

LAKEHAVEN WATERAND SEWER DISTRICT

2026 REDONDO PRIMARY AND SECONDARY CLARIFIERS REHABILITATION

Bid Number: 26-1724

ADDENDUM NO. 4

TO ALL PLANHOLDERS:

The following items shall be incorporated into the Bidding/Contract Documents for the above described project and will supersede any provisions with which they may conflict. All other provisions not modified by this addendum shall remain in full force and effect.

Issued: October 21, 2026

CHANGES TO INSTRUCTIONS TO BIDDERS

1. SUBSECTION 10.3 (Page IB-5):

A. Replace subsection 10.3 in its entirety with the following:

“10.3 Where the Contract Documents call for a specific piece of equipment, material, or craft by trade name, such specification shall be considered as if followed by the words “or an approved equal,” whether or not such words appear (except where substitutions are specifically not permitted). Items to be considered as “or equals” or substitutions shall be submitted by the Contractor to the Engineer following the Effective Date of the Contract and be reviewed as defined in Section 01 25 00 – Substitution Procedures.”

CHANGES TO ADDENDUM NO. 1:

- 2. Delete Item No. 3, Section 01 25 00, Subparagraph 1.01 A.1. in its entirety. The original subparagraph for this Section shall apply.**

CHANGES TO SPECIFICATIONS

3. SECTION 01 11 20:

A. Replace subparagraph 1.03.A. in its entirety with the following:

“A. The Owner has determined to the best of its ability that the proposed construction areas under this Contract and the materials therein do not contain asbestos. As per a Limited Asbestos Report on August 13, 2026, by Pacific Rim Environmental Inc., no asbestos containing materials were found. A copy of the report (PacRim #18590) is available upon request.”

B. Replace Paragraph 1.05 in its entirety with the following:

“1.05 CONTRACTOR’S RESPONSIBILITIES

- A. Notify all employees and subcontractors of the contents of this Section.
- B. Take the necessary precautions for compliance with Local, State, and Federal regulations.
- C. When regulated substances are present, submit an abatement and disposal plan for review and approval by the Owner. The Contractor shall not proceed until the abatement and disposal plan is approved by the Owner.
- D. The Contractor shall provide all labor, materials, equipment, and monitoring necessary to safely execute the Work and provide abatement of lead- and asbestos-containing materials in full compliance with Local, State, and Federal regulations.
- E. Should suspect material not identified in this Section be encountered, immediately suspend all work that could disturb said material and notify the Owner who will implement the proper action. Do not proceed with work that could disturb the material until authorized by the Owner, in writing, to do so.
- F. Use of asbestos containing material in new construction is prohibited.”

4. SECTION 01 29 00:

A. Replace subparagraph 3.02.A. in its entirety with the following:

“A. Payment: Primary Clarifiers #1 and #2 – Demolition (Bid Item No. 2) will be made at the lump sum price stated in the Bid Schedule. The lump sum price for Bid Item No. 2 shall include all costs associated with demolition and salvage of any and all structures, equipment, appurtenances, or other components of the Work that are not explicitly part of other Bid Items stated herein. The lump sum price shall include all necessary Work, equipment, materials, labor, and incidentals for the following demolition and salvage activities at Primary Clarifiers #1 and #2: removal and salvaging of fiberglass roofing panels and foul air ductwork for reinstallation after installation of in-tank components; demolition of the structural steel roof beam; demolition of existing effluent troughs and their associated wall supports including anchors; demolition of existing Primary Clarifier rake arms, center column mechanisms, feed wells, drives and platforms; demolition of the existing scum boxes, scum baffles, scum skimmers, and associated piping; demolition of the existing pipes through the walls to the flanges in the Primary pump room; demolition of the return piping; demolition of the existing (material) blades and adjustable squeegees; demolition of existing Primary Clarifier walkways to the center columns; demolition of lead-containing materials including abatement and safe handling and disposal in accordance with Local, State, and Federal regulations; demolition of existing electrical elements; removal and salvage of the

perimeter lighting fixtures; demolition of grout topping slabs on tank floors; and any other demolition or salvage activities required to complete the Work that are not explicitly listed in this Bid Item, except for crack injection, concrete, steel, cast-in-place anchors, epoxied or expansion anchors, or joint sealant repair Work described in Bid Items 10 through 21.”

B. Replace subparagraph 3.21.A. in its entirety with the following:

“A. Payment: Joint Sealant Repair (Bid Item No. 21) will be made at the price as stated in the Bid Schedule. The actual quantity of the Work required is not known at this time and will be determined after the existing rotating assembly and sloping topping grout are removed and the existing concrete is cleaned for inspection and the roof panels are removed at Primary and Secondary Clarifiers #1 and #2. The lineal foot price for Bid Item No. 21 shall include all necessary Work, equipment, materials, labor, and incidentals for concrete cleaning and steel cleaning to allow for concrete and steel condition assessment, containment, and removal of all debris generated by Bid Item No. 21 and Work to install the joint sealant repair per Detail 3 on Sheet S-05.”

5. SECTION 01 41 26:

A. Replace subparagraph 1.02.A. in its entirety with the following:

“A. The Owner acquires the following:

1. Building Permits, City of Des Moines.
 - a. The Owner will make the permit application and pay the associated fees for plan review and inspections. The Contractor shall be responsible for picking up the permit once review is complete and arranging for inspections.
2. NPDES Waste Discharge Permit for the Plant, State of Washington Department of Ecology.
3. Air Quality Permits and Notice of Construction Permit, Puget Sound Clean Air Agency.”

B. Add the following subparagraph 1.02.B.2.:

“2. Mechanical Permit, City of Des Moines.”

6. SECTION 01 50 00:

A. Replace subparagraph 1.01.B.6 in its entirety with the following:

“6. Temporary enclosures, including roof closures and divider walls in the Secondary Clarifiers.”

B. Add the following subparagraph 1.01.B.8:

“8. Temporary scaffolding used to support existing fiberglass roof panels.”

C. Add the following subparagraphs to 1.07:

“B. Secondary Clarifier Temporary Roof Closure:

1. Provide temporary roof closures as needed to accommodate the fiberglass roof nested construction requirements.
 - a. Temporary roof closures shall be designed in accordance with the load and capacity requirements of the 2021 International Building Code as adopted by the City of Des Moines. Provide drawings and calculations stamped by a State of Washington registered Professional Engineer for all Temporary Roof Closures.
 - b. Temporary roof closures shall be weathertight with the adjacent fiberglass roof panels.
 - c. Temporary roof closures shall be attached to the existing fiberglass roof panels by means of clamping only. No new holes will be permitted in the roof panels.

C. Temporary divider walls for the Secondary Clarifiers:

1. Provide temporary divider walls to isolate the Secondary Clarifiers whenever one Secondary Clarifier is out of service and the other Secondary Clarifier remains in service to facilitate ventilation and odor control.
2. Temporary divider walls shall be designed in accordance with the load and capacity requirements of the 2021 International Building Code as adopted by the City of Des Moines, except that the design wind speed shall be 50 mph and the Wind Exposure shall be exposure B., Risk Category III. Provide drawings and calculations stamped by a State of Washington registered Professional Engineer for all Temporary Divider Walls.

D. Temporary Scaffolding

1. Provide scaffolding to support the existing fiberglass roof panels during removal and reinstallation.
2. Temporary scaffolding shall be designed in accordance with the load and capacity requirements of the 2021 International Building Code as adopted by the City of Des Moines, except that the design wind speed shall be 75 mph and the Wind Exposure shall be exposure C., Risk Category III. Snow load shall be based on a ground snow load of 35 psf if the scaffolding will be subjected to snow loads. Provide drawings and calculations stamped by a State of Washington registered Professional Engineer for all Temporary Scaffolding.”

7. SECTION 03 62 00:

A. Delete subparagraph 3.04 B.4. in its entirety.

B. Replace subparagraph 3.04.B.5. in its entirety with the following:

“4. In accordance with 01 45 23 1.04.A., the Owner’s testing agency will make and test three 2-inch by 2-inch cubes for each 10 cubic yards of each type of Category II, Category III, or Epoxy grout used. Use restraining caps for cube molds in accordance with ASTM C1107/C1107M.”

C. Replace subparagraph 3.04.B.6. in its entirety with the following:

“5. For large grout applications, make three (3) additional cubes.”

D. Delete subparagraph 3.04.B.7. in its entirety.

E. Renumber succeeding subparagraphs 3.04.B.8., 9., and 10. as 3.04.B.6., 7., and 8.

F. Delete subparagraph 3.04.B.11. in its entirety.

G. Renumber succeeding subparagraphs 3.04.B.12., 13., and 14. as 3.04.B.9., 10., and 11.

8. SECTION 07 92 00:

A. Replace subparagraph 2.01 I. in its entirety with the following:

“I. Type 7 – Multipart Polysulfide, Immersible:

1. Polysulfide base, two-component, chemical curing; ASTM C920.
2. Capable of being continuously immersed in water.
3. For use above grade and below grade.
4. Manufacturers and Products:
 - a. Polyspec Thiokol 2235.”

B. Replace subparagraph 2.01 J. in its entirety with the following:

“J. Type 8 – One-part Polysulfide, Nonsag, Nonimmersible:

1. Polysulfide base, single-component, moisture curing; ASTM C920, Type S, Grade NS.
2. Capable of withstanding movement up to 20 percent of joint width.
3. Manufacturer and Product: W.R. Meadows; Deck-O-Seal, one-part.”

C. Replace subparagraph 3.06 A. in its entirety with the following:

“A. This schedule lists the sealant types acceptable for each joint location. Use as few different sealant types as possible to meet the requirements of the Project.

Joint Locations	Sealant Type(s)
Expansion/Contraction and Control Joints At:	
Concrete Walls (except water-holding and belowgrade portions of structures)	1, 3, 4, 5, 6, 12
Concrete Floor Slabs (except for water-holding Structures)	2, 5
Concrete Walls and Slabs immersed in water and/or below grade	7
Slabs Subject to Vehicle and Pedestrian Traffic	2, 5
Material Joints At:	
Wall Penetrations (Exterior)	1, 5, 6, 8, 12
Wall Penetrations (Interior)	1, 5, 6, 8
Floor Penetrations	5, 6, 7
Roof Penetrations	8
Sheet Metal Flashings	5, 13
Sheet Metal Roofing and Siding	5, 13
Other Joints:	
Threshold Sealant Bed	5
Between Counter Tops and Backsplashes	10
Around Plumbing Fixtures	10
Openings Around Pipes, Conduits, and Ducts Through Fire-Rated Construction	

9. SECTION 44 42 24.01:

A. Add subparagraph 2.05 A.4.:

“4. Connect the 6-inch diameter filter backwash pipe into the center column using PVC pipe in Primary Clarifiers #1 and #2.”

B. Delete subparagraph 2.05 C.4. in its entirety.

10. SECTION 44 42 28:

A. Replace subparagraph 2.04 K.2. in its entirety with the following:

“2. Trough supports shall be Type 316 stainless steel.”

CHANGES TO DRAWINGS

11. SHEET G-09:

A. Replace Keynote #4 in its entirety with the following:

“4. FRP ROOF PANELS SHALL BE REMOVED, SALVAGED, AND PROTECTED AS NEEDED TO FACILITATE REMOVAL OF CLARIFIER MECHANISM. SEE D AND M SHEETS FOR MORE INFORMATION. INSTALL NEW GASKETS FOR ANY REMOVED ROOF PANELS.”

12. SHEET D-01

A. Add General Sheet Note #8 as follows:

“8. ROOF PANELS ARE NESTED, INTERLOCKED, AND BOLTED TOGETHER AND TO THE ROOF BEAMS FOR SUPPORT. SEQUENTIAL REMOVAL, IN THE DIRECTION OF THE NESTING, AND TEMPORARY SUPPORT ARE REQUIRED DURING ROOF PANEL REMOVAL AND REINSTALLATION. REFER TO SPECIFICATION SECTION 01 50 00 AND SECTION 02 41 00 3.02.B. FOR MORE INFORMATION. REFER TO DRAWING A-01 FOR ADDITIONAL INFORMATION RELATED TO THE SUGGESTED ROOF REMOVAL AND REINSTALLATION SEQUENCING.”

13. SHEET D-04

A. Add General Sheet Note #3 as follows:

“3. ROOF PANELS ARE NESTED, INTERLOCKED, AND BOLTED TOGETHER AND TO THE ROOF BEAMS FOR SUPPORT. SEQUENTIAL REMOVAL, IN THE DIRECTION OF NESTING, AND TEMPORARY SUPPORT ARE REQUIRED DURING ROOF PANEL REMOVAL AND REINSTALLATION. REFER TO SPECIFICATION SECTION 01 50 00 AND SECTION 02 41 00 3.02.B. FOR MORE INFORMATION. REFER TO DRAWINGS A-02 AND A-03 FOR ADDITIONAL INFORMATION RELATED TO THE SUGGESTED ROOF REMOVAL AND REINSTALLATION SEQUENCING.”

14. SHEET M-02:

A. Replace Keynotes #1 and #2 in their entirety with the following:

“1. FURNISH AND INSTALL NEW SQUARE CIRCULAR CLARIFIER MECHANISM, SCUM SKIMMER, SCUM BOX, FEEDWELL, WALKWAY TO CENTER COLUMN WITH

HANDRAIL, AND ASSOCIATED TYPE 316 STAINLESS STEEL SUPPORTS, AND ANCHORS. SEE SPECIFICATION SECTION 44 42 24 AND S SHEETS FOR MORE DETAILS.

2. FURNISH AND INSTALL NEW FRP EFFLUENT TROUGHS, ASSOCIATED TYPE 316 STAINLESS STEEL SUPPORTS, AND ANCHORS. SEE SPECIFICATION SECTION 44 42 28 AND SHEET S-05 FOR MORE DETAILS.”

15. SHEET M-04:

A. Replace Keynote #1 in its entirety with the following:

- “1. REINSTALL REMOVED ROOF PANELS WITH NEW GASKETS: CLOSED CELL, 3/8” THICK X 1” SIDE NEOPRENE FOAM STRIP WITH ADHESIVE BACKING. MCMASTER CARR PART NO: 1061N124 OR APPROVED EQUAL. IF WIRES ROPES WERE REMOVED TO FACILITATE THE IN-TANK WORK, THE WIRE ROPES MUST BE REINSTALLED PRIOR TO THE ROOF PANELS BEING REINSTALLED. SEE S SHEETS FOR MORE DETAILS.”

16. SHEET M-06:

A. Replace Keynote #3 in its entirety with the following:

- “3. IF WIRES ROPES WERE REMOVED TO FACILITATE THE IN-TANK WORK, THE WIRE ROPES MUST BE REINSTALLED PRIOR TO THE ROOF PANELS BEING REINSTALLED. SEE S SHEETS FOR MORE DETAILS.”

ATTACHMENTS

1. Limited Asbestos Survey for the Clarifier Building—Foul Odor Duct System dated August 13, 2026.
2. New Drawing Sheet No. A-01, Structural, Primary Clarifiers, Suggested Roof Removal Plan.
3. New Drawing Sheet No. A-02, Structural, Secondary Clarifiers, Suggested Roof Removal Plan.
4. New Drawing Sheet No. A-03, Structural, Secondary Clarifiers, Suggested Roof Removal Plan.

The bid opening for the **2026 REDONDO PRIMARY AND SECONDARY CLARIFIERS REHABILITATION (26-1724)** project shall be extended to 1:00 p.m., local time, Tuesday, November 3, 2026, at the Owner’s Headquarters Building, 31627A 1st Avenue South, Federal Way, WA 98003.

[signature on next page]



Kamry Breard, P.E.
Project Manager

The Bidder shall acknowledge receipt of this Addendum by noting such in the Proposal in the space provided on Page P-2. Failure to do so may cause the bid to be rejected as not responsive.

END OF ADDENDUM NO. 4



August 13, 2026

Lakehaven Water & Sewer District
31627 1st Avenue South
Federal Way, WA 98003

LIMITED ASBESTOS SURVEY

**Clarifier Building – Foul Odor Duct System
515 South 288th Street
Des Moines, WA 98198**

PacRim # 18590

On August 10, 2026, Todd Carter of Pacific Rim Environmental, Inc. (PacRim) responded to your request for inspection and testing of suspect asbestos-containing materials at the Clarifier building in Seattle, Washington. Sampling was limited to the foul-odor duct system within the Clarifier Building.

Mr. Carter is an AHERA Accredited Building Inspector, and the Eurofins Built Environment Testing West LLC., asbestos analytical laboratory is accredited by the National Voluntary Laboratory Accreditation Program (See Attachments).

Note that this inspection is limited to specified building materials and does not include all potential ACM located at the subject property. Under the regulation WAC 296-62-07721 Communication of Hazards to Employees, the Owner of a building to be renovated or demolished must present a contractor with a written statement of whether the materials to be disturbed contain asbestos prior to submitting a bid. Additional sampling and survey must be performed prior to renovation or demolition to meet the requirements of WAC 296-62-07721 or PSCAA Article 4, Regulation III for asbestos surveys prior to demolition.

This survey is not intended for, nor should it be used as a design specification. The Asbestos in Schools Hazard Amendment and Reauthorization Act (ASHARA), effective November 20, 1990, expanded accreditation requirements to apply to persons who work with asbestos in public and commercial buildings as well as schools. Specifically, ASHARA expanded the Toxic Substances Control Act (TSCA) Section 206 (a) (1) and (3) to require accreditation for any person who designs or conducts a response action with respect to friable ACM in a building. TSCA Section 207 provides for civil penalties of \$5,000 for each day of a violation for not employing accredited individuals to design and conduct response actions.

Sampling of suspect asbestos-containing materials was conducted as prescribed in 40 CFR 763.86.

Pacific Rim Environmental, Inc.

6510 Southcenter Blvd, Ste. #40
Seattle, WA 98188

(206) 244-8965
www.pacrimenv.com



Suspect asbestos-containing materials within the structure were identified and classified as either surfacing material, thermal system insulation, or miscellaneous material. Surfacing materials are those, which are either spray applied or troweled-on for acoustical, decorative, or fireproofing purposes. Thermal system insulation (TSI) is insulation used to inhibit heat transfer or to prevent condensation on pipes, boilers, tanks, ducts and various other components. Miscellaneous materials include all other materials not listed in the above categories such as floor tile, ceiling tile, roofing felt, cementitious materials, wallboard systems, and products such as caulking, mastics and putties.

Three (03) samples were collected and submitted for PLM laboratory analysis.

The results are provided in Table A below. Inspection Summary with Photos, Laboratory Analysis Report, and Certifications are attached.

TABLE A

Sample Number	AHERA Category	Material Description	Sample Location	Asbestos Type / %
01	Misc.	Duct sealant	Outside building	None Detected
02	Misc.	Duct sealant	Vertical duct	None Detected
03	Misc.	Duct sealant	Main duct	None Detected

Bulk samples collected were submitted for sample analysis in accordance with method EPA-600/R-93/116: "Method for the Determination of Asbestos in Bulk Building Materials". Analyses were performed in Eurofins Built Environment Testing West LLC., NVLAP Accredited Laboratory (Lab Code 101920-0). Materials are considered asbestos-containing materials if they are found to contain greater than 1% or 1% asbestos. Materials that contain less than one percent (<1%) asbestos are not classified as asbestos-containing materials; however, if disturbed or removed, they must be handled in accordance with applicable Washington State regulations to ensure worker and occupant safety.

Materials uncovered during the course of demolition, renovation, or maintenance activities that are not identified in this inspection report must be presumed to contain asbestos until PLM analysis proves that this material is not asbestos-containing.

If you have any questions regarding this inspection, please do not hesitate to contact our office via email at pre@pacrimenv.com or by phone at (206) 244-8965.

Respectfully,

Lindsey Lewis
Office Manager
Pacific Rim Environmental, Inc.

Review By:

Review Date: 8/13/2026

PacRim # 18590

This report shall not be reproduced, except in full, without written permission from Pacific Rim Environmental, Inc.

Pacific Rim Environmental, Inc.

6510 Southcenter Blvd, Ste. #40
Seattle, WA 98188

(206) 244-8965
www.pacrimenv.com

ASBESTOS INSPECTION SUMMARY

Asbestos Inspection Summary

Project Information	
Job Number:	18590
Project Name:	Redondo Clarifier Foul Air Duct Work
Project Address:	515 South 288th Street
Building/Unit I.D.:	N/A
Client:	Lakehaven Water & Sewer District
Date of Survey:	10-Aug-2026
PacRim Technician:	Todd Carter
Limitations:	Foul odor duct system only
Technician Project Description:	Clarifier Building
Turnaround Requested:	5 day
Exterior Photo:	

Project Name: Redondo Clarifier Foul Air Duct Work		Building/Unit I.D.: N/A	
18590 Asbestos Sample		Sample Date: 10-Aug-2026	
Sample Type	Physical Sample	AHERA Category	Miscellaneous
Sample Number	01	Homogeneous Material #	
Material Description	Duct sealant		
Building Component	Duct Work	Substrate	Metal
Homogen. Mtl Area	N/A		
Sample Location	Outside building		
Quantity	20	Unit of Measure	Square Feet
Asbestos Type/%	None Detected		
Sample Photo	 		

Project Name: Redondo Clarifier Foul Air Duct Work		Building/Unit I.D.: N/A	
18590 Asbestos Sample		Sample Date: 10-Aug-2026	
Sample Type	Physical Sample	AHERA Category	Miscellaneous
Sample Number	02	Homogeneous Material #	
Material Description	Duct sealant		
Building Component	Duct Work	Substrate	Metal
Homogen. Mtl Area	N/A		
Sample Location	Vertical duct		
Quantity	40	Unit of Measure	Square Feet
Asbestos Type/%	None Detected		
Sample Photo			

Project Name: Redondo Clarifier Foul Air Duct Work		Building/Unit I.D.: N/A	
18590 Asbestos Sample		Sample Date: 10-Aug-2026	
Sample Type	Physical Sample	AHERA Category	Miscellaneous
Sample Number	03	Homogeneous Material #	
Material Description	Duct sealant		
Building Component	Duct Work	Substrate	Metal
Homogen. Mtl Area	N/A		
Sample Location	Main duct		
Quantity	80	Unit of Measure	Square Feet
Asbestos Type/%	None Detected		
Sample Photo			

BULK SAMPLE ANALYSIS REPORT

Report for:

Mr. Todd Carter
Pacific Rim Environmental
6510 Southcenter Blvd. Ste 40
Tukwila, WA 98188

Regarding: Eurofins Built Environment Testing West, LLC
Project: 18590; Clarifier Bldg Duct
EML ID: 4659834

Approved by:

Dates of Analysis:
Asbestos PLM: 08-12-2026



Approved Signatory
Rebecca Kelly

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA 600/R-93-116, EBET-PLM-SOP83921)
NVLAP Lab Code 101920-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins Built Environment Testing West, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Eurofins Built Environment Testing West, LLC

7619 6th Ave NW, Seattle, WA 98117

(833) 465-5857 www.eurofinsus.com/Built

Client: Pacific Rim Environmental

C/O: Mr. Todd Carter

Re: 18590; Clarifier Bldg Duct

Date of Sampling: 08-10-2026

Date of Receipt: 08-10-2026

Date of Report: 08-12-2026

ASBESTOS PLM REPORT**Total Samples Submitted:** 3**Total Samples Analyzed:** 3**Total Samples with Layer Asbestos Content > 1%:** 0**Location: 1, Duct Sealant**

Lab ID-Version‡: 23530833-1

Sample Layers	Asbestos Content
Gray Sealant	ND
Sample Composite Homogeneity:	Good

Location: 2, Duct Sealant

Lab ID-Version‡: 23530834-1

Sample Layers	Asbestos Content
Gray Sealant	ND
Sample Composite Homogeneity:	Good

Location: 3, Duct Sealant

Lab ID-Version‡: 23530835-1

Sample Layers	Asbestos Content
Gray Sealant	ND
Sample Composite Homogeneity:	Good

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

All components not quantified as asbestos content and non-asbestos content are considered to be non-fibrous matrix components. Matrix components may include, but are not limited to, gypsum, paint, silicate minerals, vinyl, binder, calcium carbonate, tar, and foam.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Eurofins Built Environment Testing West, LLC

7619 6th Ave NW, Seattle, WA 98117

(833) 465-5857 www.eurofinsus.com/Built

Client: Pacific Rim Environmental

C/O: Mr. Todd Carter

Re: 18590; Clarifier Bldg Duct

Date of Sampling: 08-10-2026

Date of Receipt: 08-10-2026

Date of Report: 08-12-2026

ASBESTOS PLM REPORT

PROJECT ANALYST AND SIGNATORY REPORT

Project Analyst



Analyst: Tiffany Tsui

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

East: (866) 871-1984
Central: (800) 651-4802
West: (833) 465-5857

WEATHER		Fog	Rain	Snow	Wind	Clear
LEVEL	None					
	Light					
	Moderate					
	Heavy					

REQUESTED SEF



004659834

Non-Culturable		Culturable
Spore Trap	Tape, Swab, Bulk	Andersen, SAS, Swab, Bulk, Dust, Soil, Contact

CONTACT INFORMATION

Company:	Pacific Rim Env.	Address:	6510 Southcenter Blvd #410 Seattle WA 98148
Contact:	T. Carter	Special Instructions:	
Phone:	206 244 8965		

PROJECT INFORMATION

TURN AROUND TIME CODES - (TAT)

PROJECT INFORMATION				SAMPLING INFORMATION	
Project ID:	18590			STD - Standard (Default)	Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.
Project Description:	Clarifier Bldg Duct			ND - Next Business Day	
Project Zip Code:	Sampling Date/Time:	8/19/26 8:00		SD - Same Business Day	
	Sampled By:	T. Cantor		WH - Weekend/Holiday/ASAP	

[illegible]

SAMPLE TYPE CODES

A1S - Andersen	ST - Spore Trap	T - Tape	O - Other:
SAS - Surface Air Sampler	SW - Swab	SO - Soil	
CP - Contact Plate	B - Bulk	D - Dust	
NP - Non-potable Water	P - Potable Water		

RELINQUISHED BY

DATE & TIME

2/10/26 10:50

RECEIVED BY

My

DATE & TIME

8/10/26
10:50 a

By submitting this Chain of Custody, you agree to be bound by the terms and conditions set forth at <https://www.eurofinsus.com/environment-testing/built-environment/resources/sampling-guides-cocs-and-forms/>
 ©COPYRIGHT 2025 EUROFINS BUILT ENVIRONMENT TESTING, LLC
 FRET.CO.5PM86Z94_Rev.1_Updated 9/17/25 Page 1 of 1

TECHNICIAN / LABORATORY CERTIFICATIONS

THE ASBESTOS INSTITUTE

Certifies that

Todd Carter

has attended and received instruction in the EPA approved course

AHERA Building Inspector Refresher

on

August 06, 2026

and successfully completed and passed the competency exam.

Certificate:

ON-188748-10063-080626

Date of Examination:

6-Aug-2026

Date of Expiration:

06-Aug-2027


A. Zwanenburg
Director


Approved Instructor

THE ASBESTOS INSTITUTE

20033 N. 19th Ave, Building 6, Phoenix, AZ 85027
602-864-6564 – www.theasbestosinstitute.com

FL Course # CRS228

The person receiving this certificate has completed the requisite training for asbestos accreditation under TSCA Title II.

United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 101920-0

Eurofins Built Environment Testing West- Seattle, WA
Seattle, WA

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:*

Asbestos Fiber Analysis

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality
management system (refer to joint ISO-ILAC-IAF Communiqué on ISO/IEC 17025).*

2025-10-01 through 2026-09-30

Effective Dates



A handwritten signature in blue ink, appearing to read "R. K. Knech".

For the National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Eurofins Built Environment Testing West- Seattle, WA

7619 6th Avenue, NW

Seattle, WA 98117

Kuan W. Chen

Phone: 415-377-0751

Email: kuan.chen@et.eurofinsus.com

<http://www.labcor.net>

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 101920-0

Bulk Asbestos Analysis

Code

Description

18/A01

EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples

18/A03

EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

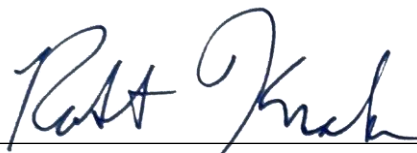
Airborne Asbestos Analysis

Code

Description

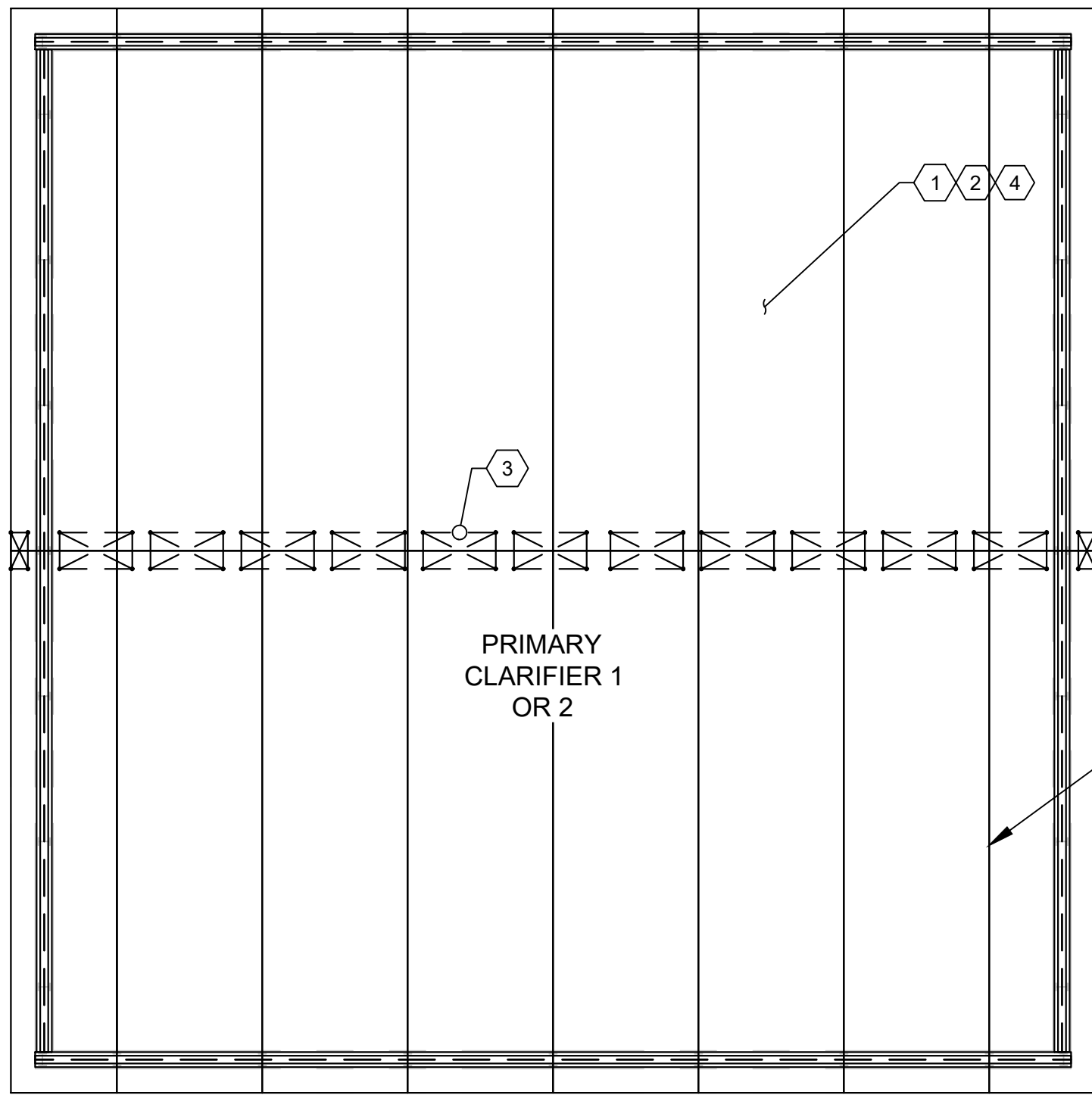
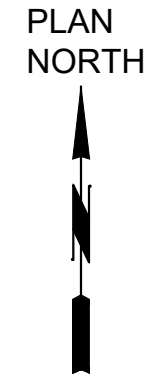
18/A02

U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

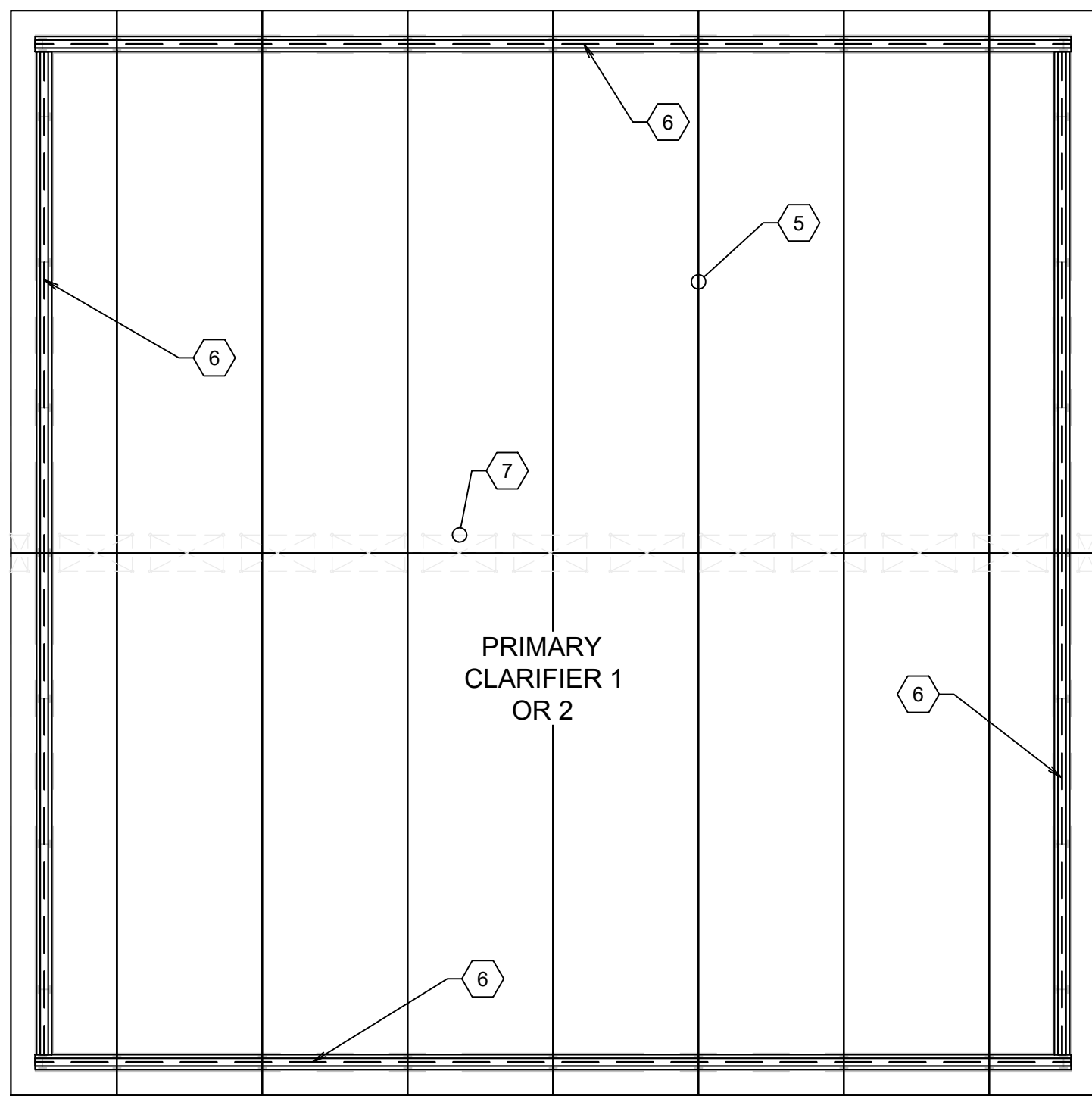
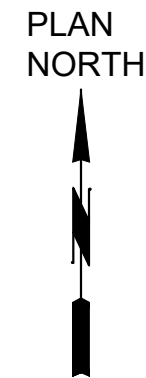


For the National Voluntary Laboratory Accreditation Program

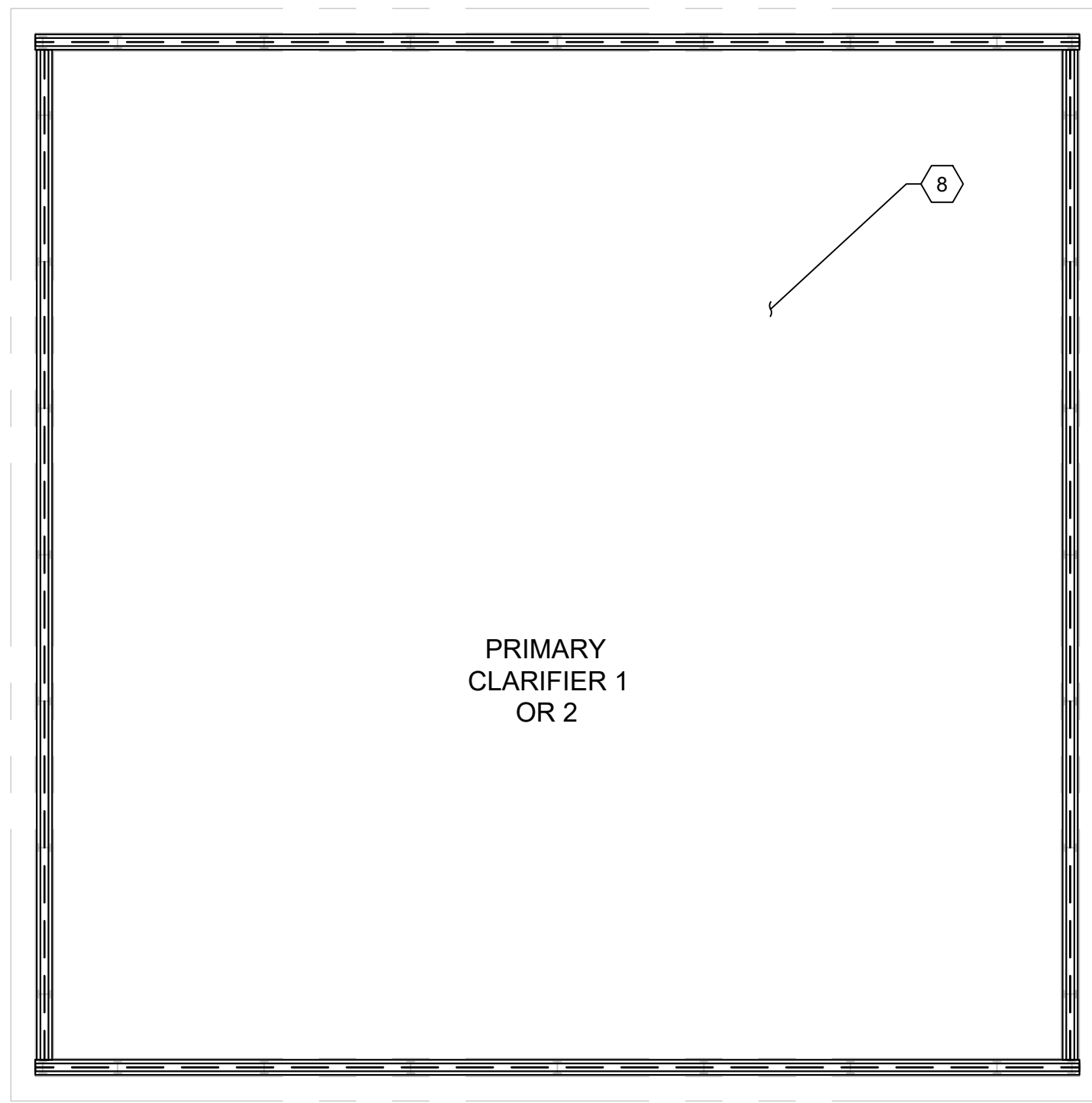
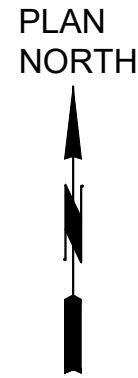
10/20/2026 9:28 AM D:\DROPPBOX\ACTIVE PROJECTS\JACOBS\LAKEHAVEN REDONDO CLARIFIER REHAB\DWG30 PROJECT DATA\REDONDO WWTP\STDRAWINGS\A-01.DWG



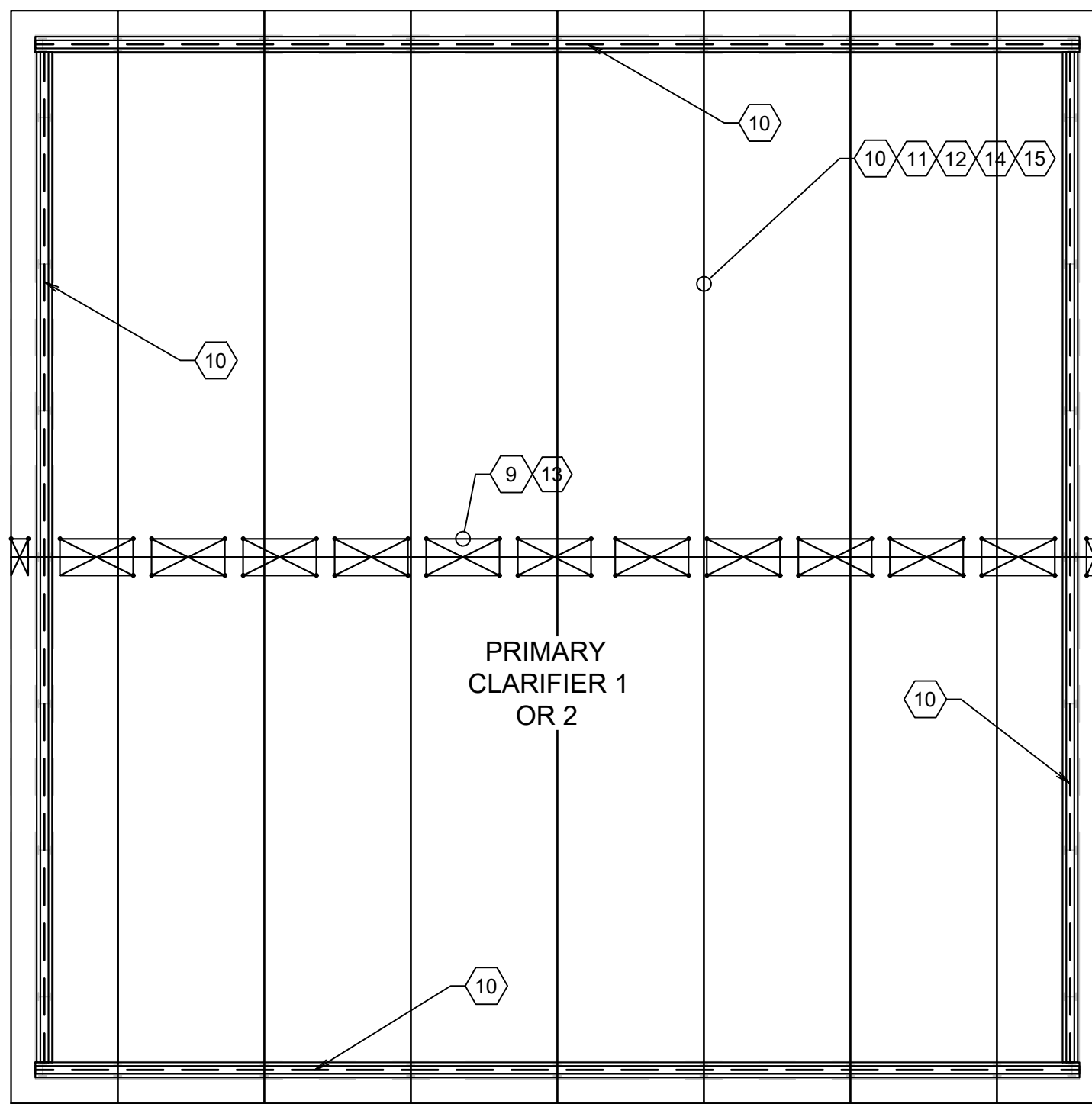
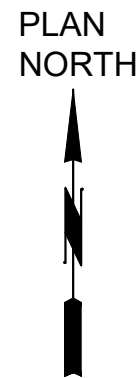
1 STAGE 1
1/8" = 1'-0"



2 STAGE 2
1/8" = 1'-0"



3 STAGE 3
1/8" = 1'-0"



4 STAGE 4
1/8" = 1'-0"

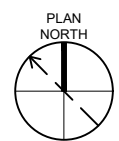
SUGGESTED SEQUENCE:

GENERAL NOTES:

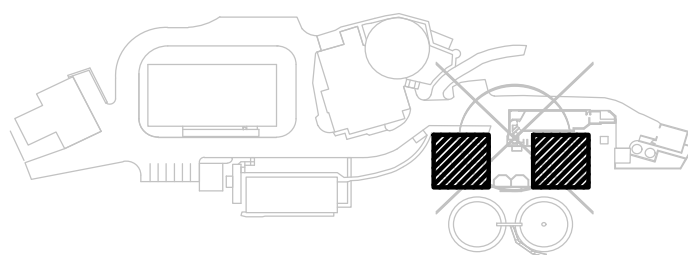
1. THE SUGGESTED SEQUENCE ADDRESSES ONLY ITEMS OF WORK THAT ARE REQUIRED BY OR AFFECTED BY THE NESTED FIBERGLASS ROOF REMOVAL AND REINSTALLATION. THE FIBERGLASS ROOF PANELS SHALL BE REMOVED AND REINSTALLED IN THE NESTED SEQUENCE. ADDITIONAL WORK IS REQUIRED BY THE PROJECT THAT IS NOT INCLUDED IN THIS SUGGESTED SEQUENCE.
2. THE EXISTING WIRE ROPES CONNECTED TO THE W8x18 ROOF BEAMS SHALL BE REMOVED AND IT SHALL BE REINSTALLED AT ITS ORIGINAL LOCATION AND AT ITS EXISTING LENGTH MEASURED FROM TURNBUCKLE TO TURNBUCKLE PRIOR TO PLACING FIBERGLASS ROOF PANELS TRIBUTARY TO THE LOAD IN THE WIRE ROPE.
3. ALL SCAFFOLDING SHALL BE DESIGNED AND STAMPED BY A WASHINGTON STATE REGISTERED PROFESSIONAL ENGINEER. SUBMIT SCAFFOLDING DESIGNS FOR REVIEW AND APPROVAL PRIOR TO UNDERTAKING THIS WORK.

KEY NOTES:

1. REMOVE THE PC FROM SERVICE.
2. REMOVE EVERYTHING HANGING FROM ROOF THE PC.
3. INSTALL TEMPORARY SCAFFOLDING IN THE PC AT THE MIDLINE WHERE OPPOSING ROOF ARCH PANELS MEET.
4. REMOVE AND STORE FIBERGLASS ROOF PANELS. UNNEST THE PANELS IN SEQUENCE. NOTE THE EXISTING LOCATION OF ALL ROOF PANELS BEFORE REMOVAL.
5. REMOVE (7) WIRE ROPES CONNECTING W8x18 ROOF BEAMS. MARK LOCATION AND EXISTING LENGTH OF WIRE ROPES FOR REINSTALLATION AT THE ORIGINAL LENGTH AND LOCATION.
6. REMOVE EXISTING ROOF BEAMS (4 SIDES OF PC, TYP) FOR REPLACEMENT.
7. REMOVE TEMPORARY SCAFFOLDING TO PERMIT PC WORK.
8. COMPLETE ALL PC WORK.
9. REINSTALL TEMPORARY SCAFFOLDING TO PERMIT ROOF PANEL REINSTALLATION.
10. INSTALL NEW ROOF BEAMS AND REINSTALL WIRE ROPES AT THEIR ORIGINAL LOCATION AND LENGTH MEASURED FROM TURNBUCKLE TO TURNBUCKLE.
11. REINSTALL FIBERGLASS ROOF PANELS AT ORIGINAL LOCATIONS AND IN PROPER NESTING SEQUENCE.
12. REMOVE TEMPORARY SCAFFOLDING WHEN NO LONGER NEEDED FOR ROOF SUPPORT OR HVAC INSTALLATION.
13. PLACE TOPPING SLAB.
14. PLACE PC IN SERVICE.
15. REPEAT AT SECOND PC.

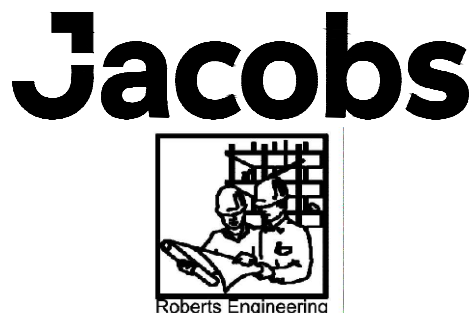


KEYPLAN SCALE: NTS



NO.	DATE	BY	APRVD	REVISION					
				PLANS ISSUED FOR					
BID	DATE	APRVD	CONST	DATE	APRVD	RECORD	DATE	APRVD	
ACTION	DATE	APRVD	ACTION	DATE	APRVD	ACTION	DATE	APRVD	

Designed
R. ROBERTS
Drawn
C. ROBERTS
Checked
A. PEREZ
Design Review Level
100% DESIGN -
NOT FOR
CONSTRUCTION



REDONDO WWTP PRIMARY AND SECONDARY CLARIFIER REHABILITATION

STRUCTURAL PRIMARY CLARIFIERS SUGGESTED ROOF REMOVAL PLAN

CONTRACT NO:

PROJECT NO:

Drawing

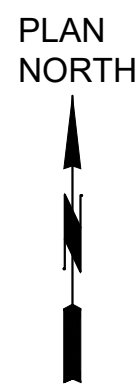
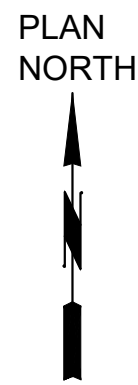
A-01

Sheet No.

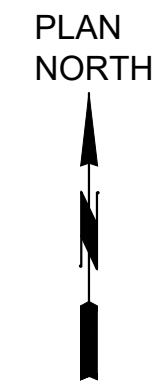
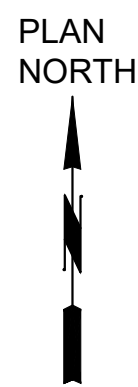
47

49

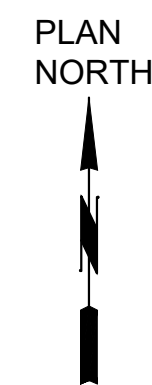
Of Total

SECONDARY
CLARIFIER #1

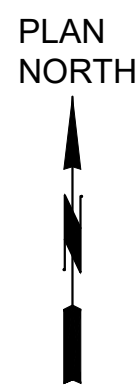
SECONDARY
CLARIFIER #1

SECONDARY
CLARIFIER #1

SECONDARY
CLARIFIER #1



SECONDARY
CLARIFIER #1



SECONDARY
CLARIFIER #1

PLANT
NORTH

 PLAN

$\frac{1}{16"} = 1'-0"$

KEY NOTES:

1. INSTALL TEMPORARY VENTILATION. VENTILATION WILL BE REQUIRED CONTINUOUSLY THROUGH TWO SEASONS.
2. REMOVE SC2 FROM SERVICE.
3. REMOVE EVERYTHING HANGING FROM ROOF SC2.
4. INSTALL TEMPORARY SCAFFOLDING IN SC2 AT THE MIDLINE WHERE OPPOSING ROOF ARCH PANELS MEET.
5. REMOVE AND STORE FIBERGLASS ROOF PANELS, STARTING AT THE WEEL END, UNNEST THE PANELS IN SEQUENCE, NOTE THE EXISTING LOCATION OF ALL ROOF PANELS BEFORE REMOVAL.
6. REMOVE TEMPORARY SCAFFOLDING
7. COMPLETE SC2 EQUIPMENT PLACEMENT AND INSTALLATION THAT REQUIRES ROOF PANEL REMOVAL FOR CRANE USE
8. REINSTALL TEMPORARY SCAFFOLDING TO PERMIT ROOF PANEL REINSTALLATION
9. REINSTALL FIBERGLASS ROOF PANELS LEAVING THE EASTERMOST PANEL NEAR THE SC1 ROOF PANELS OFF. NEST THE ROOF PANELS IN THE PROPER SEQUENCE AT THEIR ORIGINAL LOCATION. THESE PANELS WILL BE REMOVED AGAIN DUE TO ROOF PANEL NESTING CONSTRAINTS FOR SC1 WORK.
10. INSTALL A TEMPORARY ROOF CLOSURE BETWEEN THE FIBERGLASS ROOF PANELS ON SC2 AND SC1 (A ONE-PANEL-WIDE GAP REMAINS DUE TO ROOF PANEL NESTING CONSTRAINTS).
11. REMOVE TEMPORARY SCAFFOLDING.
12. INSTALL TOPPING SLAB .
13. PLACE SC2 IN SERVICE.

21. REMOVE SC1 FROM SERVICE.
22. REMOVE EVERYTHING HANGING FROM ROOF SC1
23. REMOVE THE TEMPORARY ROOF CLOSURE BETWEEN THE FIBERGLASS ROOF PANELS ON SC2 AND SC1.
24. INSTALL TEMPORARY SCAFFOLDING IN SC1 AT THE MIDLINE WHERE OPPOSING ROOF ARCH PANELS MEET.
25. REMOVE AND STORE FIBERGLASS ROOF PANELS, STARTING AT THE WEST END OF SC1. UNNEST THE PANELS IN SEQUENCE. NOTE THE EXISTING LOCATION OF ALL ROOF PANELS BEFORE REMOVAL.
26. REMOVE TEMPORARY SCAFFOLDING
27. COMPLETE SC1 EQUIPMENT PLACEMENT AND INSTALLATION THAT REQUIRES ROOF PANEL REMOVAL FOR CRANE USE.
28. REINSTALL TEMPORARY SCAFFOLDING IN SC1 TO PERMIT ROOF PANEL REINSTALLATION. REINSTALL FIBERGLASS ROOF PANELS AT SC1. LEAVE ONE PANEL GAP BETWEEN THE ROOF PANELS ON SC1 AND SC2.
29. INSTALL TEMPORARY ROOF CLOSURE BETWEEN SC1 AND SC2.
30. REMOVE TEMPORARY SCAFFOLDING IN SC1.
31. PLACE TOPPING SLAB
32. PUT SC1 BACK IN SERVICE.
33. REMOVE SC2 FROM SERVICE.
34. REINSTALL SCAFFOLDING IN SC2 TO PERMIT ROOF PANEL REMOVAL AND REINSTALLATION DUE TO ROOF PANEL NESTING CONSTRAINTS.
35. REMOVE THE TEMPORARY ROOF PANEL CLOSURE BETWEEN SC1 AND SC2.
36. REINSTALL ALL REMAINING ROOF PANELS BEGINNING WITH THE LAST PANEL SET OVER SC1. NEST THE ROOF PANELS IN THE PROPER SEQUENCE AT THEIR ORIGINAL LOCATION.
37. REMOVE TEMPORARY SCAFFOLDING IN SC2. AFTER ALL ROOF PANELS ARE INSTALLED.
38. COMPLETE PERMANENT HVAC THROUGHOUT THE SECONDARY CLARIFIERS.
39. RESTORE SC2 TO SERVICE.
40. REMOVE TEMPORARY VENTILATION.

Designed	R. ROBERTS
Drawn	C. ROBERTS
Checked	A. PEREZ
Design Review Level	
100% DESIGN - NOT FOR CONSTRUCTION	

Jacobs



STRUCTURAL
SECONDARY CLARIFIERS
SUGGESTED ROOF REMOVAL PLAN

PROJECT NO:

A-03

49 /

49
of Total