Number: E-023
Page Number: 391

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Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt

I&C CONDUIT AND CABLE SCHEDULE

CONDUIT	SIZE/TYPE	WIRE/CABLE	FUNCTION	FROM	TO	SHEET REFERENCE	REMARKS
C079	1" RGPVC	(25)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT3-FCV-1 -(5)#14 FOR AT3-FCV-5 -(5)#14 FOR AT3-FCV-2 -(5)#14 FOR AT3-FCV-4 -(5)#14 FOR AT3-FCV-3	AT3-FCV6	AT3-FCV1	E-308	
C080	3/4" RGPVC	(20)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT3-FCV-5 -(5)#14 FOR AT3-FCV-2 -(5)#14 FOR AT3-FCV-4 -(5)#14 FOR AT3-FCV-3	AT3-FCV1	AT3-FCV5	E-308	
C081	3/4" RGPVC	(15)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT3-FCV-2 -(5)#14 FOR AT3-FCV-4 -(5)#14 FOR AT3-FCV-3	AT3-FCV5	AT3-FCV2	E-308	
C082	3/4" RGPVC	(10)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT3-FCV-4 -(5)#14 FOR AT3-FCV-3	AT3-FCV2	AT3-FCV4	E-308	
C083	3/4" RGPVC	(5)#14	CONTROL FOR AT3-FCV-3	AT3-FCV4	AT3-FCV3	E-308	
C084	1 1/2" RGPVC	(35)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT4-FCV-7 -(5)#14 FOR AT4-FCV-6 -(5)#14 FOR AT4-FCV-1 -(5)#14 FOR AT4-FCV-5 -(5)#14 FOR AT4-FCV-2 -(5)#14 FOR AT4-FCV-4 -(5)#14 FOR AT4-FCV-3	AT4 IMLRP	AT4-FCV7	E-308	
C085	1" RGPVC	(30)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT4-FCV-6 -(5)#14 FOR AT4-FCV-1 -(5)#14 FOR AT4-FCV-5 -(5)#14 FOR AT4-FCV-2 -(5)#14 FOR AT4-FCV-4 -(5)#14 FOR AT4-FCV-3	AT4-FCV7	AT4-FCV6	E-308	
C086	1" RGPVC	(25)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT4-FCV-1 -(5)#14 FOR AT4-FCV-5 -(5)#14 FOR AT4-FCV-2 -(5)#14 FOR AT4-FCV-4 -(5)#14 FOR AT4-FCV-3	AT4-FCV6	AT4-FCV1	E-308	
C087	3/4" RGPVC	(20)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT4-FCV-5 -(5)#14 FOR AT4-FCV-2 -(5)#14 FOR AT4-FCV-4 -(5)#14 FOR AT4-FCV-3	AT4-FCV1	AT4-FCV5	E-308	
C088	3/4" RGPVC	(15)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT4-FCV-2 -(5)#14 FOR AT4-FCV-4 -(5)#14 FOR AT4-FCV-3	AT4-FCV5	AT4-FCV2	E-308	
C089	3/4" RGPVC	(10)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT4-FCV-4 -(5)#14 FOR AT4-FCV-3	AT4-FCV2	AT4-FCV4	E-308	
C090	3/4" RGPVC	(5)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT4-FCV-3	AT4-FCV4	AT4-FCV3	E-308	
C091	1 1/2" RGPVC	(35)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT5-FCV-7 -(5)#14 FOR AT5-FCV-6 -(5)#14 FOR AT5-FCV-1 -(5)#14 FOR AT5-FCV-5 -(5)#14 FOR AT5-FCV-2 -(5)#14 FOR AT5-FCV-4 -(5)#14 FOR AT5-FCV-3	AT5 IMLRP	AT5-FCV7	E-309	
C092	1" RGPVC	(30)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT5-FCV-6 -(5)#14 FOR AT5-FCV-1 -(5)#14 FOR AT5-FCV-5 -(5)#14 FOR AT5-FCV-2 -(5)#14 FOR AT5-FCV-4 -(5)#14 FOR AT5-FCV-3	AT5-FCV7	AT5-FCV6	E-309	
C093	1" RGPVC	(25)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT5-FCV-1 -(5)#14 FOR AT5-FCV-5 -(5)#14 FOR AT5-FCV-2 -(5)#14 FOR AT5-FCV-4 -(5)#14 FOR AT5-FCV-3	AT5-FCV6	AT5-FCV1	E-309	
C094	3/4" RGPVC	(20)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT5-FCV-5 -(5)#14 FOR AT5-FCV-2 -(5)#14 FOR AT5-FCV-4 -(5)#14 FOR AT5-FCV-3	AT5-FCV1	AT5-FCV5	E-309	
C095	3/4" RGPVC	(15)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT5-FCV-2 -(5)#14 FOR AT5-FCV-4 -(5)#14 FOR AT5-FCV-3	AT5-FCV5	AT5-FCV2	E-309	
C096	3/4" RGPVC	(10)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT5-FCV-4 -(5)#14 FOR AT5-FCV-3	AT5-FCV2	AT5-FCV4	E-309	
C097	3/4" RGPVC	(5)#14	CONTROL FOR AT5-FCV-3	AT5-FCV4	AT5-FCV3	E-309	
C098	1 1/2" RGPVC	(35)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT6-FCV-7 -(5)#14 FOR AT6-FCV-6 -(5)#14 FOR AT6-FCV-1 -(5)#14 FOR AT6-FCV-5 -(5)#14 FOR AT6-FCV-2 -(5)#14 FOR AT6-FCV-4 -(5)#14 FOR AT6-FCV-3	AT6 IMLRP	AT6-FCV7	E-309	

NOTES:
(1) SEE ELECTRICAL LEGEND ON SHEET E-003 AND GENERAL LEGEND ON SHEET G-002.
(2) RIO-01 CONSISTS OF TWO BAYS, RIO-01L AND RIO-01R. RIO-01L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-01R SHALL BE FOR DIGITAL I/O.
(3) RIO-02 CONSISTS OF TWO BAYS, RIO-02L AND RIO-02R. RIO-02L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-02R SHALL BE FOR DIGITAL I/O.

1

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Primera
550 W. Jackson Boulevard · Suite 600 · Chicago, Illinois 60661

Designed by:	Checked by:	Scale:
AR	DES	NONE
Drawn by:	Reviewed by:	
BM	CA	
Date:		
7/1/2025		

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL
CONDUIT AND CABLE SCHEDULE 13 OF 25

ROXANA A. G. LAZENBY
062-057988
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS
EXPIRES 11.30.25

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Page Number: 392

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I&C CONDUIT AND CABLE SCHEDULE

CONDUIT	SIZE/TYPE	WIRE/CABLE	FUNCTION	FROM	TO	SHEET REFERENCE	REMARKS
C099	1" RGPVC	(30)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT6-FCV-6 -(5)#14 FOR AT6-FCV-1 -(5)#14 FOR AT6-FCV-5 -(5)#14 FOR AT6-FCV-2 -(5)#14 FOR AT6-FCV-4 -(5)#14 FOR AT6-FCV-3	AT6-FCV7	AT6-FCV6	E-309	
C100	1" RGPVC	(25)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT6-FCV-1 -(5)#14 FOR AT6-FCV-5 -(5)#14 FOR AT6-FCV-2 -(5)#14 FOR AT6-FCV-4 -(5)#14 FOR AT6-FCV-3	AT6-FCV6	AT6-FCV1	E-309	
C101	3/4" RGPVC	(20)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT6-FCV-5 -(5)#14 FOR AT6-FCV-2 -(5)#14 FOR AT6-FCV-4 -(5)#14 FOR AT6-FCV-3	AT6-FCV1	AT6-FCV5	E-309	
C102	3/4" RGPVC	(15)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT6-FCV-2 -(5)#14 FOR AT6-FCV-4 -(5)#14 FOR AT6-FCV-3	AT6-FCV5	AT6-FCV2	E-309	
C103	3/4" RGPVC	(10)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR AT6-FCV-4 -(5)#14 FOR AT6-FCV-3	AT6-FCV2	AT6-FCV4	E-309	
C104	3/4" RGPVC	(5)#14	CONTROL FOR AT6-FCV-3	AT6-FCV4	AT6-FCV3	E-309	
C105	1" RGPVC	(28)#14	CONTROL FOR THE FOLLOWING: -(8)#14 FOR KGV-02 -(8)#14 FOR KGV-03 -(4)#14 FOR SP-5 -(4)#14 FOR SP-6 -(4)#14 FOR SP-7	SP-4	KGV-02	E-205, E-209	VIA SUMP PUMP CONTROL PANELS
C106	<varies> RGPVC	(32)#14	CONTROL FOR THE FOLLOWING: -(4)#14 FOR SP-4 -(8)#14 FOR KGV-02 -(8)#14 FOR KGV-03 -(4)#14 FOR SP-5 -(4)#14 FOR SP-6 -(4)#14 FOR SP-7	RIO-01	SP-4	E-209, E-407, E-416, E-417	VIA SUMP PUMP CONTROL PANELS
C107	3/4" RGPVC	(12)#14	CONTROL FOR THE FOLLOWING: -(4)#14 FOR SP-5 -(4)#14 FOR SP-6 -(4)#14 FOR SP-7	KGV-03	SP-5	E-208, E-209	VIA SUMP PUMP CONTROL PANELS
C108	3/4" RGPVC	(8)#14	CONTROL FOR THE FOLLOWING: -(4)#14 FOR SP-6 -(4)#14 FOR SP-7	SP-5	SP-6	E-207, E-208	VIA SUMP PUMP CONTROL PANELS
C109	3/4" RGPVC	(4)#14	CONTROL FOR SP-7	SP-6	SP-7	E-202, E-206, E-207	VIA SUMP PUMP CONTROL PANELS
C110	1" RGPVC	(1) 24STD FIBER	COMMUNICATION FOR DCS	PCB NETWORK CABINET	RIO-01	E-101,E-102, E-103, E-202, E-205, E-206, E-207, E-208, E-209, E-407, E-408	NETWORK CABINET IS LOCATED IN THE PCB DCS ROOM (STORE ROOM) AT EL.39.71 AS SHOWN ON E-103
C111	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR RETURN LOOP CONNECTING FT1-M04, FT2-M04	FT1-M04	FT2-M04	E-306	
C112	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR RETURN LOOP CONNECTING FT3-M06 AND AP-M08	FT3-M06	AP-M08	E-306	
C113	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR AT1-M02 CAT6 RETURN LOOP	CPN-C	AT1-M02	E-307, E-417	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
C114	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR RETURN LOOP CONNECTING AT2-M02, AT3-M02	AT2-M02	AT3-M02	E-307, E-308	
C115	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR INFL-M01, AT3-M01, AT3-M02	CPN-C	INFL-M01	E-307, E-417	
C116	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR INFL-M02, AT4-M01, AT4-M02	CPS-C	INFL-M02	E-308, E-418	
C117	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR RETURN LOOP CONNECTING AT4-M02, AT5-M02	AT4-M02	AT5-M02	E-308, E-309	
C118	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR RETURN LOOP CONNECTING AT6-M02, INFL-M04	AT6-M02	INFL-M04	E-309, 419	PROVIDE CONDUIT TEES TO SEQUENTIAL ENCLOSURES
C119	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR INFL-M04	INFL-M03	INFL-M04	E-309	
C120	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR INFL-M03, INFL-M04	CPS-C	INFL-M03	E-308, E-418	
C121	1" RTRC	(29)#14	CONTROL FOR THE FOLLOWING: -(8)#14 FOR SG-016 -(8)#14 FOR SG-020 -(8)#14 FOR SG-019 -(5)#14 FOR PAT-FCV1	PCP-C	SG-16	E-408, E-503, E-602	TRANSITION TO RGPVC WITHIN OPERATING GALLERY
C122	2" RGPVC	(85)#14	CONTROL FOR BRANCH FOR THE FOLLOWING: -(8)#14 FOR SG-010 -(8)#14 FOR SG-009 -(8)#14 FOR SG-008 -(8)#14 FOR SG-007 BRANCH FOR THE FOLLOWING: -(8)#14 FOR SG-015 -(8)#14 FOR SG-017 -(8)#14 FOR SG-018 BRANCH FOR THE FOLLOWING: -(8)#14 FOR SG-016 -(8)#14 FOR SG-020 -(8)#14 FOR SG-019 -(5)#14 FOR PAT-FCV1	RIO-01	PCP-C	E-408, E-417	

NOTES:
(1) SEE ELECTRICAL LEGEND ON SHEET E-003 AND GENERAL LEGEND ON SHEET G-002.
(2) RIO-01 CONSISTS OF TWO BAYS, RIO-01L AND RIO-01R. RIO-01L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-01R SHALL BE FOR DIGITAL I/O.
(3) RIO-02 CONSISTS OF TWO BAYS, RIO-02L AND RIO-02R. RIO-02L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-02R SHALL BE FOR DIGITAL I/O.

1

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Primera
550 W. Jackson Boulevard · Suite 600 · Chicago, Illinois 60661

Designed by:	Checked by:	Drawn by:	Reviewed by:	Date:	Scale:
AR	DES	BM	CA	7/1/2025	NONE

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL

CONDUIT AND CABLE SCHEDULE 14 OF 25

ROLANJA G. LAZENBY
062-057988
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS
EXPIRES 11.30.25

Sheet Number: E-025
Page Number: 393

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Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt

I&C CONDUIT AND CABLE SCHEDULE

CONDUIT	SIZE/TYPE	WIRE/CABLE	FUNCTION	FROM	TO	SHEET REFERENCE	REMARKS
C123	3/4" RGPVC	(20)#14	CONTROL FOR THE FOLLOWING: -(8)#14 FOR KGV-03 -(4)#14 FOR SP-5 -(4)#14 FOR SP-6 -(4)#14 FOR SP-7	KGV-02	KGV-03	E-209	
C124	3/4" RGPVC	(1) VENDOR CABLE	CONTROL FOR FE-200	FIT-0200	FE-200	E-209	CABLE FURNISHED BY VENDOR
C125	3/4" RGPVC	(5)#14	CONTROL FOR FST1-FCV1A	FST1-FCV1B	FST1-FCV1A	E-407	
C126	3/4" RGPVC	(10)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR FST1-FCV1B -(5)#14 FOR FST1-FCV1A	FST2-FCV2A	FST1-FCV1B	E-407	
C127	3/4" RGPVC	(15)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR FST2-FCV2A -(5)#14 FOR FST1-FCV1B -(5)#14 FOR FST1-FCV1A	FST2-FCV2B	FST2-FCV2A	E-407	
C128	3/4" RGPVC	(20)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR FST2-FCV2B -(5)#14 FOR FST2-FCV2A -(5)#14 FOR FST1-FCV1B -(5)#14 FOR FST1-FCV1A	RIO-01	FST2-FCV2B	E-407, E-408	
C129	3/4" RGPVC	(5)#14	CONTROL FOR FST4-FCV4B	FST4-FCV4A	FST4-FCV4B	E-408	
C130	3/4" RGPVC	(10)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR FST4-FCV4A -(5)#14 FOR FST4-FCV4B	FST3-FCV3B	FST4-FCV4A	E-408	
C131	3/4" RGPVC	(15)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR FST3-FCV3B -(5)#14 FOR FST4-FCV4A -(5)#14 FOR FST4-FCV4B	FST3-FCV3A	FST3-FCV3B	E-408	
C132	3/4" RGPVC	(20)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR FST3-FCV3A -(5)#14 FOR FST3-FCV3B -(5)#14 FOR FST4-FCV4A -(5)#14 FOR FST4-FCV4B	FST3-FCV3A	RIO-01	E-408	
C133	3/4" RGPVC	(5)#14	CONTROL FOR FST5-FCV5A	FST5-FCV5B	FST5-FCV5A	E-409	
C134	3/4" RGPVC	(10)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR FST5-FCV5B -(5)#14 FOR FST5-FCV5A	FST6-FCV6A	FST5-FCV5B	E-409	
C135	3/4" RGPVC	(15)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR FST6-FCV6A -(5)#14 FOR FST5-FCV5B -(5)#14 FOR FST5-FCV5A	FST6-FCV6B	FST6-FCV6A	E-409	
C136	3/4" RGPVC	(20)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR FST6-FCV6B -(5)#14 FOR FST6-FCV6A -(5)#14 FOR FST5-FCV5B -(5)#14 FOR FST5-FCV5A	FST6-FCV6B	RIO-02	E-409	
C137	3/4" RGPVC	(5)#14	CONTROL FOR FST8-FCV8B	FST8-FCV8A	FST8-FCV8B	E-410	
C138	3/4" RGPVC	(10)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR FST8-FCV8A -(5)#14 FOR FST8-FCV8B	FST7-FCV7B	FST8-FCV8A	E-410	
C139	3/4" RGPVC	(15)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR FST7-FCV7B -(5)#14 FOR FST8-FCV8A -(5)#14 FOR FST8-FCV8B	FST7-FCV7A	FST7-FCV7B	E-410	
C140	3/4" RGPVC	(20)#14	CONTROL FOR THE FOLLOWING: -(5)#14 FOR FST7-FCV7A -(5)#14 FOR FST7-FCV7B -(5)#14 FOR FST8-FCV8A -(5)#14 FOR FST8-FCV8B	FST7-FCV7A	RIO-02	E-409, E-410	
C141	1" RTRC	(24)#14	CONTROL FOR THE FOLLOWING: -(8)#14 FOR SG-015 -(8)#14 FOR SG-017 -(8)#14 FOR SG-018	PCP-C	SG-15	E-408, E-503, E-602	TRANSITION TO RGPVC WITHIN OPERATING GALLERY
C142	1" RGPVC	(16)#14	CONTROL FOR THE FOLLOWING: -(8)#14 FOR SG-017 -(8)#14 FOR SG-018	SG-15	SG-17	E-602	
C143	1" RGPVC	(8)#14	CONTROL FOR SG-018	SG-17	SG-18	E-602	
C144	1" RGPVC	(5)#14	CONTROL FOR PAT-FCV1	SG-16	PAT-FCV1	E-602	
C145	1" RGPVC	(16)#14	CONTROL FOR THE FOLLOWING: -(8)#14 FOR SG-020 -(8)#14 FOR SG-019	SG-16	SG-20	E-602	
C146	1" RGPVC	(8)#14	CONTROL FOR SG-019	SG-20	SG-19	E-602	
C147	1" RGPVC	(24)#14	CONTROL FOR THE FOLLOWING: -(8)#14 FOR SG-013 -(8)#14 FOR SG-012 -(8)#14 FOR SG-011	SG-13	SG-14	E-419	
C148	3/4" RGPVC	(16)#14	CONTROL FOR THE FOLLOWING: -(8)#14 FOR SG-012 -(8)#14 FOR SG-011	SG-12	SG-13	E-419	
C149	3/4" RGPVC	(8)#14	CONTROL FOR SG-011	SG-11	SG-12	E-418	
C150	1" RTRC	(32)#14	CONTROL FOR THE FOLLOWING: -(8)#14 FOR SG-014 -(8)#14 FOR SG-013 -(8)#14 FOR SG-012 -(8)#14 FOR SG-011	RIO-02	SG-14	E-409, E-410, E-419	
C151	3/4" RGPVC	(8)#14	CONTROL FOR SG-007	SG-008	SG-007	E-416	

NOTES:
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(2) RIO-01 CONSISTS OF TWO BAYS, RIO-01L AND RIO-01R. RIO-01L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-01R SHALL BE FOR DIGITAL I/O.
(3) RIO-02 CONSISTS OF TWO BAYS, RIO-02L AND RIO-02R. RIO-02L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-02R SHALL BE FOR DIGITAL I/O.

1

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1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Primera
550 W. Jackson Boulevard · Suite 600 · Chicago, Illinois 60661

Designed by:	Checked by:	Appr.
AR	DES	GD
Drawn by:	Reviewed by:	Date
BM	CA	10/15/25
Date:	Scale:	
7/1/2025	NONE	

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL

CONDUIT AND CABLE SCHEDULE 15 OF 25

ROXANA G. LAZENBY
062-057988
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS
EXPIRES 11.30.25

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I&C CONDUIT AND CABLE SCHEDULE

CONDUIT	SIZE/TYPE	WIRE/CABLE	FUNCTION	FROM	TO	SHEET REFERENCE	REMARKS
C152	3/4" RGPVC	(16)#14	CONTROL FOR THE FOLLOWING: -(8)#14 FOR SG-008 -(8)#14 FOR SG-007	SG-009	SG-008	E-416	
C153	1" RGPVC	(24)#14	CONTROL FOR THE FOLLOWING: -(8)#14 FOR SG-009 -(8)#14 FOR SG-008 -(8)#14 FOR SG-007	SG-010	SG-009	E-417	
C154	1" RTRC	(32)#14	CONTROL FOR THE FOLLOWING: -(8)#14 FOR SG-010 -(8)#14 FOR SG-009 -(8)#14 FOR SG-008 -(8)#14 FOR SG-007	PCP-C	SG-010	E-408, E-417	
C155	3/4" RGPVC	(2)#14	CONTROL FOR FST TORK GALLERY ALARM PANEL	RIO-01	FST TORQUE GALLERY	E-417	
C156	3/4" RGPVC	(8)#14	CONTROL FOR FCPN-C	FST TORQUE GALLERY	FCPN-C	E-408	
C157	3/4" RGPVC	(8)#14	CONTROL FOR FCPS-C	FST TORQUE GALLERY	FCPS-C	E-408, E-409, E-410	
C158	3/4" RGPVC	(1) RTD CABLE	CONTROL FOR TE-0001	RIO-01	TE-0001	E-417	
C159	3/4" RGPVC	(1) RTD CABLE	CONTROL FOR TE-0002	RIO-02	TE-0002	E-418	
C160	3/4" RGPVC	(1) VENDOR CABLE	CONTROL FOR FE-414	FIT-414	FE-414	E-407	CABLE FURNISHED BY VENDOR
C161	3/4" RGPVC	(1) VENDOR CABLE	CONTROL FOR FE-422	FIT-422	FE-422	E-407	CABLE FURNISHED BY VENDOR
C162	3/4" RGPVC	(6)#14	CONTROL FOR THE FOLLOWING: (2)#14 FOR TS-01 (2)#14 FOR TS-02 (2)#14 FOR TS-03	RIO-01	TS-01	E-407, E-408	
C163	3/4" RGPVC	(2)#14	CONTROL FOR TS-02	TS-01	TS-02	E-407, E-408, E-417	
C164	3/4" RGPVC	(2)#14	CONTROL FOR TS-03	TS-01	TS-03	E-407	
C165	3/4" RGPVC	(10)#14	CONTROL FOR THE FOLLOWING: (2)#14 FOR RAS-P03 LCS (2)#14 FOR SV-411 (2)#14 FOR TS-411 (2)#14 FOR PS-411A (2)#14 FOR PS-411B	RAS-P03 VFD	RAS-P03 LCS	E-407	
C166	3/4" RGPVC	(8)#14	CONTROL FOR THE FOLLOWING: (2)#14 FOR SV-411 (2)#14 FOR TS-411 (2)#14 FOR PS-411A (2)#14 FOR PS-411B	RAS-P03 LCS	SV-411	E-407	
C167	3/4" RGPVC	(2)#14	CONTROL FOR TS-411	SV-411	TS-411	E-407	
C168	3/4" RGPVC	(2)#14	CONTROL FOR PS-411A	SV-411	PS-411A	E-407	
C169	3/4" RGPVC	(2)#14	CONTROL FOR PS-411B	SV-411	PS-411B	E-407	
C170	3/4" RGPVC	(10)#14	CONTROL FOR THE FOLLOWING: (2)#14 FOR RAS-P02 LCS (2)#14 FOR SV-412 (2)#14 FOR TS-412 (2)#14 FOR PS-412A (2)#14 FOR PS-412B	RAS-P02 VFD	RAS-P02 LCS	E-407	
C171	3/4" RGPVC	(8)#14	CONTROL FOR THE FOLLOWING: (2)#14 FOR SV-412 (2)#14 FOR TS-412 (2)#14 FOR PS-412A (2)#14 FOR PS-412B	RAS-P02 LCS	SV-412	E-407	
C172	3/4" RGPVC	(2)#14	CONTROL FOR TS-412	SV-412	TS-412	E-407	
C173	3/4" RGPVC	(2)#14	CONTROL FOR PS-412A	SV-412	PS-412A	E-407	
C174	3/4" RGPVC	(2)#14	CONTROL FOR PS-412B	SV-412	PS-412B	E-407	
C175	3/4" RGPVC	(10)#14	CONTROL FOR THE FOLLOWING: (2)#14 FOR RAS-P01 LCS (2)#14 FOR SV-413 (2)#14 FOR TS-413 (2)#14 FOR PS-413A (2)#14 FOR PS-413B	RAS-P01 VFD	RAS-P01 LCS	E-407	
C176	3/4" RGPVC	(8)#14	CONTROL FOR THE FOLLOWING: (2)#14 FOR SV-413 (2)#14 FOR TS-413 (2)#14 FOR PS-413A (2)#14 FOR PS-413B	RAS-P01 LCS	SV-413	E-407	
C177	3/4" RGPVC	(2)#14	CONTROL FOR TS-413	SV-413	TS-413	E-407	
C178	3/4" RGPVC	(2)#14	CONTROL FOR PS-413A	SV-413	PS-413A	E-407	
C179	3/4" RGPVC	(2)#14	CONTROL FOR PS-413B	SV-413	PS-413B	E-407	
C180	3/4" RGPVC	(10)#14	CONTROL FOR THE FOLLOWING: (2)#14 FOR WAS-P02 LCS (2)#14 FOR SV-422 (2)#14 FOR TS-422 (2)#14 FOR PS-422A (2)#14 FOR PS-422B	WAS-P02 VFD	WAS-P02 LCS	E-407	

NOTES:
(1) SEE ELECTRICAL LEGEND ON SHEET E-003 AND GENERAL LEGEND ON SHEET G-002.
(2) RIO-01 CONSISTS OF TWO BAYS, RIO-01L AND RIO-01R. RIO-01L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-01R SHALL BE FOR DIGITAL I/O.
(3) RIO-02 CONSISTS OF TWO BAYS, RIO-02L AND RIO-02R. RIO-02L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-02R SHALL BE FOR DIGITAL I/O.

1

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Primera
550 W. Jackson Boulevard · Suite 600 · Chicago, Illinois 60661

Designed by: AR | Checked by: DES | Reviewed by: CA | Drawn by: BM | Scale: NONE | Date: 7/1/2025

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL

CONDUIT AND CABLE SCHEDULE 16 OF 25

ROXANA G. LAZENIK
062-057988
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS
EXPIRES 11.30.25

Sheet Number: E-025B
Page Number: 395

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Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt

I&C CONDUIT AND CABLE SCHEDULE

CONDUIT	SIZE/TYPE	WIRE/CABLE	FUNCTION	FROM	TO	SHEET REFERENCE	REMARKS
C181	3/4" RGPVC	(8)#14	CONTROL FOR THE FOLLOWING: (2)#14 FOR SV-422 (2)#14 FOR TS-422 (2)#14 FOR PS-422A (2)#14 FOR PS-422B	WAS-P02 LCS	SV-422	E-407	
C182	3/4" RGPVC	(2)#14	CONTROL FOR TS-422	SV-422	TS-422	E-407	
C183	3/4" RGPVC	(2)#14	CONTROL FOR PS-422A	SV-422	PS-422A	E-407	
C184	3/4" RGPVC	(2)#14	CONTROL FOR PS-422B	SV-422	PS-422B	E-407	
C185	3/4" RGPVC	(10)#14	CONTROL FOR THE FOLLOWING: (2)#14 FOR WAS-P01 LCS (2)#14 FOR SV-421 (2)#14 FOR TS-421 (2)#14 FOR PS-421A (2)#14 FOR PS-421B	WAS-P01 VFD	WAS-P01 LCS	E-407	
C186	3/4" RGPVC	(8)#14	CONTROL FOR THE FOLLOWING: (2)#14 FOR SV-421 (2)#14 FOR TS-421 (2)#14 FOR PS-421A (2)#14 FOR PS-421B	WAS-P01 LCS	SV-421	E-407	
C187	3/4" RGPVC	(2)#14	CONTROL FOR TS-421	SV-421	TS-421	E-407	
C188	3/4" RGPVC	(2)#14	CONTROL FOR PS-421A	SV-421	PS-421A	E-407	
C189	3/4" RGPVC	(2)#14	CONTROL FOR PS-421B	SV-421	PS-421B	E-407	
C190	3/4" RGPVC	(3)#14	CONTROL FOR MAU-4	RIO-1	MAU-4	E-416, E-417	
C191	3/4" RGPVC	(3)#14	CONTROL FOR MAU-1	RIO-1	MAU-1	E-417	
C192	3/4" RGPVC	(3)#14	CONTROL FOR MAU-2	RIO-02	MAU-2	E-418	
C193	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR AP-M07, AP-M08	AP-M06	AP-M07	E-306	
C194	3/4" RGPVC	(1) CAT6 ETHERNET	CONTROL FOR AP-M08	AP-M07	AP-M08	E-306	
C195	3/4" RGPVC	(5)#14	CONTROL FOR KGV-01	01 KGV	ACP	E-101	
C196	3/4" RGPVC	(5)#14	CONTROL FOR FCV-1073	FVC-1073	ACP	E-101	
C197	3/4" RGPVC	(5)#14	CONTROL FOR FCV-1053	FVC-1053	ACP	E-101	
C198	3/4" RGPVC	(5)#14	CONTROL FOR FCV-1033	FVC-1033	ACP	E-101	
C199	3/4" RGPVC	(5)#14	CONTROL FOR FCV-1013	FVC-1013	ACP	E-101	
C200	1" RGPVC	(24)#14	CONTROL FOR DCU	ACP	DCU	E-101	
C201	3/4" RGPVC	(12)#14	BREAKER MONITORING FOR MDP-E1	MDP-E1	CB-MDP	E-416	
C202	3/4" RGPVC	(12)#14	BREAKER MONITORING FOR MDP-E2	MDP-E2	CB-MDP	E-416	
C203	1" RGPVC	(24)#14	BREAKER MONITORING FOR MDP-E1, MDP-E2	CB-MDP	RIO-O1	E-416, E-417	
I001	3 1/2" RGPVC	(42) STP (29?)	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR AIT-326C, AIT-326D, AIT-326E (1) STP EACH FOR FIT-324A, FIT-324B, FIT-324C, FIT-324D, FIT-324E, FIT-324F, FIT-324G (2) STP EACH FOR AT2-FCV1, AT2-FCV2, AT2-FCV3, AT2-FCV4, AT2-FCV5, AT2-FCV6, AT2-FCV7 (1) STP EACH FOR AIT-326A, AIT-326B, AIT-326F	RIO-01	CPN-I	E-417	
I002	3 1/2" RGPVC	(41) STP (27?)	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR AIT-326C, AIT-326D, AIT-326E (1) STP EACH FOR FIT-324A, FIT-324B, FIT-324C, FIT-324D, FIT-324E, FIT-324F, FIT-324G (2) STP EACH FOR AT2-FCV1, AT2-FCV2, AT2-FCV3, AT2-FCV4, AT2-FCV5, AT2-FCV6, AT2-FCV7 (1) STP EACH FOR AIT-326A, AIT-326B, AIT-326F	RIO-01	CPN-I	E-417	
I003	2" RGPVC	(12) STP	CONTROL FOR THE FOLLOWING: (2) STP FOR FST2-FCV2B (1) STP FOR FIT-520F (2) STP FOR FST2-FCV2A (1) FIT-520D (2) STP FOR FST1-FCV1B (1) STP FOR FIT-510F (2) STP FOR FST1-FCV1A (1) STP FOR FIT-510D	RIO-01	FST2-FCV2B	E-407, E-408	
I004	3/4" RGPVC	(1) STP	CONTROL FOR FIT-540F	FIT-540F	FST4-FCV4B	E-408	
I005	3/4" RGPVC	(1) STP	CONTROL FOR FIT-540D	FIT-540D	FST4-FCV4A	E-408	
I006	3/4" RGPVC	(1) STP	CONTROL FOR FIT-530F	FIT-530F	FST3-FCV3B	E-408	
I007	3/4" RGPVC	(1) STP	CONTROL FOR FIT-530D	FIT-530D	FST3-FCV3A	E-408	
I008	3/4" RGPVC	(3) STP	CONTROL FOR THE FOLLOWING: (2) STP FOR FST4-FCV4B (1) STP FOR FIT-540F	FST4-FCV4A	FST4-FCV4B	E-408	

NOTES:
(1) SEE ELECTRICAL LEGEND ON SHEET E-003 AND GENERAL LEGEND ON SHEET G-002.
(2) RIO-01 CONSISTS OF TWO BAYS, RIO-01L AND RIO-01R. RIO-01L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-01R SHALL BE FOR DIGITAL I/O.
(3) RIO-02 CONSISTS OF TWO BAYS, RIO-02L AND RIO-02R. RIO-02L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-02R SHALL BE FOR DIGITAL I/O.

1

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Primera
550 W. Jackson Boulevard • Suite 600 • Chicago, Illinois 60661

Designed by: AR	Checked by: DES	Drawn by: BM	Reviewed by: CA
Date: 7/1/2025	Scale: NONE		

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL

CONDUIT AND CABLE SCHEDULE 17 OF 25

ROXANA G. LAZENBY
062-057988
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS
EXPIRES 11.30.25

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Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt

I&C CONDUIT AND CABLE SCHEDULE

CONDUIT	SIZE/TYPE	WIRE/CABLE	FUNCTION	FROM	TO	SHEET REFERENCE	REMARKS
I009	1 1/2" RGPVC	(6) STP	CONTROL FOR THE FOLLOWING: (2) STP FOR FST4-FCV4A (1) STP FOR FIT-540D (2) STP FOR FST4-FCV4B (1) STP FOR FIT-540F	FST3-FCV3B	FST4-FCV4A	E-408	
I010	1 1/2" RGPVC	(9) STP	CONTROL FOR THE FOLLOWING: (2) STP FOR FST3-FCV3B (1) STP FOR FIT-530F (2) STP FOR FST4-FCV4A (1) STP FOR FIT-540D (2) STP FOR FST4-FCV4B (1) STP FOR FIT-540F	FST3-FCV3A	FST3-FCV3B	E-408	
I011	2" RGPVC	(12) STP	CONTROL FOR THE FOLLOWING: (2) STP FOR FST3-FCV3A (1) STP FOR FIT-530D (2) STP FOR FST3-FCV3B (1) STP FOR FIT-530F (2) STP FOR FST4-FCV4A (1) STP FOR FIT-540D (2) STP FOR FST4-FCV4B (1) STP FOR FIT-540F	FST3-FCV3A	RIO-01	E-408	
I012	3/4" RGPVC	(1) STP	CONTROL FOR FIT-550D	FST5-FCV5A	FIT-550D	E-409	
I013	3/4" RGPVC	(1) STP	CONTROL FOR FIT-550F	FST5-FCV5B	FIT-550F	E-409	
I014	3/4" RGPVC	(1) STP	CONTROL FOR FIT-560D	FST6-FCV6A	FIT-560D	E-409	
I015	3/4" RGPVC	(1) STP	CONTROL FOR FIT-560F	FST6-FCV6B	FIT-560F	E-409	
I016	3/4" RGPVC	(3) STP	CONTROL FOR THE FOLLOWING: (2) STP FOR FST5-FCV5A (1) STP FOR FIT-550D	FST5-FCV5B	FST5-FCV5A	E-409	
I017	1 1/2" RGPVC	(6) STP	CONTROL FOR THE FOLLOWING: (2) STP FOR FST5-FCV5B (1) STP FOR FIT-550F (2) STP FOR FST5-FCV5A (1) STP FOR FIT-550D	FST6-FCV6A	FST5-FCV5B	E-409	
I018	1 1/2" RGPVC	(9) STP	CONTROL FOR THE FOLLOWING: (2) STP FOR FST6-FCV6A (1) STP FOR FIT-560D (2) STP FOR FST5-FCV5B (1) STP FOR FIT-550F (2) STP FOR FST5-FCV5A (1) STP FOR FIT-550D	FST6-FCV6B	FST6-FCV6A	E-409	
I019	2" RGPVC	(12) STP	CONTROL FOR THE FOLLOWING: (2) STP FOR FST6-FCV6B (1) STP FOR FIT-560F (2) STP FOR FST6-FCV6A (1) STP FOR FIT-560D (2) STP FOR FST5-FCV5B (1) STP FOR FIT-550F (2) STP FOR FST5-FCV5A (1) STP FOR FIT-550D	FST6-FCV6B	RIO-02	E-409	
I020	3/4" RGPVC	(1) STP	CONTROL FOR FIT-580F	FST8-FCV8B	FIT-580F	E-410	
I021	3/4" RGPVC	(1) STP	CONTROL FOR FIT-580D	FST8-FCV8A	FIT-580D	E-410	
I022	3/4" RGPVC	(1) STP	CONTROL FOR FIT-570F	FST7-FCV7B	FIT-570F	E-410	
I023	3/4" RGPVC	(1) STP	CONTROL FOR FIT-570D	FST7-FCV7A	FIT-570D	E-410	
I024	3/4" RGPVC	(3) STP	CONTROL FOR THE FOLLOWING: (2) STP FOR FST8-FCV8B (1) STP FOR FIT-580F	FST8-FCV8A	FST8-FCV8B	E-410	
I025	1 1/2" RGPVC	(6) STP	CONTROL FOR THE FOLLOWING: (2) STP FOR FST8-FCV8A (1) STP FOR FIT-580D (2) STP FOR FST8-FCV8B (1) STP FOR FIT-580F	FST7-FCV7B	FST8-FCV8A	E-410	
I026	1 1/2" RGPVC	(9) STP	CONTROL FOR THE FOLLOWING: (2) STP FOR FST7-FCV7B (1) STP FOR FIT-570F (2) STP FOR FST8-FCV8A (1) STP FOR FIT-580D (2) STP FOR FST8-FCV8B (1) STP FOR FIT-580F	FST7-FCV7A	FST7-FCV7B	E-410	
I027	2" RGPVC	(12) STP	CONTROL FOR THE FOLLOWING: (2) STP FOR FST7-FCV7A (1) STP FOR FIT-570D (2) STP FOR FST7-FCV7B (1) STP FOR FIT-570F (2) STP FOR FST8-FCV8A (1) STP FOR FIT-580D (2) STP FOR FST8-FCV8B (1) STP FOR FIT-580F	FST7-FCV7A	RIO-02	E-409, E-410	
I028	1 1/2" RTRC	(8) STP	CONTROLS FOR THE FOLLOWING: (1) STP FOR LIT-510C (1) STP FOR FST-01 PLOW (1) STP FOR LIT-520C (1) STP FOR FST-02 PLOW (1) STP FOR LIT-530C (1) STP FOR FST-03 PLOW (1) STP FOR LIT-540C (1) STP FOR FST-04 PLOW	RIO-01	HH-FSTN-02	E-408, E-503	RTRC TRANSITIONS TO RGPVC VIA FCPN-C WITHIN OPERATING GALLERY
I029	3/4" RGPVC	(1) STP	CONTROL FOR FST-01 PLOW	LIT-510C	FST-01	E-503	
I030	3/4" RGPVC	(1) STP	CONTROL FOR FST-02 PLOW	LIT-520C	FST-02	E-503	

NOTES:
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(2) RIO-01 CONSISTS OF TWO BAYS, RIO-01L AND RIO-01R. RIO-01L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-01R SHALL BE FOR DIGITAL I/O.
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SUITE 2400
CHICAGO, IL 60601, USA

Primera
550 W. Jackson Boulevard · Suite 600 · Chicago, Illinois 60661

Designed by:	Checked by:	Appr.
AR	DES	GD
Drawn by:	Reviewed by:	Date
BM	CA	10/15/25
Date:	Scale:	
7/1/2025	NONE	

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL
CONDUIT AND CABLE SCHEDULE 18 OF 25

ROZALIA A. G. LAZENBY
062-057988
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS
EXPIRES 11.30.25

Sheet Number: E-025D
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Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt

I&C CONDUIT AND CABLE SCHEDULE

CONDUIT	SIZE/TYPE	WIRE/CABLE	FUNCTION	FROM	TO	SHEET REFERENCE	REMARKS
I031	3/4" RGPVC	(1) STP	CONTROL FOR FST-03 PLOW	LIT-530C	FST-03	E-503	
I032	3/4" RGPVC	(1) STP	CONTROL FOR FST-04 PLOW	LIT-540C	FST-04	E-503	
I033	1 1/2" RTRC	(8) STP	CONTROLS FOR THE FOLLOWING: (1) STP FOR LIT-550C (1) STP FOR FST-05 PLOW (1) STP FOR LIT-560C (1) STP FOR FST-06 PLOW (1) STP FOR LIT-570C (1) STP FOR FST-07 PLOW (1) STP FOR LIT-580C (1) STP FOR FST-08 PLOW	RIO-02	HH-FSTS-2	E-410, E-506	RTRC TRANSITIONS TO RGPVC VIA FCPN-C WITHIN OPERATING GALLERY
I034	3/4" RGPVC	(1) STP	CONTROL FOR FST-05 PLOW	LIT-550C	FST-05	E-506	
I035	3/4" RGPVC	(1) STP	CONTROL FOR FST-06 PLOW	LIT-560C	FST-06	E-506	
I036	3/4" RGPVC	(1) STP	CONTROL FOR FST-07 PLOW	LIT-570C	FST-07	E-506	
I037	3/4" RGPVC	(1) STP	CONTROL FOR FST-08 PLOW	LIT-580C	FST-08	E-506	
I038	3/4" RGPVC	(1) STP	CONTROL FOR AIT-316F	CPN-I	AIT-316F	E-307, E-417	
I039	3/4" RGPVC	(2) STP	CONTROL FOR THE FOLLOWING: (1) STP FOR AIT-316B (1) STP FOR AIT-316A	CPN-I	AIT-316B	E-307, E-417	
I040	3/4" RGPVC	(1) STP	CONTROL FOR AIT-316A	AIT-316B	AIT-316A	E-307	
I041	2 1/2" RGPVC	(21) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-314A, FIT-314B, FIT-314C, FIT-314D, FIT-314E, FIT-314F, FIT-314G (2) STP EACH FOR AT1-FCV1, AT1-FCV2, AT1-FCV3, AT1-FCV4, AT1-FCV5, AT1-FCV6, AT1-FCV7	CPN-I	FIT-314G	E-307, E-417	
I042	2 1/2" RGPVC	(20) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-314A, FIT-314B, FIT-314C, FIT-314D, FIT-314E, FIT-314F (2) STP EACH FOR AT1-FCV1, AT1-FCV2, AT1-FCV3, AT1-FCV4, AT1-FCV5, AT1-FCV6, AT1-FCV7	FIT-314G	AT1-FCV7	E-307	
I043	2 1/2" RGPVC	(18) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-314A, FIT-314B, FIT-314C, FIT-314D, FIT-314E, FIT-314F (2) STP EACH FOR AT1-FCV1, AT1-FCV2, AT1-FCV3, AT1-FCV4, AT1-FCV5, AT1-FCV6	AT1-FCV7	FIT-314A	E-307	
I044	2 1/2" RGPVC	(17) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-314B, FIT-314C, FIT-314D, FIT-314E, FIT-314F (2) STP EACH FOR AT1-FCV1, AT1-FCV2, AT1-FCV3, AT1-FCV4, AT1-FCV5, AT1-FCV6	FIT-314A	FIT-314F	E-307	
I045	2" RGPVC	(16) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-314B, FIT-314C, FIT-314D, FIT-314E (2) STP EACH FOR AT1-FCV1, AT1-FCV2, AT1-FCV3, AT1-FCV4, AT1-FCV5, AT1-FCV6	FIT-314F	AT1-FCV6	E-307	
I046	2" RGPVC	(14) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-314B, FIT-314C, FIT-314D, FIT-314E (2) STP EACH FOR AT1-FCV1, AT1-FCV2, AT1-FCV3, AT1-FCV4, AT1-FCV5	AT1-FCV6	AT1-FCV1	E-307	
I047	2" RGPVC	(12) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-314B, FIT-314C, FIT-314D, FIT-314E (2) STP EACH FOR AT1-FCV2, AT1-FCV3, AT1-FCV4, AT1-FCV5	AT1-FCV1	FIT-314B	E-307	
I048	2" RGPVC	(11) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-314C, FIT-314D, FIT-314E (2) STP EACH FOR AT1-FCV2, AT1-FCV3, AT1-FCV4, AT1-FCV5	FIT-314B	FIT-314E	E-307	
I049	2" RGPVC	(10) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-314C, FIT-314D (2) STP EACH FOR AT1-FCV2, AT1-FCV3, AT1-FCV4, AT1-FCV5	FIT-314E	AT1-FCV5	E-307	
I050	1 1/2" RGPVC	(8) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-314C, FIT-314D (2) STP EACH FOR AT1-FCV2, AT1-FCV3, AT1-FCV4	AT1-FCV5	AT1-FCV2	E-307	
I051	1 1/2" RGPVC	(6) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-314C, FIT-314D (2) STP EACH FOR AT1-FCV3, AT1-FCV4	AT1-FCV2	FIT-314C	E-307	
I052	1 1/2" RGPVC	(5) STP	CONTROL FOR THE FOLLOWING: (1) STP FOR FIT-314D (2) STP EACH FOR AT1-FCV3, AT1-FCV4	FIT-314C	FIT-314D	E-307	
I053	1" RGPVC	(4) STP	CONTROL FOR THE FOLLOWING: (2) STP EACH FOR AT1-FCV3, AT1-FCV4	FIT-314D	AT1-FCV4	E-307	
I054	3/4" RGPVC	(2) STP	CONTROL FOR AT1-FCV3	AT1-FCV4	AT1-FCV3	E-307	
I055	3/4" RGPVC	(3) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR AIT-316C, AIT-316D, AIT-316E	CPN-I	AIT-316E	E-307, E-417	
I056	3/4" RGPVC	(2) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR AIT-316C, AIT-316D	AIT-316E	AIT-316D	E-307	
I057	3/4" RGPVC	(1) STP	CONTROL FOR AIT-316C	AIT-316D	AIT-316C	E-307	
I058	3/4" RGPVC	(3) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR AIT-326C, AIT-326D, AIT-326E	CPN-I	AIT-326E	E-307, E-417	

NOTES:
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I&C CONDUIT AND CABLE SCHEDULE

CONDUIT	SIZE/TYPE	WIRE/CABLE	FUNCTION	FROM	TO	SHEET REFERENCE	REMARKS
I059	3/4" RGPVC	(2) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR AIT-326C, AIT-326D	AIT-326E	AIT-326D	E-307	
I060	3/4" RGPVC	(1) STP	CONTROL FOR AIT-326C	AIT-326D	AIT-326C	E-307	
I061	2 1/2" RGPVC	(21) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-324A, FIT-324B, FIT-324C, FIT-324D, FIT-324E, FIT-324F, FIT-324G (2) STP EACH FOR AT2-FCV1, AT2-FCV2, AT2-FCV3, AT2-FCV4, AT2-FCV5, AT2-FCV6, AT2-FCV7	CPN-I	FIT-324G	E-307, E-417	
I062	2 1/2" RGPVC	(20) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-324A, FIT-324B, FIT-324C, FIT-324D, FIT-324E, FIT-324F (2) STP EACH FOR AT2-FCV1, AT2-FCV2, AT2-FCV3, AT2-FCV4, AT2-FCV5, AT2-FCV6, AT2-FCV7	FIT-324G	AT2-FCV7	E-307	
I063	2 1/2" RGPVC	(18) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-324A, FIT-324B, FIT-324C, FIT-324D, FIT-324E, FIT-324F (2) STP EACH FOR AT2-FCV1, AT2-FCV2, AT2-FCV3, AT2-FCV4, AT2-FCV5, AT2-FCV6	AT2-FCV7	FIT-324A	E-307	
I064	2 1/2" RGPVC	(17) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-324B, FIT-324C, FIT-324D, FIT-324E, FIT-324F (2) STP EACH FOR AT2-FCV1, AT2-FCV2, AT2-FCV3, AT2-FCV4, AT2-FCV5, AT2-FCV6	FIT-324A	FIT-324F	E-307	
I065	2" RGPVC	(16) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-324B, FIT-324C, FIT-324D, FIT-324E (2) STP EACH FOR AT2-FCV1, AT2-FCV2, AT2-FCV3, AT2-FCV4, AT2-FCV5, AT2-FCV6	FIT-324F	AT2-FCV6	E-307	
I066	2" RGPVC	(14) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-324B, FIT-324C, FIT-324D, FIT-324E (2) STP EACH FOR AT2-FCV1, AT2-FCV2, AT2-FCV3, AT2-FCV4, AT2-FCV5	AT2-FCV6	AT2-FCV1	E-307	
I067	2" RGPVC	(12) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-324B, FIT-324C, FIT-324D, FIT-324E (2) STP EACH FOR AT2-FCV2, AT2-FCV3, AT2-FCV4, AT2-FCV5	AT2-FCV1	FIT-324B	E-307	
I068	2" RGPVC	(11) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-324C, FIT-324D, FIT-324E (2) STP EACH FOR AT2-FCV2, AT2-FCV3, AT2-FCV4, AT2-FCV5	FIT-324B	FIT-324E	E-307	
I069	2" RGPVC	(10) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-324C, FIT-324D (2) STP EACH FOR AT2-FCV2, AT2-FCV3, AT2-FCV4, AT2-FCV5	FIT-324E	AT2-FCV5	E-307	
I070	1 1/2" RGPVC	(8) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-324C, FIT-324D (2) STP EACH FOR AT2-FCV2, AT2-FCV3, AT2-FCV4	AT2-FCV5	AT2-FCV2	E-307	
I071	1 1/2" RGPVC	(6) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-324C, FIT-324D (2) STP EACH FOR AT2-FCV3, AT2-FCV4	AT2-FCV2	FIT-324C	E-307	
I072	1 1/2" RGPVC	(5) STP	CONTROL FOR THE FOLLOWING: (1) STP FOR FIT-324D (2) STP EACH FOR AT2-FCV3, AT2-FCV4	FIT-324C	FIT-324D	E-307	
I073	1" RGPVC	(4) STP	CONTROL FOR THE FOLLOWING: (2) STP EACH FOR AT2-FCV3, AT2-FCV4	FIT-324D	AT2-FCV4	E-307	
I074	3/4" RGPVC	(2) STP	CONTROL FOR AT2-FCV3	AT2-FCV4	AT2-FCV3	E-307	
I075	3/4" RGPVC	(3) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR AIT-326A, AIT-326B, AIT-326F	CPN-I	AIT-326F	E-307, E-417	
I076	3/4" RGPVC	(2) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR AIT-326A, AIT-326B	AIT-326F	AIT-326B	E-307	
I077	3/4" RGPVC	(1) STP	CONTROL FOR AIT-326A	AIT-326B	AIT-326A	E-307	
I078	3/4" RGPVC	(1) STP	CONTROL FOR AIT-336F	CPS-I	AIT-336F	E-308, E-418	
I079	3/4" RGPVC	(2) STP	CONTROL FOR THE FOLLOWING: (1) STP FOR AIT-336A (1) STP FOR AIT-336B	CPS-I	AIT-336A	E-308, E-418	
I080	3/4" RGPVC	(1) STP	CONTROL FOR AIT-336B	AIT-336A	AIT-336B	E-308	
I081	2 1/2" RGPVC	(21) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-334A, FIT-334B, FIT-334C, FIT-334D, FIT-334E, FIT-334F, FIT-334G (2) STP EACH FOR AT3-FCV1, AT3-FCV2, AT3-FCV3, AT3-FCV4, AT3-FCV5, AT3-FCV6, AT3-FCV7	CPS-I	FIT-334G	E-308, E-418	
I082	2 1/2" RGPVC	(20) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-334A, FIT-334B, FIT-334C, FIT-334D, FIT-334E, FIT-334F (2) STP EACH FOR AT3-FCV1, AT3-FCV2, AT3-FCV3, AT3-FCV4, AT3-FCV5, AT3-FCV6, AT3-FCV7	FIT-334G	AT3-FCV7	E-308	
I083	2 1/2" RGPVC	(18) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-334A, FIT-334B, FIT-334C, FIT-334D, FIT-334E, FIT-334F (2) STP EACH FOR AT3-FCV1, AT3-FCV2, AT3-FCV3, AT3-FCV4, AT3-FCV5, AT3-FCV6	AT3-FCV7	FIT-334A	E-308	
I084	2 1/2" RGPVC	(17) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-334B, FIT-334C, FIT-334D, FIT-334E, FIT-334F (2) STP EACH FOR AT3-FCV1, AT3-FCV2, AT3-FCV3, AT3-FCV4, AT3-FCV5, AT3-FCV6	FIT-334A	FIT-334F	E-308	

NOTES:
(1) SEE ELECTRICAL LEGEND ON SHEET E-003 AND GENERAL LEGEND ON SHEET G-002.
(2) RIO-01 CONSISTS OF TWO BAYS, RIO-01L AND RIO-01R. RIO-01L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-01R SHALL BE FOR DIGITAL I/O.
(3) RIO-02 CONSISTS OF TWO BAYS, RIO-02L AND RIO-02R. RIO-02L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-02R SHALL BE FOR DIGITAL I/O.

1

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Designed by: AR | Checked by: DES
Drawn by: BM | Reviewed by: CA
Date: 7/1/2025 | Scale: NONE

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Primera
550 W. Jackson Boulevard · Suite 600 · Chicago, Illinois 60661

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL

CONDUIT AND CABLE SCHEDULE 20 OF 25

ROZALIN A. G. LAZEBNIK
062-057988
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS
EXPIRES 11.30.25

Sheet Number: E-025F
Page Number: 399

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Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt

I&C CONDUIT AND CABLE SCHEDULE

CONDUIT	SIZE/TYPE	WIRE/CABLE	FUNCTION	FROM	TO	SHEET REFERENCE	REMARKS
I085	2" RGPVC	(16) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-334B, FIT-334C, FIT-334D, FIT-334E (2) STP EACH FOR AT3-FCV1, AT3-FCV2, AT3-FCV3, AT3-FCV4, AT3-FCV5, AT3-FCV6	FIT-334F	AT3-FCV6	E-308	
I086	2" RGPVC	(14) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-334B, FIT-334C, FIT-334D, FIT-334E (2) STP EACH FOR AT3-FCV1, AT3-FCV2, AT3-FCV3, AT3-FCV4, AT3-FCV5	AT3-FCV6	AT3-FCV1	E-308	
I087	2" RGPVC	(12) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-334B, FIT-334C, FIT-334D, FIT-334E (2) STP EACH FOR AT3-FCV2, AT3-FCV3, AT3-FCV4, AT3-FCV5	AT3-FCV1	FIT-334B	E-308	
I088	2" RGPVC	(11) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-334C, FIT-334D, FIT-334E (2) STP EACH FOR AT3-FCV2, AT3-FCV3, AT3-FCV4, AT3-FCV5	FIT-334B	FIT-334E	E-308	
I089	2" RGPVC	(10) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-334C, FIT-334D (2) STP EACH FOR AT3-FCV2, AT3-FCV3, AT3-FCV4, AT3-FCV5	FIT-334E	AT3-FCV5	E-308	
I090	1 1/2" RGPVC	(8) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-334C, FIT-334D (2) STP EACH FOR AT3-FCV2, AT3-FCV3, AT3-FCV4	AT3-FCV5	AT3-FCV2	E-308	
I091	1 1/2" RGPVC	(6) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-334C, FIT-334D (2) STP EACH FOR AT3-FCV3, AT3-FCV4	AT3-FCV2	FIT-334C	E-308	
I092	1 1/2" RGPVC	(5) STP	CONTROL FOR THE FOLLOWING: (1) STP FOR FIT-334D (2) STP EACH FOR AT3-FCV3, AT3-FCV4	FIT-334C	FIT-334D	E-308	
I093	1" RGPVC	(4) STP	CONTROL FOR THE FOLLOWING: (2) STP EACH FOR AT3-FCV3, AT3-FCV4	FIT-334D	AT3-FCV4	E-308	
I094	3/4" RGPVC	(2) STP	CONTROL FOR AT3-FCV3	AT3-FCV4	AT3-FCV3	E-308	
I095	3/4" RGPVC	(3) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR AIT-336C, AIT-336D, AIT-336E	CPS-I	AIT-336E	E-308, E-418	
I096	3/4" RGPVC	(2) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR AIT-336C, AIT-336D	AIT-336E	AIT-336D	E-308	
I097	3/4" RGPVC	(1) STP	CONTROL FOR AIT-336C	AIT-336D	AIT-336C	E-308	
I098	3/4" RGPVC	(3) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR AIT-346C, AIT-346D, AIT-346E	CPS-I	AIT-346E	E-308, E-418	
I099	3/4" RGPVC	(2) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR AIT-346C, AIT-346D	AIT-346E	AIT-346D	E-308	
I100	3/4" RGPVC	(1) STP	CONTROL FOR AIT-346C	AIT-346D	AIT-346C	E-308	
I101	2 1/2" RGPVC	(21) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-344A, FIT-344B, FIT-344C, FIT-344D, FIT-344E, FIT-344F, FIT-344G (2) STP EACH FOR AT4-FCV1, AT4-FCV2, AT4-FCV3, AT4-FCV4, AT4-FCV5, AT4-FCV6, AT4-FCV7	CPS-I	FIT-344G	E-308, E-418	
I102	2 1/2" RGPVC	(20) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-344A, FIT-344B, FIT-344C, FIT-344D, FIT-344E, FIT-344F (2) STP EACH FOR AT4-FCV1, AT4-FCV2, AT4-FCV3, AT4-FCV4, AT4-FCV5, AT4-FCV6, AT4-FCV7	FIT-344G	AT4-FCV7	E-308	
I103	2 1/2" RGPVC	(18) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-344A, FIT-344B, FIT-344C, FIT-344D, FIT-344E, FIT-344F (2) STP EACH FOR AT4-FCV1, AT4-FCV2, AT4-FCV3, AT4-FCV4, AT4-FCV5, AT4-FCV6	AT4-FCV7	FIT-344A	E-308	
I104	2 1/2" RGPVC	(17) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-344B, FIT-344C, FIT-344D, FIT-344E, FIT-344F (2) STP EACH FOR AT4-FCV1, AT4-FCV2, AT4-FCV3, AT4-FCV4, AT4-FCV5, AT4-FCV6	FIT-344A	FIT-344F	E-308	
I105	2" RGPVC	(16) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-344B, FIT-344C, FIT-344D, FIT-344E (2) STP EACH FOR AT4-FCV1, AT4-FCV2, AT4-FCV3, AT4-FCV4, AT4-FCV5, AT4-FCV6	FIT-344F	AT4-FCV6	E-308	
I106	2" RGPVC	(14) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-344B, FIT-344C, FIT-344D, FIT-344E (2) STP EACH FOR AT4-FCV1, AT4-FCV2, AT4-FCV3, AT4-FCV4, AT4-FCV5	AT4-FCV6	AT4-FCV1	E-308	
I107	2" RGPVC	(12) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-344B, FIT-344C, FIT-344D, FIT-344E (2) STP EACH FOR AT4-FCV2, AT4-FCV3, AT4-FCV4, AT4-FCV5	AT4-FCV1	FIT-344B	E-308	
I108	2" RGPVC	(11) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-344C, FIT-344D, FIT-344E (2) STP EACH FOR AT4-FCV2, AT4-FCV3, AT4-FCV4, AT4-FCV5	FIT-344B	FIT-344E	E-308	
I109	2" RGPVC	(10) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-344C, FIT-344D (2) STP EACH FOR AT4-FCV2, AT4-FCV3, AT4-FCV4, AT4-FCV5	FIT-344E	AT4-FCV5	E-308	
I110	1 1/2" RGPVC	(8) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-344C, FIT-344D (2) STP EACH FOR AT4-FCV2, AT4-FCV3, AT4-FCV4	AT4-FCV5	AT4-FCV2	E-308	

NOTES:
(1) SEE ELECTRICAL LEGEND ON SHEET E-003 AND GENERAL LEGEND ON SHEET G-002.
(2) RIO-01 CONSISTS OF TWO BAYS, RIO-01L AND RIO-01R. RIO-01L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-01R SHALL BE FOR DIGITAL I/O.
(3) RIO-02 CONSISTS OF TWO BAYS, RIO-02L AND RIO-02R. RIO-02L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-02R SHALL BE FOR DIGITAL I/O.

1

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1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Primera
550 W. Jackson Boulevard · Suite 600 · Chicago, Illinois 60661

Designed by:	Checked by:	Appr.
AR	DES	GD
Drawn by:	Reviewed by:	Date:
BM	CA	7/1/2025
Date:	Scale:	
7/1/2025	NONE	

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL

CONDUIT AND CABLE SCHEDULE 21 OF 25

ROXANA G. LAZENBY
062-057988
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS
EXPIRES 11.30.25

Sheet Number: E-025G
Page Number: 400

PLOT DATE: 10/16/2025 8:45:12 AM

Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt

I&C CONDUIT AND CABLE SCHEDULE

CONDUIT	SIZE/TYPE	WIRE/CABLE	FUNCTION	FROM	TO	SHEET REFERENCE	REMARKS
I111	1 1/2" RGPVC	(6) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-344C, FIT-344D (2) STP EACH FOR AT4-FCV3, AT4-FCV4	AT4-FCV2	FIT-344C	E-308	
I112	1 1/2" RGPVC	(5) STP	CONTROL FOR THE FOLLOWING: (1) STP FOR FIT-344D (2) STP EACH FOR AT4-FCV3, AT4-FCV4	FIT-344C	FIT-344D	E-308	
I113	1" RGPVC	(4) STP	CONTROL FOR THE FOLLOWING: (2) STP EACH FOR AT4-FCV3, AT4-FCV4	FIT-344D	AT4-FCV4	E-308	
I114	3/4" RGPVC	(2) STP	CONTROL FOR AT4-FCV3	AT4-FCV4	AT4-FCV3	E-308	
I115	3/4" RGPVC	(3) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR AIT-346A, AIT-346B, AIT-346F	CPS-I	AIT-346F	E-308, E-418	
I116	3/4" RGPVC	(2) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR AIT-346A, AIT-346B	AIT-346F	AIT-346B	E-308	
I117	3/4" RGPVC	(1) STP	CONTROL FOR AIT-346A	AIT-346B	AIT-346A	E-308	
I118	3/4" RGPVC	(1) STP	CONTROL FOR AIT-356F	CPS-I	AIT-356F	E-308, E-309, E-418, E-419	
I119	3/4" RGPVC	(2) STP	CONTROL FOR THE FOLLOWING: (1) STP FOR AIT-356B (1) STP FOR AIT-356A	CPS-I	AIT-356B	E-308, E-309, E-418 E-419	
I120	3/4" RGPVC	(1) STP	CONTROL FOR AIT-356A	AIT-356B	AIT-356A	E-309	
I121	2 1/2" RGPVC	(21) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-354A, FIT-354B, FIT-354C, FIT-354D, FIT-354E, FIT-354F, FIT-354G (2) STP EACH FOR AT5-FCV1, AT5-FCV2, AT5-FCV3, AT5-FCV4, AT5-FCV5, AT5-FCV6, AT5-FCV7	CPS-I	FIT-354G	E-308, E-309, E-418, E-419	
I122	2 1/2" RGPVC	(20) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-354A, FIT-354B, FIT-354C, FIT-354D, FIT-354E, FIT-354F (2) STP EACH FOR AT5-FCV1, AT5-FCV2, AT5-FCV3, AT5-FCV4, AT5-FCV5, AT5-FCV6, AT5-FCV7	FIT-354G	AT5-FCV7	E-309	
I123	2 1/2" RGPVC	(18) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-354A, FIT-354B, FIT-354C, FIT-354D, FIT-354E, FIT-354F (2) STP EACH FOR AT5-FCV1, AT5-FCV2, AT5-FCV3, AT5-FCV4, AT5-FCV5, AT5-FCV6	AT5-FCV7	FIT-354A	E-309	
I124	2 1/2" RGPVC	(17) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-354B, FIT-354C, FIT-354D, FIT-354E, FIT-354F (2) STP EACH FOR AT5-FCV1, AT5-FCV2, AT5-FCV3, AT5-FCV4, AT5-FCV5, AT5-FCV6	FIT-354A	FIT-354F	E-309	
I125	2" RGPVC	(16) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-354B, FIT-354C, FIT-354D, FIT-354E (2) STP EACH FOR AT5-FCV1, AT5-FCV2, AT5-FCV3, AT5-FCV4, AT5-FCV5, AT5-FCV6	FIT-354F	AT5-FCV6	E-309	
I126	2" RGPVC	(14) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-354B, FIT-354C, FIT-354D, FIT-354E (2) STP EACH FOR AT5-FCV1, AT5-FCV2, AT5-FCV3, AT5-FCV4, AT5-FCV5	AT5-FCV6	AT5-FCV1	E-309	
I127	2" RGPVC	(12) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-354B, FIT-354C, FIT-354D, FIT-354E (2) STP EACH FOR AT5-FCV2, AT5-FCV3, AT5-FCV4, AT5-FCV5	AT5-FCV1	FIT-354B	E-309	
I128	2" RGPVC	(11) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-354C, FIT-354D, FIT-354E (2) STP EACH FOR AT5-FCV2, AT5-FCV3, AT5-FCV4, AT5-FCV5	FIT-354B	FIT-354E	E-309	
I129	2" RGPVC	(10) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-354C, FIT-354D (2) STP EACH FOR AT5-FCV2, AT5-FCV3, AT5-FCV4, AT5-FCV5	FIT-354E	AT5-FCV5	E-309	
I130	1 1/2" RGPVC	(8) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-354C, FIT-354D (2) STP EACH FOR AT5-FCV2, AT5-FCV3, AT5-FCV4	AT5-FCV5	AT5-FCV2	E-309	
I131	1 1/2" RGPVC	(6) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-354C, FIT-354D (2) STP EACH FOR AT5-FCV3, AT5-FCV4	AT5-FCV2	FIT-354C	E-309	
I132	1 1/2" RGPVC	(5) STP	CONTROL FOR THE FOLLOWING: (1) STP FOR FIT-354D (2) STP EACH FOR AT5-FCV3, AT5-FCV4	FIT-354C	FIT-354D	E-309	
I133	1" RGPVC	(4) STP	CONTROL FOR THE FOLLOWING: (2) STP EACH FOR AT5-FCV3, AT5-FCV4	FIT-354D	AT5-FCV4	E-309	
I134	3/4" RGPVC	(2) STP	CONTROL FOR AT5-FCV3	AT5-FCV4	AT5-FCV3	E-309	
I135	3/4" RGPVC	(3) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR AIT-356C, AIT-356D, AIT-356E	CPS-I	AIT-356E	E-308, E-309, E-418, E-419	
I136	3/4" RGPVC	(2) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR AIT-356C, AIT-356D	AIT-356E	AIT-356D	E-309	
I137	3/4" RGPVC	(1) STP	CONTROL FOR AIT-356C	AIT-356D	AIT-356C	E-309	
I138	3/4" RGPVC	(3) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR AIT-366C, AIT-366D, AIT-366E	CPS-I	AIT-366E	E-308, E-309, E-418, E-419	
I139	3/4" RGPVC	(2) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR AIT-366C, AIT-366D	AIT-366E	AIT-366D	E-309	
I140	3/4" RGPVC	(1) STP	CONTROL FOR AIT-366C	AIT-366D	AIT-366C	E-309	

NOTES:
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(2) RIO-01 CONSISTS OF TWO BAYS, RIO-01L AND RIO-01R. RIO-01L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-01R SHALL BE FOR DIGITAL I/O.
(3) RIO-02 CONSISTS OF TWO BAYS, RIO-02L AND RIO-02R. RIO-02L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-02R SHALL BE FOR DIGITAL I/O.

1

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

AECOM
PRUDENTIAL PLAZA ONE
130 E RANDOLPH STREET
SUITE 2400
CHICAGO, IL 60601, USA

Primera
550 W. Jackson Boulevard · Suite 600 · Chicago, Illinois 60661

Designed by:	Checked by:
AR	DES
Drawn by:	Reviewed by:
BM	CA
Date:	Scale:
7/1/2025	NONE

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL

CONDUIT AND CABLE SCHEDULE 22 OF 25

ROSALLY A. G. LAZEBNIK
062-057988
LICENSED
PROFESSIONAL
ENGINEER
STATE OF ILLINOIS
EXPIRES 11.30.25

Sheet Number:
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Page Number: 401

PLOT DATE: 10/16/2025 8:45:15 AM

Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt

I&C CONDUIT AND CABLE SCHEDULE

CONDUIT	SIZE/TYPE	WIRE/CABLE	FUNCTION	FROM	TO	SHEET REFERENCE	REMARKS
I141	2 1/2" RGPVC	(21) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-364A, FIT-364B, FIT-364C, FIT-364D, FIT-364E, FIT-364F, FIT-364G (2) STP EACH FOR AT6-FCV1, AT6-FCV2, AT6-FCV3, AT6-FCV4, AT6-FCV5, AT6-FCV6, AT6-FCV7	CPS-I	FIT-364A	E-308, E-309, E-418, E-419	
I142	2 1/2" RGPVC	(20) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-364B, FIT-364C, FIT-364D, FIT-364E, FIT-364F, FIT-364G (2) STP EACH FOR AT6-FCV1, AT6-FCV2, AT6-FCV3, AT6-FCV4, AT6-FCV5, AT6-FCV6, AT6-FCV7	FIT-364A	AT6-FCV7	E-309	
I143	2 1/2" RGPVC	(18) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-364B, FIT-364C, FIT-364D, FIT-364E, FIT-364F, FIT-364G (2) STP EACH FOR AT6-FCV1, AT6-FCV2, AT6-FCV3, AT6-FCV4, AT6-FCV5, AT6-FCV6	AT6-FCV7	FIT-364B	E-309	
I144	2 1/2" RGPVC	(17) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-364C, FIT-364D, FIT-364E, FIT-364F, FIT-364G (2) STP EACH FOR AT6-FCV1, AT6-FCV2, AT6-FCV3, AT6-FCV4, AT6-FCV5, AT6-FCV6	FIT-364B	FIT-364G	E-309	
I145	2" RGPVC	(16) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-364C, FIT-364D, FIT-364E, FIT-364F (2) STP EACH FOR AT6-FCV1, AT6-FCV2, AT6-FCV3, AT6-FCV4, AT6-FCV5, AT6-FCV6	FIT-364G	AT6-FCV6	E-309	
I146	2" RGPVC	(14) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-364C, FIT-364D, FIT-364E, FIT-364F (2) STP EACH FOR AT6-FCV1, AT6-FCV2, AT6-FCV3, AT6-FCV4, AT6-FCV5	AT6-FCV6	AT6-FCV1	E-309	
I147	2" RGPVC	(12) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-364C, FIT-364D, FIT-364E, FIT-364F (2) STP EACH FOR AT6-FCV2, AT6-FCV3, AT6-FCV4, AT6-FCV5	AT6-FCV1	FIT-364C	E-309	
I148	2" RGPVC	(11) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-364D, FIT-364E, FIT-364F (2) STP EACH FOR AT6-FCV2, AT6-FCV3, AT6-FCV4, AT6-FCV5	FIT-364C	FIT-364F	E-309	
I149	2" RGPVC	(10) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-364D, FIT-364E (2) STP EACH FOR AT6-FCV2, AT6-FCV3, AT6-FCV4, AT6-FCV5	FIT-364F	AT6-FCV5	E-309	
I150	1 1/2" RGPVC	(8) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-364D, FIT-364E (2) STP EACH FOR AT6-FCV2, AT6-FCV3, AT6-FCV4	AT6-FCV5	AT6-FCV2	E-309	
I151	1 1/2" RGPVC	(6) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR FIT-364D, FIT-364E (2) STP EACH FOR AT6-FCV3, AT6-FCV4	AT6-FCV2	FIT-364D	E-309	
I152	1 1/2" RGPVC	(5) STP	CONTROL FOR THE FOLLOWING: (1) STP FOR FIT-364E (2) STP EACH FOR AT6-FCV3, AT6-FCV4	FIT-364D	FIT-364E	E-309	
I153	1" RGPVC	(4) STP	CONTROL FOR THE FOLLOWING: (2) STP EACH FOR AT6-FCV3, AT6-FCV4	FIT-364E	AT6-FCV4	E-309	
I154	3/4" RGPVC	(2) STP	CONTROL FOR AT6-FCV3	AT6-FCV4	AT6-FCV3	E-309	
I155	3/4" RGPVC	(3) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR AIT-366A, AIT-366B, AIT-366F	CPS-I	AIT-366F	E-308, E-309,E-418, E-419	
I156	3/4" RGPVC	(2) STP	CONTROL FOR THE FOLLOWING: (1) STP EACH FOR AIT-366A, AIT-366B	AIT-366F	AIT-366B	E-309	
I157	3/4" RGPVC	(1) STP	CONTROL FOR AIT-366A	AIT-366B	AIT-366A	E-309	
I158	3/4" RGPVC	(1) STP	CONTROL FOR AIT-301A	CPN-I	AIT-301A	E-306, E-307, E-416, E-417	
I159	3/4" RGPVC	(1) STP	CONTROL FOR AIT-301B	CPN-I	AIT-301B	E-306, E-307, E-416, E-417	
I160	3/4" RGPVC	(1) STP	CONTROL FOR FIT-200	RIO-01	FIT-200	E-205, E-209, E-407, E-416, E-417	
I161	3/4" RGPVC	(1) STP	CONTROL FOR FIT-422	RIO-01	FIT-422	E-407, E-416, E-417	
I162	3/4" RGPVC	(1) STP	CONTROL FOR FIT-414	RIO-01	FIT-414	E-407, E-416, E-417	
I163	1" RTRC	(2) STP	CONTROL FOR THE FOLLOWING: (1) STP FOR LIT-510C (1) STP FOR FST-01 PLOW	HH-FSTN-2	LIT-510C	E-408, E-503	
I164	1" RTRC	(2) STP	CONTROL FOR THE FOLLOWING: (1) STP FOR LIT-530C (1) STP FOR FST-03 PLOW	HH-FSTN-2	LIT-530C	E-408, E-503	
I165	1" RTRC	(2) STP	CONTROL FOR THE FOLLOWING: (1) STP FOR LIT-520C (1) STP FOR FST-02 PLOW	HH-FSTN-2	LIT-520C	E-408, E-503	
I166	1" RTRC	(2) STP	CONTROL FOR THE FOLLOWING: (1) STP FOR LIT-540C (1) STP FOR FST-04 PLOW	HH-FSTN-2	LIT-540C	E-408, E-503	
I167	1" RTRC	(2) STP	CONTROL FOR THE FOLLOWING: (1) STP FOR LIT-550C (1) STP FOR FST-05 PLOW	HH-FSTS-2	LIT-550C	E-410, E-506	VIA IB-FSTS TRANSITION TO RGPVC WITHIN OPERATING GALLERY
I168	1" RTRC	(2) STP	CONTROL FOR THE FOLLOWING: (1) STP FOR LIT-560C (1) STP FOR FST-06 PLOW	HH-FSTS-2	LIT-560C	E-410, E-506	VIA IB-FSTS TRANSITION TO RGPVC WITHIN OPERATING GALLERY
I169	1" RTRC	(2) STP	CONTROL FOR THE FOLLOWING: (1) STP FOR LIT-570C (1) STP FOR FST-07 PLOW	HH-FSTS-2	LIT-570C	E-410, E-506	VIA IB-FSTS TRANSITION TO RGPVC WITHIN OPERATING GALLERY

NOTES:
(1) SEE ELECTRICAL LEGEND ON SHEET E-003 AND GENERAL LEGEND ON SHEET G-002.
(2) RIO-01 CONSISTS OF TWO BAYS, RIO-01L AND RIO-01R. RIO-01L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-01R SHALL BE FOR DIGITAL I/O.
(3) RIO-02 CONSISTS OF TWO BAYS, RIO-02L AND RIO-02R. RIO-02L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-02R SHALL BE FOR DIGITAL I/O.

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Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Designed by: AR | Checked by: DES | Reviewed by: CA | Drawn by: BM | Scale: NONE | Date: 7/1/2025

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CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL

CONDUIT AND CABLE SCHEDULE 23 OF 25

ROXANA G. LAZENK
062-057988
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS
EXPIRES 11.30.25

Sheet Number: E-025I
Page Number: 402

PLOT DATE: 10/16/2025 8:45:18 AM

Autodesk Docs://CI-AMER (USA) 60696142-MWRD O'Brien (Northside) Battery E/22-RFP-06_MOD_Revit2023.rvt

I&C CONDUIT AND CABLE SCHEDULE

CONDUIT	SIZE/TYPE	WIRE/CABLE	FUNCTION	FROM	TO	SHEET REFERENCE	REMARKS
I170	1" RTRC	(2) STP	CONTROL FOR THE FOLLOWING: (1) STP FOR LIT-580C (1) STP FOR FST-08 PLOW	HH-FSTS-2	LIT-580C	E-410, E-506	VIA IB-FSTS TRANSITION TO RGPVC WITHIN OPERATING GALLERY
I171	1" RTRC	(3) STP	CONTROL FOR THE FOLLOWING: (2) STP FOR PAT-FCV1 (1) STP FOR FIT-606	PCP-I	PAT-FCV1	E-408, E-503, E-602	TRANSITION TO RGPVC WITHIN OPERATING GALLERY
I172	1" RGPVC	(1) STP	CONTROL FOR FIT-606	PAT-FCV1	FIT-606	E-602	
I173	3/4" RGPVC	(1) STP	CONTROL FOR AIT-608B	AIT-608A	AIT-608B	E-602	
I174	1" RTRC	(2) STP	CONTROL FOR THE FOLLOWING: (1) STP FOR AIT-608A (1) STP FOR AIT-608B	PCP-I	AIT-608A	E-408, E-503, E-602	TRANSITION TO RGPVC WITHIN OPERATING GALLERY
I175	1 1/2" RGPVC	(5) STP	CONTROL FOR THE FOLLOWING: (2) STP FOR PAT-FCV1 (1) STP FOR FIT-606 (1) STP FOR AIT-608A (1) STP FOR AIT-608B	RIO-01	PCP-I	E-408	
I176	3/4" RGPVC	(1) STP	CONTROL FOR FIT-510D	FST1-FCV1A	FIT-510D	E-407	
I177	3/4" RGPVC	(1) STP	CONTROL FOR FIT-510F	FST1-FCV1B	FIT-510F	E-407	
I178	3/4" RGPVC	(1) STP	CONTROL FOR FIT-520D	FST2-FCV2A	FIT-520D	E-407	
I179	3/4" RGPVC	(1) STP	CONTROL FOR FIT-520F	FST2-FCV2B	FIT-520F	E-407	
I180	3/4" RGPVC	(3) STP	CONTROL FOR THE FOLLOWING: (2) STP FOR FST1-FCV1A (1) STP FOR FIT-510D	FST1-FCV1B	FST1-FCV1A	E-407	
I181	1 1/2" RGPVC	(6) STP	CONTROL FOR THE FOLLOWING: (2) STP FOR FST1-FCV1B (1) STP FOR FIT-510F (2) STP FOR FST1-FCV1A (1) STP FOR FIT-510D	FST2-FCV2A	FST1-FCV1B	E-407	
I182	1 1/2" RGPVC	(9) STP	CONTROL FOR THE FOLLOWING: (2) STP FOR FST2-FCV2A (1) FIT-520D (2) STP FOR FST1-FCV1B (1) STP FOR FIT-510F (2) STP FOR FST1-FCV1A (1) STP FOR FIT-510D	FST2-FCV2B	FST2-FCV2A	E-407	
I183	3/4" RGPVC	(2)STP	CONTROL FOR KGV-01	01 KGV	ACP	E-101	
I184	3/4" RGPVC	(2)STP	CONTROL FOR FCV-1073	FVC-1073	ACP	E-101	
I185	3/4" RGPVC	(2)STP	CONTROL FOR FCV-1053	FVC-1053	ACP	E-101	
I186	3/4" RGPVC	(2)STP	CONTROL FOR FCV-1033	FVC-1033	ACP	E-101	
I187	3/4" RGPVC	(2)STP	CONTROL FOR FCV-1013	FVC-1013	ACP	E-101	
I188	3/4" RGPVC	(1)STP	CONTROL FOR KGV-01	01 KGV	ACP	E-101	
I189	3/4" RGPVC	(1)STP	CONTROL FOR FIT-1073	FIT-1073	ACP	E-101	
I190	3/4" RGPVC	(1)STP	CONTROL FOR FIT-1053	FIT-1053	ACP	E-101	
I191	3/4" RGPVC	(1)STP	CONTROL FOR FIT-1033	FIT-1033	ACP	E-101	
I192	3/4" RGPVC	(1)STP	CONTROL FOR FIT-1013	FIT-1013	ACP	E-101	
I193	2" RGPVC	(15) STP	CONTROL FOR ACP	ACP	DCU	E-101	
I194	2" RGPVC	(54) STP	CONTROL FOR THE FOLLOWING: (1) STP FOR AIT-336F (1) STP EACH FOR AIT-336A, AIT-336B (1) STP EACH FOR FIT-334A, FIT-334B, FIT-334C, FIT-334D, FIT-334E, FIT-334F, FIT-334G (2) STP EACH FOR AT3-FCV1, AT3-FCV2, AT3-FCV3, AT3-FCV4, AT3-FCV5, AT3-FCV6, AT3-FCV7 (1) STP EACH FOR AIT-336C, AIT-336D, AIT-336E (1) STP EACH FOR AIT-346C, AIT-346D, AIT-346E (1) STP EACH FOR FIT-344A, FIT-344B, FIT-344C, FIT-344D, FIT-344E, FIT-344F, FIT-344G (2) STP EACH FOR AT4-FCV1, AT4-FCV2, AT4-FCV3, AT4-FCV4, AT4-FCV5, AT4-FCV6, AT4-FCV7 (1) STP EACH FOR AIT-346A, AIT-346B, AIT-346C	RIO-02	CPS-I	E-418	
I195	2" RGPVC	(54) STP	CONTROL FOR THE FOLLOWING: (1) STP FOR AIT-356F (1) STP EACH FOR AIT-356A, AIT-356B (1) STP EACH FOR FIT-354A, FIT-354B, FIT-354C, FIT-354D, FIT-354E, FIT-354F, FIT-354G (2) STP EACH FOR AT5-FCV1, AT5-FCV2, AT5-FCV3, AT5-FCV4, AT5-FCV5, AT5-FCV6, AT5-FCV7 (1) STP EACH FOR AIT-356C, AIT-356D, AIT-356E (1) STP EACH FOR AIT-366C, AIT-366D, AIT-366E (1) STP EACH FOR FIT-364A, FIT-364B, FIT-364C, FIT-364D, FIT-364E, FIT-364F, FIT-364G (2) STP EACH FOR AT6-FCV1, AT6-FCV2, AT6-FCV3, AT6-FCV4, AT6-FCV5, AT6-FCV6, AT6-FCV7 (1) STP EACH FOR AIT-366A, AIT-366B, AIT-366C	RIO-02	CPS-I	E-418	
I196	3/4" RGPVC	(1)STP	CONTROL FOR AIT-295	AIT-295	RIO-01	E-209, E-407, E-416, E-417	

NOTES:
(1) SEE ELECTRICAL LEGEND ON SHEET E-003 AND GENERAL LEGEND ON SHEET G-002.
(2) RIO-01 CONSISTS OF TWO BAYS, RIO-01L AND RIO-01R. RIO-01L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-01R SHALL BE FOR DIGITAL I/O.
(3) RIO-02 CONSISTS OF TWO BAYS, RIO-02L AND RIO-02R. RIO-02L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-02R SHALL BE FOR DIGITAL I/O.

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Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT
OF GREATER CHICAGO

AECOM
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Designed by:	Checked by:	Reviewed by:	Scale:
AR	DES	CA	NONE
Drawn by:			
BM			
Date:			
7/1/2025			

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL
CONDUIT AND CABLE SCHEDULE 24 OF 25

ROXANA G. LAZENBY
062-057988
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS
EXPIRES 11.30.25

Sheet Number: E-025J
Page Number: 403

PLOT DATE: 10/16/2025 8:45:20 AM

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I&C CONDUIT AND CABLE SCHEDULE

CONDUIT	SIZE/TYPE	WIRE/CABLE	FUNCTION	FROM	TO	SHEET REFERENCE	REMARKS
I197	3/4" RGPVC	(1)STP	CONTROL FOR AIT-291	AIT-291	RIO-01	E-206,E-207,E-208,E-209,E-407,E-416,E417	<varies>
S001	2" RTRC	EMPTY	SPARE	HH-FSTN-2	FST-01	E-503	
S002	2" RTRC	EMPTY	SPARE	HH-FSTN-2	FST-02	E-503	
S003	2" RTRC	EMPTY	SPARE	HH-FSTN-2	FST-03	E-503	
S004	2" RTRC	EMPTY	SPARE	HH-FSTN-2	FST-04	E-503	
S005	2" RTRC	EMPTY	SPARE	HH-FSTS-2	FST-05	E-506	
S006	2" RTRC	EMPTY	SPARE	HH-FSTS-2	FST-06	E-506	
S007	2" RTRC	EMPTY	SPARE	HH-FSTS-2	FST-07	E-506	
S008	2" RTRC	EMPTY	SPARE	HH-FSTS-2	FST-08	E-506	
S010	2" RTRC	EMPTY	SPARE	FCPN-C	HH-FSTN-2	E-503	TRANSITION TO RGPVC WITHIN OPERATING GALLERY
S011	2" RTRC	EMPTY	SPARE	FCPN-C	HH-FSTN-2	E-503	TRANSITION TO RGPVC WITHIN OPERATING GALLERY
S012	2" RTRC	EMPTY	SPARE	FCPS-C	HH-FSTS-2	E-506	TRANSITION TO RGPVC WITHIN OPERATING GALLERY
S013	2" RTRC	EMPTY	SPARE	FCPS-C	HH-FSTS-2	E-506	TRANSITION TO RGPVC WITHIN OPERATING GALLERY
S014	2" RTRC	EMPTY	SPARE	PCP-I	SG-15	E-408, E-503, E-602	TRANSITION TO RGPVC WITHIN OPERATING GALLERY
S015	1" RGPVC	EMPTY	SPARE	HH-FSTN-2	FST-04	E-503	
S016	1" RGPVC	EMPTY	SPARE	HH-FSTN-2	FST-02	E-503	
S017	1" RGPVC	EMPTY	SPARE	HH-FSTN-2	FST-01	E-503	
S018	1" RGPVC	EMPTY	SPARE	HH-FSTN-2	FST-03	E-503	
S019	1" RGPVC	EMPTY	SPARE	HH-FSTS-2	FST-08	E-506	
S020	1" RGPVC	EMPTY	SPARE	HH-FSTS-2	FST-06	E-506	
S021	1" RGPVC	EMPTY	SPARE	HH-FSTS-2	FST-05	E-506	
S022	1" RGPVC	EMPTY	SPARE	HH-FSTS-2	FST-07	E-506	
T001	1" RGPVC	(1) 24STD FIBER	TELEPHONE	PCB PHONE CONTROLLER	PHONE CONTROLLER (BATTERY E)	E-101, E-102, E-103, E-206, E-207, E-208, E-209, E-407, E-416	PCB PHONE CONTROLLER IS LOCATED IN THE TELEPHONE ROOM AT EL +39.71 AS SHOWN ON E-103
T002	3/4" RGPVC	(1) CAT6 ETHERNET	TELEPHONE	PHONE CONTROLLER (BATTERY E)	GALLERY HANDSET	E-416, E-417	
T003	3/4" RGPVC	(1) CAT6 ETHERNET	TELEPHONE	PHONE CONTROLLER (BATTERY E)	RAS/WAS HANDSET	E-416	
T004	1" RGPVC	(2) CAT6 ETHERNET	POWER MONITORING FOR MDP-E1, MDP-E2	TB-MDP	RIO-01	E-416, E-417	
T005	3/4" RGPVC	(1) CAT6 ETHERNET	POWER MONITORING FOR MDP-E1	MDP-E1	TB-MDP	E-416	
T006	3/4" RGPVC	(1) CAT6 ETHERNET	POWER MONITORING FOR MDP-E2	MDP-E2	TB-MDP	E-416	

NOTES:
(1) SEE ELECTRICAL LEGEND ON SHEET E-003 AND GENERAL LEGEND ON SHEET G-002.
(2) RIO-01 CONSISTS OF TWO BAYS, RIO-01L AND RIO-01R. RIO-01L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-01R SHALL BE FOR DIGITAL I/O.
(3) RIO-02 CONSISTS OF TWO BAYS, RIO-02L AND RIO-02R. RIO-02L SHALL BE FOR ANALOG I/O AND ETHERNET. RIO-02R SHALL BE FOR DIGITAL I/O.

NOTES:
(1) SEE ELECTRICAL LEGEND ON SHEET E-003 AND GENERAL LEGEND ON SHEET G-002.

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Designed by:	Checked by:
AR	DES
Drawn by:	Reviewed by:
BM	CA
Date:	Scale:
7/1/2025	NONE

AECOM
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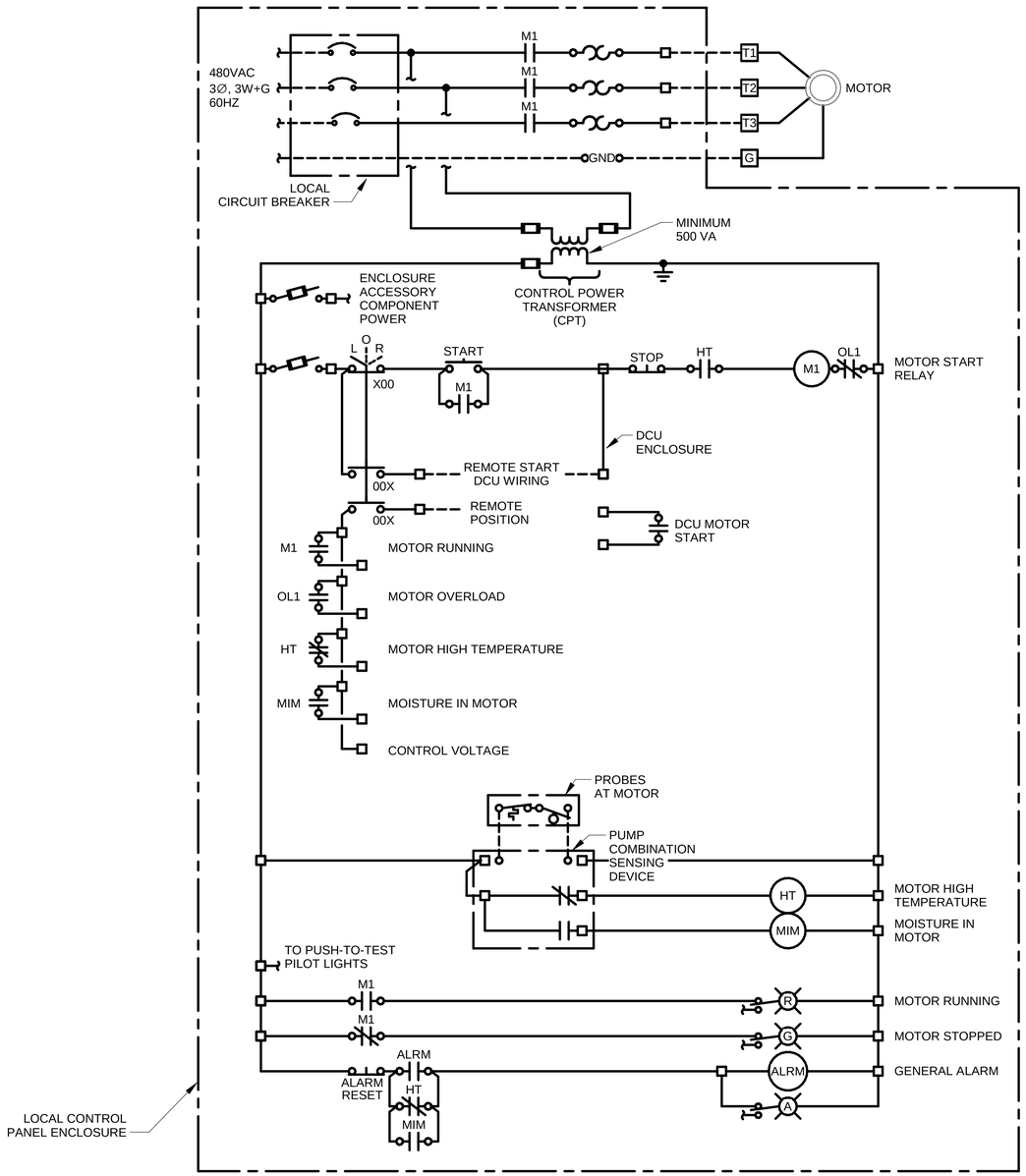
CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL
CONDUIT AND CABLE SCHEDULE 25 OF 25

ROXANA G. LAZENIK
062-057988
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS
EXPIRES 11.30.25

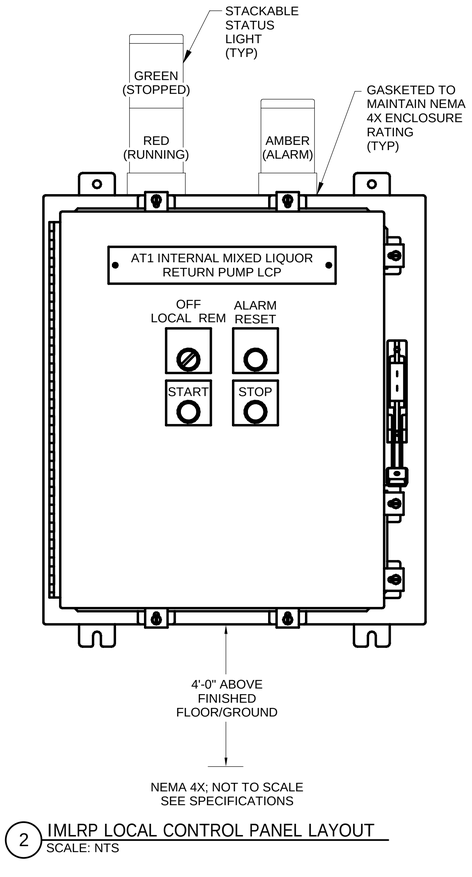
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1 INTERNAL MIXED LIQUOR RECYCLE PUMP SCHEMATIC
SCALE: NTS



2 IMLRP LOCAL CONTROL PANEL LAYOUT
SCALE: NTS

ITEM	CKT. NO.
MIXED LIQUOR RECYCLE PUMP	AT1 IMLRP E-DP-E2: 14,16,18
MIXED LIQUOR RECYCLE PUMP	AT2 IMLRP E-DP-E3: 14,16,18
MIXED LIQUOR RECYCLE PUMP	AT3 IMLRP E-DP-E5: 14,16,18
MIXED LIQUOR RECYCLE PUMP	AT4 IMLRP E-DP-E6: 14,16,18
MIXED LIQUOR RECYCLE PUMP	AT5 IMLRP E-DP-E7: 7,9,11
MIXED LIQUOR RECYCLE PUMP	AT6 IMLRP E-DP-E7: 14,16,18

1

LEGEND:

- NEW WORK FURNISHED AND INSTALLED UNDER OTHER CONTRACT ITEMS
- NEW WORK FURNISHED AND INSTALLED IN FIELD
- NEW WORK FURNISHED AND INSTALLED IN STARTER ENCLOSURE
- CONTROL PANEL ENCLOSURE

Rev.	Description	Appr.	Date
1	ADDENDUM NO. 3	GD	10/15/25

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

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Designed by:	Checked by:
AR	DES
Drawn by:	Reviewed by:
BM	CA
Date:	Scale:
7/1/2025	NONE

CONTRACT 21-092-3P
O'BRIEN WATER RECLAMATION PLANT
BATTERY E ACTIVATED SLUDGE FACILITY
GENERAL

IMLR PUMP SCHEMATIC

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